

Final Report on Supplementary Comparison EURAMET.M.P-S14 of Hydraulic Gauge Pressure Standards from 50 MPa to 1000 MPa

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Abstract

The EURAMET.M.P-S14 supplementary comparison was organized for the purpose of determination of the degree of equivalence of the national standards for static high-pressure measurement over the range 0.05 GPa to 1 GPa. A collection of eight selected high-pressure transducers with different ranges was used as a transfer standard. Five National Metrology Institutes (NMIs) from EURAMET participated in this comparison – PTB (Germany), SMU⁵ (Slovakia), CMI (Czech Republic), LNE (France), METAS (Switzerland), and all participants reported independent traceability chains to the SI. The measurements were provided at prescribed reference pressure and temperature conditions. The comparison reference value (CRV) and its uncertainty were determined separately at each pressure point, pressure transducer and particular conditions (up- and downward pressure measurement and pressure range). All the CRV results were summarised to determine the degree of equivalence for each laboratory at each pressure. The calculated degrees of equivalence show all the laboratories to be consistent at all pressures (see Appendix A6). METAS has measured, but withdrawn its results at (600, 700 and 800) MPa. Moreover, SMU withdrew their results as well. The uncertainties of the laboratories' measurements were, in many cases, much higher than the uncertainties of the laboratories' standards, which indicate problems in calibration of high pressure transducers at high pressures.

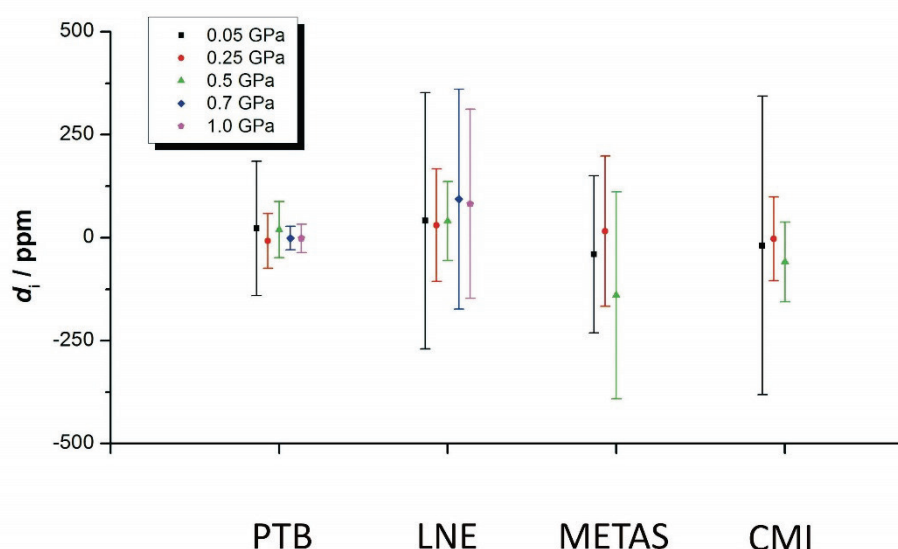


Figure 1. Degrees of equivalence with respect to the CRV of each laboratory averaged over all pressure transducers of appropriate pressure range. The error bars show the expanded uncertainty of the degree of equivalence for each calibrated value.

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1. Introduction

This comparison was embedded into the Jointed Research Project (JRP) IND03 “High pressure metrology for industrial applications” (HighPRES), carried out within the European Metrology Research Programme (EMRP), as negotiated in the technical documents of this EMRP JRP. Within EURAMET, it was registered as EURAMET project 1306. In this comparison, the equivalence of the participants' pressure standards should be tested in the range up to 1.0 GPa with a transfer standard made of eight independent high precision high-pressure transducers.

Simultaneously, an investigation of the performance of the underlying transducers with respect to testing of typical parameters like drift, hysteresis, sensitivity, repeatability, long-term stability and load cycling effects was carried out and published in [1].

PTB was agreed to be a pilot laboratory in this comparison, i.e. PTB proposed the technical protocol of the comparison, provided the transfer standard, organised the comparison, evaluated the measurement uncertainty of the participants, performed the data analysis, and composed the report for the comparison.

2. List of Participants, Facilities Used, Circulation Scheme

The transfer standard was calibrated at PTB at the beginning and end of the comparison. Meanwhile, it circulated around CMI, SMU, LNE and METAS. Measurements were carried out in two different pressure ranges, up to 0.5 GPa and up to 1 GPa. Laboratories capable of measuring up to 0.5 GPa, i.e. CMI and SMU, performed measurements in this measurement range. Laboratories with a measurement capability up to 1 GPa, i.e. PTB, LNE and METAS, performed the measurements two times, in the range of 0.5 GPa and, additionally, in the 1 GPa range.

Table 1. Participants, facilities used, reference standard uncertainty, date of measurements, and independence of the participant's traceability from other NMIs.

Participant	Type of reference standard	Relative standard uncertainty in ppm at $p_{\max}$	Date of measurements	Independent traceability?
PTB	Pressure balance: Harwood, modified, PCU: Desgranges et Huot, Operation mode: controlled clearance	29 at 0.5 GPa 52 at 1.0 GPa	(i) April 2013 and (ii) May 2014	yes
CMI	Pressure balance, PCU: DHI/Fluke, Operation mode: free deformation	32 at 0.5 GPa	May 2013	yes
LNE	Pressure balance: Desgranges et Huot, Operation mode: controlled clearance	26 at 0.5 GPa 51 at 1.0 GPa	September-November 2013	yes
METAS	Pressure balance, PCU: DHI, Operation mode: free deformation	100 at 0.5 GP	December 2013-February 2014	yes
	Pressure multiplier: Desgranges et Huot, Operation mode: controlled clearance	145 at 0.8 GPa ¹		yes

Details of the reference standards of the participants are presented in Appendix A1.

¹ METAS could reach only 0.8 GPa due to leakage problems

Unfortunately, METAS could reach only 0.8 GPa due to leakage problems at pressure generation. Due to too high piston fall-rates, their measurements beyond 0.5 GPa were withdrawn. SMU decided to withdraw their contribution due to internal reasons.

3. Transfer Standard

PTB developed and provided the transfer standard (TS) for the comparison. It consisted of eight high pressure transducers of two manufacturers, HBM (transducers S1 to S4) and WIKA (transducers S5 to S8), see Figure 2. Thus, from each manufacturer, there were four pressure transducers with different pressure ranges: one with (0 – 0.5) GPa, one with (0 – 1.0) GPa and two with (0 – 1.5) GPa pressure range.

The whole device was enclosed in an aluminium box with a Plexiglas window and had dimensions $85 \times 63 \times 15 \text{ cm}^3$. Additionally, for the read-out of the HBM transducers (type A), an HBM measuring-amplifier DMP40S2 (range 2.5 mV/V, resolution $10^{-6} \text{ mV/V} - 1 \text{ ppmFS}$) with several measuring channels was circulated as well, whereas the WIKA transducers (type B) could be read out directly via USB, see Tables 2 and 3. Appropriate, PTB-designed software for the read-out of the transducers was distributed to the participants.

It was required that the TS is set up in horizontal position. The reference level of the TS was represented by the reference lines on both sides of the TS metal case corresponding to the height position of the connecting pipe. The connection type for the connecting pipe was equivalent to the high-pressure connector of company SITEC for 3/8-inch tubing. The TS was transported in a single box made of wood.

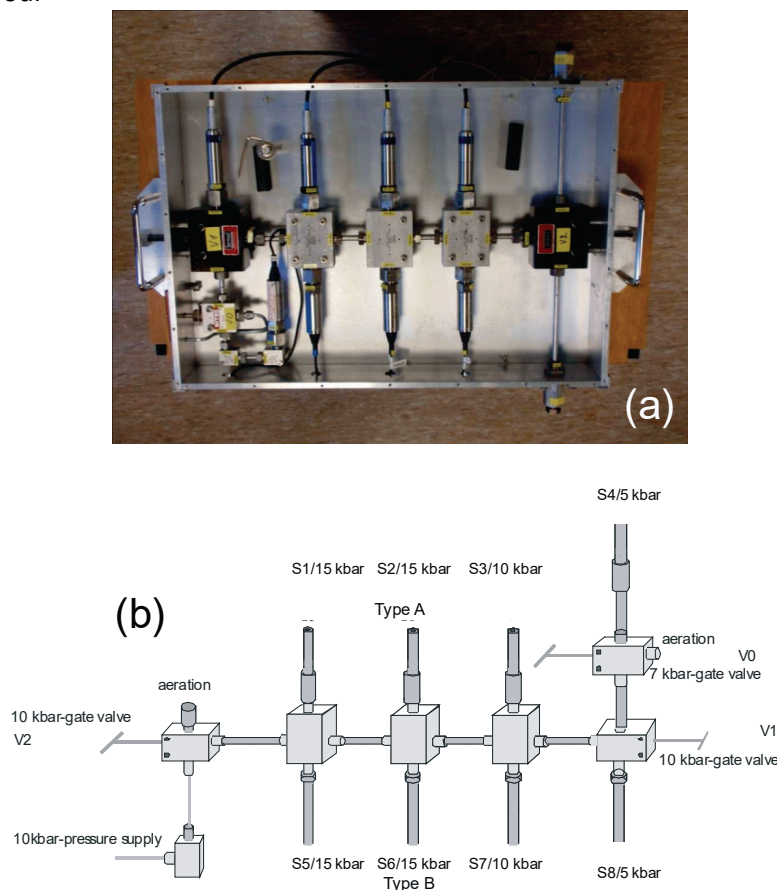


Figure 2. Image (a) and block diagram (b) of the transfer standard.

Table 2. Specifications of HBM pressure transducers (type A).

Type	1-P3TCP
Manufacturer	Hottinger Baldwin Messtechnik GmbH (HBM)
Pressure type	Absolute pressure
Principle of measurement	Foil strain gauge
Nominal sensitivity	1 mV/V over measurement range
Measuring range	0.5 GPa / 1.0 GPa / 1.5 GPa

Table 3. Specifications of WIKA pressure transducers (type B).

Type	HP-2-S
Manufacturer	Alexander Wiegand SE & Co. KG (WIKA)
Pressure type	Absolute pressure
Principle of measurement	Thin-layer strain gauge
Nominal sensitivity	1 kPa
Measuring range	0.5 GPa / 1.0 GPa / 1.5 GPa

4. Comparison Protocol

Measurement conditions and procedures were specified in the Technical protocol.

(i) Preparation

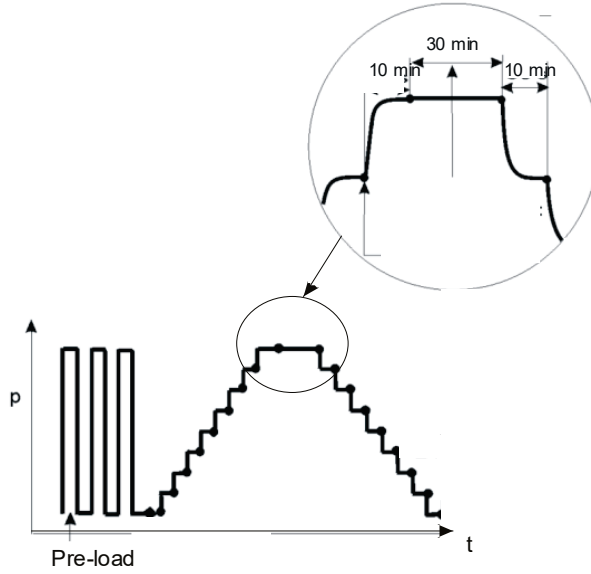
- clean Sebacate oil as a working fluid
- normal operating temperature, recommended: 20 °C
- attach the connecting plugs to the transfer standard with a torque of 100 Nm
- TS should be set up in horizontal position

(ii) Head correction

- head correction by height difference, i.e. the pressure generated by the laboratory standard (LS) at the reference level of the TS, P_{LS} , should be calculated
- height difference between the reference levels should be kept as low as possible

(iii) Calibration procedure

- two different pressure ranges, up to 0.5 GPa and up to 1 GPa. Laboratories capable of measuring up to 0.5 GPa should perform measurements in this measurement range. Laboratories with a measurement capability up to 1 GPa should perform measurements two times, in the range of 0.5 GPa and 1 GPa.
- one complete measurement cycle in each pressure range consists of 22 measurements – 11 for ascending and 11 for descending pressures, see visualisation of measurement cycles:



- pressures generated by the LS should not deviate from the nominal pressures by more than 0.1%

Details of the measurement procedures according to the technical protocol are described in Appendix A2.

5. Method of Comparison, Data Acquisition and Reporting

At each pressure point, the TS was in a pressure equilibrium with the LS. The difference between the TS output (converted to pressure) and the LS pressure was used as a measure for the comparison. A computer program was provided for readings of all 8 transducers. With the program, the readings of the 8 transducers were continuously taken and recorded from the start of the program until its finish. In addition, after the TS and LS came into pressure equilibrium and all condition specified in the Technical protocol were achieved, a record function of the program could be initiated for taking 7 readings from each of the 8 transducers to be used for the comparison purpose. Normally, it took less than 3 minutes for the 7×8 records. From the 7 readings, the average (C) and its standard deviation ($\sigma(C)$) were calculated for each transducer at each pressure point by a participant and were reported together with the respective pressure value of its laboratory standard (P_{LS}) and its standard uncertainty ($u(P_{LS})$) at this pressure point. In addition, the ambient pressure (P_{amb}), temperature of the transfer standard (T_{TS}) and the local time of the measurement were reported.

6. Reported Results and their Processing

Results reported by the participants for each measurement cycle are given in Appendix A3. They were processed by the pilot laboratory in the following way.

For each participant, each pressure transducer, in each measurement cycle, a zero pressure correction was applied by subtracting the value of C measured at zero pressure in the pressure-upwards series, $C(p_{up}=0)$, from all subsequent values $C(p)$:

$$C_{corr}(p) = C(p) - C(p_{up} = 0). \quad (1)$$

The corrected readings ($C_{corr}(p)$) were transformed to pressures of the TS (p_{TS}) in MPa by multiplying them by transformation factor (F),

$$p_{TS} = F \times C_{corr}(p), \quad (2)$$

with F being equal to 1500 MPa/(mV/V) for transducers 1 and 2, 1000 MPa/(mV/V) for transducer 3, 500 MPa/(mV/V) for transducer 4 and 0.1 MPa/bar for transducers 5 to 8.

The result of each participant obtained in cycle c (x_c) was expressed as the difference between the pressures of the TS and the laboratory standard (LS):

$$x_c = p_{TS} - p_{LS}. \quad (3)$$

The average (x) and its standard deviation ($\sigma(x)$) of the results in four cycles were calculated:

$$x = \sum_{c=1}^4 x_c / 4, \quad \sigma(x) = [\sum_{c=1}^4 (x_c - x)^2 / 3]^{0.5}. \quad (4)$$

7. Drift of the Transfer Standard

PTB results obtained at the beginning and the end of the comparison, in 2013 and 2014, were analysed to determine the drift of the TS. This analysis has shown, in particular, comparison of the drift rates of the (0.5 and 1) GPa measurements and of the results at increasing and decreasing pressures, that the changes of the 8 pressure transducers are rather irregular, so that an assumption of a linear changes in properties of the transducers between 2013 and 2014 can hardly be justified. Also, an analysis of the comparison results considering a linear drift has shown no improvement in laboratories' agreement. Therefore, it was decided to handle the difference in the PTB results 2013 and 2014 as an additional uncertainty contribution due to the TS drift, u_{Drift} :

$$u_{\text{Drift}} = F \times (x_{\text{PTB},2014} - x_{\text{PTB},2013}) / 2\sqrt{3}. \quad (5)$$

This uncertainty contribution for the 0.5 GPa and 1 GPa measurements is given in Appendix 4.

8. Uncertainty due to the Transfer Standard

Uncertainty of the transfer standard, u_{TS} , was determined for each participant, each pressure transducer, in each measurement cycle and for each pressure taking into account four components:

- the standard deviation of the four x_c values, $\sigma(x)$, calculated according to (4);
- uncertainty due to the TS drift, u_{Drift} , as defined above by (5);
- the zero deviation of the TS, u_{ZeroDev} ;
- and the instability of the TS, u_{Instab} , taken as the resolution, u_{Resol} , or the fluctuation of readings, u_{Fluct} , whichever was greater,

$$u_{\text{Instab}} = \max(u_{\text{Resol}}; u_{\text{Fluct}}). \quad (6)$$

The zero deviation was calculated as

$$u_{\text{ZeroDev}} = \max\{\text{abs}[x_1(p) - x_1(p_{\text{up}} = 0)], \dots, \text{abs}[x_4(p) - x_4(p_{\text{up}} = 0)]\} / (2\sqrt{3}). \quad (7)$$

The fluctuation of readings was calculated as

$$u_{\text{Fluct}} = \sum_{c=1}^4 F \times \sigma_c(C) / 4, \quad (8)$$

with $\sigma_c(C)$ given as $\sigma(C_i)$ in Appendix A3, c being the measurement cycle number.

Finally, the uncertainty of the transfer standard was calculated as

$$u_{TS} = [\sigma^2(x) + u_{\text{ZeroDev}}^2 + u_{\text{Instab}}^2 + u_{\text{Drift}}^2]^{0.5}. \quad (9)$$

Results for u_{Resol} , $\sigma(x)$, u_{ZeroDev} , u_{Instab} and u_{TS} are given in Appendix A5. These results show that the uncertainty of the TS pressure transducers was very different in the laboratories' measurements (A5.4) which to high extent is caused by very different fluctuations of readings observed by the laboratories in 1 GPa measurements (A5.3).

9. Data Processing and Computation of the degree of equivalence

When developing a method for calculation of the degree of equivalence, the following specific features of this comparison were considered.

- The TS comprises 8 pressure transducers. Each of them has different properties at increasing and decreasing pressures. The same pressure transducer has different properties when used in 0.5 GPa and 1 GPa measurements. I.e., only results of laboratories can be directly compared which were

obtained for the same pressure transducer, in the same pressure change direction and in the same maximum pressure comparison.

- Consequently, the comparison provided extensive information condensed in form of x and u_{TS} as defined by eqs. (4) and (9). With this information, at each nominal pressure value, 16 comparison reference values (CRV), (8 pressure transducers, 2 pressure change directions) can be generated for the 0.5 GPa, and 12 CRV (6 pressure transducers, 2 pressure change directions) for the 1 GPa measurements.
- More specifically, as some nominal pressures of the 0.5 GPa and 1 GPa measurements coincide, the following number of CRV can be obtained at that pressures: 50 MPa – 16, 100 MPa – 28, 150 MPa – 16, 200 MPa – 28, ..., 500 MPa – 28, 600 MPa – 12, 700 MPa – 12, ..., 1000 MPa – 12.
- For each of these CRV, a participant deviation to it and the uncertainty of this deviation can be calculated, which present the degree of equivalence for this particular CRV.
- As the purpose of the comparison is to determine the degree of equivalence at each pressure (not for a particular pressure transducer or a pressure change direction, etc.), a procedure was required to derive one degree of equivalence from the numerous degrees of equivalence available at the same pressure.

The procedure was realised using the following approaches and assumptions:

- ❖ To calculate each particular CRV (R_j), the method by Cox [2] was used (uncertainty weighted mean).
- ❖ Results of the NMIs were considered as independent (not correlated).
- ❖ Results of an NMI obtained in n measurements at the same pressure were considered as fully correlated. It is justified by the observation that the performance of all 8 transducers in 0.5 GPa and 6 pressure transducers in 1 GPa measurements, e.g. fluctuation of reading, is strongly correlated.

Then, the following relations apply at each nominal pressure.

With designations and definitions:

- x_{ij} – result of NMI i for measurement j according to (4),
- $i = 1 \dots N$, N being equal to 4 at pressures (50-500), and 2 at (600-1000) MPa,
- $j = 1 \dots n$. At pressures of $p = (50, 100, 150, \dots, 1000)$ MPa, $n = 16, 28, 16, \dots, 12$ as described above,
- $u(x_{ij})$ – uncertainty of x_{ij} , $u(x_{ij}) = [u_{TS}^2 + u_{LS}^2]^{0.5}$, u_{TS} calculated according to (9) and u_{LS} being uncertainty of the LS given in the tables of Appendix A3,
- $u_{ij} = u^2(x_{ij})$,
- R_j – CRV of measurement j ,
- $u(R_j)$ – uncertainty of R_j ,

$$R_j = \frac{\sum_{i=1}^N x_{ij}/u_{ij}}{\sum_{i=1}^N 1/u_{ij}}, \quad (10)$$

$$V_j = u^2(R_j) = \frac{1}{\sum_{i=1}^N 1/u_{ij}}, \quad (11)$$

The deviation of the result j of laboratory i from the CRV, d_{ij} , and its uncertainty, $u(d_{ij})$, are

$$d_{ij} = x_{ij} - R_j, \quad (12)$$

$$u(d_{ij}) = (u_{ij} - V_j)^{0.5}. \quad (13)$$

Therefore, at each pressure, for each NMI, its deviation from each of n reference values R_j is presented by a value with its associated uncertainty. A calculation of a mean CRV of n R_j values is meaningless because each of them is individual in respect to the individual pressure transducers and measurement conditions. However, deviations d_{ij} and their uncertainties $u(d_{ij})$ can be processed to determine a mean deviation $\bar{d}_i$ with its uncertainty $u(\bar{d}_i)$. An analysis of data presented in Appendix A5 shows a

very high variability in the TS uncertainties not only between the NMIs but also for the same NMI in different measurements. For this reason, to minimise the uncertainty of the mean deviation, it was calculated as a weighted mean:

$$\bar{d}_i = \frac{\sum_{j=1}^n d_{ij} / (u_{ij} - V_j)}{\sum_{j=1}^n 1 / (u_{ij} - V_j)}. \quad (14)$$

If n results of the same NMI are correlated as assumed above, the uncertainty of $\bar{d}_i$ is given by:

$$u(\bar{d}_i) = \frac{\sum_{j=1}^n 1 / (u_{ij} - V_j)^{0.5}}{\sum_{j=1}^n 1 / (u_{ij} - V_j)}. \quad (15)$$

From the definition of the CRV as the weighted mean, it follows that deviations from the weighted mean d_i should fulfil the following condition:

$$\frac{\sum_{i=1}^N d_i / u^2(d_i)}{\sum_{i=1}^N 1 / u^2(d_i)} = 0. \quad (16)$$

However, it can be shown that, in dependence on the results obtained by an NMI in different measurements at the same nominal pressures, in particular when some results lie below and some above R_j and the uncertainties of the single measurements of the same NMI and/or of different NMIs strongly vary – it was the case in this comparison – the $\bar{d}_i$ values may be shifted by some value Δ . The deviations corrected for the shift are then given as

$$d_i = \bar{d}_i + \Delta \quad (17)$$

with

$$\Delta = - \frac{\sum_{i=1}^N \bar{d}_i / u^2(\bar{d}_i)}{\sum_{i=1}^N 1 / u^2(\bar{d}_i)} \quad (18)$$

and $u(d_i) = u(\bar{d}_i)$. The expanded uncertainties, $U(d_i)$, were taken as $U(d_i) = 2 \times u(d_i)$.

10. Degrees of Equivalence and discussion

Shift Δ calculated by (18) and the degrees of equivalence are presented in table 4.

Table 4. Relative shift correction (Δ), relative deviations from the reference values (d_i/p) and expanded relative uncertainties of these deviations ($U(d_i)/p$), all in 10^{-6} .

p / MPa	Δ/p	PTB		LNE		METAS		CMI	
		d_i/p	$U(d_i)/p$	d_i/p	$U(d_i)/p$	d_i/p	$U(d_i)/p$	d_i/p	$U(d_i)/p$
50	-6	22	163	41	311	-41	191	-19	363
100	0	-4	105	48	187	-24	171	-5	185
150	-2	-11	88	28	107	4	156	-30	156
200	-6	5	78	13	120	-40	175	-8	135
250	2	-8	66	30	137	16	182	-3	102
300	-5	6	61	18	100	-57	190	-16	94
350	-2	-13	77	29	81	-4	196	-20	94
400	-8	6	53	35	99	-104	227	-31	95
450	-2	-10	84	41	89	-10	227	-31	94
500	-11	19	69	40	96	-140	252	-59	97
600	16	-5	58	70	222				
700	16	-1	29	94	267				
800	14	0	25	55	550				
900	12	0	28	23	465				
1000	31	-2	34	82	229				

Graphs of the degrees of equivalence are presented in Appendix A6.
The uncertainties of the LS and TS are collected in table 5.

Table 5. Relative standard uncertainties of the LS standards (u_{LS}), and minimum ($u_{TS, \min}$) and maximum ($u_{TS, \max}$) relative standard uncertainties of TS obtained by the laboratories, all in 10^{-6} .

p /MPa	PTB			LNE			METAS			CMI		
	u_{LS}	$u_{TS, \min}$	$u_{TS, \max}$	u_{LS}	$u_{TS, \min}$	$u_{TS, \max}$	u_{LS}	$u_{TS, \min}$	$u_{TS, \max}$	u_{LS}	$u_{TS, \min}$	$u_{TS, \max}$
50	13	70	4797	8	95	6426	33	85	5336	15	105	3675
100	14	37	3430	9	51	3162	40	45	2382	16	55	1961
150	15	28	1886	10	38	2067	48	33	1873	17	45	1385
200	16	24	1624	12	29	2109	55	30	1371	19	34	903
250	18	19	1328	14	40	1477	63	28	1187	20	26	778
300	20	17	1156	17	22	1425	70	18	1010	23	24	793
350	22	17	1175	19	21	1340	78	16	1128	25	21	652
400	24	18	857	21	22	1202	85	18	889	27	21	645
450	26	18	943	24	25	1196	93	18	789	30	17	568
500	28	22	635	26	18	1054	100	19	867	32	15	441
600	33	19	1408	31	70	1289						
700	37	20	1077	36	79	1085						
800	42	24	1000	41	156	1061						
900	47	24	925	46	137	972						
1000	52	18	869	51	57	917						

From these results, the following can be stated.

- ❖ Most results are in agreement.
- ❖ In some cases, a strong disbalance between the uncertainties of the LS and uncertainties of the comparison is clearly observable.

- The PTB uncertainties above 600 MPa regarding the deviations to the weighted mean are smaller than the uncertainties of the PTB standard. This is due to smaller uncertainties obtained by PTB for the TS compared with those by other NMIs. Due to this fact, according to (11) the uncertainty of the CRV became very close to the uncertainty of the PTB result. As the consequence from eq. (13), the difference of the squared PTB and CRV uncertainties became a rather small value.
- Contrariwise, the LNE uncertainties appear fairly overestimated compared with the uncertainty of the LNE standard and also small compared with the LNE deviation from the CRV. This can be explained by a rather poor performance of the transfer standard in the LNE experiment. At 600 MPa and higher, the uncertainties of the TS are rather high, mostly due to fluctuation of reading when taking 7 values from each pressure transducer. E.g. at (700 and 800) MPa, the fluctuations of pressure transducers S1, S2 and S3 at LNE 300 times higher than at PTB. This can indicate that the stability of the generated pressure at the NMIs was probably very different.
- ❖ Even though the agreement of the NMIs was demonstrated for most pressures, the comparison cannot sufficiently prove the uncertainties of the LS claimed by the NMIs because of too high uncertainty ascribed to the TS. This is not necessarily due to a bad performance of the TS, but may deal with a pressure instability in the measurement system, which usually cannot be seen when performing cross-float measurements.
- ❖ The results demonstrate that a comparison by means of pressure transducers can be problematic. It is an important issue keeping in mind that, above 500 MPa, pressure transducers are the most frequent instruments to be calibrated. With the observation made in this comparison, one can estimate accuracy limits when providing calibrations of pressure transducers.

11. Conclusions

- Supplementary comparison EURAMET.M.P-S14 for high-pressures in the range up to 1 GPa was conducted during 2013 – 2014. Its execution was affected by minor technical problems of the participants, the transfer standard did not significantly change its metrological properties, and the KC was completed successfully.
- Five NMIs, PTB, CMI, LNE, METAS and SMU, all maintaining independent pressure standards, participated in the comparison. SMU withdrew their data. The comparison was piloted by PTB.
- The transfer standard comprised 8 pressure transducers. Some of them, in some of the measurements, had performance as low as $14 \cdot 10^{-6}$, comparable with the uncertainty of the laboratory standards. But as the whole, the uncertainty of the transfer standard appeared too high to verify completely the uncertainty of the national standards claimed by the laboratories.
- This too high uncertainty of the transfer standard may deal with pressure instability in the pressure generation systems of the laboratories, as concluded from high fluctuations of the transfer standard readings in some of the measurements.
- A special method was applied to calculate one degree of equivalence on the basis of numerous results obtained with different pressure standards, different pressure ranges and pressure change directions.
- The results of the participants are equivalent. The results show that a comparison of very high pressures by means of pressure transducers is possible, but special measures are required to have stable pressures generated. The results also show the limits which laboratories have when calibrating high pressure transducers.

12. Acknowledgements

We thank Mr. A. Gluschko and Mr. T. Konczak for the development and characterisation of the transfer standard, performing pressure measurements at PTB and processing the results of the comparison.

APPENDICES

A1 Reference standards of the participants

A1.1 PTB pressure standard

The laboratory standard (LS) of PTB used in this comparison was a modified Harwood pressure balance with a total load mass of 500 kg. It was equipped with a 1 GPa piston-cylinder unit (PCU) identified by no. 7594 manufactured by Desgranges et Huot with a nominal effective area of 5 mm². It was the PTB laboratory standard in the CCM.P-K13 comparison, covering the pressure range up to 0.5 GPa. Details of the pressure balance are given in Table 2. The zero-pressure effective area (A_0) of the piston-cylinder assembly is traceable via a calibration chain to three primary 5 cm² 10 MPa piston-cylinder units [3]. The value of the distortion coefficient (λ) with associated uncertainty was determined by FEA [4].

Table A1.1. PTB laboratory standard.

Manufacturer	Pressure balance – Harwood, modified PCU – Desgranges et Huot, ser. No. 7594
Measurement range in MPa	50 – 1000
Material of piston	Tungsten carbide
Material of cylinder	Tungsten carbide with a sleeve of steel
Operation mode, free-deformation (FD) or controlled-clearance (CC)	Both FD and CC are possible, CC was used
Zero-pressure effective area (A_0) at reference temperature in mm ²	4.902256 ¹⁾
Relative uncertainty of A_0 in 10 ⁻⁶	13
Pressure distortion coefficient (λ) in MPa ⁻¹	0.437·10 ⁻⁶
Uncertainty of λ in MPa ⁻¹	0.05·10 ⁻⁶
Relative uncertainty of mass pieces in 10 ⁻⁶	0.6
Linear thermal expansion coefficient of piston (α_p) in °C ⁻¹	4.5·10 ⁻⁶
Linear thermal expansion coefficient of cylinder (α_c) in °C ⁻¹	4.5·10 ⁻⁶
Reference temperature (t_0) in °C	20
Local gravity (g) in m/s ²	9.812533
Relative uncertainty of g in 10 ⁻⁶	0.53

A1.2 CMI pressure standard

Piston-cylinder system No. 1637 used in the comparison is traceable to the geometrically evaluated piston-cylinder No. 368 through a series of cross-float measurements- This CMI laboratory standard participated in two KCDB registered comparisons: EUROMET.M.P-K4 (only up to 100 MPa) and EURAMET.M.P-K7.

Table A1.2. CMI laboratory standard.

