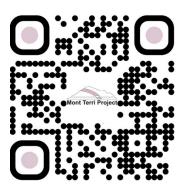
# Mont Terri Project Underground Rock Laboratory

Report period: June 23-29, 2025

Assembled and edited by swisstopo, St-Ursanne





**Spotlight of the week:** M. Abdelouhabi (swisstopo) brought three samples to BGR to do Raman analyses together with C. Ostertag-Henning (BGR). Maps and punctual data has been acquired within a carbonate-rich sample of the sandy facies. Two other samples will be analysed by C. Ostertag-Henning. This data will help us to document the diversity and spatial carbonate distribution of the heterogeneous sandy facies. This documentation is important to understand subsequent mineralogical transformations after CO<sub>2</sub> injection (Fig. C. Ostertag Henning (BGR)).

#### CD-A (Influence of Humidity on Cyclic and Long-Term Deformations) experiment

• On Friday, June 27, S. Schefer (swisstopo) on behalf of S. Tuñón (Amphos21) restarted the psychrometric measurements.

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

- From Tuesday to Thursday, June 24-26, A. Eul and S. Braunschweig (Eul GmbH) drilled BCL-11 to a final depth of 14.46 m.
- From Wednesday to Thursday, June 25–26, M. Ziegler and D. Jaeggi (swisstopo) logged the core fractures of BCL-11, conducted 360 degree optical scans, and took six samples between 10.77 m and 14.14 m.
- On Thursday, June 26, S. Schefer (swisstopo) measured the drilled position and orientation of BCL-11. It differs to the planned version by half a degree, resulting in ca. 0.1 m at final depth.
- On Thursday, June 26, M. Frädrich (Terratec) performed logging inside BCL-11 (OBI, DIL, SGR).
- On Thursday, June 26, M. Ziegler (swisstopo) restarted the seismic DAS at CL, after monitoring stop on June 12th (intended June 24th), to continue seismic monitoring and conduct active seismic transmission surveys.
- On Friday, June 27, J. Gisiger and A. Jakupi (Solexperts) installed a 5-fold multipackersystem in BCL-B11. The packers were inflated to 25 bar and the intervals pressurized to 5 bar.

#### FE-G (Monitoring the Gas Composition within the FE Experiment) experiment

 From Wednesday to Thursday, June 25–26, Y. Tomonaga (Entracers GmbH) performed gas sampling for off-site analyses (Figure 1).

#### FE-M (Long-Term Monitoring of the Full-Scale Emplacement Experiment) experiment

• On Tuesday, June 24, J. Gisiger (Solexperts) re-installed the GeoMonitor DAS box in the FE niche and resumed data acquisition.

#### FS-B (Imaging the Long-Term Loss of Faulted Host Rock Integrity) experiment

- On Tuesday, June 24, J. Gisiger (Solexperts) prepared the SM and MM Fiber optic cable for the upcoming instrumentation of BFS-B17.
- On Friday, June 27, PX. Meury (Géo&Environnement) was on site to continue the mapping of BFS-B16.

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

On Tuesday, June 24, J. Gisiger (Solexperts) increased the pressure of the helium tank and continued the constant head
injection at 1780 kPa.

## PF-A (Progressive Evolution of Structurally-Controlled Overbreaks: Long-term monitoring, hydromechanical simulation and rock testing) experiment

• On Tuesday, June 24, M. Ziegler (swisstopo) moved the seismic DAS from CL to PF-A to conduct active seismic transmission surveys. The automated transmissions were manually started. Data sets were recorded on June 24th and June 26th. Note that no data were recorded since June 12th, 11 pm, at the CL site due to the power shortage (the pc was started but not the acquisition program).

#### SM-C (Permanent Nanoseismic Monitoring) experiment

• On Friday, June 27, S. Schefer (swisstopo) removed the HLS Electronics Box to send it for repair to E. Meier (EMP).

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

• On Monday, June 23, S. Schefer (swisstopo) refilled the HPT of shaft 1.

#### **Visits**

Day	Date	Group Name	Group Size	Visitors Guide
Tue	24.6.2025	Korea Radioactive Waste Agency, KORAD	I <b>Y</b>	C. Nussbaum (swisstopo) R. Nicol (swisstopo)

Thu	26.6.2025	Kantonschule Musegg Luzern	20	H. Sager (Nagra)
Thu	26.6.2025	Endress + Hauser Flowtec AG	17	H. Sager (Nagra)
Thu	26.6.2025	Business France Suisse	22	R. Nicol (swisstopo)
Fri	27.6.2025	ENSI, Bastian Graupner	14	B. Graupner (ENSI) T. Vietor (Nagra)
Fri	27.6.2025	Universität Basel, Geowissenschaften	24	S. Schefer (swisstopo)
Sat	28.6.2025	Bundesamt Für Energie, BFE	15	O. Moser (Nagra) R. Nicol (swisstopo) T. van Stiphout (ENSI)

### Figures



**Figure 1: FE-G:** Y. Tomonaga in front of the FE-G cabinet (M. Ziegler, swisstopo).