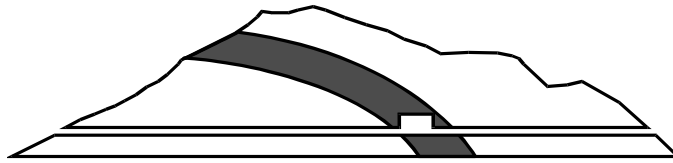


ANDRA BfE BGR CHEVRON CRIEPI DOE ENRESA ENSI ETH FANC GRS HELMHOLTZ  
IRSN JAEA NAGRA NWMO OBAYASHI RWM SCK-CEN SWISSTOPO TOTAL



# Mont Terri Project

## List of Technical Reports

Update: June 2019

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR96-01	Geol	Results of the Phase 1 Drilling Campaign.	Bossart	Bläsi, Mörj, Bossart	UNI Bern, GI

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR97-01	Geol	Results of the Phase 2 Drilling Campaign.	Bossart	Möri, Adler, Wermeille, Bossart	GI
TR97-02	WS	Basic Geochemical Data from Water Sampling (WS) Experiments, Phases 1 and 2.	Gautschi	Bossart (editor)	GI

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR98-01	Geol	Results of the Phase 3 Drilling Campaign.	Bossart	Mori, Cabal, Bossart, Adler, Wermelle	GI, DM Iberia SA
TR98-02 (converted from TN98-27rev)	HE-B	Heater (HE-B) Experiment: Preliminary Design and Test Plan.	Huertas	Fuentes-Cantillana, Garcia-Sineriz, Franco, Jockwer, Flach, Zimmer	AITEMIN, GRS
TR98-03 (converted from TN98-28)	HE-B	Heater (HE-B) Experiment: Scoping Calculation.	Huertas	Alonso	UPC
TR98-04 (converted from TN 98-41)	Geol	Mineralogical composition of Opalinus Clay at Mont Terri – a laboratory intercomparison.	Bossart	Mazurek	UNI Bern

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR99-01	Geol	Paleohydrological Study on the Surroundings of the Mont Terri Rock Laboratory.	Bossart	Wermeille, Bossart	GI
TR99-02	Geol	In Situ Stress in the Mont Terri Region Data Compilation.	Bossart	Wermeille, Bossart	GI
TR99-03 (converted from TN99-22)	Geol	Conditions géologiques et hydrogéologiques générales.	Tripet	Haarpaintner, Schaeren	Bureau Technique Norbert SA, Lausanne
TR99-04 (converted from TN99-27)	ED-C	Geophysical Characterisation of the Excavation Disturbed Zone (ED-C) Experiment Geoelectrical Characterization of the Opalinus Clay formation in the Underground Rock Laboratory of Mont Terri	Alheid	Yaramanci, Kiewer	TU Berlin

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2000-01 (converted from TN97-39)	HA, OP	Laboratory Experiments on Hydraulic and Osmotic Flow in Opalinus Clay.	Bossart	Harrington, Horseman	BGS
TR2000-02	RA	Rock Mechanics Analyses and Synthesis: Data Report on Rock Mechanics.	Blümling	Bock	Q+S Consult
TR2000-03	DI	Diffusion In-situ Experiment DI: field activity and data report.	Palut	Palut, Fierz, Eikenberg, van Dorp, Möri, Bossart, Aubry, Garcia-Gutierrez, Drouiller	ANDRA, Solexperts, PSI, nagra, GI, OEPN, CIEMAT
TR2000-04 (converted from TN 2000-33)	ED-C	Geophysical Characterisation of the Excavation Disturbed Zone (ED-C) Experiment: Geoelectrical Characterization of the Opalinus Clay Formation in the Underground Rock Laboratory of Mont Terri.	Alheid	Yaramanci, Kruschwitz, Maultzsch	TU Berlin
TR2000-05 (converted from TN 2000-61)	ED-C	Geophysical Characterisation of the Excavation Disturbed Zone (ED-C) Experiment: Seismic Investigations of the EDZ and Acoustic Emission Measurements in the New Gallery, Mont Terri Rock Laboratory.	Alheid	Schuster, Alheid, Böddener, Eichhorn, Spies, Heidrich	BGR
TR2000-06 (converted from TN 2000-31)	HE-B	Heater (HE-B) Experiment: Pre-Start Modifications and Auxiliary Test.	Huertas	Garcia-Sineriz, Franco, Fuentes-Cantillana	ATEMIN
TR2000-07 (converted from TN 2000-41)	FM-C	Flow Mechanism (FM-C) Experiment: Modelling He-3 concentration in a cross-hole experiment.	Meier	Gomez-Hernandez, Cassiraga, Guardiola-Albert	University Polytechnica de Valencia (UPV)
TR2000-08 (converted from TN 2000-42)	FM-C	Flow Mechanism (FM-C) Experiment: Three-dimensional model predictions of tracer evolution of HTO and iodine in the main fault.	Meier	Gomez-Hernandez, Guardiola-Albert	University Polytechnica de Valencia (UPV)

