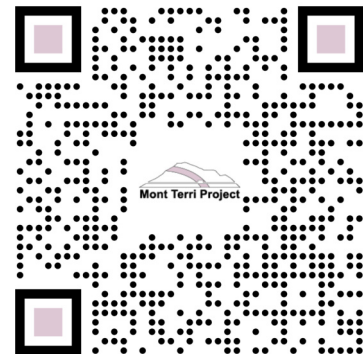


# Mont Terri Project Underground Rock Laboratory

Report period: March 4–10, 2024

Assembled and edited by swisstopo, St-Ursanne



**Spotlight of the week:** In 2023, the Mont Terri Visitor Centre welcomed almost 4,000 visitors in 177 groups. It is an important place for information, exchange and education. Since 2021 we have been running a research project on acceptance, supported by the Swiss Federal Office of Energy. To do this, we have put in place a data collection and analysis method that has already enabled us to publish 3 reports. The analysis of data for 2023 is currently being prepared. For 2022, we can basically say that 36% of our visitors come from schools or colleges, 40% of our visitors are under 25 and 15% are retired. 89% of respondents to our feedback questionnaire believe that Switzerland has a duty to look after its own nuclear waste. 32.7% "strongly agree" and 51.7% "somewhat agree" with the solution of deep disposal. Much more information can be found in the reports, which are available on request (in French only) from R. Nicol (swisstopo).

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

- On Tuesday, March 5, S. Schefer (swisstopo) restarted the psychrometers.

## CL (CO<sub>2</sub>LPIE-CO<sub>2</sub> Long-Term Periodic Injection) experiment

- On Monday, March 4, A. Eul and F. Durulan (Eul GmbH) installed the rig for BCL-6 and S. Schefer (swisstopo) oriented it to its planned orientation (327.5/33.5) (**Figure 1**).
- On Monday, March 4, T. Theurillat (swisstopo) stopped the air injection into borehole BCL-8. This injection was destined to reduce the heat during the polymerisation of the resin which was casted on last Friday. He also adapted the fittings to the new packer designed to be inserted into borehole BCL-6 and started to inflate it in order to check its tightness.
- From Tuesday to Wednesday, March 5–6, A. Eul and F. Durulan (Eul GmbH) drilled borehole BCL-6 to 17.50 m and did a grinding to its final depth of 17.51 m. The reaming will be done next week (**Figure 2**).
- From Tuesday to Wednesday, March 5–6, P. X. Meury (Géo&Environnement) and J. Windisch (swisstopo) did the core mapping of BCL-6 and took samples for determining water content, rock density, etc. The samples were sealed in aluminium and/or plastic bags.
- On Thursday, March 7, A. Obermann, J. Junker and E. Zylis (ETHZ), together with M. Ziegler (swisstopo), installed the seismic data acquisition system and connected the sensors of boreholes BCL-3, -4, -5, -7, and -8.
- From Thursday to Saturday, March 7–9, A. Engelke and M. Kreutz (BGR) performed pneumatic measurements inside BCL-6.

## DR-C (Diffusion in a Thermal Gradient) experiment

- On Friday, March 8, T. Theurillat and S. Schefer (swisstopo) installed anchors above BDR-C1 and BDR-C2 for next week's removal of the downhole installation due to repair work.

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

- From Thursday to Friday, March 7–8, Y. Tomonaga (Entracers) was on site to take gas samples for analysis in the lab.

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

- From Wednesday to Thursday, March 6–7, M. Ziegler and T. Theurillat (swisstopo) deinstalled the GmuG seismic sensor strings of BPF-2, -5 and -6 for repeat seismic measurements of BGR. The sensor string of BPF-1 is stuck inside the borehole and has to be pulled with a special tool.

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

- On Thursday, March 7, S. Schefer and T. Theurillat (swisstopo) replaced the steel tube injecting into shaft 1 with a polyamid tube bypassing EV5 that is malfunctioning, reducing the flow to nearly zero. Pressure and flow rate are now back to normal (20 bars, 0.3-0.4 l/d). They also refilled the HPT of shaft 1.

## Visits

Day	Date	Group Name	Group Size	Visitors Guide
Mon	4.3.2024	Swisstopo, Bereich Vermessung	18	S. Schefer (swisstopo)

## Figures



Figure 1: CL: The "hovering" drill rig for BCL-6, fixed on the ceiling (S. Schefer, swisstopo).



Figure 2: CL: The drilling of BCL-6 (J. Windisch, swisstopo).