Manufacturer	DHI – Fluke. s. n. 1637
Measurement range in MPa	5 to 500
Material of piston	tungsten-carbide
Material of cylinder	tungsten-carbide
Operation mode, free-deformation or controlled-clearance	free deformation
Zero-pressure effective area (A_0) at reference temperature in mm ²	1.9616402
Relative uncertainty of A_0 in 10 ⁻⁶	11
Pressure distortion coefficient (λ) in MPa ⁻¹	$5.8 \cdot 10^{-7}$
Uncertainty of λ in MPa ⁻¹	$5.8 \cdot 10^{-8}$
Relative uncertainty of mass pieces in 10 ⁻⁶	2.5
Linear thermal expansion coefficient of piston (α_p) in °C ⁻¹	$4.5 \cdot 10^{-6}$
Linear thermal expansion coefficient of cylinder (α_c) in °C ⁻¹	$4.5 \cdot 10^{-6}$
Reference temperature (t_0) in °C	20
Local gravity (g) in m/s ²	9.809273
Relative uncertainty of g in 10 ⁻⁶	1.8
Height difference between laboratory standard (LS) and TS (h , positive if LS is higher than TS) in mm	0
Uncertainty of h in mm	2

A1.3 LNE pressure standard**Table A1.3. LNE laboratory standard.**

Manufacturer	Desgranges et Huot
Measurement range in MPa	1000
Material of piston	tungsten carbide
Material of cylinder	tungsten carbide
Operation mode, free-deformation or controlled-clearance	controlled clearance
Zero-pressure effective area (A_0) at reference temperature in mm ²	9.804751
Relative uncertainty of A_0 in 10 ⁻⁶	7.2
Pressure distortion coefficient (λ) in MPa ⁻¹	$1.32 \cdot 10^{-7}$
Uncertainty of λ in MPa ⁻¹	$5.00 \cdot 10^{-8}$
Relative uncertainty of mass pieces in 10 ⁻⁶	7.5
Linear thermal expansion coefficient of piston (α_p) in °C ⁻¹	$4.50 \cdot 10^{-6}$
Linear thermal expansion coefficient of cylinder (α_c) in °C ⁻¹	$4.50 \cdot 10^{-6}$
Reference temperature (t_0) in °C	20
Local gravity (g) in m/s ²	9.809273
Relative uncertainty of g in 10 ⁻⁶	0.1
Height difference between laboratory standard (LS) and TS (h , positive if LS is higher than TS) in mm	153.14
Uncertainty of h in mm	1

A1.4 METAS pressure standard

The laboratory standards of METAS in this comparison consisted of two instruments. In the range up to 0.5 GPa, a pressure balance was used. For the pressure range of 1.0 GPa, a pressure multiplier was applied.

Table A1.4. METAS laboratory standard for the range 0 to 0.5 GPa.

Manufacturer	DH Instruments
Measurement range in MPa	500
Material of piston	tungsten carbide
Material of cylinder	tungsten carbide
Operation mode, free-deformation or controlled-clearance	free deformation
Zero-pressure effective area (A_0) at reference temperature in mm^2	1.9607884
Relative uncertainty of A_0 in 10^{-6}	25
Pressure distortion coefficient (λ) in MPa^{-1}	$8.5 \cdot 10^{-7}$
Uncertainty of λ in MPa^{-1}	$1.5 \cdot 10^{-7}$
Relative uncertainty of mass pieces in 10^{-6}	1
Linear thermal expansion coefficient of piston (α_p) in $^{\circ}\text{C}^{-1}$	$4.5 \cdot 10^{-6}$
Linear thermal expansion coefficient of cylinder (α_c) in $^{\circ}\text{C}^{-1}$	$4.5 \cdot 10^{-6}$
Reference temperature (t_0) in $^{\circ}\text{C}$	20
Local gravity (g) in m/s^2	9.805885
Relative uncertainty of g in 10^{-6}	1
Height difference between laboratory standard (LS) and TS (h , positive if LS is higher than TS) in mm	0.0
Uncertainty of h in mm	1.0

The traceability of the mass is made through the mass laboratory of METAS which is linked to the BIPM through the national copy of the international prototype. The gravitation field has been measured using a relative gravimeter adjusted with a gravimetric point traceable to SI unit using an absolute gravimeter.

The piston cylinder area at 20°C and zero pressure has been determined using a calibration chain of piston-cylinder, from the large area piston-cylinder traceable to the length unit by dimensional measurement. The deformation coefficient has been determined using the experimental Legras model [5], where the pressure dependent effective area is calculated from a change of the effective area caused by a variation of the jacket pressure from p_{j1} to p_{j2} and the piston fall rates measured at the first and second jacket pressures for an ideal gap geometry, and it has been confronted to finite element modeling using Comsol Multiphysics.

Table A1.5. METAS laboratory standard for the range 0 to 1 GPa.

Manufacturer	Desgranges & Huot
Measurement range in MPa	1000
Material of piston	steel
Material of cylinder	tungsten carbide
Operation mode, free-deformation or controlled-clearance	free deformation
Zero-pressure effective area (A_0) at reference temperature in mm ²	4.903265
Relative uncertainty of A_0 in 10 ⁻⁶	25
Pressure distortion coefficient (λ) in MPa ⁻¹	$8.6 \cdot 10^{-7}$
Uncertainty of λ in MPa ⁻¹	$1.5 \cdot 10^{-7}$
Relative uncertainty of mass pieces in 10 ⁻⁶	1
Linear thermal expansion coefficient of piston (α_p) in °C ⁻¹	$10.5 \cdot 10^{-6}$
Linear thermal expansion coefficient of cylinder (α_c) in °C ⁻¹	$4.5 \cdot 10^{-6}$
Reference temperature (t_0) in °C	20
Local gravity (g) in m/s ²	9.805885
Relative uncertainty of g in 10 ⁻⁶	1
Height difference between laboratory standard (LS) and TS (h , positive if LS is higher than TS) in mm	0.0
Uncertainty of h in mm	1.0
Multiplier coefficient	10.0019
Relative uncertainty on multiplier coefficient and deformation in 10 ⁻⁶	400

The traceability is similar to the 500 MPa laboratory standard. The multiplier has been characterized by comparison up to 500 MPa with a pressure balance. The properties of the multiplier have been extrapolated up to 1000 MPa.

A2 Detailed measurement procedures according to the technical protocol

A2.1. Preparation

(i) Measurements should be done after an appropriate acclimatization time of at least 24 h, and the results be written on the forms annexed to the technical protocol. All institutes should use clean Sebacate oil as a working fluid. Each participant had to prepare the oil.

(ii) The measurements for environmental condition, for example, atmospheric pressure, ambient temperature and relative humidity, should be performed using participant's instruments. The institutes should operate their pressure standards at their normal operating temperature. It was recommended to perform measurements at 20 °C.

(iii) The transfer standard should be installed according to detailed description in section 5 of the technical protocol. It was requested to attach the connecting plugs to the transfer standard with the distributed torque wrench with a torque of 100 Nm. After installation, the transfer standard should undergo a leak test. The participants were requested not to disconnect the pressure transducers, neither to treat the connection between the adapters and the pressure transducers, and they ought not change the settings and adjustment of the pressure transducers or of the measurement amplifier. For carrying out the measurements, the distributed measurement software TS-monitor.exe from the CD should be installed and run.

A2.2. Head correction

For the head correction by height difference, the pressure generated by the LS at the reference level of the TS, P_{LS} , is calculated as follows:

$$P_{LS} = p_{std} + (\rho_f - \rho_a) \cdot g \cdot h \quad (2)$$

where, p_{std} is the pressure generated by the LS at its reference level; $(\rho_f - \rho_a) \cdot g \cdot h$ is the head correction, with ρ_f the density of the working fluid at pressure p_{std} , ρ_a the air density, g the local acceleration due

to gravity, and h the vertical distance between the reference levels of the two intercompared standards (LS and TS). h is positive if the level of the LS is higher than of the TS. To minimize uncertainties in pressure measurement, it was recommended that the height difference between the reference levels should be kept as low as possible. From the height difference, each institute had to make appropriate corrections to the applied pressure and to include their contributions to the uncertainty of pressure.

A2.3. Measurement procedures

(i) Measurements should be carried out in two different pressure ranges, up to 0.5 GPa and up to 1 GPa. Laboratories capable of measuring up to 0.5 GPa should perform measurements in this measurement range. Laboratories with a measurement capability up to 1 GPa should perform measurements two times, in the range of 0.5 GPa and 1 GPa.

(iia) In the first measurement range up to 0.5 GPa, V1 had always be opened. Measurements should be performed at nominal pressures of (0, 50, 100, 150, 200, 250, 300, 350, 400, 450, and 500) MPa.

(iib) For the measurement range up to 1.0 GPa, respectively, V1 had always be closed. Measurements should be performed at nominal pressures of (0, 100, 200, 300, 400, 500, 600, 700, 800, 900, and 1000) MPa.

(iii) It is supposed that one complete measurement cycle should be performed in one day. In both measurement ranges, pressures P_{LS} generated by the LS should not deviate from the nominal pressures by more than 0.1%. For each P_{LS} , readings of the TS transducers should be recorded. These readings were transformed by the pilot laboratory to TS pressures (p_{TS}) using a uniform procedure.

(iv) Concerning the measurements, no gauge pressure ought to be applied to the pressure transducers during the 12 hours before the start of each measurement cycle. Valve V2 should be closed and valves V0 and V1 should be open to apply atmospheric pressure to the pressure transducers. The participants had to make sure that the oil-air surface in the TS lied at the aeration level.

(v) Before the measurements, three times pre-load of the transfer standard at maximum desired pressure had to be performed. After the pre-lad, the participants had to wait for 15 minutes before starting to measure.

(vi) Clicking the button „Record“ in the program TS-monitor.exe, enabling to record transducers' readings. Simultaneously, the participants should record environmental conditions and all parameters of the LS required to calculate P_{LS} . using their laboratory measurement tools.

(vii) All pressure changes in the TS should be appropriately slow to avoid damage or maladjustment of the transducers. After each change of pressure, it was stabilized for 10 minutes. The position of the piston of the pressure balance of the LS should be kept in the floating range. Between the pressure steps, no further pressure changes should be executed. After 10 minutes waiting time, the measurements should be started (at latest, within 5 minutes). After performing the measurement at the maximum pressure in the ascending pressure series, a waiting time of more than 30 minutes should be taken. During the waiting time, the pressure of the LS should be kept as close as possible to the maximum value. If the pressure at maximum value drops within this time by more than 0.1%, it should be corrected and then it shout be waited for at least 10 minutes. After the total waiting time of more than 30 minutes and a stable pressure in the last 10 minutes, the first pressure point of the descending pressure series should be taken. When un-installing the TS after completing the last calibration cycle the oil should not be removed.

A3 Results of the participants

In the tables below, the following designations are used:

- *1 Ambient pressure of laboratory room.
- *2 Temperature measured in the vicinity of TS.
- *3 Local time of the first of the seven readings of the respective pressure transducer.
- *4 Average of the seven readings of pressure transducers S1 ... S8.
- *5 Relative standard deviation of the mean value C_i .
- *6 Pressure measured with the LS at the reference level of the TS according to equation (1).
- *7 Relative standard uncertainty ($k=1$) of P_{LS} .

A3.1 PTB results

PTB-2013, 0.5 GPa

Date: 19.04.2013

Measurement cycle: 1 of 4

File name for continuous records: 201304190648+201304191307.data

File name for selected records: 201304190648+201304191307.prot

P_{nom}	P_{amb}^{*1}	T_{TS}^{*2}	Local time t_3^{*3}	C_1^{*4}	$\sigma(C_1)^{*5}$	C_2^{*4}	$\sigma(C_2)^{*5}$	C_3^{*4}	$\sigma(C_3)^{*5}$	C_4^{*4}	$\sigma(C_4)^{*5}$	C_5^{*4}	$\sigma(C_5)^{*5}$	C_6^{*4}	$\sigma(C_6)^{*5}$	C_7^{*4}	$\sigma(C_7)^{*5}$	C_8^{*4}	$\sigma(C_8)^{*5}$	P_{LS}^{*6}	$u(P_{LS})/P_{LS}^{*7}$
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	101.088	19.98	07:35	-0.0000077	0.0000014	0.0000186	0.0000015	0.0000786	0.0000019	0.0001554	0.0000032	-103.843	1.60	-70.32	2.46	38.63	0.96	-1.08	0.26	0	0
500	101.117	19.98	07:51	0.0326737	0.0000008	0.0327197	0.0000014	0.0493949	0.0000020	0.0993634	0.0000010	396.077	1.30	429.16	0.94	537.61	1.02	497.01	0.35	50.00346	13
1000	101.142	19.99	08:07	0.0654369	0.0000011	0.0654966	0.0000010	0.0988240	0.0000020	0.1987903	0.0000014	894.403	1.97	928.10	1.29	1036.29	1.76	995.42	0.19	100.00453	14
1500	101.166	20.00	08:24	0.0982706	0.0000010	0.0983457	0.0000014	0.1483623	0.0000018	0.2984403	0.0000014	1394.194	1.02	1428.96	1.04	1537.11	0.81	1494.14	0.33	149.99955	15
2000	101.172	20.01	08:40	0.1311774	0.0000015	0.1312680	0.0000000	0.1980069	0.0000023	0.3983309	0.0000023	1894.654	1.74	1928.43	2.54	2037.52	0.58	1993.21	0.24	200.00623	16
2500	101.163	20.01	08:58	0.1641334	0.0000010	0.1642386	0.0000010	0.2477249	0.0000020	0.4983837	0.0000037	2396.031	1.63	2429.44	4.80	2537.59	1.23	2492.07	0.30	249.99931	18
3000	101.163	20.01	09:15	0.1971851	0.0000011	0.1973054	0.0000010	0.2975734	0.0000015	0.5987569	0.0000030	2897.143	0.58	2930.91	1.35	3039.06	1.40	2991.46	0.26	300.00162	20
3500	101.168	20.01	09:32	0.2302917	0.0000014	0.2304257	0.0000014	0.3474837	0.0000021	0.6993391	0.0000038	3398.443	1.17	3433.05	3.07	3541.42	2.04	3491.43	0.54	349.98913	22
4000	101.205	20.02	09:53	0.2634800	0.0000016	0.2636229	0.0000011	0.3974917	0.0000024	0.8001866	0.0000038	3900.908	1.88	3934.15	1.52	4043.90	1.19	3991.67	0.43	400.00700	24
4500	101.243	20.03	10:16	0.2967160	0.0000012	0.2968651	0.0000011	0.4475514	0.0000019	0.9011666	0.0000043	4401.874	2.36	4433.62	2.93	4546.42	0.68	4491.90	0.26	450.00842	26
5000	101.266	20.04	10:36	0.3300000	0.0000012	0.3301549	0.0000011	0.4976657	0.0000024	1.0021769	0.0000038	4903.226	1.06	4936.37	1.88	5048.55	0.34	4992.05	0.25	500.00192	28
5500	101.299	20.03	11:11	0.3300143	0.0000008	0.3301686	0.0000010	0.4976734	0.0000010	1.0022566	0.0000028	4902.429	1.87	4936.37	2.50	5048.80	1.71	4992.29	0.22	500.00198	28
4500	101.302	20.02	11:31	0.2968363	0.0000014	0.2969769	0.0000011	0.4476554	0.0000022	0.9017191	0.0000023	4395.634	1.65	4427.82	1.44	4543.93	1.21	4491.65	0.45	450.00837	26
4000	101.301	20.01	11:50	0.2636834	0.0000015	0.2638091	0.0000011	0.3976797	0.0000021	0.8011837	0.0000029	3892.491	2.61	3922.62	1.63	4040.82	1.10	3991.64	0.25	400.00690	24
3500	101.302	20.01	12:08	0.2305689	0.0000011	0.2306794	0.0000010	0.3477594	0.0000025	0.7007017	0.0000029	3385.928	2.71	3417.63	1.81	3536.98	1.50	3491.52	0.26	350.00896	22
3000	101.32	20.01	12:27	0.1974874	0.0000010	0.1975826	0.0000015	0.2978829	0.0000020	0.6002689	0.0000023	2882.074	1.49	2914.12	2.22	3034.23	1.69	2991.95	0.31	300.00140	20
2500	101.324	20.01	12:46	0.1644509	0.0000011	0.1645340	0.0000012	0.2480651	0.0000023	0.4999374	0.0000034	2382.711	1.01	2411.84	2.16	2532.20	0.77	2492.38	0.24	249.99910	18
2000	101.324	20.01	13:09	0.1314594	0.0000010	0.1315331	0.0000011	0.1983189	0.0000020	0.3997234	0.0000022	1882.431	1.56	1913.19	0.99	2032.86	0.93	1993.12	0.28	200.00607	16
1500	101.329	20.01	13:27	0.0971894	0.0000015	0.0972566	0.0000015	0.1466446	0.0000022	0.2956206	0.0000022	1364.220	2.20	1393.83	2.56	1511.97	2.02	1474.07	0.29	147.99834	15
1000	101.36	20.02	13:49	0.0656086	0.0000015	0.0656674	0.0000010	0.0990326	0.0000022	0.1996634	0.0000032	887.349	3.64	917.15	2.73	1032.87	1.23	995.35	0.28	100.00440	14
500	101.368	20.04	14:09	0.0327689	0.0000011	0.0328149	0.0000016	0.0495146	0.0000022	0.0998691	0.0000030	390.360	1.71	422.58	2.14	535.15	1.61	496.88	0.37	50.00338	13
0	101.374	20.05	14:26	-0.0000054	0.0000010	0.0000249	0.0000011	0.0000874	0.0000015	0.0003017	0.0000024	-103.723	1.96	-71.97	2.71	38.27	1.04	-0.99	0.18	0.0000	0

PTB-2013, 0.5 GPa

Date: 24.04.2013

Measurement cycle: 2 of 4

File name for continuous records: 201304240717.prot

File name for selected records: 201304240717.data

P _{nom}	P _{amb} v ₁	T _{TS} v ₂	Local time v ₃	C ₁ v ₄	σ(C ₁) v ₅	C ₂ v ₄	σ(C ₂) v ₅	C ₃ v ₄	σ(C ₃) v ₅	C ₄ v ₄	σ(C ₄) v ₅	C ₅ v ₄	σ(C ₅) v ₅	C ₆ v ₄	σ(C ₆) v ₅	C ₇ v ₄	σ(C ₇) v ₅	C ₈ v ₄	σ(C ₈) v ₅	P _{LS} v ₆	u(P _{LS})/P _{LS} v ₇
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	101.758	19.97	08:09	-0.0000346	0.0000015	-0.0000037	0.0000008	0.0000669	0.0000016	0.0002380	0.0000037	-106.209	1.91	-72.63	2.79	38.35	1.39	-1.19	0.25	0	0
500	101.758	19.99	08:26	0.0326446	0.0000010	0.0326966	0.0000010	0.0493831	0.0000011	0.0994423	0.0000014	392.931	2.85	424.81	1.82	538.40	1.11	497.00	0.23	50.00337	13
1000	101.770	20.00	08:43	0.0654091	0.0000011	0.0654731	0.0000011	0.0988120	0.0000016	0.1988686	0.0000010	894.129	2.01	926.01	1.09	1038.40	1.56	995.49	0.17	100.00438	14
1500	101.782	20.01	09:00	0.0982374	0.0000010	0.0983180	0.0000000	0.1483457	0.0000018	0.2985143	0.0000014	1392.317	2.50	1424.92	2.15	1537.01	1.57	1494.08	0.31	149.99932	15
2000	101.776	20.02	09:17	0.1311454	0.0000010	0.1312423	0.0000008	0.1979969	0.0000028	0.3984163	0.0000021	1893.463	2.12	1926.31	2.05	2038.83	0.95	1992.96	0.26	200.00593	16
2500	101.777	20.03	09:34	0.1641166	0.0000010	0.1642283	0.0000008	0.2477391	0.0000030	0.4985243	0.0000021	2395.611	2.00	2429.52	2.35	2538.91	0.94	2492.23	0.22	249.99894	18
3000	101.794	20.04	09:52	0.1971551	0.0000011	0.1972846	0.0000010	0.2975737	0.0000021	0.5988723	0.0000037	2896.294	1.67	2929.53	3.08	3040.81	1.27	2991.61	0.33	300.00115	20
3500	101.795	20.05	10:09	0.2302666	0.0000010	0.2304091	0.0000011	0.3474903	0.0000018	0.6994751	0.0000041	3399.103	2.62	3431.79	1.42	3542.07	1.47	3491.43	0.53	350.0086	22
4000	101.790	20.05	10:26	0.2634343	0.0000014	0.2635863	0.0000008	0.3974734	0.0000019	0.8002637	0.0000042	3901.423	1.12	3935.43	2.14	4045.01	0.74	3991.51	0.37	400.00645	24
4500	101.780	20.06	10:43	0.2966614	0.0000010	0.2968223	0.0000014	0.4475257	0.0000024	0.9012071	0.0000041	4403.477	1.49	4439.39	1.46	4547.73	1.04	4491.71	0.39	450.00788	26
5000	101.780	20.07	11:01	0.3299351	0.0000011	0.3301037	0.0000008	0.4976383	0.0000027	1.0021923	0.0000041	4906.954	2.11	4941.75	1.41	5051.12	0.88	4992.27	0.43	500.0013	28
5000	101760	20.06	11:38	0.3299480	0.0000012	0.3301149	0.0000011	0.4976446	0.0000022	1.0022691	0.0000030	4906.337	1.36	4943.69	1.67	5051.11	0.97	4992.51	0.32	500.00131	28
4500	101.750	20.07	11:55	0.2967700	0.0000000	0.2969223	0.0000014	0.4476240	0.0000028	0.9017300	0.0000028	4400.066	1.65	4434.27	1.43	4546.65	1.00	4491.90	0.11	450.00778	26
4000	101.732	20.07	12:15	0.2636171	0.0000011	0.2637571	0.0000011	0.3976500	0.0000026	0.8011960	0.0000020	3895.277	1.85	3929.36	2.21	4042.97	1.03	3991.69	0.24	400.00635	24
3500	101.691	20.07	12:32	0.2305049	0.0000016	0.2306311	0.0000011	0.3477303	0.0000021	0.7007183	0.0000021	3390.566	2.34	3422.37	1.58	3539.22	1.18	3491.59	0.17	350.0085	22
3000	101.684	20.07	12:51	0.1974274	0.0000010	0.1975346	0.0000016	0.2978546	0.0000022	0.6002897	0.0000021	2886.317	1.94	2919.38	2.06	3036.67	1.19	2992.01	0.41	300.00105	20
2500	101.663	20.07	13:09	0.1643931	0.0000011	0.1644886	0.0000015	0.2480366	0.0000028	0.4999580	0.0000033	2384.751	1.46	2415.12	1.65	2535.17	1.21	2492.49	0.25	249.99881	18
2000	101.642	20.07	13:27	0.1314094	0.0000010	0.1314929	0.0000011	0.1982949	0.0000016	0.3979600	0.0000023	1882.483	2.21	1914.96	2.12	2035.00	1.11	1993.49	0.22	200.00582	16
1500	101.635	20.07	13:46	0.0984631	0.0000011	0.0985340	0.0000012	0.1486080	0.0000016	0.2996514	0.0000040	1382.657	1.60	1414.88	2.89	1533.89	1.22	1494.37	0.29	149.99923	15
1000	101.615	20.07	14:05	0.0655663	0.0000014	0.0656340	0.0000012	0.0990117	0.0000024	0.1997029	0.0000038	886.483	2.06	917.43	2.13	1034.53	2.32	995.46	0.34	100.00431	14
500	101.600	20.06	14:24	0.0327314	0.0000015	0.0327860	0.0000012	0.0494960	0.0000016	0.0999143	0.0000029	388.783	1.53	421.09	0.97	536.01	0.60	496.95	0.31	50.00333	13
0	101.566	20.06	14:40	-0.0000331	0.0000016	0.0000037	0.0000008	0.0000740	0.0000020	0.0003591	0.0000030	-106.054	1.72	-74.10	1.64	38.17	1.69	-1.18	0.40	0	0

PTB-2013, 0.5 GPa

Date: 23.04.2013

Measurement cycle: 3 of 4

File name for continuous records: 201304230725.prot

File name for selected records: 201304230725.data.data

P _{nom}	P _{amb} v ₁	T _{TS} v ₂	Local time v ₃	C ₁ v ₄	σ(C ₁) v ₅	C ₂ v ₄	σ(C ₂) v ₅	C ₃ v ₄	σ(C ₃) v ₅	C ₄ v ₄	σ(C ₄) v ₅	C ₅ v ₄	σ(C ₅) v ₅	C ₆ v ₄	σ(C ₆) v ₅	C ₇ v ₄	σ(C ₇) v ₅	C ₈ v ₄	σ(C ₈) v ₅	P _{LS}	u(P _{LS})/P _{LS} v ₇
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	100.822	19.99	08:25	-0.0000334	0.0000015	-0.0000017	0.0000021	0.0000686	0.0000015	0.0002303	0.0000037	-106.054	1.98	-71.07	2.00	39.34	0.68	-1.13	0.52	0	0
500	100.839	20.00	08:41	0.0326460	0.0000000	0.0326974	0.0000015	0.0493846	0.0000010	0.0994289	0.0000011	394.749	1.31	426.37	1.46	538.55	1.21	497.31	0.29	50.00347	13
1000	100.827	20.03	08:59	0.0654089	0.0000011	0.0654726	0.0000015	0.0988120	0.0000016	0.1988569	0.0000011	893.023	1.65	925.84	2.22	1037.70	1.48	995.60	0.28	100.00453	14
1500	100.837	20.05	09:15	0.0982371	0.0000011	0.0983180	0.0000012	0.1483457	0.0000014	0.2984994	0.0000022	1393.286	2.12	1424.64	4.92	1536.89	0.61	1494.00	0.28	149.99954	15
2000	100.834	20.07	09:33	0.1311457	0.0000014	0.1312429	0.0000011	0.1979991	0.0000011	0.3984023	0.0000014	1894.828 ¹		1927.69	2.09	2038.29	1.49	1992.97	0.27	200.00619	16
2500	100.836	20.09	09:49	0.1641111	0.0000011	0.1642237	0.0000014	0.2477326	0.0000015	0.4984951	0.0000034	2396.229	1.63	2427.08	2.67	2537.50	1.35	2492.02	0.23	249.99923	18
3000	100.864	20.1	10:06	0.1971537	0.0000014	0.1972840	0.0000000	0.2975737	0.0000008	0.5988511	0.0000038	2897.289	0.92	2931.09	1.83	3041.22	0.81	2991.50	0.29	300.00148	20
3500	100.878	20.12	10:23	0.2302671	0.0000011	0.2304106	0.0000010	0.3474951	0.0000034	0.6994594	0.0000040	3400.800	1.64	3431.77	1.29	3542.58	0.93	3491.18	0.32	350.00895	22
4000	100.902	20.14	10:42	0.2634351	0.0000016	0.2635871	0.0000011	0.3974746	0.0000030	0.8002511	0.0000038	3900.763	1.33	3934.23	2.15	4044.98	0.56	3991.60	0.36	400.00679	24
4500	100.906	20.15	10:59	0.2966643	0.0000018	0.2968257	0.0000018	0.4475314	0.0000015	0.9012029	0.0000040	4403.237	1.48	4437.15	1.97	4547.72	1.43	4491.71	0.22	450.0082	26
5000	100.925	20.16	11:17	0.3299371	0.0000011	0.3301066	0.0000015	0.4976414	0.0000025	1.0021883	0.0000055	4907.443	3.26	4941.82	3.11	5051.89	1.49	4992.40	0.33	500.00164	28
5000	100.943	20.16	11:54	0.3299483	0.0000014	0.3301171	0.0000011	0.4976471	0.0000025	1.0022683	0.0000039	4903.971	2.96	4940.02	1.89	5049.55	0.59	4992.37	0.14	500.00158	28
4500	100.943	20.17	12:13	0.2967691	0.0000016	0.2969237	0.0000008	0.4476274	0.0000025	0.9017223	0.0000031	4399.568	1.47	4433.36	1.65	4545.52	1.02	4491.73	0.45	450.00802	26
4000	100.952	20.16	12:31	0.2636191	0.0000011	0.2637591	0.0000011	0.3976543	0.0000014	0.8011923	0.0000027	3892.714	1.21	3927.27	2.25	4041.79	1.56	3991.65	0.28	400.00655	24
3500	100.969	20.16	12:48	0.2305066	0.0000010	0.2306323	0.0000014	0.3477340	0.0000012	0.7007134	0.0000030	3389.494	2.59	3421.53	2.18	3539.33	0.38	3491.52	0.17	350.00868	22
3000	100.961	20.15	13:06	0.1974291	0.0000011	0.1975357	0.0000008	0.2978589	0.0000016	0.6002831	0.0000034	2885.649	2.44	2918.45	1.51	3036.36	1.34	2991.98	0.32	300.00123	20
2500	100.968	20.14	13:24	0.1643949	0.0000011	0.1644894	0.0000010	0.2480437	0.0000008	0.4999554	0.0000036	2384.451	2.76	2416.46	2.96	2534.40	1.09	2492.40	0.20	249.99896	18
2000	100.981	20.13	13:43	0.1314103	0.0000008	0.1314934	0.0000010	0.1982971	0.0000016	0.3997497	0.0000029	1883.100	1.69	1916.31	2.33	2033.66	1.37	1993.19	0.36	200.00597	16
1500	101.004	20.12	14:01	0.0984631	0.0000011	0.0985346	0.0000010	0.1486106	0.0000022	0.2996411	0.0000029	1384.483	1.49	1415.52	1.62	1533.75	1.58	1493.95	0.43	149.99934	15
1000	101.020	20.11	14:20	0.0655674	0.0000010	0.0656354	0.0000015	0.0990137	0.0000018	0.1996923	0.0000031	887.434	1.98	918.39	2.15	1035.12	0.56	995.44	0.28	100.00437	14
500	101.050	20.11	14:41	0.0327243	0.0000014	0.0327769	0.0000011	0.0494840	0.0000012	0.0998694	0.0000028	391.209	0.84	423.01	2.04	536.71	0.92	497.19	0.41	50.00338	13
0	101.068	20.11	14:57	-0.0000351	0.0000011	0.0000017	0.0000014	0.0000760	0.0000023	0.0003426	0.0000028	-104.006	1.42	-72.99	1.77	38.62	1.26	-1.28	0.32	0	0