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2001-01	ED-B	EDZ in Clay Shale: Mont Terri Rock Laboratory.	Blümling	Martin, Lanyon	GeoScience
TR2001-02	HA	Synthesis of hydrogeological investigations at the Mont Terri site (Phases 1 to 5).	Marschall	Marschall, Croisé, Schlickenrieder, Boisson, Vogel, Yamamoto	Colenco
TR2001-03	RA	Rock Mechanics Analyses (RA) Experiment: Rock Mechanics Analyses and Synthesis: Conceptual Model of the Opalinus Clay.	Blümling	Bock	Q+S Consult
TR2001-04	Geol	Géométrie et cinématique d'une zone de chevauchement ("Main Fault") recoupant les Argiles à Opalinus dans le laboratoire souterrain du Mont Terri.	Bossart	Nussbaum, Bossart, Zingg, Inderbitzin, Steiger	GIFOWG/SGS
TR2001-05	DI	Mont Terri Project. In situ diffusion experiment (DI): synthesis report.	Palut	Tevissen, Soler	CEA

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2002-01 (converted from TN 2002-06)	EB	Engineered Barrier (EB) Experiment: EDZ Geophysical Characterisation. Detection and Characterisation of the Disturbed Rock Zone in Claystone with Complex Valued Geoelectrics, Mont Terri Rock Laboratory.	Alheid	Kruschwitz, Yaramanci	TU Berlin
TR2002-02 (converted from TN 2002-08)	ED-C	Geophysical Characterisation of the Excavation Disturbed Zone (ED-C) Experiment: Acoustic emission measurements during the excavation of the EB niche – a mine-by experiment, Mont Terri Rock Laboratory.	Alheid	Spies, Heidrich, Kruschwitz	BGR
TR2002-03 (converted from TN 2002-44)	EB	Engineered Barrier (EB) Experiment and Geophysical Characterisation of the Excavation Disturbed Zone (ED-C) Experiment: Seismic Investigation of the EDZ in the EB niche.	Alheid	Schuster, Alheid	BGR



Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2003-01	OP	An experimental and behaviour study of chemico-osmotic effects in the Opalinus Clay of Switzerland.	Bossart	Noy , Horseman, Harrington, Bossart, Fisch	BGS, GI, Solexperts
TR2003-02	DI-A	Long-term Diffusion Experiment (DI-A): Diffusion of HTO, <sup>36</sup> Cl-, I- and <sup>22</sup> Na+ in Opalinus Clay parallel and perpendicular to the bedding plane under laboratory conditions.	Wersin	Van Loon Müller Ylera Hernandez	PSI, Ciemat
TR2003-03	WS-A to WS-G	Geochemistry of Water in the Opalinus Clay Formation at the Mont Terri Laboratory.	Gautschi	Pearson, Arcos, Bath, Boisson, Fernández, Gabler, Gaucher, Gautschi, Griffault, Hernán and Waber	Pearson
TR2003-04 (converted from TN2004-87)	LT	LT Experiment: Strength tests on cylindrical specimens, documentation and evaluation (phases 8 and 9).	Pfischke	SchnierStührenberg	BGR
TR2003-06	DI-A	Long-term Diffusion Experiment (DI-A): Diffusion of HTO, I-, <sup>22</sup> Na+ and Cs+: Field activities, data and modelling.	Wersin	Wersin, Baeyens, Bossart, Cartalade, Dewonck, Eikenberg, Fierz, Fisch, Gimmi, Grolimund, Hernán, Mbrí, Savoye, Soler, Van Dorp, Van Loon	PSI

