



Mont Terri Project

Underground Rock Laboratory

ANDRA ◦ BASE ◦ BGE ◦ BGR ◦ CHEVRON ◦ CRIEPI ◦ DOE ◦ ENRESA ◦ ENSI ◦ ETHZ/EPFL ◦ FANC ◦ GRS
HELMHOLTZ ◦ IRSN ◦ JAEA ◦ NAGRA ◦ NWMO ◦ NWS ◦ OBAYASHI ◦ SCK·CEN ◦ SWISSTOPO ◦ TOTAENERGIES

Mont Terri Rock Laboratory

Field report: November 28–December 4, 2022 (Phase 28)

CI-D (Diffusion Across 10-Year-Old Concrete/Claystone Interface) experiment

- On Friday, U. Mäder (RWC) was on site to take pH-measurements, to release pressure on the control interval and to take a water sample. Together with A. Eul (Eul GmbH) they discussed the next steps of the drilling campaign next year.

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

- On Thursday, J. Gisiger (Solexperts) was on site for maintenance work in the surface installation.

HE-E (In-Situ Heater Test in VE-Micro-Tunnel) experiment

- On Friday, F. Kober, M. Lukas (Nagra), U. Maeder (RWC), A. Eul (Eul GmbH) and S. Schefer (swisstopo) discussed the dismantling of the experiment and marked the positions of the two boreholes inside Ga98.

HT (Hydrogen Transfer in Opalinus Clay) experiment

- On Monday, Wednesday and Friday, T. Theurillat (swisstopo) took water samples from BHT-1.

SI-B (Seismic Imaging of Structures Below the Mont Terri Tunnel and Rock Laboratory) experiment

- On Tuesday, G. Graf and S. Schefer (swisstopo) marked the 24 borehole positions in the security gallery. These boreholes will be drilled in 10 days and equipped with geophones.

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

- On Tuesday and Friday, G. Graf and S. Schefer (swisstopo) refilled the high-pressure tank.
- From Tuesday to Friday, A. Jimenez, S. Jimenez and V. Martin (Amberg) continued the installation of DS03 in shaft 2 until layer L10. Due to next week's holidays in Spain, the installation will continue on December 12 only.
- On Tuesday and Thursday, G. Graf and P. Maeder (swisstopo) measured the location of the installed sensors (**Figure 1**).

Varia

- This week, the installation for the new transformer in Niche C started. T. Theurillat (swisstopo) drilled 5 boreholes for the ground wire, H. Anliker and M. Eigenmann (Borner AG) placed an insulating floor (**Figure 2**) and next week, the transformer will be installed.
- **Attention:** There will be an **interruption of power in the entire lab for several** hours during the installation of the new transformer! The generator will be running, providing electricity for all of the critical experiments and site management will be in the lab to oversee the procedure and intervene if necessary.

Visits

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|-----|------------|---|----|--------------------|
| Tue | 29.11.2022 | Ecole française internationale de Berne | 10 | M. Pretalli |
| Fri | 02.12.2022 | Fondation Serei, Bassecourt / La Chaux-de-Fonds | 22 | R. Nicol |
| Fri | 02.12.2022 | Jura Tourisme | 14 | C. Boner |
| Sat | 03.12.2022 | Besuchstag Nagra | 38 | H. Sager, O. Moser |

D. Jaeggi and S. Schefer, December 4, 2022



Figure 1: SW-A: G. Graf and P. Maeder preparing for the geodetic measurements inside shaft 1 (Photo: S. Schefer, swisstopo).



Figure 2: Varia: The frame for the insulating floor is in place. Next week, the new transformer will arrive in Niche C (Photo: S. Schefer, swisstopo).