PTB-2013, 0.5 GPa

Date: 24.04.2013

Measurement cycle: 4 of 4

File name for continuous records: 201304240717.prot

File name for selected records: 201304240717.data

P _{nom}	P _{amb} +1	T _{TS} +2	Local time +3	C ₁ +4	σ(C ₁) +5	C ₂ +4	σ(C ₂) +5	C ₃ +4	σ(C ₃) +5	C ₄ +4	σ(C ₄) +5	C ₅ +4	σ(C ₅) +5	C ₆ +4	σ(C ₆) +5	C ₇ +4	σ(C ₇) +5	C ₈ +4	σ(C ₈) +5	P _{LS} +6	u(P _{LS})/P _{LS} +7
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	101.758	19.97	08:09	-0.0000346	0.0000015	-0.0000037	0.0000008	0.0000069	0.0000016	0.0002380	0.0000037	-106.209	1.91	-72.63	2.79	38.35	1.39	-1.19	0.25	0	0
500	101.758	19.99	08:26	0.0326446	0.0000010	0.0326966	0.0000010	0.0493831	0.0000011	0.0994423	0.0000014	392.931	2.85	424.81	1.82	538.40	1.11	497.00	0.23	50.00337	13
1000	101.770	20.00	08:43	0.0654091	0.0000011	0.0654731	0.0000011	0.0988120	0.0000016	0.1988686	0.0000010	894.129	2.01	926.01	1.09	1038.40	1.56	995.49	0.17	100.00438	14
1500	101.782	20.01	09:00	0.0982374	0.0000010	0.0983180	0.0000000	0.1483457	0.0000018	0.2985143	0.0000014	1392.317	2.50	1424.92	2.15	1537.01	1.57	1494.08	0.31	149.99932	15
2000	101.776	20.02	09:17	0.1311454	0.0000010	0.1312423	0.0000008	0.1979969	0.0000028	0.3984163	0.0000021	1893.463	2.12	1926.31	2.05	2038.83	0.95	1992.96	0.26	200.00593	16
2500	101.777	20.03	09:34	0.1641166	0.0000010	0.1642283	0.0000008	0.2477391	0.0000030	0.4985243	0.0000021	2395.611	2.00	2429.52	2.35	2538.91	0.94	2492.23	0.22	249.99894	18
3000	101.794	20.04	09:52	0.1971551	0.0000011	0.1972846	0.0000010	0.2975737	0.0000021	0.5988723	0.0000037	2896.294	1.67	2929.53	3.08	3040.81	1.27	2991.61	0.33	300.00115	20
3500	101.795	20.05	10:09	0.2302666	0.0000010	0.2304091	0.0000011	0.3474903	0.0000018	0.6994751	0.0000041	3399.103	2.62	3431.79	1.42	3542.07	1.47	3491.43	0.53	350.0086	22
4000	101.790	20.05	10:26	0.2634343	0.0000014	0.2635863	0.0000008	0.3974734	0.0000019	0.8002637	0.0000042	3901.423	1.12	3935.43	2.14	4045.01	0.74	3991.51	0.37	400.00645	24
4500	101.780	20.06	10:43	0.2966614	0.0000010	0.2968223	0.0000014	0.4475257	0.0000024	0.9012071	0.0000041	4403.477	1.49	4439.39	1.46	4547.73	1.04	4491.71	0.39	450.00788	26
5000	101.780	20.07	11:01	0.3299351	0.0000011	0.3301037	0.0000008	0.4976383	0.0000027	1.0021923	0.0000041	4906.954	2.11	4941.75	1.41	5051.12	0.88	4992.27	0.43	500.0013	28
5000	101760	20.06	11:38	0.3299480	0.0000012	0.3301149	0.0000011	0.4976446	0.0000022	1.0022691	0.0000030	4906.337	1.36	4943.69	1.67	5051.11	0.97	4992.51	0.32	500.00131	28
4500	101.750	20.07	11:55	0.2967700	0.0000000	0.2969223	0.0000014	0.4476240	0.0000028	0.9017300	0.0000028	4400.066	1.65	4434.27	1.43	4546.65	1.00	4491.90	0.11	450.00778	26
4000	101.732	20.07	12:15	0.2636171	0.0000011	0.2637571	0.0000011	0.3976500	0.0000026	0.8011960	0.0000020	3895.277	1.85	3929.36	2.21	4042.97	1.03	3991.69	0.24	400.00635	24
3500	101.691	20.07	12:32	0.2305049	0.0000016	0.2306311	0.0000011	0.3477303	0.0000021	0.7007183	0.0000021	3390.566	2.34	3422.37	1.58	3539.22	1.18	3491.59	0.17	350.0085	22
3000	101.684	20.07	12:51	0.1974274	0.0000010	0.1975349	0.0000016	0.2978546	0.0000022	0.6002897	0.0000021	2886.317	1.94	2919.38	2.06	3036.67	1.19	2992.01	0.41	300.00105	20
2500	101-663	20.07	13:09	0.1643931	0.0000011	0.1644886	0.0000015	0.2480366	0.0000028	0.4999580	0.0000033	2384.751	1.46	2415.12	1.65	2535.17	1.21	2492.49	0.25	249.99881	18
2000	101.642	20.07	13:27	0.1314094	0.0000010	0.1314929	0.0000011	0.1982949	0.0000016	0.3997600	0.0000023	1882.483	2.21	1914.96	2.12	2035.00	1.11	1993.49	0.22	200.00582	16
1500	101.635	20.07	13:46	0.0984631	0.0000011	0.0985340	0.0000012	0.1486080	0.0000016	0.2996514	0.0000040	1382.657	1.60	1414.88	2.89	1533.89	1.22	1494.37	0.29	149.99923	15
1000	101.615	20.07	14:05	0.0655663	0.0000014	0.0656340	0.0000012	0.0990117	0.0000024	0.1997029	0.0000038	886.483	2.06	917.43	2.13	1034.53	2.32	995.46	0.34	100.00431	14
500	101.600	20.06	14:24	0.0327314	0.0000015	0.0327860	0.0000012	0.0494960	0.0000016	0.0999143	0.0000029	388.783	1.53	421.09	0.97	536.01	0.60	496.95	0.31	50.00333	13
0	101.566	20.06	14:40	-0.0000331	0.0000016	0.0000037	0.0000008	0.0000740	0.0000020	0.0003591	0.0000030	-106.054	1.72	-74.10	1.64	38.17	1.69	-1.18	0.40	0	0

PTB-2013, 1 GPa

Date: 16.04.2013

Measurement cycle: 1 of 4

File name for continuous records: 201304160808.prot

File name for selected records: 201304160808.data

P _{nom}	P _{amb} +1	T _{TS} +2	Local time +3	C ₁ +4	σ(C ₁) +5	C ₂ +4	σ(C ₂) +5	C ₃ +4	σ(C ₃) +5	C ₄ +4	σ(C ₄) +5	C ₅ +4	σ(C ₅) +5	C ₆ +4	σ(C ₆) +5	C ₇ +4	σ(C ₇) +5	P _{LS} +6	u(P _{LS})/P _{LS} +7
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	101.078	20.01	09:01	0.0000054	0.0000010	0.0000277	0.0000008	0.0000823	0.0000018	-100.311	1.688	-65.78	0.78	39.54	2.03	0	0	0	0
100	101.079	20.00	09:20	0.0654514	0.0000010	0.0655074	0.0000015	0.0988260	0.0000016	898.654	2.153	931.45	2.98	1037.71	0.80	100.00449	14		
200	101.066	20.00	09:33	0.1311940	0.0000012	0.1312789	0.0000011	0.1980109	0.0000023	1896.146	1.584	1931.42	3.34	2038.26	1.34	200.00621	16		
300	101.067	20.01	09:50	0.1972126	0.0000022	0.1973260	0.0000000	0.2975920	0.0000000	2895.394	1.113	2927.83	1.02	3039.58	1.09	300.00161	20		
400	101.051	20.00	10:10	0.2635089	0.0000011	0.2636437	0.0000014	0.3975063	0.0000018	3897.480	1.892	3929.63	1.87	4042.33	0.99	400.00717	24		
500	101.06	20.00	10:30	0.3300494	0.0000022	0.3301940	0.0000020	0.4976983	0.0000018	4898.906	2.525	4934.85	2.87	5046.61	0.27	500.00225	28		
600	101.064	20.00	10:47	0.3968454	0.0000015	0.3969871	0.0000011	0.5982014	0.0000028	5901.960	1.987	5938.72	1.58	6046.59	1.18	599.99821	33		
700	101.015	20.01	11:03	0.4638966	0.0000015	0.4640251	0.0000020	0.6990549	0.0000023	6902.811	2.406	6942.37	2.61	7046.71	0.94	699.99788	37		
800	101.064	20.01	11:20	0.5311894	0.0000019	0.5313023	0.0000008	0.8002691	0.0000020	7905.155	1.441	7944.75	2.58	8047.91	0.77	799.99837	42		
900	101.062	20.00	11:37	0.5987149	0.0000016	0.5988206	0.0000010	0.9018543	0.0000008	8906.331	1.979	8948.72	2.48	9050.58	0.89	900.00052	47		
1000	101.058	19.99	11:55	0.6663731	0.0000045	0.6664880	0.0000049	1.0037217	0.0000120	9909.334	2.064	9951.99	3.14	10051.82	1.39	999.99865	52		
1000	101.022	19.96	12:30	0.6664140	0.0000045	0.6665246	0.0000046	1.0037491	0.0000063	9908.126	2.433	9949.08	1.99	10052.21	0.88	999.99887	52		
900	101.027	19.94	12:48	0.5989931	0.0000011	0.5990746	0.0000010	0.9020794	0.0000015	8883.240	2.071	8919.63	2.10	9031.29	0.99	900.00086	47		
800	101.017	19.95	13:06	0.5317354	0.0000019	0.5317914	0.0000015	0.8007017	0.0000024	7865.237	2.070	7900.06	1.22	8013.23	0.99	799.99854	42		
700	100.991	19.94	13:28	0.4646440	0.0000028	0.4646931	0.0000016	0.6996589	0.0000023	6851.760	1.225	6883.10	1.36	6999.94	1.22	699.99807	37		
600	100.992	19.93	13:43	0.3977326	0.0000015	0.3977783	0.0000021	0.5989271	0.0000034	5840.906	1.629	5873.04	1.53	5992.18	1.17	599.99853	33		
500	100.987	19.91	14:01	0.3309940	0.0000016	0.3310397	0.0000014	0.4984851	0.0000023	4837.929	2.879	4869.27	2.21	4989.78	1.24	500.00251	28		
400	100.964	19.9	14:19	0.2644329	0.0000020	0.2644737	0.0000027	0.3983109	0.0000020	3841.637	1.734	3868.29	1.43	3992.97	1.12	400.00741	24		
300	100.971	19.88	14:37	0.1980366	0.0000022	0.1980746	0.0000022	0.2983557	0.0000014	2851.594	1.836	2873.98	1.46	2999.72	1.23	300.00182	20		
200	100.958	19.88	14:56	0.1318220	0.0000016	0.1318563	0.0000024	0.1986346	0.0000019	1862.049	1.153	1889.13	2.02	2009.52	0.75	200.00636	16		
100	100.953	19.87	15:15	0.0657917	0.0000014	0.0658294	0.0000015	0.0991831	0.0000020	877.937	1.923	908.33	2.05	1022.83	1.17	100.00459	14		
0	100.941	19.92	15:40	0.0000363	0.0000014	0.0000574	0.0000010	0.0000969	0.0000016	-102.926	3.368	-72.03	1.96	37.89	1.26	0	0		

PTB-2013, 1 GPa

Date: 17.04.2013

Measurement cycle: 2 of 4

File name for continuous records: 01304170630.prot

File name for selected records: data

P _{nom}	P _{amb} * ₁	T _{TS} * ₂	Local time * ₃	C ₁ * ₄	σ(C ₁) * ₅	C ₂ * ₄	σ(C ₂) * ₅	C ₃ * ₄	σ(C ₃) * ₅	C ₅ * ₄	σ(C ₅) * ₅	C ₆ * ₄	σ(C ₆) * ₅	C ₇ * ₄	σ(C ₇) * ₅	P _{LS} * ₆	u(P _{LS})/P _{LS} * ₇
/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	101.381	20.04	07:32	0.0000143	0.0000014	0.0000366	0.0000015	0.0000903	0.0000024	-102.300	2.050	-66.45	1.05	39.73	1.26	0	0
100	100.387	20.04	07:50	0.0654626	0.0000010	0.0655174	0.0000010	0.0988377	0.0000024	897.866	3.537	931.17	1.82	1037.85	0.89	100.00464	14
200	100.396	20.03	08:06	0.1312040	0.0000012	0.1312886	0.0000010	0.1980226	0.0000022	1897.234	3.057	1929.74	0.86	2037.50	0.86	200.00646	16
300	100.402	20.02	08:22	0.1972209	0.0000011	0.1973357	0.0000014	0.2975997	0.0000021	2895.111	2.269	2927.15	2.33	3039.99	1.05	300.00202	20
400	100.422	20.01	08:38	0.2635143	0.0000014	0.2636489	0.0000011	0.3975094	0.0000025	3897.600	1.863	3929.58	2.31	4042.90	1.12	400.00768	24
500	100.418	20.00	08:54	0.3300526	0.0000022	0.3301971	0.0000020	0.4976977	0.0000044	4899.240	1.068	4933.26	1.68	5046.81	1.69	500.00294	28
600	100.421	20.00	09:10	0.3968497	0.0000021	0.3969926	0.0000022	0.5982031	0.0000030	5901.763	1.574	5938.17	2.62	6047.74	1.83	599.99909	33
700	100.426	20.00	09:27	0.4638971	0.0000020	0.4640280	0.0000020	0.6990591	0.0000036	6902.477	1.086	6942.87	0.73	7047.05	1.32	699.99878	37
800	100.436	20.00	09:44	0.5311926	0.0000010	0.5313063	0.0000024	0.8002743	0.0000029	7905.763	1.965	7944.50	1.87	8050.22	2.07	799.99936	42
900	100.44	20.00	10:00	0.5987129	0.0000011	0.5988191	0.0000011	0.9018574	0.0000030	8905.526	1.239	8946.82	1.68	9050.97	1.29	900.00179	47
1000	100.428	20.00	10:17	0.6663674	0.0000054	0.6664849	0.0000053	1.0037234	0.0000089	9911.177	1.749	9952.70	1.67	10053.26	1.19	999.99999	52
1000	100.418	19.96	10:52	0.6663949	0.0000016	0.6665117	0.0000024	1.0037414	0.0000028	9909.017	1.677	9950.85	0.61	10052.73	2.52	1000.0002	52
900	100.417	19.94	11:08	0.5989786	0.0000010	0.5990651	0.0000016	0.9020780	0.0000026	8884.406	1.525	8923.51	2.96	9032.16	1.54	900.00203	47
800	100.415	19.92	11:24	0.5317229	0.0000016	0.5317843	0.0000018	0.8007026	0.0000010	7866.000	1.470	7901.49	1.79	8014.89	0.51	799.99978	42
700	100.406	19.91	11:40	0.4646340	0.0000023	0.4646863	0.0000018	0.6996589	0.0000034	6852.489	2.333	6886.69	1.37	7001.51	1.45	699.99914	37
600	100.406	19.91	11:56	0.3977200	0.0000023	0.3977689	0.0000023	0.5989243	0.0000024	5841.429	2.126	5875.42	2.28	5992.46	1.17	599.99934	33
500	100.395	19.92	12:12	0.3309829	0.0000023	0.3310306	0.0000022	0.4984851	0.0000030	4838.400	2.062	4869.18	2.88	4988.90	1.62	500.00312	28
400	100.38	19.92	12:28	0.2644234	0.0000028	0.2644686	0.0000015	0.3983123	0.0000021	3842.589	1.431	3868.52	1.27	3992.37	0.98	400.00787	24
300	100.365	19.91	12:44	0.1980274	0.0000019	0.1980697	0.0000021	0.2983583	0.0000008	2849.631	1.971	2876.39	1.39	2999.59	0.78	300.00221	20
200	100.358	19.91	13:00	0.1318154	0.0000015	0.1318543	0.0000021	0.1986374	0.0000015	1861.937	0.869	1889.00	2.13	2009.93	1.46	200.00662	16
100	100.356	19.9	13:17	0.0657900	0.0000023	0.0658306	0.0000010	0.0991880	0.0000026	879.249	2.272	908.36	1.85	1022.14	1.10	100.00472	14
0	101.343	19.88	13:33	0.0000474	0.0000010	0.0000686	0.0000010	0.0001083	0.0000014	-103.209	1.886	-71.56	1.74	37.50	0.81	0	0

PTB-2013, 1 GPa

Date: 18.04.2013

Measurement cycle: 3 of 4

File name for continuous records: 201304180646.prot

File name for selected records: 201304180646.data

P _{nom}	P _{amb} * ₁	T _{TS} * ₂	Local time * ₃	C ₁ * ₄	σ(C ₁) * ₅	C ₂ * ₄	σ(C ₂) * ₅	C ₃ * ₄	σ(C ₃) * ₅	C ₅ * ₄	σ(C ₅) * ₅	C ₆ * ₄	σ(C ₆) * ₅	C ₇ * ₄	σ(C ₇) * ₅	P _{LS} * ₆	u(P _{LS})/P _{LS} * ₇
/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	100.247	20.02	07:45	0.0000197	0.0000014	0.0000420	0.0000016	0.0000966	0.0000015	-101.786	1.778	-67.74	1.11	40.35	1.68	0	0
100	100.257	20.01	08:01	0.0654646	0.0000010	0.0655217	0.0000014	0.0988406	0.0000019	896.700	2.004	930.10	1.57	1037.33	0.89	100.00469	14
200	100.249	20.01	08:18	0.1312103	0.0000008	0.1312969	0.0000011	0.1980331	0.0000016	1896.429	1.334	1927.89	1.75	2037.39	1.18	200.00656	16
300	100.257	20.01	08:35	0.1972260	0.0000012	0.1973400	0.0000000	0.2976071	0.0000025	2894.314	1.070	2927.91	2.71	3039.17	2.45	300.00212	20
400	100.27	20.01	08:51	0.2635180	0.0000012	0.2636537	0.0000008	0.3975166	0.0000015	3898.011	1.413	3929.57	1.36	4043.07	1.35	400.00774	24
500	100.269	20.01	09:07	0.3300557	0.0000014	0.3302023	0.0000021	0.4977046	0.0000022	4899.283	1.318	4932.78	1.40	5046.94	1.21	500.00302	28
600	100.289	20.00	09:24	0.3968491	0.0000011	0.3969940	0.0000016	0.5982091	0.0000023	5902.774	3.057	5938.37	2.03	6048.95	1.32	599.99911	33
700	100.289	19.99	09:41	0.4638971	0.0000023	0.4640300	0.0000016	0.6990634	0.0000038	6902.923	1.979	6942.69	1.88	7047.99	0.76	699.99892	37
800	100.297	19.98	09:58	0.5311911	0.0000023	0.5313086	0.0000025	0.8002834	0.0000022	7904.752	0.919	7944.93	1.06	8050.47	0.89	799.99959	42
900	100.323	19.97	10:15	0.5987034	0.0000010	0.5988146	0.0000010	0.9018546	0.0000028	8907.360	1.794	8947.87	1.28	9052.97	2.03	900.00194	47
1000	100.328	19.98	10:32	0.6663523	0.0000024	0.6664743	0.0000018	1.0037214	0.0000032	9911.065	1.966	9954.10	2.23	10054.61	1.60	1000.0001	52
1000	100.408	19.98	11:02	0.6663674	0.0000028	0.6664886	0.0000019	1.0037240	0.0000053	9909.771	1.408	9952.44	1.43	10053.79	1.37	999.99992	52
900	100.419	19.96	11:19	0.5989620	0.0000012	0.5990517	0.0000008	0.9020714	0.0000019	8884.406	3.254	8924.18	1.19	9034.00	1.13	900.0018	47
800	100.452	19.95	11:35	0.5317051	0.0000020	0.5317691	0.0000011	0.8006926	0.0000019	7865.486	4.364	7901.21	1.71	8016.37	0.86	799.99946	42
700	100.481	19.94	11:52	0.4646177	0.0000021	0.4646731	0.0000025	0.6996529	0.0000045	6852.969	1.647	6887.01	2.23	7002.85	0.76	699.99882	37
600	100.508	19.94	12:07	0.3977071	0.0000023	0.3977586	0.0000025	0.5989200	0.0000035	5840.340	0.538	5876.11	1.62	5994.53	1.03	599.99904	33
500	100.541	19.93	12:24	0.3309251	0.0000020	0.3309797	0.0000014	0.4984369	0.0000016	4839.712	2.246	4871.62	2.39	4991.70	2.07	500.00291	28
400	100.556	19.92	12:41	0.2644100	0.0000012	0.2644577	0.0000014	0.3983080	0.0000023	3841.646	1.153	3870.47	2.45	3992.85	0.72	400.00768	24
300	100.554	19.92	12:59	0.1980189	0.0000016	0.1980623	0.0000014	0.2983574	0.0000028	2848.157	1.763	2875.62	1.94	2999.32	1.88	300.00206	20
200	100.557	19.93	13:17	0.1318074	0.0000019	0.1318480	0.0000023	0.1986374	0.0000015	1860.814	1.992	1890.77	1.86	2008.89	1.30	200.0065	16
100	100.566	19.93	13:35	0.0657837	0.0000014	0.0658263	0.0000021	0.0991897	0.0000014	877.500	1.638	907.93	1.29	1022.10	1.42	100.00465	14
0	100.575	19.93	13:55	0.0000417	0.0000018	0.0000654	0.0000015	0.0001100	0.0000016	-104.777	1.893	-70.49	1.69	37.39	1.44	0	0

PTB-2013, 1 GPa

Date: 10.04.2013

Measurement cycle: 4 of 4

File name for continuous records: 201304100723.prot

File name for selected records: 201304100723.data

P _{nom}	P _{amb} +1	T _{TS} +2	Local time +3	C ₁ +4	σ(C ₁) +5	C ₂ +4	σ(C ₂) +5	C ₃ +4	σ(C ₃) +5	C ₅ +4	σ(C ₅) +5	C ₆ +4	σ(C ₆) +5	C ₇ +4	σ(C ₇) +5	P _{LS} +6	u(P _{LS})/P _{LS} +7
/kPa	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	99.556	19.87	08:18	0.0000254	0.0000015	0.0000363	0.0000008	0.0000694	0.0000010	-99.180	2.048	-66.05	2.59	40.43	0.84	0	0
100	99.560	19.87	08:36	0.0641609	0.0000011	0.0642017	0.0000008	0.0968360	0.0000016	879.583	1.773	912.14	0.81	1018.26	1.34	98.00368	14
200	99.564	19.88	08:52	0.1298991	0.0000011	0.1299777	0.0000008	0.1960151	0.0000020	1878.660	1.596	1911.52	3.02	2018.34	1.56	198.00584	16
300	99.557	19.90	09:08	0.1959229	0.0000011	0.1960209	0.0000011	0.2955851	0.0000034	2876.417	2.079	2910.24	1.25	3020.30	1.35	298.00166	20
400	99.565	19.91	09:25	0.2622214	0.0000015	0.2623349	0.0000025	0.3954949	0.0000032	3878.306	1.046	3910.41	1.98	4022.65	1.18	398.00758	24
500	99.580	19.92	09:42	0.3287606	0.0000022	0.3288826	0.0000015	0.4956791	0.0000038	4879.714	1.369	4912.05	1.82	5025.79	0.67	498.00308	28
600	99.584	19.92	09:58	0.3955546	0.0000022	0.3956754	0.0000015	0.5961837	0.0000029	5881.406	2.020	5916.89	2.66	6025.53	1.99	597.99947	33
700	99.598	19.93	10:14	0.4626006	0.0000019	0.4627111	0.0000023	0.6970314	0.0000028	6882.026	2.199	6920.85	1.63	7025.07	1.26	697.99942	37
800	99.602	19.93	10:30	0.5298889	0.0000016	0.5299929	0.0000011	0.7982414	0.0000019	7881.874	2.410	7922.60	1.19	8025.66	1.31	798.00022	42
900	99.612	19.93	10:46	0.5974129	0.0000011	0.5975011	0.0000011	0.8998266	0.0000015	8882.734	3.675	8925.63	1.57	9029.05	0.94	898.00291	47
1000	99.622	19.93	11:02	0.6651020	0.0000016	0.6651934	0.0000015	1.0017263	0.0000014	9887.623	1.328	9929.71	2.27	10032.02	1.13	998.00126	52
1000	99.633	19.94	11:38	0.6651331	0.0000011	0.6652231	0.0000020	1.0017480	0.0000040	9886.397	4.020	9928.13	1.50	10030.11	1.14	998.00107	52
900	99.633	19.94	11:55	0.5976594	0.0000015	0.5977251	0.0000016	0.9000257	0.0000027	8865.351	1.416	8902.12	1.45	9010.40	1.08	898.00256	47
800	99.638	19.94	12:12	0.5304351	0.0000016	0.5304837	0.0000021	0.7986860	0.0000033	7845.214	1.458	7877.51	1.32	7992.86	0.56	797.99996	42
700	99.635	19.94	12:29	0.4633491	0.0000023	0.4633900	0.0000016	0.6976471	0.0000032	6830.434	3.069	6863.10	1.64	6979.34	1.06	697.99907	37
600	99.648	19.95	12:46	0.3964380	0.0000020	0.3964771	0.0000020	0.5969214	0.0000034	5820.660	2.677	5854.29	1.60	5972.47	1.04	597.99909	33
500	99.653	19.95	13:03	0.3297029	0.0000020	0.3297409	0.0000016	0.4964866	0.0000030	4818.720	1.150	4848.13	1.83	4970.14	1.67	498.00277	28
400	99.649	19.94	13:20	0.2631429	0.0000023	0.2631771	0.0000011	0.3963157	0.0000018	3822.231	2.520	3849.76	1.96	3973.19	0.88	398.00732	24
300	99.644	19.94	13:37	0.1967451	0.0000020	0.1967783	0.0000018	0.2963617	0.0000024	2830.989	1.277	2857.40	0.80	2980.93	0.83	298.00149	20
200	99.649	19.93	13:54	0.1305320	0.0000020	0.1305626	0.0000015	0.1966460	0.0000016	1843.406	2.801	1869.79	2.06	1990.43	1.25	198.00571	16
100	99.667	19.92	14:11	0.0645049	0.0000011	0.0645246	0.0000022	0.0971957	0.0000014	858.969	2.536	889.04	1.22	1003.17	0.92	98.00361	14
0	99.669	19.91	14:28	0.0000577	0.0000014	0.0000697	0.0000014	0.0000940	0.0000020	-103.166	2.211	-70.06	2.25	37.38	1.15	0	0

PTB-2014, 0.5 GPa

Date: 15.05.2014

Measurement cycle: 1 of 4

File name for continuous records: 201405150624.prot

File name for selected records: 201405150624.data

P _{nom}	P _{amb} +1	T _{TS} +2	Local time +3	C ₁ +4	σ(C ₁) +5	C ₂ +4	σ(C ₂) +5	C ₃ +4	σ(C ₃) +5	C ₄ +4	σ(C ₄) +5	C ₅ +4	σ(C ₅) +5	C ₆ +4	σ(C ₆) +5	C ₇ +4	σ(C ₇) +5	C ₈ +4	σ(C ₈) +5	P _{LS} +6	u(P _{LS})/P _{LS} +7
/kPa	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	102.290	19.82	07:15	-0.0002789	0.0000011	-0.0000971	0.0000016	0.0001263	0.0000014	-0.0002314	0.0000036	-110.169	2.53	-61.91	1.38	51.51	1.16	-1.67	0.29	0	0
500	102.301	19.83	07:33	0.0323951	0.0000011	0.0325969	0.0000011	0.0494400	0.0000016	0.0989580	0.0000012	388.714	1.58	437.42	1.57	550.49	0.74	496.46	0.42	50.00337	5
1000	102.309	19.84	07:49	0.0651537	0.0000008	0.0653680	0.0000012	0.0988674	0.0000010	0.1983851	0.0000020	886.577	2.33	936.04	2.26	1049.98	1.58	995.11	0.15	100.00437	9
1500	102.323	19.86	08:07	0.0979763	0.0000008	0.0982091	0.0000011	0.1483986	0.0000010	0.2980223	0.0000021	1387.654	1.52	1435.38	1.40	1550.03	1.32	1493.67	0.31	149.99932	13
2000	102.341	19.87	08:23	0.1308754	0.0000015	0.1311277	0.0000014	0.1980486	0.0000015	0.3979114	0.0000019	1887.746	2.63	1936.23	2.53	2050.41	1.08	1992.48	0.21	200.00593	16
2500	102.352	19.88	08:39	0.1638389	0.0000011	0.1641060	0.0000000	0.2477846	0.0000010	0.4980100	0.0000035	2388.874	2.32	2437.26	1.32	2551.03	1.83	2491.71	0.45	249.99891	18
3000	102.365	19.89	08:56	0.1968751	0.0000020	0.1971660	0.0000016	0.2976223	0.0000014	0.5983680	0.0000033	2889.883	1.64	2938.53	1.55	3052.61	1.22	2991.37	0.39	300.00111	20
3500	102.384	19.9	09:13	0.2299823	0.0000018	0.2302857	0.0000021	0.3475443	0.0000018	0.6989497	0.0000039	3390.789	2.75	3438.87	1.83	3555.08	2.42	3490.83	0.23	350.00854	22
4000	102.388	19.9	09:29	0.2631486	0.0000019	0.2634614	0.0000022	0.3975246	0.0000025	0.7997023	0.0000050	3895.466	1.59	3941.16	2.28	4056.81	1.31	3991.01	0.51	400.00642	24
4500	102.392	19.9	09:45	0.2963763	0.0000018	0.2966994	0.0000025	0.4475803	0.0000024	0.9005860	0.0000065	4396.749	1.28	4442.67	2.00	4561.12	1.14	4491.38	0.13	450.00787	26
5000	102.396	19.9	10:02	0.3296580	0.0000016	0.3299874	0.0000019	0.4976949	0.0000020	1.0014826	0.0000073	4899.309	0.91	4944.58	1.48	5063.71	0.81	4991.83	0.23	500.00133	29
5000	102.402	19.88	10:36	0.3296709	0.0000028	0.3300000	0.0000000	0.4977009	0.0000036	1.0015511	0.0000016	4899.094	2.24	4944.01	2.06	5063.86	1.14	4992.03	0.21	500.00136	29
4500	102.405	19.87	10:53	0.2964923	0.0000018	0.2968094	0.0000015	0.4476820	0.0000038	0.9010386	0.0000039	4390.611	2.61	4435.34	2.06	4558.46	1.19	4491.90	0.27	450.00789	26
4000	102.414	19.85	11:11	0.2633454	0.0000022	0.2636466	0.0000015	0.3977077	0.0000021	0.8005271	0.0000051	3886.320	1.36	3930.48	1.84	4053.71	0.51	3991.67	0.38	400.0065	24
3500	102.42	19.85	11:28	0.2302357	0.0000018	0.2305223	0.0000014	0.3477909	0.0000023	0.7000706	0.0000053	3382.140	2.57	3424.65	2.05	3551.31	1.19	3491.41	0.49	350.00861	22
3000	102.425	19.86	11:48	0.1971574	0.0000019	0.1974243	0.0000016	0.2979160	0.0000020	0.5996577	0.0000035	2879.477	1.87	2920.61	0.98	3048.51	0.41	2991.54	0.29	300.00113	20
2500	102.423	19.86	12:08	0.1641269	0.0000011	0.1643797	0.0000008	0.2481026	0.0000015	0.4993546	0.0000036	2377.431	2.27	2421.21	0.38	2547.48	0.98	2492.15	0.40	249.99887	18
2000	102.422	19.86	12:27	0.1311449	0.0000011	0.1313843	0.0000014	0.1983569	0.0000016	0.3991663	0.0000027	1876.389	2.87	1920.03	1.32	2046.27	1.30	1993.15	0.17	200.00588	16
1500	102.426	19.86	12:45	0.0982017	0.0000014	0.0984286	0.0000019	0.1486686	0.0000015	0.2990783	0.0000018	1377.583	1.44	1422.62	1.85	1546.34	0.79	1494.02	0.32	149.99925	13
1000	102.428	19.86	13:04	0.0653180	0.0000016	0.0655320	0.0000016	0.0990740	0.0000012	0.1991557	0.0000034	880.594	0.74	928.11	2.02	1046.21	1.18	995.21	0.24	100.0043	9
500	102.424	19.87	13:23	0.0324826	0.0000010	0.0326880	0.0000012	0.0495583	0.0000008	0.0994043	0.0000029	384.583	3.29	431.13	1.12	549.02	1.00	496.58	0.39	50.00332	5
0			13:39	-0.0002751	0.0000016	-0.0000886	0.0000015	0.0001337	0.0000008	-0.0001057	0.0000018	-111.471	1.77	-63.07	2.24	51.33	0.53	-1.47	0.24	0	0