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2004-02	EB	EB: Engineered Barrier Emplacement Experiment in Opalinus Clay (EB) Experiment: Seismic Long Term Observation in the EB Niche FIKW-CT-00-00017 Seismic Characterisation of the EDZ, WP 7 / T71, Deliverable D16 (EDZ) – 5-6 (Appendix D written in German)	Mayor	Schuster Alheid	BGR

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2005-02	HE-C	HE-C synthesis.	Wileveau	Wileveau	ANDRA
TR2005-03	HE-D	HE-D experiment: synthesis report	Wileveau	Wileveau	ANDRA

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2006-01	HE-D	THM behaviour of host rock (HE-D) Experiment: Study of Thermal effects on Opalinus Clay. Synthesis.	Wileveau	edited by Wileveau and Rothfuchs	ANDRA
TR2006-02	DI-A	Long-term Diffusion (DI-A) Experiment: Diffusion of HTO, Br-, I-, Cs+, 85Sr2+ and 60Co2+ in a Clay Formation: Results and Modeling from an In-Situ Experiment in Opalinus Clay	Wersin	Wersin, Soler, Van Loon, Eikenberg, Baeyens, Grolmund, Gimmi, Dewonck	NAGRA

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2007-01	HA	Hydrogeologic Analyses and Synthesis (HA) Experiment); Two-phase flow analysis of gas test in Opalinus Clay Core Specimen: Complementary Analysis	Marschall	Poller, Mayer and Croisé	Colenco
TR2007-02	HE-D	HE-D experiment: Thermal Effects on the Opalinus Clay. A Joint Heating Experiment of ANDRA and GRS at the Mont Terri URL.	Wileveau	Zhang, Rothfuchs, Jockwer, Wieczorek, Dittrich, Müller, Hartwig, Komischke	GRS
TR2007-03	PC	Porewater Chemistry (PC) Experiment: Reactive transport simulations	Wersin	Alt-Epping Gimmi Waber	UNI BERN
TR2007-04	HE-D	HE-D experiment: Influence of bedding planes (IFC). Final report. Deliverable D4.2.15.	Wileveau	Popp Salzer	IFG
TR2007-05 (converted from TN2007-45)	LT	LT Experiment: Strength and Deformation of Opalinus Clay	Piischke	Gräsle Piischke	BGR
TR2007-06	VE	Ventilation Test (VE) Experiment: Final activity report on high resolution seismic investigations within the VE Experiment	Mayor	Schuster	BGR

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2008-01	VE	Ventilation Test (VE) Experiment: Final activity report for ENRESA. WP 4.3 The Ventilation Experiment Phase II (Synthesis Report) DELIVERABLE (D-N°:4.3.18) NF-PRO Contract Number: F16W-CT-2003-02389	Mayor	Mayor Velasco	ENRESA
TR2008-02	SF	SF (Self sealing of fault and paleo-fluid flow): Synthesis report	Traber	De Haller	UNI BERN
TR2008-03	LT	Laboratory Testing of Opalinus Clay (LT) Experiment: Comparison of Opalinus Clay and Callovo-Oxfordian clay-stone with respect to mechanical strength and carbonate microfabric	Pfischke	Klinkenberg Dohrmann Kaufhold Siegesmund	BGR
TR2008-04	RA	RA Experiment: Updated Review of the Rock Mechanics Properties of the Opalinus Clay of the Mont Terri URL based on Laboratory and Field Testing.	Vietor	Bock	Q + S Consult
TR2008-06 TR2008-06rev	PC PC-CGD	Geochemistry of pore waters in Opalinus Clay at Mont Terri: experimental data and behaviour Status Report including outcome from Workshop in Bure (F), Nov. 7-8, 2007	Leupin	P. Wersin E. Gaucher Th. Gimmi O. Leupin U. Mäder F. J. Pearson T. Thoenen Ch. Toumassat	NAGRA

