



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 25 – March 3, 2019 (Phase 24)

Distribution

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Paul Scherrer Institute PSI: S. Churakov, M. Glaus, Th. Gimmi, L. van Loon
ETHZ: S. Löw, S. Wiemer, A. Zappone, M. Ziegler
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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 continues in Gallery18 and has reached GM217 by Friday, March 1st. The fracture density increased significantly the last 10 meters. This might correspond to the south-western prolongation of fault zone observed and mapped in the EZ-A niche. Since the Gallery 18 axis is perpendicular to the bedding and fault strike in the current section, the tunnel stability is much better compared to EZ-A niche (parallel to bedding strike).

CS-D (CO₂: Studying Caprock and Fault Sealing Integrity) experiment

- On Friday, March 1st, E. Huguenot and B. Helmlinger (Solexperts France) tested the fiber-optical system in the CS-D-boreholes.

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

- From Monday to Wednesday, M. Komischke and B. Zehle (GRS) were on site in order to improve the pore water pressure monitoring system of the MB-A experiment. Two more 42 mm diameter boreholes BMB-A23 (-11.3°, 15.4 m) and BMB-A24 (-5.7°, 10.0 m) were drilled, which replace Mini-piezometers in boreholes BMB-A15 and BMB-A13, respectively. The downwards dipping boreholes were equipped with mini-piezometers, resin was injected in order to seal off the intervals and Pearson water was injected for saturation of the intervals.

PF (Progressive Evolution of Structurally Controlled Overbreaks) experiment

- On Tuesday, February 25, T. Renz and M. Ziegler (ETHZ) joined the Mont Terri mapping crew to inspect the Gallery18 excavation area for a fault-rich place where it will be worthy of setting up Niche PF (niche 6).

Varia:

- On Friday, March 1st, the new swisstopo trainee Maud Galletti started her internship at the Mont Terri (**Figure 2**). We welcome her and wish her a good start! Maud has just finished her MSc in Earth Sciences at ETHZ and will stay with us for one year.
- On Thursday, February 28, R. Raselli finished his internship with swisstopo at Mont Terri. We thank Raeto for all the work he did, especially for the documentation of the excavation of Ga18 and wish him all the best for the future!

Visits

Day	Date	Number of persons	Name of the group	Guide
Tue	26.02.2019	8	Personnel laboratoire Hôpital du Jura	M. Pretalli
Thu	28.02.2019	4	Radioactive Waste Management Funding and Research Center RWMC	G. Fiedler/ A. Martin
Fri	01.03.2019	20	Personnel laboratoire Hôpital du Jura	M. Pretalli



Figure 1: MB-A: M. Komischke (GRS) preparing resin for the sealing of BMB-A24 (Photo: R. Raselli, swisstopo).



Figure 2: Varia: Our new trainee Maud Galletti (Photo by the former trainee Raeto Raselli, swisstopo).