PTB-2014, 0.5 GPa

Date: 19.05.2014

Measurement cycle: 2 of 4

File name for continuous records: 201405190628.prot

File name for selected records: 201405190628.data

P _{nom}	P _{amb} #1	T _{TS} #2	Local time #3	C ₁ #4	σ(C ₁) #5	C ₂ #4	σ(C ₂) #5	C ₃ #4	σ(C ₃) #5	C ₄ #4	σ(C ₄) #5	C ₅ #4	σ(C ₅) #5	C ₆ #4	σ(C ₆) #5	C ₇ #4	σ(C ₇) #5	C ₈ #4	σ(C ₈) #5	P _{LS} #6	u(P _{LS})/P _{LS} #7
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	100.174	19.95	07:22	-0.0003040	0.0000000	-0.0001186	0.0000010	0.0001146	0.0000010	-0.0002243	0.0000024	-114.077	2.67	-64.48	3.14	52.36	1.08	-1.75	0.27	0	0
50	100.185	19.96	07:38	0.0323700	0.0000012	0.0325763	0.0000008	0.0494286	0.0000010	0.0989709	0.0000011	387.377	1.77	436.89	1.60	551.22	0.80	496.63	0.24	50.00357	13
100	100.187	19.97	07:54	0.0651291	0.0000011	0.0653466	0.0000010	0.0988543	0.0000008	0.1983960	0.0000012	885.531	3.45	935.66	1.50	1049.93	1.22	994.89	0.34	100.00469	14
150	100.184	19.98	08:09	0.0979494	0.0000010	0.0981869	0.0000011	0.1483871	0.0000011	0.2980337	0.0000018	1386.737	2.41	1436.05	1.59	1549.77	1.06	1493.49	0.21	149.99976	15
200	100.184	19.99	08:26	0.1308511	0.0000011	0.1311060	0.0000012	0.1980374	0.0000015	0.3979263	0.0000021	1887.249	0.88	1937.21	2.00	2051.09	1.02	1992.43	0.43	200.0065	16
250	100.195	19.99	08:42	0.1638123	0.0000008	0.1640840	0.0000012	0.2477709	0.0000011	0.4980243	0.0000024	2388.754	2.89	2436.34	1.37	2552.10	1.16	2491.85	0.32	249.99962	18
300	100.189	19.99	08:58	0.1968489	0.0000016	0.1971429	0.0000011	0.2976091	0.0000016	0.5983777	0.0000031	2890.774	2.08	2938.05	1.68	3054.05	1.11	2991.39	0.29	300.00198	20
350	100.185	19.99	09:15	0.2299551	0.0000011	0.2302631	0.0000011	0.3475300	0.0000012	0.6989629	0.0000038	3393.729	1.53	3440.11	2.20	3555.87	1.78	3490.84	0.22	350.00956	22
400	100.186	19.99	09:31	0.2631206	0.0000022	0.2634377	0.0000014	0.3975094	0.0000022	0.7997131	0.0000041	3895.646	1.13	3942.12	2.47	4058.85	0.65	3991.18	0.16	400.00757	24
450	100.195	19.98	09:48	0.2963480	0.0000016	0.2966734	0.0000010	0.4475640	0.0000026	0.9005977	0.0000031	4397.923	1.87	4442.57	2.88	4562.42	1.28	4491.63	0.25	450.0091	26
500	100.194	19.98	10:04	0.3296229	0.0000011	0.3299569	0.0000023	0.4976740	0.0000012	1.0014854	0.0000055	4900.089	1.21	4946.75	3.01	5065.10	1.37	4992.11	0.41	500.00278	28
500	100.202	19.98	10:38	0.3296366	0.0000015	0.3299700	0.0000012	0.4976817	0.0000021	1.0015563	0.0000045	4899.051	1.53	4946.37	1.99	5064.22	1.30	4992.10	0.13	500.00269	28
450	100.197	19.98	10:55	0.2964571	0.0000020	0.2967786	0.0000015	0.4476611	0.0000023	0.9010434	0.0000030	4392.660	0.93	4438.49	2.48	4559.41	1.31	4491.61	0.40	450.00906	26
400	100.191	19.99	11:12	0.2633086	0.0000019	0.2636151	0.0000016	0.3976880	0.0000012	0.8005306	0.0000041	3888.249	2.06	3933.51	1.21	4056.21	0.51	3991.39	0.28	400.00746	24
350	100.18	20.00	11:29	0.2301997	0.0000014	0.2304929	0.0000016	0.3477720	0.0000016	0.7000763	0.0000037	3385.149	1.55	3425.51	1.70	3553.31	1.42	3491.71	0.21	350.00944	22
300	100.184	20.01	11:46	0.1971237	0.0000021	0.1973906	0.0000016	0.2979006	0.0000015	0.5996680	0.0000038	2880.377	2.09	2922.62	2.79	3050.10	1.09	2991.72	0.20	300.00186	20
250	100.184	20.01	12:03	0.1640931	0.0000016	0.1643511	0.0000011	0.2480840	0.0000012	0.4993594	0.0000036	2378.657	1.06	2422.19	1.28	2548.34	1.17	2492.02	0.23	249.99949	18
200	100.181	20.01	12:20	0.1311126	0.0000010	0.1313577	0.0000008	0.1983394	0.0000019	0.3991740	0.0000040	1877.829	1.86	1921.71	2.82	2047.27	1.70	1992.95	0.39	200.00638	16
150	100.176	20.01	12:37	0.0981703	0.0000014	0.0984031	0.0000016	0.1486549	0.0000011	0.2990849	0.0000036	1378.354	1.98	1423.30	1.44	1547.70	1.40	1493.96	0.18	149.99967	15
100	100.185	20.01	12:55	0.0652883	0.0000008	0.0655071	0.0000011	0.0990597	0.0000008	0.1991609	0.0000034	882.540	2.65	926.50	2.13	1048.35	0.78	995.35	0.14	100.00462	14
50	100.183	20.00	13:13	0.0324557	0.0000014	0.0326651	0.0000011	0.0495463	0.0000014	0.0994100	0.0000028	382.457	1.73	430.81	1.62	549.26	1.09	496.74	0.27	50.00353	13
0			13:29	-0.0002986	0.0000010	-0.0001074	0.0000010	0.0001240	0.0000012	-0.0000974	0.0000028	-111.454	2.96	-62.94	2.28	51.93	0.98	-1.78	0.37	0	0

PTB-2014, 0.5 GPa

Date: 20.05.2014

Measurement cycle: 3 of 4

File name for continuous records: 201405200637.prot

File name for selected records: 201405200637.data

P _{nom}	P _{amb} #1	T _{TS} #2	Local time #3	C ₁ #4	σ(C ₁) #5	C ₂ #4	σ(C ₂) #5	C ₃ #4	σ(C ₃) #5	C ₄ #4	σ(C ₄) #5	C ₅ #4	σ(C ₅) #5	C ₆ #4	σ(C ₆) #5	C ₇ #4	σ(C ₇) #5	C ₈ #4	σ(C ₈) #5	P _{LS} #6	u(P _{LS})/P _{LS} #7
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	100.401	19.98	07:33	-0.0003029	0.0000011	-0.0001183	0.0000008	0.0001146	0.0000010	-0.0001929	0.0000030	-112.457	2.06	-61.86	1.04	51.47	1.46	-1.88	0.33	0	0
50	100.422	19.99	07:49	0.0323706	0.0000010	0.0325763	0.0000008	0.0494280	0.0000000	0.0990017	0.0000008	386.374	0.63	437.38	1.99	551.24	1.20	496.64	0.29	50.00354	13
100	100.426	20.00	08:05	0.0651297	0.0000008	0.0653474	0.0000010	0.0988546	0.0000015	0.1984260	0.0000016	886.140	3.11	935.13	2.27	1050.59	1.00	995.02	0.16	100.00464	14
150	100.436	20.01	08:21	0.0979506	0.0000010	0.0981869	0.0000011	0.1483860	0.0000012	0.2980640	0.0000016	1386.069	1.98	1435.12	1.74	1550.38	0.86	1493.54	0.30	149.99968	15
200	100.432	20.02	08:37	0.1308506	0.0000010	0.1311046	0.0000015	0.1980340	0.0000012	0.3979546	0.0000019	1886.657	1.07	1936.49	1.83	2050.89	0.91	1992.47	0.37	200.0064	16
250	100.438	20.02	08:53	0.1638126	0.0000010	0.1640843	0.0000014	0.2477691	0.0000011	0.4980551	0.0000030	2389.080	3.11	2437.03	2.05	2551.50	1.05	2491.70	0.35	249.9995	18
300	100.449	20.02	09:09	0.1968497	0.0000008	0.1971434	0.0000010	0.2976077	0.0000021	0.5984080	0.0000026	2890.569	2.06	2939.57	1.57	3053.99	1.07	2991.25	0.25	300.00186	20
350	100.459	20.02	09:25	0.2299557	0.0000008	0.2302623	0.0000008	0.3475269	0.0000011	0.6989906	0.0000040	3392.880	2.22	3439.67	2.24	3555.62	1.29	3491.06	0.25	350.00941	22
400	100.464	20.01	09:41	0.2631186	0.0000010	0.2634363	0.0000008	0.3975057	0.0000018	0.7997386	0.0000038	3894.274	1.49	3943.17	3.68	4057.95	0.99	3991.05	0.35	400.0074	24
450	100.461	20.01	09:58	0.2963437	0.0000014	0.2966703	0.0000014	0.4475606	0.0000010	0.9006186	0.0000038	4399.526	1.25	4444.77	2.04	4562.22	0.89	4491.49	0.34	450.00896	26
500	100.473	20.00	10:14	0.3296171	0.0000016	0.3299529	0.0000011	0.4976689	0.0000016	1.0015046	0.0000040	4900.783	1.83	4947.28	2.13	5064.66	1.71	4992.07	0.37	500.00257	28
500	100.471	19.99	10:49	0.3296306	0.0000010	0.3299657	0.0000014	0.4976749	0.0000016	1.0015771	0.0000030	4901.340	2.50	4948.11	1.69	5064.89	0.52	4992.12	0.26	500.00257	28
450	100.463	20.00	11:07	0.2964526	0.0000015	0.2967734	0.0000010	0.4476563	0.0000018	0.9010640	0.0000023	4395.146	2.21	4438.18	1.95	4560.88	0.71	4491.66	0.29	450.00892	26
400	100.472	19.99	11:24	0.2633037	0.0000018	0.2636114	0.0000010	0.3976831	0.0000016	0.8005520	0.0000020	3888.771	1.41	3932.63	2.37	4056.82	1.46	3991.40	0.34	400.00735	24
350	100.473	19.99	11:40	0.2301969	0.0000020	0.2304894	0.0000010	0.3477663	0.0000008	0.7000974	0.0000030	3386.177	2.18	3427.61	2.01	3553.26	1.76	3491.45	0.43	350.0094	22
300	100.472	19.97	11:59	0.1971220	0.0000016	0.1973940	0.0000016	0.2978943	0.0000021	0.5996909	0.0000034	2882.117	1.79	2924.55	2.11	3050.33	0.74	2991.70	0.25	300.00184	20
250	100.471	19.98	12:16	0.1640926	0.0000010	0.1643497	0.0000008	0.2480803	0.0000014	0.4993817	0.0000041	2379.951	2.47	2422.75	2.43	2548.90	1.46	2492.24	0.21	249.99948	18
200	100.469	19.97	12:34	0.1311123	0.0000008	0.1313569	0.0000016	0.1983349	0.0000016	0.3991943	0.0000031	1878.446	0.83	1922.43	1.08	2047.04	0.89	1993.00	0.40	200.00638	16
150	100.47	19.97	12:51	0.0981714	0.0000015	0.0984023	0.0000008	0.1486497	0.0000014	0.2991054	0.0000032	1378.191	1.97	1422.48	1.65	1547.25	1.03	1494.13	0.36	149.99965	15
100	100.469	19.96	13:09	0.0652906	0.0000010	0.0655069	0.0000011	0.0990546	0.0000010	0.1991829	0.0000023	878.769	1.13	926.60	1.96	1047.23	1.11	995.19	0.24	100.00461	14
50	100.467	19.96	13:27	0.0324594	0.0000010	0.0326671	0.0000016	0.0495437	0.0000008	0.0994337	0.0000029	382.980	1.73	429.99	1.90	549.98	0.92	496.89	0.29	50.00352	13
0			13:42	-0.0002940	0.0000012	-0.0001040	0.0000012	0.0001229	0.0000011	-0.0000717	0.0000027	-113.280	1.94	-63.69	1.32	51.92	1.39	-1.55	0.14	0	0

PTB-2014, 0.5 GPa

Date: 21.05.2014

Measurement cycle: 4 of 4

File name for continuous records: 201405210640.prot

File name for selected records: 201405210640.data

P _{nom}	P _{amb} *1	T _{TS} *2	Local time *3	C ₁ *4	σ(C ₁) *5	C ₂ *4	σ(C ₂) *5	C ₃ *4	σ(C ₃) *5	C ₄ *4	σ(C ₄) *5	C ₅ *4	σ(C ₅) *5	C ₆ *4	σ(C ₆) *5	C ₇ *4	σ(C ₇) *5	C ₈ *4	σ(C ₈) *5	P _{LS} *6	u(P _{LS})/P _{LS} *7
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	100.507	20.00	07:30	-0.0003034	0.0000010	-0.0001180	0.0000000	0.0001143	0.0000008	-0.0001766	0.0000032	-113.134	1.59	-61.98	1.11	51.98	1.73	-1.71	0.37	0	0
50	100.506	20.01	07:46	0.0323703	0.0000014	0.0325766	0.0000010	0.0494277	0.0000018	0.0990174	0.0000015	385.877	1.22	436.40	2.49	550.41	0.53	496.55	0.14	50.00353	13
100	100.53	20.01	08:02	0.0651294	0.0000015	0.0653483	0.0000008	0.0988543	0.0000008	0.1984426	0.0000015	886.311	3.37	936.20	2.00	1051.09	2.43	994.69	0.30	100.00462	14
150	100.537	20.01	08:19	0.0979506	0.0000010	0.0981871	0.0000011	0.1483851	0.0000011	0.2980820	0.0000026	1384.577	1.46	1434.97	1.98	1549.69	0.64	1493.51	0.30	149.99967	15
200	100.541	20.01	08:36	0.1308503	0.0000014	0.1311060	0.0000012	0.1980331	0.0000011	0.3979717	0.0000021	1886.426	1.99	1935.66	1.85	2051.27	1.64	1992.48	0.42	200.0064	16
250	100.541	20.01	08:53	0.1638129	0.0000011	0.1640846	0.0000010	0.2477683	0.0000008	0.4980734	0.0000022	2389.577	2.53	2435.92	1.46	2551.43	1.08	2491.84	0.37	249.9995	18
300	100.544	20.00	09:09	0.1968494	0.0000022	0.1971440	0.0000012	0.2976057	0.0000014	0.5984257	0.0000037	2890.226	2.05	2937.61	1.74	3054.31	0.74	2991.24	0.42	300.00187	20
350	100.548	20.00	09:25	0.2299554	0.0000015	0.2302617	0.0000014	0.3475249	0.0000011	0.6990057	0.0000041	3392.374	1.73	3439.65	2.66	3556.16	1.31	3490.83	0.23	350.00942	22
400	100.544	20.00	09:41	0.2631183	0.0000021	0.2634349	0.0000016	0.3975040	0.0000020	0.7997554	0.0000044	3897.360	1.59	3942.46	2.71	4058.17	0.93	3991.17	0.19	400.00738	24
450	100.554	20.00	09:57	0.2963414	0.0000015	0.2966694	0.0000010	0.4475563	0.0000021	0.9006309	0.0000041	4398.540	1.69	4444.49	2.11	4561.27	1.10	4491.44	0.33	450.00893	26
500	100.56	20.00	10:14	0.3296120	0.0000016	0.3299480	0.0000020	0.4976637	0.0000018	1.0015154	0.0000055	4901.023	1.32	4948.38	1.14	5066.43	1.12	4992.17	0.38	500.00254	28
500	100.571	20.00	10:49	0.3296251	0.0000020	0.3299606	0.0000015	0.4976697	0.0000014	1.0015863	0.0000029	4901.580	1.03	4946.98	2.24	5065.33	0.94	4991.98	0.40	500.00249	28
450	100.576	20.00	11:07	0.2964474	0.0000015	0.2967697	0.0000014	0.4476514	0.0000022	0.9010743	0.0000039	4395.806	2.51	4439.95	1.89	4560.78	1.20	4491.73	0.28	450.00887	26
400	100.558	20.00	11:25	0.2632986	0.0000015	0.2636069	0.0000016	0.3976769	0.0000023	0.8005634	0.0000040	3889.749	1.63	3935.15	1.75	4056.37	1.57	3991.63	0.33	400.00733	24
350	100.562	19.99	11:44	0.2301906	0.0000015	0.2304857	0.0000014	0.3477617	0.0000024	0.7001089	0.0000028	3386.374	1.72	3428.82	1.03	3552.48	0.57	3491.29	0.22	350.00938	22
300	100.557	19.99	12:01	0.1971171	0.0000016	0.1973897	0.0000014	0.2978897	0.0000021	0.5997017	0.0000039	2882.400	2.01	2926.76	1.51	3051.11	0.65	2991.62	0.35	300.0018	20
250	100.537	19.98	12:18	0.1640880	0.0000012	0.1643457	0.0000014	0.2480763	0.0000008	0.4993954	0.0000034	2379.831	1.48	2422.65	2.04	2549.53	1.09	2492.35	0.28	249.99948	18
200	100.52	19.97	12:35	0.1311089	0.0000020	0.1313540	0.0000016	0.1983326	0.0000015	0.3992103	0.0000031	1878.514	1.80	1922.98	1.91	2048.10	0.89	1992.98	0.39	200.00637	16
150	100.526	19.96	12:52	0.0981686	0.0000010	0.0984006	0.0000010	0.1486474	0.0000015	0.2991211	0.0000030	1377.317	2.18	1424.51	1.73	1547.80	1.34	1493.85	0.18	149.99965	15
100	100.516	19.96	13:12	0.0652874	0.0000010	0.0655051	0.0000016	0.0990529	0.0000011	0.1991934	0.0000036	879.566	1.73	927.32	2.05	1048.18	1.29	995.29	0.34	100.00461	14
50	100.506	19.96	13:30	0.0324560	0.0000000	0.0326666	0.0000015	0.0495420	0.0000000	0.0994477	0.0000027	381.720	0.79	430.91	2.04	549.99	0.84	496.74	0.41	50.00352	13
0	0			-0.0002977	0.0000014	-0.0001069	0.0000011	0.0001211	0.0000011	-0.0000637	0.0000027	-113.014	1.52	-63.38	2.12	51.42	1.78	-1.70	0.20	0	0

PTB-2014, 1 GPa

Date: 09.05.2014

Measurement cycle: 1 of 4

File name for continuous records: 201405091105.prot

File name for selected records: 201405091105.data

P _{nom}	P _{amb} *1	T _{TS} *2	Local time *3	C ₁ *4	σ(C ₁) *5	C ₂ *4	σ(C ₂) *5	C ₃ *4	σ(C ₃) *5	C ₄ *4	σ(C ₄) *5	C ₅ *4	σ(C ₅) *5	C ₆ *4	σ(C ₆) *5	C ₇ *4	σ(C ₇) *5	P _{LS} *6	u(P _{LS})/P _{LS} *7
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	100.057	19.87	12:18	-0.0002929	0.0000011	-0.0001043	0.0000014	0.0001231	0.0000011	-107.734	1.314	-59.67	1.90	51.86	1.07	0		0	0
100	100.047	19.87	12:33	0.0651380	0.0000012	0.0653577	0.0000014	0.0988600	0.0000012	890.486	1.797	938.79	1.92	1049.26	1.29	100.0048		14	
200	100.024	19.87	12:48	0.1308600	0.0000012	0.1311146	0.0000010	0.1980420	0.0000012	1890.086	2.477	1938.09	1.24	2050.61	1.65	200.00674		16	
300	100.016	19.91	13:02	0.1968600	0.0000012	0.1971529	0.0000011	0.2976160	0.0000016	2890.697	1.678	2938.49	1.01	3052.63	1.14	300.00235		20	
400	100.015	19.93	13:16	0.2631391	0.0000016	0.2634531	0.0000011	0.3975291	0.0000011	3892.517	1.716	3941.14	1.15	4057.77	1.65	400.00806		24	
500	100.015	19.95	13:31	0.3296531	0.0000011	0.3299829	0.0000011	0.4976997	0.0000021	4896.900	1.180	4943.65	1.76	5062.82	0.68	500.00332		28	
600	100.009	19.95	13:48	0.3964371	0.0000011	0.3967686	0.0000010	0.5982034	0.0000010	5904.257	2.484	5951.81	1.86	6067.09	1.10	599.99949		33	
700	99.999	19.96	14:02	0.4634640	0.0000020	0.4637906	0.0000015	0.6990454	0.0000019	6909.497	1.049	6959.61	1.27	7073.03	1.58	699.99919		37	
800	99.99	19.96	14:19	0.5307200	0.0000016	0.5310334	0.0000010	0.8002394	0.0000010	7914.077	2.628	7971.40	2.27	8078.98	1.24	799.99986		42	
900	99.979	19.97	14:37	0.5982280	0.0000000	0.5985349	0.0000011	0.9018083	0.0000008	8917.380	1.912	8977.11	0.52	9083.35	1.13	900.00221		47	
1000	99.976	19.97	14:52	0.6658991	0.0000011	0.6662186	0.0000010	1.0037040	0.0000012	9924.343	2.283	9984.75	0.96	10086.44	1.19	1000.0004		52	
1000	99.969	19.97	15:28	0.6659280	0.0000012	0.6662489	0.0000011	1.0037257	0.0000014	9920.674	2.220	9983.34	1.89	10084.82	1.19	1000.0001		52	
900	99.964	19.98	15:45	0.5985003	0.0000021	0.5987823	0.0000014	0.9020320	0.0000020	8896.346	2.281	8955.38	2.42	9063.98	1.36	900.00183		47	
800	99.969	19.98	16:01	0.5312403	0.0000014	0.5315037	0.0000014	0.8006583	0.0000008	7877.152	2.026	7931.19	1.67	8046.77	0.96	799.99953		42	
700	99.988	19.98	16:24	0.4641543	0.0000021	0.4644086	0.0000010	0.6996183	0.0000014	6861.377	1.485	6914.62	1.63	7031.90	1.20	699.99884		37	
600	99.968	19.98	16:40	0.3972509	0.0000016	0.3975014	0.0000015	0.5988909	0.0000011	5850.060	2.194	5903.05	1.61	6023.17	1.76	599.99911		33	
500	99.991	19.99	16:57	0.3305209	0.0000016	0.3307677	0.0000014	0.4984554	0.0000019	4841.460	1.295	4898.40	2.56	5016.88	1.29	500.00286		28	
400	100.005	19.99	17:14	0.2639700	0.0000012	0.2642123	0.0000014	0.3982866	0.0000015	3840.017	2.632	3896.31	1.97	4014.82	0.92	400.00765		24	
300	100.014	20.00	17:30	0.1975897	0.0000018	0.1978251	0.0000016	0.2983394	0.0000015	2845.560	1.708	2896.11	1.47	3016.35	1.04	300.00202		20	
200	100.039	19.99	17:47	0.1313966	0.0000019	0.1316231	0.0000020	0.1986231	0.0000011	1856.486	2.366	1904.82	2.74	2023.46	1.39	200.00652		16	
100	100.061	19.99	18:06	0.0654146	0.0000015	0.0656311	0.0000011	0.0991906	0.0000015	871.106	2.378	918.31	2.20	1035.61	1.11	100.00468		14	
0	100.083	19.98	18:21	-0.0002709	0.0000011	-0.0000766	0.0000010	0.0001431	0.0000011	-110.983	1.856	-62.78	2.11	49.77	0.74	0		0	

PTB-2014, 1 GPa

Date: 12.05.2014

Measurement cycle: 2 of 4

File name for continuous records: 201405120639.prot

File name for selected records: 201405120639.data

P _{nom}	P _{amb} +1	T _{TS} +2	Local time +3	C ₁ +4	σ(C ₁) +5	C ₂ +4	σ(C ₂) +5	C ₃ +4	σ(C ₃) +5	C ₄ +4	σ(C ₄) +5	C ₅ +4	σ(C ₅) +5	C ₆ +4	σ(C ₆) +5	C ₇ +4	σ(C ₇) +5	P _{LS} +6	u(P _{LS})/P _{LS} +7
/kPa	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	99.720	19.90	07:35	-0.0002820	0.0000016	-0.0000986	0.0000015	0.0001269	0.0000011	-108.763	1.177	-58.62	2.51	51.95	0.93	0	0	0	0
100	99.735	19.90	07:50	0.0651509	0.0000011	0.0653660	0.0000016	0.0988680	0.0000012	889.646	1.502	937.79	1.80	1050.34	0.96	100.00486	14	14	14
200	99.75	19.91	08:08	0.1308737	0.0000008	0.1311254	0.0000010	0.1980494	0.0000010	1890.677	3.181	1937.73	2.53	2050.37	1.48	200.00682	16	16	16
300	99.745	19.92	08:25	0.1968751	0.0000011	0.1971646	0.0000010	0.2976251	0.0000011	2888.657	1.784	2937.72	3.68	3052.61	1.22	300.00249	20	20	20
400	99.752	19.92	08:42	0.2631506	0.0000010	0.2634623	0.0000008	0.3975337	0.0000008	3892.003	2.076	3939.94	2.29	4056.97	1.46	400.00823	24	24	24
500	99.753	19.93	08:58	0.3296723	0.0000014	0.3299974	0.0000010	0.4977123	0.0000008	4898.306	1.819	4941.57	2.41	5061.75	0.84	500.00357	28	28	28
600	99.779	19.93	09:14	0.3964543	0.0000008	0.3967817	0.0000014	0.5982169	0.0000011	5903.666	2.337	5948.19	1.53	6065.63	1.85	599.99976	33	33	33
700	99.773	19.92	09:30	0.4634780	0.0000012	0.4637994	0.0000022	0.6990500	0.0000012	6909.411	2.331	6959.30	1.14	7072.81	0.76	699.98961	37	37	37
800	99.79	19.92	09:46	0.5307454	0.0000015	0.5310523	0.0000014	0.8002574	0.0000010	7914.488	2.201	7969.26	1.46	8078.55	1.23	800.00037	42	42	42
900	99.806	19.92	10:02	0.5982517	0.0000014	0.5985540	0.0000000	0.9018297	0.0000008	8917.037	2.330	8977.65	1.55	9083.05	0.82	900.00275	47	47	47
1000	99.811	19.93	10:20	0.6659074	0.0000010	0.6662240	0.0000012	1.0037074	0.0000010	9922.080	3.016	9986.66	0.62	10086.86	0.91	1000.0009	52	52	52
1000	99.837	19.93	10:55	0.6659331	0.0000011	0.6662506	0.0000010	1.0037254	0.0000010	9921.403	1.532	9984.11	1.92	10085.77	1.61	1000.0008	52	52	52
900	99.859	19.93	11:12	0.5985089	0.0000011	0.5987891	0.0000011	0.9020374	0.0000010	8896.774	3.752	8954.34	2.22	9064.88	1.31	900.00244	47	47	47
800	99.853	19.92	11:28	0.5312511	0.0000011	0.5315114	0.0000010	0.8006660	0.0000016	7874.880	2.317	7931.56	1.26	8047.58	1.84	800.00001	42	42	42
700	99.865	19.91	11:44	0.46441703	0.0000014	0.4644197	0.0000014	0.6996286	0.0000015	6860.589	1.729	6913.62	1.41	7032.61	0.84	699.99932	37	37	37
600	99.872	19.91	12:00	0.3972654	0.0000015	0.3975106	0.0000015	0.5988977	0.0000014	5847.669	2.342	5905.45	1.95	6022.17	1.29	599.99955	33	33	33
500	99.889	19.9	12:21	0.3305337	0.0000018	0.3307760	0.0000012	0.4984611	0.0000020	4841.357	2.263	4900.48	2.10	5016.41	1.17	500.00341	28	28	28
400	99.901	19.88	12:38	0.2639866	0.0000019	0.2642240	0.0000020	0.3982926	0.0000010	3838.714	2.321	3897.45	2.53	4014.12	1.38	400.00809	24	24	24
300	99.905	19.88	12:54	0.1976060	0.0000023	0.1978351	0.0000020	0.2983434	0.0000015	2844.986	1.230	2897.06	1.34	3015.89	0.63	300.00235	20	20	20
200	99.902	19.89	13:12	0.1314140	0.0000023	0.1316343	0.0000018	0.1986309	0.0000011	1856.186	2.018	1904.70	3.52	2024.19	1.07	200.00671	16	16	16
100	99.886	19.90	13:30	0.0654283	0.0000014	0.0656397	0.0000014	0.0991946	0.0000019	870.917	1.609	918.84	1.17	1034.98	1.96	100.00477	14	14	14
0			13:46	-0.0002583	0.0000014	-0.0000686	0.0000010	0.0001457	0.0000008	-113.366	2.792	-63.35	1.64	49.59	0.73	0	0	0	0