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2009-02	MB	MB experiment: Mine-by test. Synthesis report	Vietor	Vietor et al.	NAGRA
TR2009-03	SB	SB experiment: Self-sealing Barriers of Clay/Sand Mixtures. Synthesis report.	Rothfuchs	Rothfuchs et al.	GRS
TR2009-04	DI-A	Long-term Diffusion (DI-A) Experiment: DI-A2: Diffusion of HTO, Br-, I-, Cs+, 85Sr2+ and 60Co2+; Field activities, data and modelling	Leupin	P. Wersin C.A.J. Appelo B. Baeyens P. Bossart S. Dewonck J. Eikenberg T. Fierz H.R. Fisch T. Gimmi D. Grollmund O.X. Leupin A. Mörj J. M. Soler F. van Dorp L. Van Loon	NAGRA, ANDRA, PSI, swisstopo, Solexperts, CIMNE
TR2009-06	PC	PC (Porewater chemistry);experiment: synthesis report	Leupin	O. Leupin P. Wersin S. Mettler U. Mäder E.C. Gaucher A. Vinsot P. De Cannière H.E. Gäbler L. Eichinger T. KUNImaro K. Kiho	NAGRA University of Berne Gruner Ltd. Solexperts Ltd. BRGM ANDRA SCK-CEN BGR Hydroisotop JAEA CRIEPI
TR2009-07 (converted from TN2009-56)	LT	Laboratory Testing (LT) Experiment: Mechanical Behavior of Opalinus Clay, Final report from Phases 6 – 14	Piischke	Gräsle Piischke	BGR

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2010-01	Geol	Time-dependent behaviour of selected boreholes by performing video-observations (part of PhD thesis Seeska)	Nussbaum	Seeska	TU Clausthal



Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2011-01	DR	DR (Diffusion and retention): synthesis report	Leupin	Wersin et al	UNI Bern, NAGRA, PSI, ANDRA, IRSN
TR2011-03	DR-A	DR-A experiment (Retention, diffusion and perturbations): Reactive Transport Modelling of In-situ Diffusion Experiments for the Mont Terri Project	Leupin	U. Mayer K. MacQuarrie Leupin	UBC, NAGRA, NWMO
TR2011-05	SE-H	SE-H (Self-sealing with heat (Timodaz): Synthesis report	Vietor	Vietor et al.	NAGRA
TR2011-06	SR	SR (Low pH shotcrete for rock support): Synthesis report	Cloet	Fries et al.	NAGRA, VSH

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2012-05	DS	Geological documentation of BDS-5 borehole at Derrière Mont Terri	Vietor	Jaeggi et al.	Swisstopo, NAGRA
TR2012-06	DS	DS (Determination of stress): synthesis report	Vietor	Vietor et al.	NAGRA, BGR, NWMO, Chevron, CRIEPI
TR2012-17 (converted from TN2012-91)	LT-A	LT-A Experiment: Mechanical Behaviour of Opalinus Clay	Pfischke	Gräsle, Kaufhold, Pfischke	BGR
TR2012-20	MA	MA (Microbial activity): Synthesis report	Schwyn	Schwyn et al.	NAGRA, ANDRA, BGR, NWMO, EPFL, AECL, UNI Dresden
TR2012-38	HG-C/ HG-D	Modelling Gas and Water Flow through Dilating Pathways in Opalinus Clay. The HG-C and HG-D Experiments	Wieczorek	Martin Navarro	GRS

