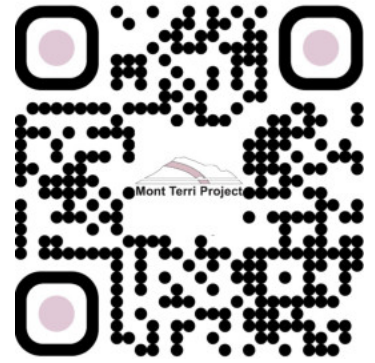


# Mont Terri Project

## Underground Rock Laboratory



Report period: May 11–24, 2026

Assembled and edited by swisstopo, St-Ursanne



**Spotlight of the week:** A little botanical excursion: Spring has arrived in St-Ursanne and the long-leaved helleborine (*Cephalanthera longifolia*) is blossoming behind the car port of the Mont Terri Project. This orchid is a characteristic species beech forests growing on calcarous soil. The tiny seeds can only germinate with the help of special root fungi (mycorrhiza). It often takes nine years for the plant to produce its first above-ground leaf. It is only after about ten years that it produces its first flowers.

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

- On Monday, May 11, D. Jaeggi (swisstopo) switched the Eh and pH sondes to monitoring mode.
- On Wednesday, May 13, J. Windisch (swisstopo) took two water samples from BCL-11.
- On Wednesday, May 13, D. Jaeggi (swisstopo) set all pH and Eh sondes back to bypass and increased the CO<sub>2</sub>-pressure in the reservoirs to 20 bar.
- On Wednesday, May 20, D. Jaeggi (swisstopo) switched all Eh and pH sondes to monitoring mode.
- On Friday, May 22, J. Windisch (swisstopo) switched all Eh and pH sondes back to bypass.

## DB-B (Deep Borehole to resolve the Mont Terri Anticline Hydrogeology) experiment

- On Monday, May 11, the Stump team cleaned the borehole with the casing shoe down to 774 m and pulled the casing up to 680 m as a protective casing for the logging.
- On Tuesday, May 12, F. Schwahn, D. Story (Terratec) and S. Schefer (swisstopo) performed logging below the protective casing. Unfortunately, most of the section was not accessible and despite multiple tries with moving the casing up and down, only the section from 695–720 m could be logged with the caliper. Borehole breakouts show diameters of more than 250 mm at several intervals and logging had to be stopped.
- On Wednesday, May 13, the Stump team pulled the protective casing, added the floating shoe for the cementation and pushed the casing down to 500 m (still inside the PQ casing) for the long weekend.
- From Monday to Thursday, May 18–21, we encountered multiple problems of stability inside the borehole and decided to ream the entire open hole section before setting the casing.
- On Friday, May 22, the Stump team cemented the HQ section down to 774 m. The decision was taken to keep the rods and the drill bit on target depth (774 m) and cement directly through the drilling rods. Next week, the remaining cement and the drill bit have to be drilled in NQ before attacking the last section inside the Schinznach Formation. (Figure 1 , Figure 2)

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

- On Monday, May 11, S. Schefer (swisstopo) on behalf of S. Tuñón (Amphos21) switched heater 2 to manual mode and activated resistor A.
- On Thursday, May 21, A. Caballero and S. Hidrani (Amphos21) did some maintenance and repaired the power issues at the FE heaters. (Figure 3)

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

- On Monday, May 11, S. Schefer (swisstopo) replaced both nitrogen bottles for the constant pressure injection on BFS-B2.

## IC-A (Corrosion of Iron in Bentonite) experiment

- On Tuesday, May 12, A. Ammon, A. Jakupi, D. Farsky (Solexperts) and A. Martin (Nagra) tried to extract modules from BIC-A1. After retrieving the packer, there was too much mud in the borehole (presumably from the water drilled in BFS-B14) to catch the modules. A new approach to clean the mud needs to be developed. (Figure 4)

## Mont Terri URL experiment

- On Tuesday, May 12, 40 palettes from different important drilling campaigns (Cargo Souterrain) were delivered by the Swiss army from Hochdorf to St-Ursanne. N. Rentsch, C. Lötscher, J. Windisch and S. Schefer (swisstopo) unloaded, labeled and stored the drill cores inside the National Core Storage. (Figure 5)

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

- On Wednesday, May 13, J. Windisch (swisstopo) refilled the HPT from shaft 1.
- On Thursday, May 21, J. Windisch (swisstopo) refilled the HPT from shaft 1.

## Varia

- On Tuesday, May 19, T. Burkhardt (Jura) and S. Schefer (swisstopo) installed 4 radon measuring devices in the Niches Closed Twin, Passwang, FE-A and MI, respectively. After three months exposure time the total radon will be measured. This is part of health and safety measures underground. The last measurements for radon were conducted more than 10 years ago.
- On Tuesday, May 19, C. Lötscher had his last day as a civil servant. We thank him for all the support we got and wish him all the best for the future!
- On Friday, May 22, the BKW grid went offline at 19:39. Lab and office were without electricity. At 20:15, electricity came back on, the lab was online again, but the transformer outside the office building blew a fuse, so FAC was still offline. J.

Windisch (swisstopo) arrived on site at 21:20 and checked the lab, where everything was working properly. S. Schefer (swisstopo) called the BKW intervention service and F. Guénon (BKW) arrived on site at 22:40. At 23:25 after replacing the fuse, it blew again and the lab went offline for another 2 minutes. J. Windisch performed another lab check and left the site at 0:30. BKW replaced the transformer on Saturday without any more outages to the lab. Please check your experiment's DAS!

## Visits

Day	Date	Group Name	Group Size	Visitors Guide
Mon	11.5.2026	Realschule Schaffhausen	18	H. Sager (Nagra)
Wed	13.5.2026	Gymnasium Laufen	28	C. Etter (swisstopo) H. Hauser (freelance)
Mon	18.5.2026	Texas AM University	24	R. Nicol (swisstopo)
Tue	19.5.2026	Oxford University	4	R. Schneeberger (Nagra)
Thu	21.5.2026	Nuclear Waste Management Organization Of Japan (NUMO)	4	R. Schneeberger (Nagra)

## Figures



Figure 1: DB-B: A new powerful pump to accomplish the challenging cement job (S. Schefer, swisstopo)



Figure 2: DB-B: Cementing the last section. (J. Windisch, swisstopo)



Figure 3: FE-M: Maintenance of the FE heaters (J. Windisch, swisstopo)



Figure 4: IC-A: Start of the retraction of the module. Mood still good. (S. Schefer, swisstopo)



Figure 5: Mont Terri URL: Unloading the trailer and the truck simultaneously from the middle (S. Schefer, swisstopo)