PTB-2014, 1 GPa

Date: 13.05.2014

Measurement cycle: 3 of 4

File name for continuous records: 201405130644.prot

File name for selected records: 201405130644.data

P _{nom}	P _{amb} +1	T _{TS} +2	Local time +3	C ₁ +4	σ(C ₁) +5	C ₂ +4	σ(C ₂) +5	C ₃ +4	σ(C ₃) +5	C ₄ +4	σ(C ₄) +5	C ₅ +4	σ(C ₅) +5	C ₆ +4	σ(C ₆) +5	C ₇ +4	σ(C ₇) +5	P _{LS} +6	u(P _{LS})/P _{LS} +7
/kPa	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	100.325	19.86	07:41	-0.0002694	0.0000010	-0.0000866	0.0000015	0.0001349	0.0000011	-110.023	1.931	-60.24	1.07	51.27	1.67	0	0	0	0
100	100.337	19.87	07:59	0.0651620	0.0000000	0.0653780	0.0000012	0.0988743	0.0000008	887.940	2.363	937.00	1.68	1049.51	1.35	100.00477	14	14	14
200	100.356	19.88	08:17	0.1308854	0.0000010	0.1311360	0.0000012	0.1980566	0.0000010	1888.954	1.811	1937.61	0.58	2049.43	2.25	200.00666	16	16	16
300	100.363	19.89	08:33	0.1968869	0.0000011	0.1971757	0.0000008	0.2976346	0.0000010	2889.840	1.295	2937.20	2.16	3052.31	0.77	300.00223	20	20	20
400	100.374	19.9	08:52	0.2631629	0.0000011	0.2634749	0.0000011	0.3975417	0.0000014	3892.534	1.444	3939.12	2.31	4056.22	1.10	400.00786	24	24	24
500	100.384	19.9	09:07	0.3296857	0.0000008	0.3300094	0.0000010	0.4977231	0.0000011	4896.557	1.385	4940.89	1.48	5061.88	1.15	500.00315	28	28	28
600	100.384	19.9	09:24	0.3964651	0.0000016	0.3967931	0.0000011	0.5982240	0.0000012	5903.031	1.778	5947.72	2.64	6065.86	1.46	599.99928	33	33	33
700	100.394	19.9	09:41	0.4634986	0.0000010	0.4638203	0.0000008	0.6990709	0.0000011	6909.463	1.418	6957.30	1.04	7072.05	1.84	699.99905	37	37	37
800	100.412	19.89	09:57	0.5307594	0.0000015	0.5310677	0.0000008	0.8002706	0.0000010	7913.546	2.745	7970.11	1.88	8079.53	1.04	799.99966	42	42	42
900	100.432	19.89	10:14	0.5982637	0.0000021	0.5985643	0.0000014	0.9018383	0.0000014	8917.286	0.904	8977.17	1.45	9084.22	1.46	900.00202	47	47	47
1000	100.439	19.89	10:31	0.6659209	0.0000011	0.6662369	0.0000011	1.0037251	0.0000020	9922.183	3.400	9985.33	2.46	10087.18	0.65	1000.0002	52	52	52
1000	100.457	19.88	11:06	0.6659380	0.0000016	0.6662560	0.0000023	1.0037314	0.0000028	9921.395	2.110	9984.18	2.01	10086.39	1.79	1000.0001	52	52	52
900	100.468	19.87	11:22	0.5985171	0.0000011	0.5987971	0.0000011	0.9020451	0.0000016	8896.482	1.733	8955.02	2.41	9065.58	1.25	900.00188	47	47	47
800	100.47	19.86	11:40	0.5312563	0.0000008	0.5315169	0.0000011	0.8006703	0.0000018	7876.148	1.730	7932.40	1.87	8047.66	1.38	799.99964	42	42	42
700	100.48	19.85	11:58	0.46441763	0.0000014	0.4644260	0.0000016	0.6996317	0.0000014	6861.326	1.453	6915.10	2.32	7032.83	1.36	699.99894	37	37	37
600	100.477	19.85	12:15	0.3972714	0.0000019	0.3975180	0.0000016	0.5989023	0.0000018	5848.466	1.184	5904.69	1.61	6022.63	1.20	599.99918	33	33	33
500	100.478	19.85	12:34	0.3305409	0.0000011	0.3307843	0.0000008	0.4984660	0.0000023	4841.229	2.679	4900.52	1.83	5016.33	1.37	500.00306	28	28	28
400	100.478	19.85	12:51	0.2639926	0.0000019	0.2642300	0.0000012	0.3982969	0.0000020	3840.540	1.905	3897.97	1.60	4015.11	0.62	400.00782	24	24	24
300	100.486	19.84	13:08	0.1976126	0.0000010	0.1978420	0.0000020	0.2983491	0.0000016	2843.786	2.065	2897.47	2.12	3016.51	2.05	300.00216	20	20	20
200	100.498	19.83	13:26	0.1314209	0.0000020	0.1316417	0.0000021	0.1986343	0.0000018	1855.826	1.576	1903.14	1.78	2023.78	1.18	200.00661	16	16	16
100	100.498	19.83	13:44	0.0654386	0.0000010	0.0656503	0.0000014	0.0992009	0.0000011	869.640	4.213	916.90	1.88	1034.41	0.84	100.00472	14	14	14
0			14:00	-0.0002446	0.0000015	-0.0000569	0.0000016	0.0001537	0.0000008	-112.603	1.498	-63.49	1.76	48.95	0.82	0	0	0	0

PTB-2014, 1 GPa

Date: 14.05.2014

Measurement cycle: 4 of 4

File name for continuous records: 201405140623.prot

File name for selected records: 201405140623.data

P _{nom}	P _{amb} P ₁	T _{TS} T ₂	Local time t ₃	C ₁ C ₄	σ(C ₁) C ₅	C ₂ C ₄	σ(C ₂) C ₅	C ₃ C ₄	σ(C ₃) C ₅	C ₅ C ₄	σ(C ₅) C ₅	C ₆ C ₄	σ(C ₆) C ₅	C ₇ C ₄	σ(C ₇) C ₅	P _{LS} P ₆	u(P _{LS})/P _{LS} P ₇
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	101.395	19.79	07:23	-0.0002583	0.0000014	-0.0000757	0.0000014	0.0001417	0.0000008	-110.254	2.345	-61.51	1.82	50.17	1.56	0	0
100	101.406	19.79	07:41	0.0651757	0.0000008	0.0653894	0.0000015	0.0988846	0.0000010	887.863	2.115	936.91	2.32	1048.95	1.12	100.00458	14
200	101.419	19.8	07:58	0.1308963	0.0000008	0.1311454	0.0000010	0.1980631	0.0000011	1888.431	2.513	1935.75	1.12	2049.21	1.23	200.00636	16
300	101.439	19.83	08:14	0.1968966	0.0000015	0.1971834	0.0000022	0.2976383	0.0000014	2890.097	0.891	2936.43	1.65	3050.70	1.16	300.00177	20
400	101.45	19.85	08:30	0.2631723	0.0000014	0.2634811	0.0000020	0.3975451	0.0000011	3890.220	1.926	3938.16	1.77	4055.79	1.31	400.00723	24
500	101.472	19.86	08:46	0.3296923	0.0000014	0.3300166	0.0000022	0.4977274	0.0000022	4896.197	1.328	4939.19	2.26	5061.71	1.34	500.00227	28
600	101.482	19.87	09:03	0.3964717	0.0000021	0.3967994	0.0000015	0.5982291	0.0000030	5903.289	2.070	5946.42	2.01	6066.35	0.82	599.99818	33
700	101.479	19.88	09:19	0.4635000	0.0000023	0.4638229	0.0000023	0.6990731	0.0000034	6910.114	1.412	6957.38	2.14	7072.13	0.97	699.99767	37
800	101.499	19.88	09:40	0.5307694	0.0000019	0.5310777	0.0000008	0.8002786	0.0000032	7912.903	1.162	7968.46	2.08	8078.78	0.78	799.99801	42
900	101.515	19.89	09:56	0.5982606	0.0000015	0.5985654	0.0000015	0.9018383	0.0000014	8917.491	1.472	8978.56	2.57	9084.17	1.16	900.0001	47
1000	101.526	19.90	10:13	0.6659111	0.0000020	0.6662309	0.0000016	1.0037166	0.0000028	9922.723	0.907	9985.30	1.32	10088.39	0.97	999.998	52
1000	101.555	19.91	10:47	0.6659240	0.0000000	0.6662454	0.0000015	1.0037209	0.0000016	9922.054	2.099	9986.20	2.04	10087.30	1.69	999.99761	52
900	101.574	19.91	11:04	0.5985026	0.0000010	0.5987851	0.0000011	0.9020340	0.0000020	8896.234	1.189	8956.23	2.38	9067.32	1.78	899.99955	47
800	101.577	19.91	11:21	0.5312443	0.0000027	0.5315077	0.0000014	0.8006651	0.0000030	7877.220	2.147	7933.49	1.94	8049.15	1.13	799.99742	42
700	101.567	19.91	11:38	0.4641666	0.0000025	0.4644206	0.0000022	0.6996329	0.0000028	6861.103	0.712	6916.71	1.03	7034.19	1.38	699.99695	37
600	101.585	19.9	11:57	0.3971960	0.0000012	0.3974529	0.0000023	0.5988483	0.0000031	5850.609	3.909	5910.12	2.00	6025.81	1.32	599.9975	33
500	101.602	19.91	12:14	0.3305354	0.0000010	0.3307811	0.0000011	0.4984674	0.0000022	4841.769	1.774	4901.94	2.04	5018.20	0.84	500.0016	28
400	101.604	19.91	12:31	0.2639834	0.0000022	0.2642251	0.0000011	0.3982974	0.0000022	3839.880	0.954	3899.37	1.68	4015.62	0.81	400.0066	24
300	101.610	19.90	12:49	0.1976054	0.0000015	0.1978386	0.0000015	0.2983500	0.0000020	2845.269	1.635	2899.04	1.55	3017.51	1.19	300.00124	20
200	101.600	19.90	13:07	0.1314143	0.0000021	0.1316397	0.0000021	0.1986369	0.0000016	1854.909	1.929	1904.62	1.28	2023.31	1.04	200.00595	16
100	101.606	19.90	13:29	0.0654314	0.0000015	0.0656454	0.0000015	0.0992043	0.0000014	869.203	2.247	918.24	1.34	1034.66	0.63	100.00436	14
0			13:45	-0.0002514	0.0000010	-0.0000594	0.0000015	0.0001577	0.0000008	-113.177	1.643	-64.49	2.39	48.76	0.93	0	0

A3.2 LNE results

LNE, 0.5 GPa

Date: 24.09.2013

Measurement cycle: 1 of 4

File name for continuous records: 240920130944.prot

File name for selected records: 240920130944.data

P _{nom}	P _{amb} P ₁	T _{TS} T ₂	Local time t ₃	C ₁ C ₄	σ(C ₁) C ₅	C ₂ C ₄	σ(C ₂) C ₅	C ₃ C ₄	σ(C ₃) C ₅	C ₄ C ₄	σ(C ₄) C ₅	C ₅ C ₄	σ(C ₅) C ₅	C ₆ C ₄	σ(C ₆) C ₅	C ₇ C ₄	σ(C ₇) C ₅	C ₈ C ₄	σ(C ₈) C ₅	P _{LS} P ₆	u(P _{LS})/P _{LS} P ₇
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	100.8	19.852	11:04:26	-0.0002251	0.0000011	-0.0001017	0.0000014	0.0000611	0.0000011	-0.0000011	0.0000011	-98.99	2.20	-57.11	2.05	50.71	1.14	-1.36	0.27	0.0000	0
50	100.8	19.865	11:21:57	0.0324523	0.0000014	0.0325969	0.0000011	0.0493794	0.0000015	0.0992100	0.0000028	400.88	0.60	442.58	2.22	549.95	1.60	496.89	0.31	500.0350	7.6
100	100.8	19.873	11:36:20	0.0652320	0.0000012	0.0653880	0.0000000	0.0988369	0.0000016	0.1986949	0.0000028	899.55	1.95	939.99	2.31	1048.66	1.07	995.52	0.36	1000.3298	8.8
150	100.8	19.885	11:52:20	0.0980726	0.0000010	0.0982491	0.0000011	0.1483994	0.0000010	0.2984031	0.0000028	1398.65	1.14	1440.08	1.24	1549.59	1.32	1494.64	0.13	1500.5916	10
200	100.8	19.893	12:06:57	0.1309763	0.0000014	0.1311714	0.0000015	0.1980514	0.0000010	0.3983043	0.0000037	1900.36	1.61	1941.03	1.45	2049.45	1.69	1993.50	0.25	2000.6722	12
250	100.8	19.903	12:21:56	0.1639603	0.0000014	0.1641703	0.0000018	0.2478166	0.0000019	0.4984614	0.0000038	2401.51	1.18	2441.75	1.19	2552.04	2.35	2493.14	0.25	2500.8842	14
300	100.8	19.911	12:36:27	0.1970023	0.0000014	0.1972326	0.0000015	0.2976583	0.0000014	0.5988286	0.0000065	2899.50	1.92	2943.21	2.55	3051.65	1.04	2992.81	0.36	3000.9598	17
350	100.8	19.929	12:50:27	0.2300526	0.0000025	0.2302960	0.0000026	0.3474926	0.0000015	0.6992454	0.0000085	3401.37	3.32	3440.97	1.82	3552.34	1.46	3491.53	0.31	3500.1257	19
400	100.8	19.929	13:05:20	0.2632374	0.0000025	0.2634923	0.0000027	0.3975034	0.0000028	0.8000737	0.0000113	3902.85	1.87	3944.28	1.35	4054.90	1.15	3992.27	0.23	4000.3637	21
450	100.8	19.947	13:20:27	0.2964709	0.0000047	0.2967346	0.0000053	0.4475689	0.0000064	0.9010043	0.000161	4403.73	1.47	4444.94	2.27	4558.49	0.72	4492.63	0.35	4500.4001	24
500	100.8	19.944	13:34:57	0.3297603	0.0000024	0.3300323	0.0000021	0.4977006	0.0000028	1.0019620	0.0000103	4906.92	0.90	4946.03	2.41	5061.10	2.09	4993.60	0.25	5000.6497	26
500	100.7	19.973	14:18:27	0.3297766	0.0000044	0.3300486	0.0000051	0.4977109	0.0000071	1.0020614	0.0000163	4904.89	2.20	4947.21	1.80	5059.70	1.24	4993.35	0.40	5000.6493	26
450	100.7	19.973	14:35:21	0.2965800	0.0000023	0.2968380	0.0000028	0.4476637	0.0000027	0.9014734	0.0000056	4398.85	1.20	4437.55	1.24	4555.09	0.75	4493.13	0.54	4500.3997	24
400	100.7	19.991	14:49:57	0.2634269	0.0000011	0.2636717	0.0000021	0.3976860	0.0000028	0.8009517	0.0000056	3893.67	1.44	3932.84	2.38	4051.13	0.93	3992.49	0.20	4000.3620	21
350	100.6	19.991	15:16:57	0.2302926	0.0000015	0.2305220	0.0000000	0.3477334	0.0000015	0.7004080	0.0000016	3388.88	1.08	3427.05	1.97	3547.41	0.95	3492.06	0.36	3500.1248	17
300	100.6	19.996	15:31:57	0.1972811	0.0000011	0.1974903	0.0000008	0.2979560	0.0000016	0.6001929	0.0000011	2888.03	2.07	2925.81	2.08	3046.20	1.53	2993.24	0.29	3000.9585	19
250	100.6	20.006	15:46:57	0.1642451	0.0000016	0.1644400	0.0000012	0.2481351	0.0000011	0.4998654	0.0000010	2385.69	1.48	2424.61	1.73	2544.69	1.18	2493.75	0.18	2500.8827	14
200	100.6	20.014	16:02:51	0.1312206	0.0000010	0.1314074	0.0000010	0.1983437	0.0000008	0.3995306	0.0000010	1887.16	1.73	1924.55	2.77	2043.17	1.62	1994.05	0.15	2000.6707	12
150	100.6	20.019	16:16:27	0.0982849	0.0000011	0.0984557	0.0000008	0.1486543	0.0000014	0.2994614	0.0000028	1388.13	1.29	1425.84	1.56	1542.92	0.95	1494.96	0.29	1500.5902	10
100	100.6	20.016	16:32:21	0.0653871	0.0000016	0.0655477	0.0000008	0.0990471	0.0000011	0.1995129	0.0000025	890.25	1.62	929.35	1.72	1043.77	1.19	995.93	0.51	1000.3288	8.8
50	100.6	20.029	16:45:27	0.0325343	0.0000008	0.0326851	0.0000016	0.0495051	0.0000011	0.0996994	0.0000041	394.55	1.81	434.07	1.72	546.30	0.69	497.15	0.17	500.0344	7.6
0	100.6	20.032	16:58:27	-0.0002297	0.0000008	-0.0000966	0.0000010	0.0000754	0.0000010	0.0001620	0.0000031	-101.62	1.73	-59.41	1.50	48.66	1.26	-1.27	0.31	0.0000	0

LNE, 0.5 GPa

Date: 26.09.2013

Measurement cycle: 2 of 4

File name for continuous records: 250920130943.prot

File name for selected records: 250920130943.data

P _{nom}	P _{amb} P ₁	T _{TS} T ₂	Local time t ₃	C ₁ C ₄	σ(C ₁) σ ₅	C ₂ C ₄	σ(C ₂) σ ₅	C ₃ C ₄	σ(C ₃) σ ₅	C ₄ C ₄	σ(C ₄) σ ₅	C ₅ C ₄	σ(C ₅) σ ₅	C ₆ C ₄	σ(C ₆) σ ₅	C ₇ C ₄	σ(C ₇) σ ₅	C ₈ C ₄	σ(C ₈) σ ₅	P _{LS} P ₆	u(P _{LS})/P _{LS} P ₇
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	100.4	19.970	10:30:45	-0.0002349	0.0000011	-0.0001077	0.0000008	0.0000640	0.0000000	0.0000480	0.0000020	-101.66	1.30	-57.82	2.35	48.74	1.35	-1.53	0.35	0.0000	0
50	100.4	19.965	10:47:09	0.0324426	0.0000010	0.0325906	0.0000010	0.0493817	0.0000008	0.0992523	0.0000008	398.09	1.72	440.71	1.38	548.71	0.81	496.86	0.38	500.0349	7.6
100	100.4	19.980	11:04:15	0.0652240	0.0000000	0.0653837	0.0000008	0.0988386	0.0000010	0.1987426	0.0000010	896.48	3.28	938.12	1.15	1048.51	1.31	995.59	0.26	1000.3294	8.8
150	100.4	19.978	11:18:39	0.0980686	0.0000015	0.0982466	0.0000010	0.1484034	0.0000010	0.2984494	0.0000019	1397.48	2.44	1439.22	1.69	1548.54	0.81	1494.54	0.50	1500.5912	10
200	100.4	19.996	11:33:39	0.1309700	0.0000000	0.1311660	0.0000012	0.1980509	0.0000011	0.3983497	0.0000031	1898.37	3.58	1940.26	2.22	2049.21	1.19	1993.78	0.16	2000.6716	12
250	100.4	19.998	11:47:09	0.1639594	0.0000010	0.1641726	0.0000015	0.2478303	0.0000014	0.4985329	0.0000020	2402.09	1.90	2439.67	1.77	2550.66	0.90	2493.01	0.51	2500.8837	14
300	100.4	20.009	12:01:46	0.1969960	0.0000016	0.1972291	0.0000016	0.2976594	0.0000019	0.5988797	0.0000065	2901.28	1.07	2940.74	1.88	3052.60	0.41	2992.78	0.35	3000.9592	17
350	100.4	20.016	12:16:09	0.2300426	0.0000030	0.2302886	0.0000022	0.3474883	0.0000018	0.6992846	0.0000087	3401.24	1.41	3444.60	2.22	3553.64	1.24	3491.68	0.23	3500.1253	19
400	100.4	20.021	12:30:16	0.2632237	0.0000029	0.2634800	0.0000016	0.3974931	0.0000023	0.8001011	0.0000077	3903.06	3.65	3944.67	2.87	4055.55	0.88	3992.26	0.39	4000.3630	21
450	100.4	20.019	12:44:09	0.2964531	0.0000045	0.2967194	0.0000054	0.4475549	0.0000063	0.9010197	0.0000172	4406.08	0.70	4446.96	1.67	4557.79	1.25	4492.46	0.35	4500.4003	24
500	100.4	20.034	12:59:16	0.3297417	0.0000014	0.3300177	0.0000014	0.4976911	0.0000011	1.0019886	0.0000046	4907.26	2.47	4948.89	0.78	5061.25	1.28	4993.50	0.34	5000.6489	26
500	100.4	20.047	13:48:46	0.3297631	0.0000011	0.3300380	0.0000012	0.4977066	0.0000010	1.0021057	0.0000018	4906.69	2.57	4947.69	1.22	5061.29	0.68	4993.75	0.20	5000.6483	26
450	100.4	20.050	14:03:46	0.2965589	0.0000011	0.2968183	0.0000014	0.4476471	0.0000016	0.9014917	0.0000008	4401.48	1.52	4440.35	1.67	4555.62	0.67	4492.75	0.26	4500.3988	24
400	100.4	20.057	14:18:10	0.2634123	0.0000021	0.2636583	0.0000027	0.3976774	0.0000041	0.8009860	0.0000064	3896.66	1.36	3935.20	1.70	4052.26	0.91	3992.60	0.27	4000.3616	21
350	100.4	20.065	14:33:16	0.2302817	0.0000008	0.2305131	0.0000011	0.3477277	0.0000014	0.7004529	0.0000011	3391.83	1.54	3429.69	1.51	3549.44	1.57	3492.21	0.23	3500.1237	19
300	100.4	20.052	14:49:40	0.1972603	0.0000014	0.1974654	0.0000010	0.2979323	0.0000008	0.6001049	0.0000020	2887.49	1.54	2926.45	2.33	3045.62	1.24	2993.54	0.28	3000.9580	17
250	100.3	20.065	15:06:46	0.1642097	0.0000008	0.1644063	0.0000014	0.2480837	0.0000008	0.4997754	0.0000015	2387.38	1.57	2426.28	1.71	2544.45	1.48	2493.59	0.26	2500.8825	14
200	100.3	20.068	15:27:16	0.1312183	0.0000008	0.1314014	0.0000010	0.1983226	0.0000010	0.3995640	0.0000020	1885.84	0.75	1926.09	3.15	2043.75	1.49	1994.07	0.27	2000.6706	12
150	100.3	20.070	15:48:40	0.0982866	0.0000015	0.0984577	0.0000008	0.1486643	0.0000014	0.2995186	0.0000022	1388.13	2.38	1424.43	1.32	1543.95	1.20	1495.09	0.34	1500.5902	10
100	100.3	20.073	16:05:17	0.0653834	0.0000015	0.0655417	0.0000014	0.0990409	0.0000011	0.1995360	0.0000037	889.53	1.95	928.24	1.34	1044.95	1.32	995.95	0.29	1000.3287	8.8
50	100.3	20.073	16:22:16	0.0324977	0.0000008	0.0326480	0.0000016	0.0494497	0.0000014	0.0996163	0.0000035	393.77	2.73	431.30	2.38	546.09	1.53	496.85	0.42	500.0344	7.6
0	100.3	20.070	16:38:47	-0.0002320	0.0000012	-0.0001003	0.0000008	0.0000717	0.0000008	0.0001751	0.0000016	-101.75	1.87	-60.06	1.61	49.12	0.96	-1.18	0.74	0.0000	0

LNE, 0.5 GPa

Date: 26.09.2013

Measurement cycle: 3 of 4

File name for continuous records: 260920130940.prot

File name for selected records: 260920130940.data

P _{nom}	P _{amb} P ₁	T _{TS} T ₂	Local time t ₃	C ₁ C ₄	σ(C ₁) σ ₅	C ₂ C ₄	σ(C ₂) σ ₅	C ₃ C ₄	σ(C ₃) σ ₅	C ₄ C ₄	σ(C ₄) σ ₅	C ₅ C ₄	σ(C ₅) σ ₅	C ₆ C ₄	σ(C ₆) σ ₅	C ₇ C ₄	σ(C ₇) σ ₅	C ₈ C ₄	σ(C ₈) σ ₅	P _{LS} P ₆	u(P _{LS})/P _{LS} P ₇
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	100.7	19.960	10:29:27	-0.0002286	0.0000010	-0.0001040	0.0000012	0.0000629	0.0000011	0.0000703	0.0000024	-102.52	2.32	-61.67	2.30	48.67	0.96	-1.37	0.22	0.0000	0
50	100.7	19.970	10:44:51	0.0324474	0.0000015	0.0325931	0.0000011	0.0493789	0.0000016	0.0992754	0.0000015	398.26	2.32	437.87	0.94	548.25	1.16	496.67	0.30	500.0347	7.6
100	100.7	19.978	10:58:58	0.0652260	0.0000012	0.0653840	0.0000016	0.0988343	0.0000008	0.1987591	0.0000016	897.18	1.46	937.23	1.24	1048.48	0.49	995.54	0.36	1000.3291	8.8
150	100.7	19.978	11:14:58	0.0980689	0.0000011	0.0982460	0.0000016	0.1483966	0.0000010	0.2984643	0.0000027	1396.17	2.51	1438.36	1.60	1548.95	1.04	1494.50	0.39	1500.5907	10
200	100.7	19.991	11:34:58	0.1309709	0.0000011	0.1311666	0.0000019	0.1980469	0.0000011	0.3983723	0.0000014	1897.14	0.81	1939.93	2.29	2048.26	0.78	1993.68	0.33	2000.6709	12
250	100.8	19.996	11:48:58	0.1639531	0.0000011	0.1641651	0.0000016	0.2478094	0.0000022	0.4985226	0.0000043	2401.77	2.67	2441.71	2.29	2549.90	0.81	2493.19	0.23	2500.8823	14
300	100.7	20.011	12:04:51	0.1969963	0.0000021	0.1972277	0.0000018	0.2976517	0.0000021	0.5988946	0.0000069	2901.37	1.39	2940.13	1.26	3051.33	1.08	2992.61	0.37	3000.9579	17
350	100.7	20.019	12:19:51	0.2300617	0.0000021	0.2303066	0.0000019	0.3474846	0.0000030	0.6993626	0.0000088	3401.75	2.47	3442.11	1.86	3554.29	0.63	3491.87	0.29	3500.1238	19
400	100.8	20.021	12:34:51	0.2632294	0.0000025	0.2634846	0.0000030	0.3974951	0.0000040	0.8001354	0.0000106	3904.18	1.43	3944.89	2.18	4056.30	1.10	3992.15	0.25	4000.3607	21
450	100.8	20.027	12:50:28	0.2964591	0.0000016	0.2967229	0.0000011	0.4475557	0.0000014	0.9010651	0.0000060	4406.88	1.42	4447.38	1.61	4558.44	1.28	4492.50	0.37	4500.3972	24
500	100.8	20.034	13:04:58	0.3297511	0.0000065	0.3300251	0.0000032	0.4977000	0.0000043	1.0020374	0.0000126	4908.10	2.69	4951.36	1.18	5062.49	0.80	4993.67	0.34	5000.6461	26
500	100.8	20.052	13:40:52	0.3297506	0.0000010	0.3300271	0.0000025	0.4976909	0.0000016	1.0020829	0.0000038	4908.97	2.37	4949.97	0.82	5061.90	1.32	4993.48	0.35	5000.6453	26
450	100.8	20.063	13:55:22	0.2965560	0.0000040	0.2968169	0.0000034	0.4476457	0.0000053	0.9015023	0.0000119	4401.87	2.10	4442.18	2.28	4557.06	0.72	4492.47	0.21	4500.3957	24
400	100.7	20.055	14:11:22	0.2634069	0.0000020	0.2636531	0.0000016	0.3976711	0.0000025	0.8009857	0.0000047	3895.53	2.15	3936.75	1.77	4053.21	1.57	3992.61	0.21	4000.3600	21
350	100.8	20.057	14:28:22	0.2302746	0.0000015	0.2305063	0.0000008	0.3477200	0.0000012	0.7004514	0.0000015	3390.70	2.20	3430.44	3.27	3549.07	1.32	3492.01	0.27	3500.1219	19
300	100.7	20.063	14:43:28	0.1972557	0.0000014	0.1974657	0.0000014	0.2979260	0.0000012	0.6001946	0.0000025	2890.36	1.80	2925.88	3.20	3047.39	0.72	2993.19	0.45	3000.9564	17
250	100.8	20.078	14:58:22	0.1642277	0.0000014	0.1644257	0.0000008	0.2481200	0.0000012	0.4998954	0.0000015	2387.70	2.02	2426.17	1.87	2545.74	1.43	2493.91	0.51	2500.8804	14
200	100.8	20.075	15:15:22	0.1312277	0.0000008	0.1314114	0.0000010	0.1983477	0.0000014	0.3996423	0.0000027	1886.97	2.55	1925.95	2.51	2044.82	0.79	1994.24	0.27	2000.6690	12
150	100.8	20.078	15:32:28	0.0982849	0.0000016	0.0984563	0.0000008	0.1486614	0.0000010	0.2995429	0.0000034	1388.42	2.37	1425.39	1.30	1544.61	1.25	1494.95	0.24	1500.5891	10
100	100.8	20.081	16:00:52	0.0653754	0.0000010	0.0655340	0.0000000	0.0990340	0.0000016	0.1995229	0.0000023	890.34	2.14	929.24	2.07	1044.64	1.52	995.97	0.37	1000.3280	8.8
50	100.7	20.088	16:16:52	0.0325266	0.0000010	0.0326757	0.0000014	0.0494934	0.0000010	0.0997177	0.0000031	394.11	2.21	432.26	2.88	547.19	1.24	497.11	0.14	500.0341	7.6
0	100.7	20.093	16:33:59	-0.0002323	0.0000008	-0.0001014	0.0000015	0.0000697	0.0000014	0.0001840	0.0000028	-102.87	1.78	-61.77	1.71	48.94	0.77	-1.43	0.28	0.0000	0

LNE, 0.5 GPa

Date: 27.09.2013

Measurement cycle: 4 of 4

File name for continuous records: 270920130936.prot

File name for selected records: 270920130936.data

P _{nom}	P _{amb} p ₁	T _{TS}	Local time t ₃	C ₁ c ₄	σ(C ₁) c ₅	C ₂ c ₄	σ(C ₂) c ₅	C ₃ c ₄	σ(C ₃) c ₅	C ₄ c ₄	σ(C ₄) c ₅	C ₅ c ₄	σ(C ₅) c ₅	C ₆ c ₄	σ(C ₆) c ₅	C ₇ c ₄	σ(C ₇) c ₅	C ₈ c ₄	σ(C ₈) c ₅	P _{LS} p ₆	u(P _{LS})/P _{LS} p ₇
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	100.7	20.052	10:30:21	-0.0002520	0.0000000	-0.0001191	0.0000011	0.0000626	0.0000010	0.0000726	0.0000022	-103.21	1.74	-61.53	1.19	49.76	0.66	-1.39	0.39	0.0000	0
50	100.7	20.052	10:45:15	0.0324277	0.0000014	0.0325800	0.0000000	0.0493800	0.0000012	0.0992834	0.0000010	397.55	2.30	437.35	2.47	548.34	1.39	497.21	0.26	500.0343	7.6
100	100.7	20.047	11:07:45	0.0652083	0.0000008	0.0653717	0.0000014	0.0988357	0.0000008	0.1987743	0.0000008	896.78	1.97	938.47	1.89	1049.43	1.61	995.75	0.11	1000.3284	8.8
150	100.7	20.065	11:28:52	0.0980534	0.0000010	0.0982363	0.0000014	0.1484014	0.0000010	0.2984906	0.0000010	1397.02	2.16	1438.97	2.05	1547.79	1.01	1494.56	0.07	1500.5894	10
200	100.7	20.065	11:44:15	0.1309551	0.0000016	0.1311566	0.0000010	0.1980497	0.0000014	0.3983874	0.0000022	1897.77	2.36	1939.20	1.80	2048.80	1.53	1993.64	0.45	2000.6695	12
250	100.6	20.081	11:59:22	0.1639377	0.0000014	0.1641543	0.0000014	0.2478120	0.0000012	0.4985423	0.0000047	2399.96	2.33	2440.69	2.09	2550.68	1.03	2493.19	0.38	2500.8812	14
300	100.6	20.086	12:15:22	0.1969800	0.0000016	0.1972169	0.0000011	0.2976546	0.0000022	0.5989166	0.0000065	2899.97	1.87	2941.53	1.12	3052.41	0.98	2993.03	0.38	3000.9562	17
350	100.7	20.091	12:29:22	0.2300329	0.0000020	0.2302834	0.0000015	0.3474923	0.0000018	0.6993494	0.0000078	3401.07	1.38	3442.54	2.45	3552.91	1.06	3491.58	0.29	3500.1213	19
400	100.6	20.093	12:44:15	0.2632123	0.0000018	0.2634720	0.0000023	0.3974934	0.0000015	0.8001551	0.0000075	3904.42	2.46	3946.10	2.23	4056.23	0.75	3992.10	0.53	4000.3591	21
450	100.6	20.091	13:00:52	0.2964417	0.0000037	0.2967111	0.0000040	0.4475526	0.0000053	0.9010694	0.0000133	4404.76	2.69	4447.62	1.23	4558.90	0.77	4492.67	0.30	4500.3958	24
500	100.6	20.099	13:18:15	0.3297349	0.0000025	0.3300120	0.0000023	0.4976957	0.0000024	1.0020526	0.0000061	4908.72	2.39	4951.20	3.03	5062.66	1.17	4993.87	0.48	5000.6446	26
500	100.6	20.099	14:03:15	0.3297426	0.0000032	0.3300217	0.0000027	0.4976931	0.0000047	1.0021217	0.0000109	4908.81	1.38	4950.17	1.28	5062.53	0.85	4993.70	0.15	5000.6446	26
450	100.5	20.104	14:20:45	0.2965474	0.0000015	0.2968100	0.0000023	0.4476460	0.0000028	0.9015349	0.0000059	4402.28	1.35	4443.50	2.52	4558.10	0.79	4492.93	0.27	4500.3961	24
400	100.5	20.104	14:35:15	0.2633906	0.0000022	0.2636397	0.0000021	0.3976617	0.0000027	0.8009949	0.0000050	3896.24	1.32	3936.99	2.06	4053.19	1.51	3992.45	0.25	4000.3595	21
350	100.5	20.104	14:55:52	0.2302649	0.0000016	0.2304983	0.0000014	0.3477149	0.0000011	0.7004734	0.0000019	3390.87	2.87	3431.49	0.70	3549.11	1.00	3492.06	0.18	3500.1219	19
300	100.5	20.109	15:12:16	0.1972529	0.0000011	0.1974654	0.0000019	0.2979357	0.0000008	0.6002446	0.0000010	2891.23	2.24	2928.90	1.79	3047.76	0.43	2993.09	0.30	3000.9559	17
250	100.5	20.106	15:34:16	0.1642183	0.0000008	0.1644169	0.0000011	0.2481151	0.0000016	0.4999063	0.0000014	2386.91	2.46	2426.84	1.62	2546.11	1.27	2493.53	0.30	2500.8808	14
200	100.5	20.114	15:48:52	0.1312209	0.0000011	0.1314074	0.0000010	0.1983440	0.0000012	0.3996637	0.0000031	1887.63	1.86	1926.62	2.44	2045.25	1.95	1994.17	0.23	2000.6691	12
150	100.5	20.119	16:01:46	0.0982803	0.0000014	0.0984526	0.0000010	0.1486589	0.0000011	0.2995666	0.0000032	1388.41	0.96	1425.51	2.08	1544.90	1.60	1494.92	0.23	1500.5891	10
100	100.5	20.119	16:15:16	0.0653771	0.0000011	0.0655363	0.0000008	0.0990349	0.0000011	0.1995743	0.0000031	889.65	1.29	929.07	1.52	1044.30	1.92	995.97	0.29	1000.3281	8.8
50	100.4	20.119	16:29:52	0.0325226	0.0000010	0.0326740	0.0000016	0.0494931	0.0000011	0.0997500	0.0000052	394.40	2.47	432.22	1.62	547.12	1.59	497.10	0.26	500.0342	7.6
0	100.4	20.119	16:46:22	-0.0002357	0.0000014	-0.0001031	0.0000011	0.0000700	0.0000012	0.0002146	0.0000028	-102.64	2.35	-63.17	1.38	49.07	0.59	-1.23	0.26	0.0000	0

