



Mont Terri Project

Underground Rock Laboratory

ANDRA BGR CHEVRON CRIEPI DOE ENRESA ENSI FANC GRS HELMHOLTZ IRSN JAEA NAGRA NWMO OBAYASHI RWM SCK•CEN SWISSTOPO TOTAL

Mont Terri Rock Laboratory

Field report: February 18–24, 2019 (Phase 24)

Distribution

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Paul Scherrer Institute PSI: S. Churakov, M. Glaus, Th. Gimmi, L. van Loon
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Project Management

Swisstopo: C. Nussbaum (Project Manager), T. Theurillat (Site Manager), S. Schefer (Deputy Site Manager), D. Jaeggi (Research Associate)
GGT: F. Burrus (Project Engineer), Th. Küttel, R. Daneluzzi

Construction of Gallery 18

- The excavation is now continuing in Gallery18 and has reached GM203 by Friday, February 22.

BN (Bitumen-Nitrate-Clay interaction) experiment

- From Monday to Friday, S. Smets and W. Verwimp (SCK•CEN) worked on the BN experiment (**Figure 1**). They built in containers into interval #3 and changed the solution in interval #3. Further, they calibrated the Eh- and pH-electrode and built in a gas-trap into interval #3. They sampled solutions and restored circulation afterwards. Following, they built in clay loops in interval #3 and exchanged blocked valves.

MB-A (MineByTest 2018 Hydromechanic Characterization of the Sandy Facies Before and During Excavation) experiment

- From Tuesday to Friday, M. Komischke and B. Zehle (GRS) came on site in order to improve the pore water pressure monitoring system of the MB-A experiment (**Figure 2**). The work consisted in checking the existing mini-piezometer boreholes BMB-A13 to BMB-A17 for leaks and in sealing the boreholes again with resin. The second step consists in replacing existing mini-piezometer by drilling new boreholes. On Thursday and Friday, borehole BMB-A25 (diameter: 42 mm, last 0.5 m have a diameter of 20 mm, dip: -5.7°, length: 14.68 m) was drilled, which replaces borehole BMB-A17. The drilling and instrumentation work will continue next week.

MH (Long-Term Monitoring of Displacements in the Security Gallery and the Rock Laboratory) experiment

- From Monday to Wednesday, S. Condamin, D. Willi and N. Binetti (swisstopo) with the help of J. Obrecht (swisstopo) conducted another levelling campaign in the existing lab. On Friday, N. Binetti documented the existing reference points in the security gallery as a preparation for the renovation of the gallery.

TS (Testing Different Tunneling Support in Sandy Facies during Extension of Ga18) experiment

- On Tuesday night, February 19, A. Vlasek (Marmota Engineering) performed measurements using the fiber optical strain sensors in the floor of the 2nd and 3rd TS section in Gallery18.

Varia:

- J. Obrecht has fulfilled his civil duty at the Mont Terri and will now leave us. We thank him for his work and wish him all the best!

Visits

Day	Date	Number of persons	Name of the group	Guide
Tue	19.02.2019	25	Wandergruppe ERGOLZ	G. Fiedler
Wed	20.02.2019	11	Geo-Energy Lab, B. Lecampion - EPFL	C. Nussbaum
Fri	22.02.2019	6	Gruppe Raselli	R. Raselli



Figure 1: BN experiment: W. Verwimp and S. Smets (SCK•CEN) working on interval #3 (Photo: R. Raselli, swisstopo).



Figure 2: MB-A experiment: M. Komischke and B. Zehle (GRS) installing the drill rig at borehole BMB-A25 (Photo: R. Raselli, swisstopo).