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2013-01	FE	Gallery FE: Documentation of the engineering part.	Müller	Daneluzzi	GGT

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2014-02	EB	Engineered Barrier Emplacement Experiment in Opalinus Clay: "EB" Experiment Horizontal borehole results (geophysics, hydro test, laboratory tests) (DELIVERABLE-N°: D2.1-1)	Mayor	Schuster et al.	BGR
TR2014-03	EB	Engineered Barrier Emplacement Experiment in Opalinus Clay: "EB" Experiment EDZ seismic results - seismic transmission measurements (DELIVERABLE-N°: D2.1-6)	Mayor	Schuster et al.	BGR
TR2014-04	EB	Engineered Barrier Emplacement Experiment in Opalinus Clay: "EB" Experiment Geoelectrical monitoring of dismantling operation (DELIVERABLE-N°: D2.1-9)	Mayor	Furche et al.	BGR
TR2014-05	HE-E	HE-E experiment: Seismic data report on EDZ and EBS evolution (Deliverable N°: D2.2-10)	Gaus	Schuster et al.	BGR
TR2014-06	LT-A	Title follows	Piischke	Gräsle et al.	BGR
TR2014-07	SO	Biostratigraphy of the Basal Part of the Opalinus-Ton at the Mont Terri rock laboratory, Switzerland	Jaeggi	Reisdorf et al.	NMBE
TR2014-08	IS-D	Rock Stress Measurements at the Mont Terri Rock Laboratory (IS-D)	Heusermann	Heusermann et al.	BGR

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2015-02	Ga18	New research programme for the extension of the Gallery 2018: Strategic report	Bossart	Nussbaum	swisstopo

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2016-02	SO	SO Experiment: Litho- and biostratigraphy of the 250 m deep borehole Mont Terri BDB-1 through the Opalinus Clay and bounding formations, St. Ursanne, Switzerland	Jaeggi	Reisdorf	NMBE
TR2016-04	LT-A	LT-A Experiment: Strength and Deformation of Opalinus Clay: Data report from phase 20 and 21	Gräsle	Gräsle	BGR

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2017-01	DB-A	Mont Terri DB-A Experiment: Comparison of Pore-water Investigations Conducted by Several Research Groups on Core Materials from the BDB-1 Borehole	Kennel	M. Mazurek, T. Al, M. Celejewski, I.D. Clark, A.M. Fernandez, L. Kennel-Morrison, J.M. Matray, S. Murselli, T. Oyama, S. Qiu, D. Rufer, G. St-Jean, H.N. Waber & C. Yu	Uni Bern and others
TR2017-02	DB-A	Porewater Geochemistry, Method Comparison and Opalinus Clay-Passwang Formation Interface Study at the Mont Terri URL	Kennel	H.N. Waber and D. Rufer	Uni Bern
TR2017-05	Geology	3D structural model of the Mont Terri structure, Northwestern Swiss Jura	Nussbaum	T. Caer, C. Nussbaum, A. Kloppenburg, B. Maillot, S. Schefer	GEC
TR2017-06	GD	Intercomparison of CEC methods within the GD project	Traber	J. Hadi, P. Wersin, M. Mazurek, H.N. Waber, M. Marques Fernandes, B. Baeyens, M. Honny, M. De Craen, L. Frederickx, R. Dohrmann, A. M. Fernández	UNI Bern PSI SCK-CEN BGR CIEMAT

Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2018-03	GD	GD-Experiment: Mineralogy of carbonate and sulphate minerals in the Opalinus Clay and adjacent formations	Traber	Pekala/Wersin	PSI/UNIBE



Number of TR	Experiment	Title of TR	Responsible	Authors	Organisation Company
TR2019-03	FE	Implementation of the Full-scale Emplacement Experiment at Mont Terri: Design, Construction and Preliminary Results	Garitte	NAGRA	NAGRA