LNE, 1 GPa

Date: 05.11.2013

Measurement cycle: 1 of 4

File name for continuous records: 051120130941.prot

File name for selected records: 051120130941.data

P _{nom}	P _{amb} p ₁	T _{TS} t ₂	Local time t ₃	C ₁ c ₄	σ(C ₁) c ₅	C ₂ c ₄	σ(C ₂) c ₅	C ₃ c ₄	σ(C ₃) c ₅	C ₄ c ₄	σ(C ₄) c ₅	C ₅ c ₄	σ(C ₅) c ₅	C ₆ c ₄	σ(C ₆) c ₅	C ₇ c ₄	σ(C ₇) c ₅	P _{LS} p ₆	u(P _{LS})/P _{LS} p ₇
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	99	19.613	11:34:05	-0.0001806	0.0000010	-0.0001209	0.0000020	0.0001286	0.0000015	-99.29	2.16	-56.72	1.25	49.71	0.71	0.0000	0	0.0000	0
100	99	19.639	11:50:35	0.0651797	0.0000014	0.0653774	0.0000015	0.0988600	0.0000012	900.76	2.12	942.13	1.75	1048.97	1.02	1000.3344	8.8	1000.3344	8.8
200	99	19.662	12:06:05	0.1309254	0.0000010	0.1311589	0.0000011	0.1980714	0.0000010	1899.27	2.54	1941.15	1.40	2049.56	1.49	2000.6815	12.3	2000.6815	12.3
300	99	19.685	12:23:35	0.1968829	0.0000011	0.1971523	0.0000014	0.2975803	0.0000024	2897.30	2.95	2939.13	2.16	3051.46	0.58	2999.9732	16.6	2999.9732	16.6
400	98.9	19.706	12:41:35	0.2631860	0.0000035	0.2634789	0.0000036	0.3975277	0.0000050	3900.13	1.77	3940.19	2.15	4055.85	1.48	4000.3826	21.3	4000.3826	21.3
500	98.9	19.729	13:02:35	0.3297489	0.0000342	0.3300469	0.0000099	0.4977460	0.0000057	4904.48	2.74	4944.66	1.67	5059.64	1.13	5000.6730	26.0	5000.6730	26.0
600	98.9	19.749	13:20:06	0.3966077	0.0001573	0.3968800	0.0000665	0.5982940	0.0000385	5907.24	4.09	5951.37	2.48	6062.98	1.83	6000.8464	30.9	6000.8464	30.9
700	98.9	19.772	13:37:29	0.4636317	0.0001679	0.4638994	0.0000920	0.6992529	0.0003239	6907.32	2.74	6955.83	2.27	7063.02	2.59	7000.1558	35.7	7000.1558	35.7
800	98.9	19.793	13:52:29	0.5311149	0.0003383	0.5312689	0.0003287	0.8003977	0.0005975	7912.47	5.54	7962.02	5.30	8068.74	5.39	8000.4361	40.6	8000.4361	40.6
900	98.9	19.819	14:08:05	0.5984729	0.0006199	0.5987914	0.0006891	0.9019220	0.0010769	8915.06	9.13	8968.25	10.77	9072.94	9.54	9000.8185	45.6	9000.8185	45.6
1000	98.9	19.921	14:25:29	0.6661211	0.0004967	0.6664866	0.0004635	1.0040569	0.0006653	9915.56	8.33	9968.43	7.77	10071.53	5.76	10000.0531	50.5	10000.0531	50.5
1000	98.9	19.921	15:00:29	0.6660857	0.0000622	0.6664763	0.0000588	1.0038709	0.0000887	9909.03	2.59	9961.40	2.30	10064.98	1.98	10000.0531	50.5	10000.0531	50.5
900	98.9	19.937	15:16:59	0.5988029	0.0002171	0.5990206	0.0001911	0.9022280	0.0002504	8887.19	5.62	8936.15	3.37	9046.72	2.35	9000.8090	45.6	9000.8090	45.6
800	98.9	19.944	15:34:29	0.5315354	0.0003801	0.5317100	0.0002909	0.8007951	0.0003329	7871.16	5.40	7914.26	5.84	8028.82	5.09	8000.4256	40.6	8000.4256	40.6
700	98.9	19.932	15:51:36	0.4643263	0.0000851	0.4645369	0.0000742	0.6996834	0.0000874	6855.20	3.29	6897.18	1.56	7013.30	2.08	7000.1462	35.7	7000.1462	35.7
600	98.9	19.903	16:08:30	0.3974540	0.0000065	0.3976637	0.0000065	0.5990217	0.0000094	5843.07	2.62	5887.30	1.66	6005.38	1.36	6000.8384	30.9	6000.8384	30.9
500	98.9	19.896	16:22:06	0.3306529	0.0000050	0.3308631	0.0000055	0.4985086	0.0000069	4841.18	1.59	4883.77	2.19	5001.76	1.40	5000.6657	26.0	5000.6657	26.0
400	98.9	19.893	16:38:06	0.2641191	0.0000016	0.2643226	0.0000015	0.3983491	0.0000030	3844.44	1.39	3881.22	1.13	4004.11	1.23	4000.3761	21.3	4000.3761	21.3
300	98.9	19.890	16:52:36	0.1976823	0.0000014	0.1978780	0.0000020	0.2983226	0.0000010	2849.93	2.26	2888.86	2.07	3011.34	0.89	2999.9683	16.6	2999.9683	16.6
200	99	19.888	17:08:06	0.1315277	0.0000014	0.1317191	0.0000020	0.1986883	0.0000008	1865.17	1.78	1901.37	1.23	2021.15	0.89	2000.6775	12.3	2000.6775	12.3
100	99	19.885	17:21:30	0.0655011	0.0000025	0.0656891	0.0000023	0.0992183	0.0000008	879.05	1.71	919.12	2.91	1033.61	1.32	1000.3323	8.8	1000.3323	8.8
0	99.1	19.880	17:35:00	-0.0002911	0.0000011	-0.0001231	0.0000011	0.0000386	0.0000010	-105.51	1.75	-61.46	2.25	46.59	1.48	0.0000	0	0.0000	0

LNE, 1 GPa

Date: 06.11.2013

Measurement cycle: 2 of 4

File name for continuous records: 061120130926.prot

File name for selected records: 061120130926.data

P _{nom}	P _{amb} +1	T _{TS} +2	Local time +3	C ₁ +4	$\sigma(C_1)$ +5	C ₂ +4	$\sigma(C_2)$ +5	C ₃ +4	$\sigma(C_3)$ +5	C ₅ +4	$\sigma(C_5)$ +5	C ₆ +4	$\sigma(C_6)$ +5	C ₇ +4	$\sigma(C_7)$ +5	P _{LS} +6	u(P _{LS})/P _{LS} +7
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	100	19.821	10:50:18	-0.0002974	0.0000010	-0.0001343	0.0000008	0.0000551	0.0000011	-100.71	1.87	-56.18	2.59	48.77	1.21	0.0000	0
100	100	19.826	11:08:18	0.0651969	0.0000011	0.0653903	0.0000008	0.0988820	0.0000012	899.41	1.52	940.98	2.54	1049.01	0.63	1000.3314	8.8
200	100	19.831	11:22:55	0.1309457	0.0000014	0.1311754	0.0000010	0.1980966	0.0000010	1897.05	2.07	1941.75	1.47	2049.07	1.07	2000.6756	12.3
300	100	19.837	11:39:18	0.1969106	0.0000019	0.1971757	0.0000018	0.2976120	0.0000020	2896.89	1.96	2938.99	2.84	3051.06	0.57	2999.9649	16.6
400	100	19.844	11:54:55	0.2632189	0.0000025	0.2635060	0.0000028	0.3975603	0.0000034	3899.63	1.58	3941.20	2.02	4055.79	1.44	4000.3713	21.3
500	100	19.852	12:09:55	0.3297540	0.0000057	0.3300540	0.0000057	0.4977600	0.0000068	4901.40	2.32	4944.54	1.31	5059.49	1.14	5000.6597	26.0
600	100	19.862	12:24:55	0.3965617	0.0000008	0.3968617	0.0000014	0.5982906	0.0000015	5905.76	2.12	5950.11	1.86	6063.50	1.49	6000.8311	30.9
700	100	19.870	12:41:48	0.4635691	0.0000216	0.4639129	0.0001505	0.6991217	0.0001537	6906.62	1.73	6956.03	1.81	7064.06	2.62	7000.1387	35.7
800	100	19.878	12:55:48	0.5309860	0.0004185	0.5312191	0.0003352	0.8003623	0.0003868	7909.25	4.69	7961.19	6.61	8066.03	5.46	8000.4174	40.6
900	100	19.890	13:14:55	0.5983834	0.0000335	0.5986406	0.0000329	0.9018226	0.0000502	8912.06	1.33	8964.63	3.02	9070.17	0.91	9000.7982	45.6
1000	100	19.919	13:35:25	0.6661154	0.0001469	0.6663826	0.0001402	1.0038091	0.0002024	9915.45	1.93	9966.59	2.90	10070.27	2.26	10000.0371	50.5
1000	100	19.968	14:15:19	0.6661100	0.0000167	0.6663851	0.0000154	1.0038031	0.0000224	9914.60	1.90	9965.94	2.01	10068.41	1.35	10000.0328	50.5
900	100.1	19.973	14:39:19	0.5986434	0.0000406	0.5988797	0.0000349	0.9020557	0.0000439	8888.55	1.77	8938.18	1.55	9048.55	1.41	9000.7905	45.6
800	100	19.975	14:58:25	0.5314146	0.0001256	0.5316203	0.0000992	0.8006969	0.0001198	7871.38	2.49	7914.27	2.34	8030.67	2.05	8000.4106	40.6
700	100.1	19.973	15:13:49	0.4643309	0.0000016	0.4645409	0.0000016	0.6996954	0.0000015	6854.93	1.65	6899.37	2.06	7015.78	1.40	7000.1313	35.7
600	100.1	19.970	15:29:49	0.3974471	0.0000243	0.3976546	0.0000241	0.5990077	0.0000369	5845.13	2.15	5889.13	0.99	6009.08	1.64	6000.8241	30.9
500	100.1	19.962	15:49:49	0.3306951	0.0000016	0.3308997	0.0000024	0.4985494	0.0000022	4841.21	1.96	4884.06	1.81	5003.77	1.04	5000.6538	26.0
400	100.1	19.955	16:04:25	0.2640311	0.0000016	0.2642351	0.0000016	0.3982494	0.0000010	3846.81	2.92	3883.68	1.18	4005.35	1.23	4000.3666	21.3
300	100.1	19.944	16:21:49	0.1977063	0.0000008	0.1979011	0.0000011	0.2983606	0.0000010	2852.26	1.60	2889.10	1.34	3011.07	0.94	2999.9614	16.6
200	100.1	19.934	16:38:56	0.1315389	0.0000242	0.1317263	0.0000240	0.1986960	0.0000371	1862.57	0.46	1902.28	1.62	2020.89	1.26	2000.6734	12.3
100	100.1	19.924	16:55:19	0.0655126	0.0000022	0.0656977	0.0000021	0.0992294	0.0000010	878.22	3.20	919.59	2.04	1033.13	0.95	1000.3303	8.8
0	100.1	19.914	17:12:26	-0.0002203	0.0000018	-0.0000583	0.0000021	0.0001311	0.0000011	-104.48	2.70	-60.03	2.01	48.01	1.44	0.0000	0

LNE, 1 GPa

Date: 07.11.2013

Measurement cycle: 3 of 4

File name for continuous records: 071120130933.prot

File name for selected records: 071120130933.data

P _{nom}	P _{amb} +1	T _{TS} +2	Local time +3	C ₁ +4	$\sigma(C_1)$ +5	C ₂ +4	$\sigma(C_2)$ +5	C ₃ +4	$\sigma(C_3)$ +5	C ₅ +4	$\sigma(C_5)$ +5	C ₆ +4	$\sigma(C_6)$ +5	C ₇ +4	$\sigma(C_7)$ +5	P _{LS} +6	u(P _{LS})/P _{LS} +7
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	100.4	19.551	11:05:38	-0.0002380	0.0000012	-0.0000806	0.0000010	0.0001154	0.0000010	-102.47	2.53	-58.16	2.27	49.58	0.91	0.0000	0
100	100.3	19.567	11:21:02	0.0652217	0.0000008	0.0654094	0.0000010	0.0988891	0.0000011	898.22	1.97	941.45	1.62	1048.06	0.67	1000.3332	8.8
200	100.3	19.587	11:36:02	0.1309674	0.0000019	0.1311917	0.0000008	0.1981017	0.0000014	1898.87	1.94	1940.50	1.69	2049.49	0.64	2000.6791	12.3
300	100.3	19.608	11:50:32	0.1969380	0.0000238	0.1971889	0.0000011	0.2976134	0.0000010	2896.94	1.47	2939.07	1.59	3050.67	0.83	2999.9697	16.6
400	100.3	19.629	12:05:32	0.2632346	0.0000043	0.2635174	0.0000041	0.3975609	0.0000046	3898.81	1.17	3940.47	1.67	4055.58	0.85	4000.3773	21.3
500	100.3	19.654	12:21:32	0.3297777	0.0000070	0.3300743	0.0000058	0.4977726	0.0000091	4902.00	2.55	4945.70	2.37	5059.05	0.50	5000.6663	26.0
600	100.3	19.672	12:35:02	0.3965960	0.0000023	0.3968931	0.0000020	0.5983169	0.0000016	5906.80	2.09	5950.18	1.66	6063.21	1.79	6000.8385	30.9
700	100.3	19.700	12:53:08	0.4636489	0.0000028	0.4639303	0.0000021	0.6991437	0.0000029	6904.71	1.06	6952.60	1.75	7061.37	0.94	7000.1463	35.7
800	100.3	19.718	13:09:02	0.5309606	0.0000094	0.5312291	0.0000096	0.8004071	0.0000128	7907.78	1.86	7958.22	1.89	8065.87	1.27	8000.4252	40.6
900	100.3	19.747	13:25:08	0.5983894	0.0000147	0.5986546	0.0000150	0.9018726	0.0000222	8911.03	1.68	8962.49	1.09	9067.75	1.75	9000.8058	45.6
1000	100.3	19.777	13:50:08	0.6660111	0.0000404	0.6662869	0.0000385	1.0036729	0.0000574	9913.87	2.71	9965.77	1.72	10068.85	0.67	10000.0454	50.5
1000	100.2	19.862	14:32:32	0.6661297	0.0000084	0.6664029	0.0000076	1.0038106	0.0000118	9910.11	1.98	9963.86	2.61	10065.61	0.95	10000.0395	50.5
900	100.2	19.878	14:47:38	0.5987757	0.0000312	0.5990166	0.0000324	0.9022457	0.0000421	8888.19	2.37	8934.57	1.05	9046.73	0.64	9000.7968	45.6
800	100.2	19.888	15:04:09	0.5314743	0.0000008	0.5316926	0.0000010	0.8008089	0.0000011	7870.07	1.70	7912.83	2.40	8027.74	1.34	8000.4141	40.6
700	100.2	19.893	15:21:32	0.4643283	0.0000008	0.4645400	0.0000012	0.6997011	0.0000011	6855.81	2.45	6899.04	3.54	7014.59	1.00	7000.1350	35.7
600	100.2	19.896	15:39:09	0.3974323	0.0000014	0.3976423	0.0000018	0.5990034	0.0000010	5845.70	1.45	5890.00	1.42	6007.83	0.97	6000.8272	30.9
500	100.2	19.893	15:53:32	0.3307049	0.0000011	0.3309097	0.0000008	0.4985580	0.0000020	4840.87	1.48	4881.99	2.48	5002.28	0.80	5000.6562	26.0
400	100.2	19.890	16:08:09	0.2640477	0.0000008	0.2642526	0.0000010	0.3982700	0.0000023	3847.52	1.36	3883.01	2.06	4005.98	1.01	4000.3683	21.3
300	100.2	19.885	16:22:09	0.1977206	0.0000019	0.1979149	0.0000020	0.2983726	0.0000015	2851.37	0.96	2888.87	1.37	3009.57	0.77	2999.9625	16.6
200	100.2	19.880	16:36:09	0.1315586	0.0000015	0.1317463	0.0000018	0.1987177	0.0000014	1865.61	1.85	1901.12	2.79	2019.86	0.74	2000.6741	12.3
100	100.2	19.873	16:52:03	0.0655246	0.0000019	0.0657103	0.0000008	0.0992383	0.0000014	879.57	2.33	919.53	1.67	1033.84	1.45	1000.3306	8.8
0	100.2	19.862	17:08:03	-0.0002109	0.0000016	-0.0000483	0.0000008	0.0001371	0.0000016	-103.40	2.27	-61.18	2.21	47.30	1.06	0.0000	0

LNE, 1 GPa

Date: 08.11.2013

Measurement cycle: 4 of 4

File name for continuous records: 081120130931.prot

File name for selected records: 081120130931.data

P _{nom}	P _{amb} #1	T _{TS} #2	Local time #3	C ₁ #4	σ(C ₁) #5	C ₂ #4	σ(C ₂) #5	C ₃ #4	σ(C ₃) #5	C ₅ #4	σ(C ₅) #5	C ₆ #4	σ(C ₆) #5	C ₇ #4	σ(C ₇) #5	P _{LS} #6	u(P _{LS})/P _{LS} #7
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	100.1	19.572	11:12:09	-0.0002306	0.0000010	-0.0000723	0.0000014	0.0001231	0.0000011	-102.37	1.00	-58.13	3.07	48.65	1.20	0.0000	0
100	100.1	19.595	11:29:39	0.0652271	0.0000011	0.0654160	0.0000012	0.0988963	0.0000008	897.11	1.23	941.14	2.44	1048.52	1.13	1000.3333	8.8
200	100	19.616	11:44:08	0.1309751	0.0000011	0.1312003	0.0000008	0.1981120	0.0000000	1897.97	2.22	1940.47	1.39	2048.80	0.79	2000.6795	12.3
300	100	19.636	11:59:09	0.1969483	0.0000018	0.1972091	0.0000016	0.2976423	0.0000018	2896.59	1.43	2939.13	1.85	3049.58	0.75	2999.9703	16.6
400	100	19.657	12:15:32	0.2632389	0.0000016	0.2635226	0.0000010	0.3975643	0.0000008	3898.89	2.21	3941.35	1.65	4054.66	0.82	4000.3781	21.3
500	100	19.677	12:33:02	0.3297989	0.0000011	0.3300963	0.0000014	0.4977943	0.0000014	4902.21	2.90	4941.74	4.01	5060.06	1.73	5000.6674	26.0
600	100	19.700	12:51:02	0.3966243	0.0000014	0.3969206	0.0000015	0.5983411	0.0000020	5905.30	1.66	5948.79	1.03	6063.58	0.83	6000.8397	30.9
700	99.9	19.721	13:07:09	0.4635946	0.0000091	0.4638840	0.0000089	0.6990920	0.0000153	6907.25	1.55	6954.79	2.07	7064.43	1.23	7000.1490	35.7
800	99.9	19.747	13:26:02	0.5309369	0.0000025	0.5312071	0.0000036	0.8003751	0.0000050	7908.84	2.14	7957.59	0.54	8065.09	1.42	8000.4279	40.6
900	99.9	19.777	13:45:39	0.5984951	0.0000117	0.5987597	0.0000128	0.9020243	0.0000161	8911.62	1.72	8965.32	1.67	9069.21	0.99	9000.8087	45.6
1000	99.8	19.813	14:05:09	0.6660474	0.0000279	0.6663266	0.0000265	1.0037431	0.0000357	9914.78	1.36	9967.68	1.48	10070.61	2.38	10000.0496	50.5
1000	99.8	19.873	14:40:09	0.6661054	0.0000132	0.6663851	0.0000142	1.0038140	0.0000207	9914.48	1.97	9968.37	2.73	10071.30	0.97	10000.0448	50.5
900	99.8	19.890	14:58:39	0.5986443	0.0000243	0.5988920	0.0000259	0.9021046	0.0000405	8894.13	2.18	8942.10	2.20	9049.92	1.12	9000.8010	45.6
800	99.7	19.901	15:20:09	0.5314377	0.0000116	0.5316620	0.0000114	0.8007894	0.0000183	7873.48	1.09	7917.44	1.98	8032.43	1.18	8000.4193	40.6
700	99.7	19.906	15:36:33	0.4643211	0.0000016	0.4645343	0.0000014	0.6996966	0.0000030	6857.29	1.09	6900.30	2.42	7017.22	0.79	7000.1395	35.7
600	99.7	19.903	15:52:03	0.3973977	0.0000034	0.3976069	0.0000041	0.5989440	0.0000060	5845.17	1.78	5890.83	1.52	6007.73	1.75	6000.8313	30.9
500	99.7	19.901	16:07:03	0.3306514	0.0000253	0.3308606	0.0000258	0.4985080	0.0000389	4842.65	1.71	4885.73	1.66	5003.90	0.70	5000.6594	26.0
400	99.7	19.898	16:25:03	0.2641154	0.0000015	0.2643169	0.0000011	0.3983463	0.0000021	3845.02	2.12	3883.35	0.38	4003.85	1.41	4000.3710	21.3
300	99.8	19.893	16:38:09	0.1977089	0.0000016	0.1979043	0.0000014	0.2983629	0.0000011	2849.73	1.39	2888.05	2.51	3009.45	2.36	2999.9641	16.6
200	99.8	19.885	16:56:39	0.1315377	0.0000018	0.1317257	0.0000018	0.1986894	0.0000019	1864.39	1.89	1901.25	2.75	2020.93	1.17	2000.6752	12.3
100	99.8	19.880	17:10:33	0.0655243	0.0000024	0.0657094	0.0000015	0.0992380	0.0000012	877.34	1.86	919.92	3.11	1032.93	0.47	1000.3311	8.8
0	99.8	19.873	17:28:34	-0.0002080	0.0000012	-0.0000466	0.0000015	0.0001380	0.0000016	-104.17	1.98	-60.47	1.23	47.13	1.44	0.0000	0

A3.3 METAS results

METAS, 0.5 GPa

Date: 22.01.2014

Measurement cycle: 1 of 4

File name for continuous records: 201401220707.prot

File name for selected records: 201401220707.data

P _{nom}	P _{amb} #1	T _{TS} #2	Local time #3	C ₁ #4	σ(C ₁) #5	C ₂ #4	σ(C ₂) #5	C ₃ #4	σ(C ₃) #5	C ₄ #4	σ(C ₄) #5	C ₅ #4	σ(C ₅) #5	C ₆ #4	σ(C ₆) #5	C ₇ #4	σ(C ₇) #5	C ₈ #4	σ(C ₈) #5	P _{LS} #6	u(P _{LS})/P _{LS} #7
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	94.704	20.60	07:44:33	-0.000307	0.0000015	-0.000139	0.0000016	0.0000083	0.0000011	-0.000105	0.0000023	-104.734	0.934	-55.869	2.786	53.394	1.255	-1.449	0.242	0	0
50	94.711	20.60	08:00:33	0.032366	0.0000012	0.032555	0.0000015	0.049396	0.0000008	0.099091	0.0000011	394.149	1.820	440.734	1.864	552.097	0.729	496.703	0.268	50.0000	33.4
100	94.723	20.60	08:16:03	0.065121	0.0000010	0.065322	0.0000014	0.098817	0.0000010	0.198506	0.0000012	895.157	1.406	940.337	1.877	1051.274	1.126	994.994	0.308	99.9957	40.4
150	94.739	20.60	08:31:33	0.097941	0.0000015	0.098161	0.0000010	0.148348	0.0000008	0.298151	0.0000016	1395.154	2.297	1440.386	1.120	1551.371	1.194	1493.614	0.166	149.9873	47.8
200	94.744	20.60	08:47:03	0.130834	0.0000014	0.131073	0.0000016	0.197988	0.0000008	0.398024	0.0000018	1894.294	1.641	1940.537	0.972	2051.846	0.641	1992.429	0.229	199.9746	55.2
250	94.751	20.60	09:03:38	0.163798	0.0000008	0.164053	0.0000010	0.247728	0.0000012	0.498135	0.0000022	2396.306	2.762	2442.292	1.786	2551.886	1.494	2491.560	0.398	249.9576	62.7
300	94.752	20.65	09:19:08	0.196811	0.0000011	0.197089	0.0000011	0.297527	0.0000011	0.598413	0.0000032	2896.663	1.424	2942.323	1.513	3054.029	1.267	2990.766	0.230	299.9364	70.1
350	94.755	20.60	09:35:08	0.229895	0.0000011	0.230187	0.0000011	0.347412	0.0000008	0.698940	0.0000035	3398.649	1.695	3443.974	1.350	3556.303	0.600	3490.231	0.290	349.9109	77.6
400	94.755	20.70	09:50:38	0.263041	0.0000011	0.263343	0.0000011	0.397366	0.0000008	0.799646	0.0000044	3899.803	2.175	3946.826	1.041	4058.097	1.475	3990.303	0.188	399.8812	85.1
450	94.758	20.70	10:06:08	0.296239	0.0000011	0.296552	0.0000008	0.447383	0.0000010	0.900465	0.0000040	4402.131	1.981	4449.009	1.714	4561.320	0.642	4490.363	0.076	449.8473	92.6
500	94.755	20.70	10:22:08	0.329486	0.0000008	0.329809	0.0000011	0.497465	0.0000010	1.001309	0.0000036	4904.768	1.788	4951.166	1.895	5064.194	0.771	4990.577	0.196	499.8091	100.1
500	94.770	20.70	11:04:56	0.329500	0.0000014	0.329823	0.0000011	0.497471	0.0000011	1.001391	0.0000011	4904.743	1.657	4950.043	1.536	5064.177	1.400	4990.463	0.314	499.8095	100.1
450	94.768	20.63	11:20:26	0.296344	0.0000012	0.296653	0.0000011	0.447485	0.0000010	0.900936	0.0000012	4398.583	1.722	4443.163	2.229	4559.217	0.719	4490.817	0.316	449.8478	92.6
400	94.756	20.70	11:35:26	0.263219	0.0000011	0.263514	0.0000008	0.397546	0.0000014	0.800488	0.0000018	3893.571	2.123	3936.823	1.125	4055.709	1.397	3990.689	0.098	399.8816	85.1
350	94.746	20.70	11:50:26	0.230129	0.0000015	0.230409	0.0000015	0.347654	0.0000018	0.700078	0.0000016	3389.606	1.492	3432.866	2.890	3552.234	1.091	3490.789	0.191	349.9112	77.6
300	94.736	20.70	12:06:49	0.197073	0.0000011	0.197330	0.0000014	0.297806	0.0000008	0.599719	0.0000030	2884.474	1.585	2929.817	1.299	3050.789	0.742	2991.466	0.333	299.9366	70.1
250	94.719	20.70	12:22:19	0.164059	0.0000010	0.164304	0.0000012	0.248019	0.0000010	0.499457	0.0000016	2383.080	1.381	2427.694	1.939	2549.303	0.533	2492.174	0.220	249.9577	62.7
200	94.711	20.70	12:38:19	0.131085	0.0000010	0.131317	0.0000016	0.198284	0.0000000	0.399284	0.0000021	1883.511	1.010	1928.220	2.207	2048.063	0.901	1993.123	0.395	199.9746	55.2
150	94.701	20.70	12:53:49	0.098156	0.0000016	0.098374	0.0000016	0.148617	0.0000011	0.299226	0.0000034	1385.691	2.073	1429.509	2.553	1547.983	1.216	1494.080	0.291	149.9873	47.8
100	94.688	20.70	13:09:19	0.065274	0.0000012	0.065479	0.0000011	0.099025	0.0000011	0.199303	0.0000032	887.914	1.972	932.623	1.487	1049.926	1.033	995.511	0.164	99.9956	40.4
50	94.681	20.70	13:24:19	0.032440	0.0000016	0.032636	0.0000012	0.049507	0.0000010	0.099539	0.0000032	390.377	1.561	435.386	1.245	550.326	0.936	496.891	0.275	49.9999	33.4
0	94.672	20.70	13:38:19	-0.000312	0.0000000	-0.000133	0.0000010	0.000096	0.0000014	0.000038	0.0000024	-104.477	2.549	-58.491	1.392	52.126	0.738	-1.383	0.168	0	0

METAS, 0.5 GPa

Date: 27.01.2014

Measurement cycle: 2 of 4

File name for continuous records: 201401230527.prot

File name for selected records: 201401230527.data

P _{nom}	P _{amb} +1	T _{TS} +2	Local time +3	C ₁ +4	σ(C ₁) +5	C ₂ +4	σ(C ₂) +5	C ₃ +4	σ(C ₃) +5	C ₄ +4	σ(C ₄) +5	C ₅ +4	σ(C ₅) +5	C ₆ +4	σ(C ₆) +5	C ₇ +4	σ(C ₇) +5	C ₈ +4	σ(C ₈) +5	P _{L5} +6	u(P _{L5})/P _{L5} +7
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	95.078	20.60	05:59:17	-0.000307	0.0000011	-0.000138	0.0000014	0.000086	0.0000012	-0.000073	0.0000038	-103.654	1.354	-57.943	1.567	53.446	1.561	-1.177	0.269	0	0
50	95.088	20.60	06:15:17	0.032366	0.0000016	0.032555	0.0000010	0.049398	0.0000014	0.099119	0.0000010	394.851	2.345	441.000	2.021	552.200	1.183	496.743	0.131	50.0000	33.4
100	95.088	20.60	06:30:17	0.065122	0.0000008	0.065325	0.0000011	0.098822	0.0000008	0.198536	0.0000012	894.300	1.610	940.371	1.863	1051.766	0.958	995.160	0.270	99.9956	40.4
150	95.092	20.60	06:45:17	0.097943	0.0000010	0.098163	0.0000011	0.148350	0.0000008	0.298179	0.0000020	1393.920	3.947	1438.414	1.600	1550.760	1.116	1493.686	0.196	149.9872	47.8
200	95.107	20.60	07:00:17	0.130831	0.0000015	0.131071	0.0000011	0.197982	0.0000008	0.398037	0.0000020	1893.514	6.009	1939.311	2.020	2052.011	1.439	1992.531	0.321	199.9744	55.2
250	95.106	20.60	07:15:18	0.163788	0.0000008	0.164045	0.0000010	0.247709	0.0000010	0.498125	0.0000034	2395.723	2.425	2441.323	1.296	2552.611	1.054	2491.537	0.245	249.9574	62.7
300	95.118	20.60	07:30:18	0.196810	0.0000008	0.197089	0.0000010	0.297527	0.0000010	0.598437	0.0000028	2896.560	1.126	2941.637	1.767	3054.314	0.952	2991.003	0.240	299.9361	70.1
350	95.120	20.60	07:45:18	0.229895	0.0000011	0.230186	0.0000014	0.347413	0.0000010	0.698959	0.0000036	3398.803	1.833	3444.651	1.517	3555.400	2.045	3490.066	0.295	349.9106	77.6
400	95.123	20.60	08:00:27	0.263039	0.0000010	0.263343	0.0000010	0.397365	0.0000010	0.799663	0.0000034	3900.600	1.099	3946.483	2.142	4058.914	1.759	3990.191	0.239	399.8809	85.1
450	95.138	20.60	08:15:27	0.296236	0.0000008	0.296551	0.0000016	0.447382	0.0000000	0.900480	0.0000029	4402.166	2.334	4448.589	1.560	4561.143	1.127	4490.380	0.282	449.8469	92.6
500	95.154	20.60	08:30:27	0.329481	0.0000011	0.329804	0.0000008	0.497458	0.0000014	1.001313	0.0000030	4903.946	1.591	4951.646	2.282	5064.446	1.357	4990.632	0.263	499.8086	100.1
550	95.189	20.60	09:04:16	0.329494	0.0000008	0.329816	0.0000012	0.497465	0.0000010	1.001385	0.0000022	4904.066	1.525	4951.183	2.558	5064.451	1.575	4990.706	0.223	499.8089	100.1
450	95.204	20.60	09:19:16	0.296339	0.0000010	0.296647	0.0000010	0.447480	0.0000008	0.900933	0.0000010	4400.057	2.864	4443.926	2.434	4559.737	0.986	4490.703	0.405	449.8473	92.6
400	95.221	20.60	09:34:16	0.263215	0.0000011	0.263509	0.0000011	0.397543	0.0000015	0.800489	0.0000011	3893.846	1.667	3939.283	1.735	4055.766	0.816	3990.677	0.221	399.8812	85.1
350	95.235	20.60	09:49:16	0.230126	0.0000008	0.230405	0.0000015	0.347651	0.0000010	0.700081	0.0000016	3389.486	2.321	3434.460	3.165	3552.789	1.200	3490.972	0.359	349.9108	77.6
300	95.248	20.60	10:04:16	0.197074	0.0000012	0.197331	0.0000016	0.297809	0.0000010	0.599734	0.0000027	2886.831	2.802	2930.246	0.704	3051.531	1.097	2991.709	0.356	299.9363	70.1
250	95.263	20.60	10:19:16	0.164059	0.0000010	0.164303	0.0000016	0.248017	0.0000015	0.499465	0.0000032	2384.800	2.733	2428.946	1.416	2549.394	1.184	2492.171	0.302	249.9574	62.7
200	95.272	20.60	10:34:16	0.131085	0.0000010	0.131315	0.0000011	0.198281	0.0000010	0.399292	0.0000026	1884.206	1.416	1929.206	2.532	2048.851	0.889	1993.020	0.188	199.9744	55.2
150	95.277	20.60	10:49:16	0.098157	0.0000011	0.098375	0.0000011	0.148615	0.0000010	0.299235	0.0000036	1384.106	1.672	1429.620	2.135	1547.800	1.077	1494.217	0.268	149.9872	47.8
100	95.284	20.60	11:04:16	0.065277	0.0000011	0.065481	0.0000015	0.099023	0.0000010	0.199311	0.0000030	885.840	0.961	933.111	1.590	1048.886	1.028	995.657	0.374	99.9955	40.4
50	95.288	20.60	11:17:13	0.032438	0.0000018	0.032640	0.0000014	0.049508	0.0000012	0.099555	0.0000034	390.120	1.990	436.251	2.295	551.320	1.080	496.989	0.363	49.9999	33.4
0	95.283	20.60	11:32:13	-0.000312	0.0000008	-0.000130	0.0000014	0.000096	0.0000008	0.000050	0.0000027	-105.180	2.075	-57.960	1.560	53.263	0.761	-1.386	0.272	0	0

METAS, 0.5 GPa

Date: 28.01.2014

Measurement cycle: 3 of 4

File name for continuous records: 201401280718.prot

File name for selected records: 201401280718.data

P _{nom}	P _{amb} +1	T _{TS} +2	Local time +3	C ₁ +4	σ(C ₁) +5	C ₂ +4	σ(C ₂) +5	C ₃ +4	σ(C ₃) +5	C ₄ +4	σ(C ₄) +5	C ₅ +4	σ(C ₅) +5	C ₆ +4	σ(C ₆) +5	C ₇ +4	σ(C ₇) +5	C ₈ +4	σ(C ₈) +5	P _{L5} +6	u(P _{L5})/P _{L5} +7
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	93.824	20.60	07:51:04	-0.000317	0.0000011	-0.000146	0.0000000	0.0000080	0.0000008	-0.000109	0.0000020	-105.283	1.193	-56.803	2.182	52.737	1.295	-1.646	0.343	0	0
50	93.825	20.60	08:06:34	0.032355	0.0000011	0.032548	0.0000008	0.049392	0.0000014	0.099087	0.0000015	393.026	1.372	440.014	2.429	552.349	0.703	496.974	0.325	50.0000	33.4
100	93.839	20.60	08:21:04	0.065111	0.0000010	0.065316	0.0000000	0.098815	0.0000010	0.198506	0.0000014	894.917	2.013	940.517	1.150	1051.331	1.281	994.989	0.369	99.9957	40.4
150	93.842	20.60	08:36:04	0.097930	0.0000018	0.098154	0.0000008	0.148342	0.0000008	0.298145	0.0000010	1392.317	1.881	1439.289	2.087	1550.771	1.059	1493.711	0.443	149.9874	47.8
200	93.829	20.60	08:51:04	0.130819	0.0000011	0.131061	0.0000016	0.197974	0.0000008	0.398005	0.0000019	1895.349	2.353	1939.320	2.075	2051.451	0.840	1992.354	0.405	199.9747	55.2
250	93.851	20.60	09:06:04	0.163775	0.0000011	0.164034	0.0000008	0.247701	0.0000010	0.498093	0.0000032	2394.806	1.949	2440.911	1.420	2553.497	0.967	2491.477	0.263	249.9577	62.7
300	93.846	20.60	09:21:04	0.196797	0.0000011	0.197079	0.0000010	0.297519	0.0000016	0.598404	0.0000023	2897.400	2.325	2943.891	1.097	3055.326	0.805	2990.963	0.240	299.9365	70.1
350	93.860	20.60	09:36:04	0.229882	0.0000008	0.230177	0.0000010	0.347405	0.0000011	0.698929	0.0000023	3396.669	2.629	3445.346	2.581	3556.114	1.586	3490.086	0.267	349.9111	77.6
400	93.868	20.60	09:51:04	0.263024	0.0000000	0.263300	0.0000012	0.397355	0.0000010	0.799628	0.0000035	3900.446	2.168	3946.611	1.097	4059.103	0.446	3990.228	0.224	399.8815	85.1
450	93.859	20.60	10:06:04	0.296222	0.0000008	0.296538	0.0000014	0.447371	0.0000010	0.900446	0.0000041	4405.037	2.732	4448.477	1.530	4561.411	0.671	4490.163	0.187	449.8477	92.6
500	93.849	20.60	10:21:05	0.329465	0.0000011	0.329792	0.0000012	0.497449	0.0000011	1.001282	0.0000031	4905.266	1.524	4953.720	1.599	5065.149	0.691	4990.749	0.383	499.8094	100.1
500	93.856	20.60	10:54:05	0.329476	0.0000014	0.329802	0.0000008	0.497456	0.0000012	1.001351	0.0000020	4905.506	1.721	4953.060	5.241	5064.434	0.901	4990.851	0.280	499.8098	100.1
450	93.825	20.60	11:09:21	0.296321	0.0000015	0.296633	0.0000010	0.447469	0.0000010	0.900899	0.0000011	4400.803	0.755	4445.211	1.726	4560.686	1.094	4490.534	0.225	449.8482	92.6
400	93.820	20.60	11:24:21	0.263197	0.0000011	0.263495	0.0000010	0.397351	0.0000010	0.800453	0.0000019	3893.614	1.350	3940.063	1.776	4056.337	0.677	3990.749	0.350	399.8820	85.1
350	93.809	20.60	11:39:21	0.230106	0.0000008	0.230392	0.0000016	0.347639	0.0000011	0.700047	0.0000015	3390.214	2.595	3434.777	0.888	3554.777	1.021	3490.763	0.232	349.9115	77.6
300	93.785	20.65	11:54:21	0.197055	0.0000011	0.197318	0.0000012	0.297797	0.0000010	0.599698	0.0000018	2887.029	1.104	2930.794	2.192	3051.514	0.757	2991.286	0.317	299.9369	70.1
250	93.774	20.63	12:09:21	0.164041	0.0000011	0.164289	0.0000010	0.248006	0.0000014	0.499429	0.0000028	2384.786	1.727	2430.951	1.329	2550.446	0.888	2492.057	0.365	249.9580	62.7
200	93.752	20.60	12:25:21	0.131068	0.0000008	0.131302	0.0000018	0.198273	0.0000011	0.399259	0.0000022	1883.786	2.493	1929.566	1.094	2048.480	0.754	1992.980	0.247	199.9748	55.2
150	93.739	20.60	12:40:23	0.098140	0.0000014	0.098362	0.0000008	0.148605	0.0000010	0.299201	0.0000020	1384.354	1.649	1430.203	1.055	1548.640	0.528	1494.254	0.319	149.9874	47.8
100	93.721	20.60	12:55:23	0.065261	0.0000011	0.065469	0.0000015	0.099015	0.0000011	0.199278	0.0000035	886.569	1.130	933.617	1.331	1048.811	1.809	995.409	0.341	99.9957	40.4
50	93.714	20.60	13:10:23	0.032431	0.0000010	0.032630	0.0000012	0.049505	0.0000010	0.099530	0.0000031	390.643	1.939	437.520	1.416	550.994	2.066	497.006	0.157	50.0000	33.4
0	93.693	20.60	13:25:23	-0.000320	0.0000008	-0.000140	0.0000008	0.000900	0.0000008	0.000022	0.0000018	-105.840	1.393	-57.806	2.202	52.714	0.929	-1.523	0.319	0	0

METAS, 0.5 GPa

Date: 29.01.2014

Measurement cycle: 4 of 4

File name for continuous records: 201401290658.prot

File name for selected records: 201401290658.data

P _{nom}	P _{amb} +1	T _{TS} +2	Local time +3	C ₁ +4	σ(C ₁) +5	C ₂ +4	σ(C ₂) +5	C ₃ +4	σ(C ₃) +5	C ₄ +4	σ(C ₄) +5	C ₅ +4	σ(C ₅) +5	C ₆ +4	σ(C ₆) +5	C ₇ +4	σ(C ₇) +5	C ₈ +4	σ(C ₈) +5	P _{LS} +6	u(P _{LS})/P _{LS} +7
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	93.309	20.50	07:27:18	-0.000311	0.0000011	-0.000143	0.0000011	0.000078	0.0000012	-0.000090	0.0000035	-104.803	2.488	-58.337	0.835	53.051	1.279	-1.589	0.316	0	0
50	93.309	20.60	07:43:18	0.032361	0.0000010	0.032551	0.0000010	0.049390	0.0000008	0.099103	0.0000010	393.489	1.912	439.483	2.785	551.891	0.744	496.577	0.355	50.0001	33.4
100	93.324	20.60	07:58:18	0.065116	0.0000016	0.065319	0.0000010	0.098813	0.0000011	0.198524	0.0000008	893.383	2.487	939.857	1.013	1051.451	1.266	995.071	0.290	99.9959	40.4
150	93.335	20.60	08:13:18	0.097936	0.0000014	0.098158	0.0000014	0.148341	0.0000019	0.298164	0.0000014	1393.063	1.733	1439.486	2.317	1551.960	1.370	1493.817	0.173	149.9877	47.8
200	93.348	20.60	08:28:11	0.130823	0.0000010	0.131064	0.0000008	0.197973	0.0000010	0.398022	0.0000018	1893.069	1.178	1939.826	0.423	2052.263	1.294	1992.480	0.355	199.9750	55.2
250	93.354	20.60	08:43:11	0.163784	0.0000012	0.164044	0.0000014	0.247711	0.0000010	0.498123	0.0000030	2394.206	0.926	2441.786	1.829	2553.028	1.294	2491.420	0.297	249.9582	62.7
300	93.330	20.60	08:58:11	0.196803	0.0000011	0.197082	0.0000008	0.297520	0.0000008	0.598429	0.0000030	2897.177	2.292	2942.023	2.202	3053.709	0.768	2990.743	0.279	299.9371	70.1
350	93.362	20.60	09:13:20	0.229885	0.0000011	0.230178	0.0000014	0.347402	0.0000012	0.698945	0.0000036	3398.614	1.779	3444.780	1.263	3556.623	1.007	3490.189	0.260	349.9118	77.6
400	93.381	20.60	09:28:20	0.263028	0.0000012	0.263333	0.0000011	0.397355	0.0000011	0.799648	0.0000042	3899.306	2.198	3947.031	1.350	4059.731	1.580	3990.074	0.403	399.8822	85.1
450	93.387	20.60	09:43:20	0.296223	0.0000010	0.296539	0.0000011	0.447369	0.0000016	0.900459	0.0000034	4403.691	2.072	4449.754	1.221	4560.686	1.246	4490.037	0.287	449.8485	92.6
500	93.414	20.60	09:59:20	0.329467	0.0000011	0.329791	0.0000011	0.497445	0.0000016	1.001296	0.0000031	4906.243	2.030	4954.166	2.286	5064.503	0.598	4990.551	0.259	499.8103	100.1
500	93.440	20.60	10:33:20	0.329478	0.0000018	0.329802	0.0000012	0.497452	0.0000000	1.001367	0.0000019	4905.446	1.471	4954.448	2.747	5064.423	0.691	4990.735	0.316	499.8107	100.1
450	93.445	20.63	10:49:20	0.296320	0.0000008	0.296632	0.0000012	0.447466	0.0000012	0.900913	0.0000010	4400.280	1.229	4447.046	1.853	4560.171	1.689	4490.431	0.370	449.8489	92.6
400	93.461	20.60	11:04:20	0.263198	0.0000008	0.263495	0.0000010	0.397531	0.0000011	0.800470	0.0000018	3896.023	1.706	3941.563	1.442	4056.349	1.444	3990.580	0.308	399.8826	85.1
350	93.467	20.60	11:19:20	0.230108	0.0000014	0.230391	0.0000010	0.347642	0.0000008	0.700064	0.0000014	3391.551	1.270	3437.520	2.399	3553.932	0.722	3490.751	0.148	349.9121	77.6
300	93.462	20.60	11:34:20	0.197056	0.0000012	0.197324	0.0000012	0.297796	0.0000014	0.599715	0.0000023	2887.834	1.498	2932.569	2.801	3052.503	0.857	2991.346	0.293	299.9373	70.1
250	93.464	20.63	11:49:20	0.164042	0.0000012	0.164290	0.0000016	0.248003	0.0000011	0.499445	0.0000025	2385.900	2.142	2430.557	1.999	2550.217	1.311	2491.889	0.347	249.9583	62.7
200	93.464	20.60	12:04:23	0.131070	0.0000012	0.131305	0.0000011	0.198271	0.0000010	0.399276	0.0000028	1884.480	2.416	1929.343	2.221	2048.971	0.819	1993.057	0.321	199.9751	55.2
150	93.463	20.60	12:20:23	0.098142	0.0000008	0.098363	0.0000010	0.148603	0.0000010	0.299217	0.0000022	1384.251	3.004	1430.709	1.810	1548.983	0.991	1494.020	0.444	149.9876	47.8
100	93.458	20.60	12:35:05	0.065264	0.0000000	0.065471	0.0000019	0.099015	0.0000010	0.199298	0.0000029	887.983	2.586	932.914	1.029	1049.560	2.042	995.546	0.192	99.9958	40.4
50	93.455	20.60	12:50:05	0.032432	0.0000014	0.032630	0.0000012	0.049502	0.0000008	0.099542	0.0000033	388.937	2.183	436.346	1.930	551.657	1.686	496.983	0.215	50.0000	33.4
0	93.452	20.60	13:04:05	-0.000319	0.0000010	-0.000139	0.0000010	0.000090	0.0000012	0.000044	0.0000034	-107.443	0.696	-58.954	0.920	53.640	1.303	-1.566	0.339	0	0

METAS, 1 GPa

Date: 19.02.2014

Measurement cycle: 1 of 4

File name for continuous records: 201402190715.prot

File name for selected records: 201402190715.data

P _{nom}	P _{amb} +1	T _{TS} +2	Local time +3	C ₁ +4	σ(C ₁) +5	C ₂ +4	σ(C ₂) +5	C ₃ +4	σ(C ₃) +5	C ₅ +4	σ(C ₅) +5	C ₆ +4	σ(C ₆) +5	C ₇ +4	σ(C ₇) +5	P _{LS} +6	u(P _{LS})/P _{LS} +7
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	95.154	20.50	08:01:22	-0.000320	0.0000012	-0.000141	0.0000020	0.000105	0.0000010	-105.471	1.963	-59.340	2.115	51.354	0.704	0	0
100	95.184	20.50	08:17:22	0.065109	0.0000010	0.065323	0.0000077	0.098852	0.0000440	893.306	1.964	939.831	1.942	1050.703	1.087	99.9976	40.4
200	95.199	20.55	08:32:22	0.130817	0.0000011	0.131066	0.0000038	0.197997	0.0000011	1890.986	1.429	1939.937	1.229	2049.714	2.401	199.9941	55.2
300	95.204	20.50	08:47:22	0.196815	0.0000036	0.197101	0.0000036	0.297569	0.0000036	2892.686	1.509	2939.769	1.144	3053.206	1.699	299.9899	70.1
400	95.216	20.50	09:01:22	0.263067	0.0000174	0.263380	0.0000334	0.397439	0.0000382	3895.183	2.051	3942.343	2.048	4056.440	1.329	399.9846	85.1
500	95.240	20.50	09:17:22	0.329554	0.0000352	0.329881	0.0000445	0.497552	0.0000026	4899.737	1.916	4944.883	1.396	5059.475	1.365	499.9787	100.1
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500	93.464	20.63	11:40:08	0.330131	0.0000094	0.330397	0.0000038	0.498032	0.0000027	4865.126	1.388	4914.883	1.516	5035.452	1.149	499.9787	100.1
400	93.464	20.60	11:56:08	0.263670	0.0000018	0.263931	0.0000121	0.397958	0.0000023	3858.386	2.029	3910.697	1.430	4028.806	0.729	399.9845	85.1
300	93.463	20.60	12:11:38	0.197373	0.0000022	0.197619	0.0000235	0.298107	0.0000171	2857.886	1.811	2912.426	1.044	3028.874	1.066	299.9899	70.1
200	93.458	20.60	12:30:08	0.131220	0.0000016	0.131447	0.0000097	0.198411	0.0000038	1864.474	1.651	1918.303	2.498	2031.486	0.835	199.9940	55.2
100	93.455	20.60	12:45:08	0.065339	0.0000020	0.065546	0.0000023	0.099100	0.0000016	874.251	2.601	925.920	2.214	1038.000	1.074	99.9976	40.4
0	93.452	20.60	13:00:08	-0.000300	0.0000016	-0.000116	0.0000016	0.000121	0.0000016	-110.923	1.733	-61.277	2.767	49.691	1.075	0	0

METAS, 1 GPa

Date: 22.02.2014

Measurement cycle: 2 of 4

File name for continuous records: 201402210645.prot

File name for selected records: 201402210645.data

P _{nom}	P _{amb} +1	T _{TS} +2	Local time +3	C ₁ +4	σ(C ₁) +5	C ₂ +4	σ(C ₂) +5	C ₃ +4	σ(C ₃) +5	C ₅ +4	σ(C ₅) +5	C ₆ +4	σ(C ₆) +5	C ₇ +4	σ(C ₇) +5	P _{LS} +6	u(P _{LS})/P _{LS} +7
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	94.706	20.50	07:29:21	-0.000321	0.0000011	-0.000144	0.0000014	0.000101	0.0000010	-107.134	1.189	-58.731	1.079	52.080	0.947	0	0
100	94.717	20.50	07:45:17	0.065111	0.0000023	0.065319	0.0000022	0.098839	0.0000034	891.566	1.546	939.771	1.201	1049.886	0.648	99.9977	40.4
200	94.738	20.50	08:00:32	0.130820	0.0000012	0.131074	0.0000237	0.197999	0.0000016	1892.940	3.538	1940.160	2.266	2050.194	1.442	199.9942	55.2
300	94.786	20.60	08:15:32	0.196812	0.0000012	0.197096	0.0000008	0.297565	0.0000043	2892.977	2.733	2939.023	1.617	3052.429	1.152	299.9901	70.1
400	94.814	20.60	08:31:32	0.263063	0.0000050	0.263375	0.0000106	0.397426	0.0000018	3894.189	1.753	3940.517	1.674	4054.954	1.177	399.9848	85.1
500	94.846	20.60	08:49:32	0.329553	0.0000055	0.329872	0.0000035	0.497556	0.0000048	4897.492	2.031	4943.931	2.346	5059.480	1.920	499.9791	100.1
600																	
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500	93.464	20.63	11:00:15	0.330085	0.0000366	0.330353	0.0000189	0.497994	0.0000131	4866.977	1.384	4916.640	1.716	5037.280	0.946	499.9790	100.1
400	93.464	20.60	11:15:15	0.263653	0.0000030	0.263907	0.0000020	0.397947	0.0000016	3859.251	2.515	3911.383	2.078	4030.349	0.976	399.9848	85.1
300	93.463	20.60	11:30:15	0.197354	0.0000062	0.197602	0.0000272	0.298080	0.0000079	2859.283	3.208	2911.749	1.761	3028.869	1.844	299.9901	70.1
200	93.458	20.60	11:45:28	0.131243	0.0000019	0.131467	0.0000015	0.198450	0.0000014	1863.351	1.456	1918.140	1.697	2032.172	0.557	199.9941	55.2
100	93.455	20.60	12:00:28	0.065330	0.0000021	0.065539	0.0000015	0.099099	0.0000109	875.477	0.831	927.429	1.702	1038.954	0.665	99.9977	40.4
0	93.452	20.60	12:15:28	-0.000304	0.0000000	-0.000118	0.0000014	0.000121	0.0000010	-111.111	1.228	-61.209	1.714	49.474	0.968	0	0

METAS, 1 GPa

Date: 24.02.2014

Measurement cycle: 3 of 4

File name for continuous records: 201402240637.prot

File name for selected records: 201402240637.data

P _{nom}	P _{amb} +1	T _{TS} +2	Local time +3	C ₁ +4	σ(C ₁) +5	C ₂ +4	σ(C ₂) +5	C ₃ +4	σ(C ₃) +5	C ₅ +4	σ(C ₅) +5	C ₆ +4	σ(C ₆) +5	C ₇ +4	σ(C ₇) +5	P _{LS} +6	u(P _{LS})/P _{LS} +7
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	95.371	20.50	07:23:17	-0.000326	0.0000008	-0.000146	0.0000018	0.000105	0.0000010	-107.580	1.507	-58.791	1.921	51.291	1.317	0	0
100	95.390	20.50	07:38:17	0.065101	0.0000020	0.065315	0.0000060	0.098840	0.0000145	891.574	1.265	938.554	1.923	1049.874	1.331	99.9976	40.4
200	95.398	20.60	07:53:17	0.130811	0.0000016	0.131060	0.0000014	0.197997	0.0000028	1892.151	1.051	1938.463	2.192	2049.240	0.792	199.9940	55.2
300	95.411	20.55	08:08:19	0.196810	0.0000021	0.197097	0.0000010	0.297577	0.0000020	2891.203	1.186	2939.486	2.049	3052.543	0.691	299.9898	70.1
400	95.415	20.50	08:24:20	0.263048	0.0000008	0.263355	0.0000011	0.397416	0.0000018	3893.657	1.356	3942.026	1.948	4056.143	1.248	399.9845	85.1
500	95.418	20.50	08:39:20	0.329542	0.0000021	0.329865	0.0000010	0.497560	0.0000021	4898.666	1.316	4945.371	1.553	5060.983	0.630	499.9786	100.1
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500	93.464	20.63	10:58:26	0.330100	0.0000018	0.330372	0.0000012	0.498017	0.0000010	4867.140	1.769	4916.991	2.066	5038.012	1.829	499.9786	100.1
400	93.464	20.60	11:14:26	0.263636	0.0000048	0.263897	0.0000049	0.397933	0.0000063	3860.203	1.541	3911.537	1.421	4031.554	1.016	399.9845	85.1
300	93.463	20.60	11:29:26	0.197349	0.0000047	0.197586	0.0000018	0.298077	0.0000020	2860.114	1.500	2912.169	3.297	3029.823	1.302	299.9898	70.1
200	93.458	20.60	11:44:26	0.131237	0.0000076	0.131459	0.0000025	0.198444	0.0000115	1864.740	0.891	1918.637	1.454	2032.531	1.466	199.9940	55.2
100	93.455	20.60	12:00:07	0.065332	0.0000062	0.065539	0.0000032	0.099101	0.0000034	875.169	1.292	927.189	1.047	1039.137	0.839	99.9976	40.4
0	93.452	20.60	12:15:07	-0.000306	0.0000008	-0.000120	0.0000012	0.000122	0.0000008	-112.029	1.678	-62.040	1.642	49.680	1.141	0	0

METAS, 1 GPa

Date: 26.02.2014

Measurement cycle: 4 of 4

File name for continuous records: 201402260634.prot

File name for selected records: 201402260634.data

P _{nom}	P _{amb} P ₁	T _{TS} T ₂	Local time t ₃	C ₁ C ₄	σ(C ₁) C ₅	C ₂ C ₄	σ(C ₂) C ₅	C ₃ C ₄	σ(C ₃) C ₅	C ₅ C ₄	σ(C ₅) C ₅	C ₆ C ₄	σ(C ₆) C ₅	C ₇ C ₄	σ(C ₇) C ₅	P _{LS} P ₆	u(P _{LS})/P _{LS} P ₇
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	95.012	20.50	07:15:04	-0.000319	0.0000010	-0.000140	0.0000016	0.000107	0.0000015	-107.571	1.102	-58.440	2.092	50.451	0.657	0	0
100	95.026	20.50	07:30:04	0.065116	0.0000024	0.065325	0.0000020	0.098847	0.0000010	889.603	2.282	939.171	1.332	1049.474	1.184	99.9976	40.4
200	95.057	20.50	07:46:04	0.130818	0.0000016	0.131067	0.0000015	0.198000	0.0000021	1890.480	3.263	1938.977	2.490	2048.931	0.820	199.9941	55.2
300	95.067	20.60	08:01:04	0.196812	0.0000014	0.197097	0.0000020	0.297567	0.0000023	2889.523	2.360	2940.926	1.687	3051.154	0.943	299.9900	70.1
400	95.060	20.60	08:16:34	0.263053	0.0000117	0.263357	0.0000128	0.397423	0.0000395	3892.877	1.484	3943.097	1.762	4055.257	1.802	399.9846	85.1
500	95.089	20.70	08:32:04	0.329547	0.0000030	0.329870	0.0000044	0.497561	0.0000025	4896.806	1.652	4945.097	1.732	5059.869	1.698	499.9789	100.1
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500	93.464	20.63	10:36:08	0.330089	0.0000025	0.330363	0.0000011	0.498015	0.0000104	4867.226	1.047	4916.940	1.634	5038.217	1.096	499.9789	100.1
400	93.464	20.60	10:51:08	0.263629	0.0000028	0.263891	0.0000023	0.397931	0.0000022	3862.431	1.424	3910.766	1.921	4032.291	1.047	399.9847	85.1
300	93.463	20.60	11:06:24	0.197337	0.0000025	0.197577	0.0000020	0.298070	0.0000023	2861.931	1.813	2913.463	1.987	3030.669	1.069	299.9900	70.1
200	93.458	20.60	11:21:24	0.131227	0.0000028	0.131453	0.0000015	0.198437	0.0000020	1864.637	2.781	1918.740	2.793	2033.657	0.866	199.9941	55.2
100	93.455	20.60	11:36:24	0.065327	0.0000015	0.065539	0.0000043	0.099101	0.0000025	874.543	2.288	928.054	1.961	1039.389	1.370	99.9976	40.4
0	93.452	20.60	11:51:24	-0.000307	0.0000011	-0.000120	0.0000020	0.000124	0.0000008	-112.937	1.690	-60.531	2.173	48.800	1.120	0	0

A3.4 CMI results

CMI, 0.5 GPa

Date: 22.05.2013

Measurement cycle: 1 of 4

File name for continuous records: 2013522827.prot

File name for selected records: 2013522827.data

P _{nom}	P _{amb} P ₁	T _{TS} T ₂	Local time t ₃	C ₁ C ₄	σ(C ₁) C ₅	C ₂ C ₄	σ(C ₂) C ₅	C ₃ C ₄	σ(C ₃) C ₅	C ₄ C ₄	σ(C ₄) C ₅	C ₅ C ₄	σ(C ₅) C ₅	C ₆ C ₄	σ(C ₆) C ₅	C ₇ C ₄	σ(C ₇) C ₅	C ₈ C ₄	σ(C ₈) C ₅	P _{LS} P ₆	u(P _{LS})/P _{LS} P ₇
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	97.026	20.98	09:06:30	-0.0000903	0.0000005	-0.0000460	0.0000004	0.0000460	0.0000006	0.0002174	0.0000016	-104.545713	0.881025	-72.488570	1.128926	40.359998	0.397420	-1.314286	0.080559	0	
50	97.026	20.99	09:21:30	0.0325814	0.0000006	0.0326463	0.0000003	0.0493531	0.0000004	0.0994006	0.0000004	392.005720	0.467308	425.571424	0.691016	538.897138	0.269869	496.928571	0.118549	49.99613	15
100	97.028	21.01	09:36:30	0.0653380	0.0000000	0.0654143	0.0000005	0.0987734	0.0000004	0.1988103	0.0000003	893.339983	1.226414	926.777152	0.954144	1038.668561	0.346804	995.337106	0.119799	99.98952	16
150	97.031	21.02	09:51:00	0.0981580	0.0000000	0.0982520	0.0000004	0.1482971	0.0000004	0.2984389	0.0000006	1393.388602	0.808646	1424.065674	0.321206	1538.422851	0.500947	1493.765712	0.144992	149.9795	17
200	97.016	21.05	10:06:00	0.1310491	0.0000004	0.1311611	0.0000004	0.1979257	0.0000005	0.3982943	0.0000007	1892.751412	0.600777	1926.248553	0.786629	2038.697126	0.292638	1992.779995	0.161596	199.9667	19
250	97.005	21.09	10:20:30	0.1640083	0.0000003	0.1641337	0.0000003	0.2476523	0.0000003	0.4983703	0.0000007	2394.642927	0.905199	2427.377127	0.607336	2539.594308	0.583826	2491.691371	0.163810	249.9508	20
300	97.000	21.11	10:35:00	0.1970309	0.0000004	0.1971771	0.0000004	0.2974631	0.0000004	0.5986720	0.0000012	2897.151332	0.392250	2929.028599	0.555547	3040.719901	0.579141	2991.159947	0.104496	299.9317	23
350	96.985	21.18	10:49:30	0.2301163	0.0000005	0.2302749	0.0000004	0.3473463	0.0000005	0.6992009	0.0000011	3400.199951	0.353024	3433.345633	0.432430	3542.822859	0.536554	3490.491350	0.075281	349.9097	25
400	96.971	21.29	11:04:00	0.2632606	0.0000006	0.2634300	0.0000004	0.3972966	0.0000006	0.7999249	0.0000016	3902.331438	0.941284	3936.239990	0.555481	4045.525739	0.434296	3990.648612	0.132147	399.8845	27
450	96.952	21.35	11:18:30	0.2964560	0.0000004	0.2966346	0.0000006	0.4473111	0.0000004	0.9007757	0.0000016	4403.751395	0.796401	4439.940081	1.185627	4548.748605	0.900144	4490.640206	0.124847	449.8561	30
500	96.941	21.40	11:33:30	0.3296917	0.0000008	0.3298811	0.0000004	0.4973794	0.0000007	1.0016443	0.0000018	4907.580008	0.768743	4943.957171	0.649161	5051.943011	0.315123	4990.951381	0.156331	499.8245	32
500	96.914	21.46	12:07:45	0.3297017	0.0000005	0.3298937	0.0000005	0.4973926	0.0000004	1.0017423	0.0000005	4907.734375	0.528065	4943.974121	0.316132	5050.634277	0.485724	4991.125628	0.110196	499.8243	32
450	96.909	21.48	12:23:00	0.2965474	0.0000004	0.2967240	0.0000004	0.4474086	0.0000004	0.9012777	0.0000005	4403.374233	1.045158	4437.059710	0.506909	4548.302804	0.759565	4490.839844	0.152477	449.8558	30
400	96.886	21.49	12:38:00	0.2634180	0.0000004	0.2635814	0.0000004	0.3974686	0.0000006	0.8008109	0.0000006	3897.102958	0.860963	3931.320034	1.119903	4043.714286	0.551919	3991.117083	0.081776	399.8841	27
350	96.888	21.52	12:53:00	0.2303263	0.0000003	0.2304769	0.0000004	0.3475797	0.0000003	0.7003926	0.0000004	3393.094413	0.645812	3425.991420	0.826499	3541.988665	0.404223	3491.185652	0.166001	349.9092	25
300	96.875	21.54	13:07:30	0.1972731	0.0000004	0.1974034	0.0000004	0.2977380	0.0000004	0.6000411	0.0000007	2889.214286	0.600388	2924.297119	0.865448	3038.280029	0.618223	2991.845878	0.125463	299.9311	23
250	96.863	21.57	13:22:00	0.1642591	0.0000004	0.1643763	0.0000005	0.2479534	0.0000006	0.4997777	0.0000008	2388.420026	0.746293	2420.734305	0.787437	2536.708531	0.418227	2492.371408	0.095585	249.9502	20
200	96.884	21.62	13:36:30	0.1312743	0.0000003	0.1313786	0.0000004	0.1982023	0.0000003	0.3995643	0.0000007	1887.317086	0.976800	1919.237165	0.687063	2035.514317	0.647718	1993.185739	0.119034	199.9661	19
150	96.868	21.65	13:51:30	0.0982849	0.0000006	0.0983800	0.0000000	0.1484594	0.0000007	0.2992451	0.0000011	1386.351423	0.675068	1418.520002	0.534094	1537.068569	0.486901	1494.534249	0.115933	149.979	17
100	96.870	21.68	14:06:00	0.0654640	0.0000000	0.0655500	0.0000004	0.0989746	0.0000006	0.1996131	0.0000013	888.197135	0.694144	919.191424	0.843204	1036.577166	0.284436	995.880022	0.109809	99.98909	16
50	96.870	21.72	14:20:30	0.0326351	0.0000004	0.0327114	0.0000007	0.0494711	0.0000004	0.0998557	0.0000010	390.668575	0.578385	422.888576	0.723024	537.931431	0.507744	497.308568	0.086284	49.99587	15
0	96.873	21.78	14:35:30	-0.0001229	0.0000004	-0.0000623	0.0000003	0.0000597	0.0000003	0.0003257	0.0000011	-104.485712	0.463438	-74.451429	0.351916	39.519999	0.439827	-1.222857	0.090336	0	

CMI, 0.5 GPa

Date: 24.05.2013

Measurement cycle: 2 of 4

File name for continuous records: 2013524847.prot

File name for selected records: 2013524847.data

P _{nom}	P _{amb} P ₁	T _{TS} T ₂	Local time t ₃	C ₁ C ₄	σ(C ₁) σ ₅	C ₂ C ₄	σ(C ₂) σ ₅	C ₃ C ₄	σ(C ₃) σ ₅	C ₄ C ₄	σ(C ₄) σ ₅	C ₅ C ₄	σ(C ₅) σ ₅	C ₆ C ₄	σ(C ₆) σ ₅	C ₇ C ₄	σ(C ₇) σ ₅	C ₈ C ₄	σ(C ₈) σ ₅	P _{LS} P ₆	u(P _{LS})/P _{LS} P ₇
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	96.960	20.10	09:32:00	-0.0000349	0.0000004	-0.0000106	0.0000004	0.0000343	0.0000003	0.0001903	0.0000010	-105.882859	0.699434	-75.214285	0.641408	39.777143	0.571505	-1.380000	0.198374	0	-
50	96.962	20.17	09:47:00	0.0326369	0.0000004	0.0326829	0.0000007	0.0493434	0.0000006	0.0993806	0.0000004	390.154301	0.906534	422.982853	0.634940	538.931414	0.416024	496.828561	0.076576	49.99654	15
100	96.973	20.23	10:01:30	0.0653897	0.0000003	0.0654509	0.0000004	0.0987649	0.0000004	0.1987960	0.0000004	891.042873	0.334760	923.682861	0.359215	1038.440046	0.321895	995.142866	0.109675	99.99029	16
150	96.967	20.26	10:16:30	0.0982111	0.0000004	0.0982889	0.0000004	0.1482909	0.0000004	0.2984306	0.0000006	1390.345651	0.491972	1422.025670	0.558714	1538.348546	0.362519	1493.688581	0.104016	149.9806	17
200	96.977	20.29	10:31:30	0.1311014	0.0000007	0.1311963	0.0000003	0.1979206	0.0000004	0.3982849	0.0000004	1890.514247	0.665150	1923.094221	0.626109	2038.400025	0.253127	1992.414254	0.062904	199.9682	19
250	96.985	20.32	10:46:00	0.1640597	0.0000003	0.1641697	0.0000003	0.2476486	0.0000006	0.4983671	0.0000010	2391.214181	0.929441	2425.842843	0.415231	2539.982840	0.489968	2491.600063	0.073929	249.9527	20
300	96.995	20.36	11:00:30	0.1970811	0.0000004	0.1972117	0.0000003	0.2974620	0.0000000	0.5986694	0.0000010	2893.774205	0.838144	2927.211531	1.354645	3041.097133	0.574155	2990.837228	0.086903	299.9339	23
350	96.991	20.36	11:15:00	0.2301666	0.0000004	0.2303097	0.0000003	0.3473434	0.0000004	0.6991977	0.0000017	3397.431397	0.528057	3432.034389	0.561017	3543.359794	0.344510	3490.234270	0.086194	349.9123	25
400	96.992	20.38	11:29:30	0.2633097	0.0000005	0.2634649	0.0000004	0.3972957	0.0000005	0.7999151	0.0000015	3900.137207	0.622537	3934.122907	0.839787	4046.040004	0.618376	3990.274414	0.087834	399.8875	27
450	96.996	20.41	11:44:00	0.2965097	0.0000005	0.2966734	0.0000004	0.4473143	0.0000003	0.9007754	0.0000014	4403.005650	0.965231	4439.485770	0.454492	4547.880022	0.511887	4490.305804	0.107116	449.8595	30
500	97.000	20.45	11:58:30	0.3297406	0.0000004	0.3299146	0.0000004	0.4973766	0.0000007	1.0016174	0.0000015	4906.800014	0.291302	4944.591518	0.574423	5052.497140	0.621256	4990.462821	0.074672	499.8284	32
550	96.989	20.49	12:32:37	0.3297483	0.0000005	0.3299243	0.0000007	0.4973854	0.0000006	1.0017023	0.0000013	4907.023019	0.542514	4944.694336	0.589355	5052.039969	0.473174	4990.605469	0.074128	499.8283	32
450	96.998	20.53	12:49:00	0.2965949	0.0000004	0.2967574	0.0000004	0.4474037	0.0000005	0.9012460	0.0000004	4401.077009	0.598059	4438.876953	0.626817	4546.234305	0.592762	4490.762974	0.154790	449.8595	30
400	96.994	20.56	13:03:30	0.2634706	0.0000006	0.2636183	0.0000003	0.3974694	0.0000004	0.8008011	0.0000004	3896.939942	0.595152	3930.737165	1.493072	4043.388532	0.242208	3990.622873	0.049058	399.8873	27
350	97.003	20.56	13:18:00	0.2303751	0.0000004	0.2305089	0.0000004	0.3475711	0.0000004	0.7003629	0.0000009	3393.102888	1.134749	3426.625628	0.851047	3540.662912	0.439679	3490.814244	0.136805	349.912	25
300	97.003	20.54	13:32:30	0.1973266	0.0000004	0.1974409	0.0000004	0.2977377	0.0000007	0.6000331	0.0000009	2889.942871	0.661247	2922.419991	0.352102	3037.965681	0.330005	2991.822824	0.152549	299.9336	23
250	97.006	20.56	13:47:00	0.1643071	0.0000006	0.1644080	0.0000000	0.2479380	0.0000004	0.4997443	0.0000005	2386.131452	0.825002	2419.765695	0.587260	2536.382882	0.709643	2492.385742	0.170665	249.9523	20
200	97.008	20.59	14:01:30	0.1313309	0.0000004	0.1314206	0.0000004	0.1982034	0.0000004	0.3995669	0.0000012	1886.811489	0.645612	1919.648525	0.737582	2035.765764	0.456674	1993.220023	0.131444	199.9678	19
150	97.012	20.63	14:18:00	0.0983320	0.0000004	0.0984109	0.0000004	0.1484460	0.0000006	0.2992020	0.0000006	1385.794277	0.652029	1419.642909	0.684563	1535.897164	0.465970	1494.228533	0.133856	149.9802	17
100	97.017	20.65	14:32:30	0.0655131	0.0000004	0.0655846	0.0000004	0.0989589	0.0000004	0.1995894	0.0000011	887.245727	0.454848	919.920000	0.922669	1036.925711	0.609231	995.702863	0.106045	99.98995	16
50	97.014	20.66	14:47:00	0.0326883	0.0000005	0.0327466	0.0000006	0.0494543	0.0000003	0.0998371	0.0000014	388.208562	0.752756	422.751426	0.795813	538.154288	0.368733	497.102857	0.153400	49.99629	15
0	97.022	20.66	15:01:30	-0.0000637	0.0000003	-0.0000226	0.0000004	0.0000500	0.0000006	0.0003263	0.0000011	-108.857142	0.342107	-76.045715	0.588294	40.451428	0.308818	-1.417143	0.168660	0	-

CMI, 0.5 GPa

Date: 25.05.2013

Measurement cycle: 3 of 4

File name for continuous records: 2013525621.prot

File name for selected records: 2013525621.data

P _{nom}	P _{amb} /kPa	T _{TS} /°C	Local time hh:mm:ss	C ₁ /(mV/V)	σ(C ₁) /(mV/V)	C ₂ /(mV/V)	σ(C ₂) /(mV/V)	C ₃ /(mV/V)	σ(C ₃) /(mV/V)	C ₄ /(mV/V)	σ(C ₄) /(mV/V)	C ₅ /bar	σ(C ₅) /bar	C ₆ /bar	σ(C ₆) /bar	C ₇ /bar	σ(C ₇) /bar	C ₈ /bar	σ(C ₈) /bar	P _{LS} /MPa	u(P _{LS})/P _{LS} /10 ⁻⁶
0	97.060	19.92	07:02:30	-0.0000294	0.0000006	-0.0000060	0.0000000	0.0000331	0.0000004	0.0002034	0.0000010	-107.237143	0.868961	-75.771430	0.772650	39.308571	0.435974	-1.274286	0.111758	0	-
50	97.057	20.01	07:17:30	0.0326417	0.0000003	0.0326866	0.0000004	0.0493431	0.0000003	0.0993937	0.0000003	390.548566	0.982279	423.720019	0.482488	539.102879	0.334996	497.088571	0.173310	49.99661	15
100	97.062	20.07	07:32:00	0.0653969	0.0000004	0.0654551	0.0000006	0.0987626	0.0000004	0.1988077	0.0000003	889.945714	0.560995	923.228559	0.462800	1038.674247	0.518132	994.982875	0.093450	99.99046	16
150	97.065	20.15	07:47:30	0.0982180	0.0000004	0.0982954	0.0000004	0.1482914	0.0000004	0.2984446	0.0000006	1390.139980	0.685237	1423.002860	1.002004	1538.960013	0.392702	1493.745780	0.133076	149.9809	17
200	97.074	20.22	08:02:00	0.1311074	0.0000007	0.1312014	0.0000004	0.1979197	0.0000005	0.3983003	0.0000009	1890.205758	0.301942	1923.960013	0.902282	2037.897147	0.613920	1992.442854	0.108648	199.9684	19
250	97.081	20.29	08:16:30	0.1640637	0.0000003	0.1641734	0.0000004	0.2476477	0.0000005	0.4983806	0.0000013	2392.559954	0.789807	2426.537144	0.943674	2539.445766	0.202726	2491.599993	0.125442	249.953	20
300	97.093	20.35	08:31:00	0.1970854	0.0000006	0.1972160	0.0000004	0.2974623	0.0000005	0.5986851	0.0000011	2894.305559	0.554725	2927.751395	0.712527	3041.228585	0.419913	2990.982840	0.117396	299.9341	23
350	97.098	20.37	08:45:30	0.2301694	0.0000004	0.2303140	0.0000004	0.3473460	0.0000000	0.6992160	0.0000014	3397.594378	0.675261	3431.065744	0.424067	3542.782924	0.422672	3490.239990	0.102611	349.9125	25
400	97.105	20.41	09:00:00	0.2633123	0.0000003	0.2634683	0.0000003	0.3972980	0.0000000	0.7999351	0.0000017	3901.568639	0.610130	3935.357108	1.013735	4044.800014	0.733858	3990.134242	0.076812	399.8777	27
450	97.106	20.44	09:14:30	0.2965086	0.0000004	0.2966740	0.0000000	0.4473140	0.0000004	0.9007834	0.0000012	4404.848493	1.245470	4439.940011	0.354792	4547.645717	0.503782	4494.344431	0.096908	449.8598	30
500	97.111	20.48	09:29:00	0.3297420	0.0000006	0.3299169	0.0000009	0.4973797	0.0000005	1.0016314	0.0000018	4907.228655	1.012733	4944.197196	0.780142	5052.765625	0.631162	4990.559849	0.071842	499.8286	32
500	97.131	20.54	10:03:00	0.3297489	0.0000004	0.3299249	0.0000006	0.4973889	0.0000009	1.0017151	0.0000013	4906.079939	0.481429	4944.720075	0.456020	5051.811245	0.494903	4990.645717	0.136395	499.8285	32
450	97.141	20.60	10:17:30	0.2965937	0.0000005	0.2967580	0.0000004	0.4474066	0.0000004	0.9012580	0.0000004	4401.025600	0.349878	4437.720145	0.351304	4547.051479	0.248564	4490.591239	0.140862	449.8596	30
400	97.143	20.64	10:32:30	0.2634671	0.0000004	0.2636183	0.0000003	0.3974683	0.0000005	0.8008057	0.0000005	3895.885672	0.600819	3933.274309	0.534057	4042.994385	0.485545	3990.868583	0.095728	399.8874	27
350	97.147	20.67	10:47:00	0.2303769	0.0000004	0.2305134	0.0000006	0.3475820	0.0000000	0.7003962	0.0000007	3392.579939	0.685354	3426.882813	0.783578	3541.314348	0.427444	3491.134242	0.154636	349.9121	25
300	97.150	20.67	11:01:30	0.1973180	0.0000000	0.1974340	0.0000000	0.2977286	0.0000006	0.60060234	0.0000009	2889.754360	0.685836	2925.248640	0.544639	3038.428572	0.437465	2991.568569	0.141398	299.936	23
250	97.143	20.69	11:16:00	0.1643071	0.0000004	0.1644126	0.0000004	0.2479509	0.0000004	0.4997763	0.0000007	2386.928571	0.615009	2421.274379	1.009587	2537.634242	0.530911	2492.414307	0.076420	249.9523	20
200	97.132	20.72	11:30:30	0.1313294	0.0000004	0.1314220	0.0000004	0.1982134	0.0000004	0.3995923	0.0000011	1885.457111	0.480834	1918.757150	0.652269	2036.125750	0.329307	1993.259992	0.153600	199.9678	19
150	97.127	20.70	11:45:00	0.0983249	0.0000004	0.0984071	0.0000004	0.1484406	0.0000004	0.2992060	0.0000009	1386.120012	0.998162	1419.034032	0.702031	1536.325719	0.156485	1594.359985	0.106303	149.9803	17
100	97.142	20.68	11:59:30	0.0655089	0.0000004	0.0655834	0.0000004	0.0989603	0.0000005	0.1996026	0.0000015	886.337176	0.658926	919.739999	0.343924	1036.451416	0.390530	995.625715	0.089422	99.9897	16
50	97.143	20.69	12:14:00	0.0326831	0.0000004	0.0327449	0.0000004	0.0494557	0.0000003	0.0998494	0.0000014	389.228581	0.877373	422.374281	0.698226	537.874285	0.593970	497.254290	0.101858	49.99633	15
0	97.151	20.73	12:28:30	-0.0000691	0.0000004	-0.0000243	0.0000005	0.0000494	0.0000004	0.0003383	0.0000011	-106.551428	1.089044	-74.957140	1.030926	40.074285	0.534267	-1.322857	0.147773	0	-

CMI, 0.5 GPa

Date: 27.05.2013

Measurement cycle: 4 of 4

File name for continuous records: 20135271033.prot

File name for selected records: 20135271033.data

	P _{amb} x ₁	T _{TS} x ₂	Local time x ₃	C ₁ x ₄	σ(C ₁) x ₅	C ₂ x ₄	σ(C ₂) x ₅	C ₃ x ₄	σ(C ₃) x ₅	C ₄ x ₄	σ(C ₄) x ₅	C ₅ x ₄	σ(C ₅) x ₅	C ₆ x ₄	σ(C ₆) x ₅	C ₇ x ₄	σ(C ₇) x ₅	C ₈ x ₄	σ(C ₈) x ₅	P _{LS} x ₆	u(P _{LS})/P _{LS} x ₇
	/kPa	/°C	hh:mm:ss	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/(mV/V)	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/bar	/MPa	/10 ⁻⁶
0	97.017	20.45	11:10:30	-0.0000706	0.0000004	-0.0000340	0.0000004	0.0000374	0.0000004	0.0001829	0.0000011	-107.622857	0.726838	-73.645715	0.473864	40.657144	0.556168	-1.257143	0.085683	0	-
50	97.023	20.46	11:26:00	0.0326049	0.0000004	0.0326606	0.0000004	0.0493469	0.0000004	0.0993757	0.0000003	389.948569	0.801402	422.699999	0.841732	538.559998	0.388300	496.837145	0.110192	49.99665	15
100	97.025	20.44	11:40:30	0.0653623	0.0000005	0.0654314	0.0000004	0.0987689	0.0000004	0.1987943	0.0000005	890.700003	0.659222	924.111415	0.638542	1038.017177	0.561633	995.202855	0.110012	99.99014	16
150	97.030	20.44	11:55:00	0.0981871	0.0000006	0.0982743	0.0000007	0.1482989	0.0000004	0.2984346	0.0000009	1390.251413	0.553404	1422.625715	0.767573	1538.491403	0.422135	1493.774275	0.093158	149.9804	17
200	97.034	20.45	12:09:30	0.1310797	0.0000003	0.1311823	0.0000005	0.1979274	0.0000004	0.3982903	0.0000007	1891.688581	1.035959	1922.991438	0.690887	2038.360038	0.577235	1992.579956	0.117185	199.968	19
250	97.033	20.46	12:24:00	0.1640394	0.0000004	0.1641571	0.0000004	0.2476511	0.0000004	0.4983691	0.0000012	2392.662772	0.593504	2425.980015	0.675375	2539.377127	0.785356	2491.488630	0.083714	249.9524	20
300	97.048	20.46	12:38:30	0.1970651	0.0000004	0.1972017	0.0000005	0.2974663	0.0000003	0.5986763	0.0000013	2895.899937	1.112189	2928.582799	0.436955	3042.222796	0.332483	2990.925781	0.129934	299.9336	23
350	97.049	20.48	12:53:00	0.2301500	0.0000004	0.2302989	0.0000004	0.3473480	0.0000000	0.6992049	0.0000015	3398.502930	0.744779	3430.945731	0.742121	3544.171387	0.474774	3490.205741	0.050097	349.9119	25
400	97.051	20.48	13:07:30	0.2632960	0.0000004	0.2634554	0.0000004	0.3972991	0.0000004	0.7999220	0.0000016	3901.500104	0.664531	3935.340053	0.631728	4045.428641	0.521731	3990.431466	0.112752	399.8871	27
450	97.062	20.50	13:22:00	0.2964929	0.0000004	0.2966611	0.0000006	0.4473129	0.0000004	0.9007614	0.0000015	4404.882813	0.629824	4440.154227	0.732152	4548.542690	0.711682	4490.377162	0.139579	449.8592	30
500	97.076	20.53	13:36:30	0.3297297	0.0000003	0.3299080	0.0000004	0.4973820	0.0000004	1.0016211	0.0000015	4908.120047	0.563073	4945.097168	0.966556	5052.325614	0.267380	4990.620117	0.141517	499.828	32
500	97.090	20.58	14:10:30	0.3297391	0.0000004	0.3299177	0.0000007	0.4973886	0.0000004	1.0017031	0.0000009	4906.259765	0.816583	4945.714425	0.706089	5051.525739	0.371677	4990.657087	0.110008	499.8281	32
450	97.096	20.58	14:25:00	0.2965886	0.0000004	0.2967526	0.0000006	0.4474080	0.0000000	0.9012471	0.0000004	4401.968680	0.624384	4439.417341	0.772956	4547.371373	0.415561	4490.842773	0.120457	449.8593	30
400	97.098	20.60	14:40:00	0.2634611	0.0000004	0.2636114	0.0000006	0.3974680	0.0000006	0.8007871	0.0000004	3897.128697	0.565627	3933.085798	0.441060	4043.491385	0.883354	3990.785784	0.078290	399.8872	27
350	97.106	20.64	14:54:00	0.2303723	0.0000005	0.2305097	0.0000003	0.3475834	0.0000004	0.7003857	0.0000005	3393.231515	0.685683	3427.037214	0.809082	3541.045794	0.453978	3491.014369	0.113626	349.912	25
300	97.110	20.68	15:08:35	0.1973137	0.0000005	0.1974314	0.0000004	0.2977323	0.0000003	0.6000151	0.0000006	2889.300014	0.791897	2923.131452	0.723502	3038.982875	0.648466	2991.637102	0.068237	299.9335	23
250	97.102	20.70	15:23:45	0.1642903	0.0000005	0.1643940	0.0000004	0.2479254	0.0000004	0.4997074	0.0000010	2386.894287	0.614544	2420.751465	1.034373	2536.885777	0.438802	2492.348598	0.113081	249.9523	20
200	97.107	20.71	15:38:30	0.1313246	0.0000006	0.1314169	0.0000006	0.1982140	0.0000000	0.3995794	0.0000013	1885.791452	0.642940	1920.762852	0.663708	2036.360020	0.314249	1993.002842	0.128978	199.9678	19
150	97.111	20.71	15:53:00	0.0983546	0.0000004	0.0984357	0.0000003	0.1484866	0.0000006	0.2993520	0.0000006	1386.968576	1.034636	1419.711408	0.713854	1536.880005	0.504454	1494.388620	0.106183	149.9802	17
100	97.116	20.72	16:07:30	0.0655020	0.0000006	0.0655771	0.0000004	0.0989574	0.0000004	0.1995860	0.0000012	888.077131	0.639653	919.851423	0.596910	1037.742815	0.692764	995.637146	0.062705	99.98997	16
50	97.112	20.74	16:22:30	0.0326723	0.0000005	0.0327351	0.0000006	0.0494474	0.0000006	0.0998200	0.0000011	388.577131	0.548619	421.491438	0.387614	537.485718	0.546048	497.305716	0.109347	49.99632	15
0	97.114	20.75	16:37:00	-0.0000766	0.0000006	-0.0000314	0.0000006	0.0000471	0.0000004	0.0003180	0.0000011	-107.922855	1.108337	-73.800000	0.880162	40.554286	0.553116	-1.134286	0.105534	0	-

A4 Uncertainties due to TS drift

A4.1. Uncertainties for 0.5 GPa measurements, in MPa.

p / MPa	S1	S2	S3	S4	S5	S6	S7	S8
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.003	0.002	0.001	0.002	0.006	0.047	0.016	0.003
100	0.005	0.005	0.001	0.002	0.026	0.005	0.013	0.001
150	0.008	0.007	0.002	0.003	0.003	0.012	0.006	0.002
200	0.012	0.010	0.003	0.004	0.006	0.003	0.018	0.001
250	0.013	0.011	0.002	0.003	0.002	0.039	0.003	0.007
300	0.016	0.011	0.003	0.003	0.014	0.027	0.003	0.011
350	0.019	0.015	0.003	0.007	0.003	0.048	0.012	0.002
400	0.022	0.016	0.004	0.013	0.041	0.049	0.002	0.004
450	0.023	0.018	0.005	0.024	0.059	0.083	0.034	0.009
500	0.024	0.018	0.005	0.039	0.030	0.080	0.033	0.011
500	0.024	0.017	0.005	0.040	0.068	0.106	0.036	0.007
450	0.024	0.017	0.005	0.036	0.046	0.102	0.030	0.015
400	0.022	0.015	0.005	0.033	0.035	0.096	0.014	0.013
350	0.020	0.013	0.004	0.029	0.078	0.099	0.021	0.015
300	0.019	0.013	0.003	0.026	0.083	0.095	0.025	0.007
250	0.017	0.012	0.002	0.023	0.048	0.044	0.033	0.010
200	0.014	0.011	0.002	0.020	0.059	0.063	0.004	0.009
150	0.013	0.011	0.003	0.018	0.036	0.019	0.021	0.012
100	0.005	0.006	0.001	0.014	0.009	0.012	0.002	0.013
50	0.003	0.002	0.001	0.007	0.001	0.010	0.012	0.010
0	0.002	0.002	0.000	0.001	0.013	0.027	0.005	0.004

A4.2. Uncertainties for 1 GPa measurements, in MPa.

p / MPa	S1	S2	S3	S4	S5	S6	S7	S8
0	0.000	0.000	0.000		0.000	0.000	0.000	
100	0.009	0.009	0.003		0.027	0.003	0.012	
200	0.017	0.016	0.004		0.021	0.019	0.021	
300	0.025	0.019	0.004		0.081	0.077	0.029	
400	0.033	0.026	0.005		0.065	0.095	0.076	
500	0.041	0.032	0.008		0.173	0.046	0.121	
600	0.047	0.036	0.008		0.285	0.115	0.223	
700	0.055	0.041	0.011		0.444	0.281	0.419	
800	0.069	0.055	0.015		0.510	0.552	0.551	
900	0.076	0.061	0.019		0.581	0.689	0.621	
1000	0.078	0.060	0.016		0.616	0.776	0.664	
1000	0.081	0.062	0.018		0.617	0.804	0.651	
900	0.079	0.064	0.021		0.589	0.762	0.640	
800	0.084	0.066	0.022		0.553	0.739	0.640	
700	0.080	0.064	0.021		0.505	0.680	0.597	
600	0.084	0.068	0.025		0.481	0.711	0.555	
500	0.069	0.055	0.017		0.319	0.701	0.448	
400	0.070	0.055	0.019		0.175	0.636	0.311	
300	0.063	0.051	0.017		0.090	0.435	0.155	
200	0.054	0.044	0.016		0.061	0.235	0.078	
100	0.035	0.029	0.011		0.003	0.091	0.030	
0	0.004	0.002	0.000		0.021	0.029	0.012	

A5 Uncertainty contributions of the TS in the measurements of laboratories**A5.1. Resolution $u_{\text{Resol.}}(x)$ /MPa.**

S1	S2	S3	S4	S5	S6	S7	S8
0.003	0.003	0.002	0.001	0.002	0.002	0.002	0.002

**A5.2. Zero deviation u_{ZeroDev} /MPa
in 0.5 GPa measurements**

	S1	S2	S3	S4	S5	S6	S7	S8
PTB	0.004	0.006	0.003	0.018	0.076	0.053	0.016	0.009
LNE	0.007	0.007	0.004	0.024	0.076	0.066	0.059	0.010
METAS	0.003	0.004	0.004	0.021	0.076	0.076	0.037	0.006
CMI	0.017	0.008	0.005	0.020	0.086	0.057	0.024	0.004

in 1 GPa measurements

	S1	S2	S3	S4	S5	S6	S7	S8
PTB	0.011	0.013	0.006		0.133	0.137	0.068	
LNE	0.048	0.033	0.026		0.180	0.137	0.090	
METAS	0.009	0.011	0.006		0.157	0.094	0.075	

**A5.3. Instability $u_{\text{Instab.}}(x)/\text{MPa}$
in PTB 0.5 GPa measurements**

p / MPa	S1	S2	S3	S4	S5	S6	S7	S8
0	0.003	0.003	0.002	0.002	0.221	0.167	0.136	0.031
50	0.003	0.003	0.002	0.001	0.130	0.191	0.082	0.027
100	0.003	0.003	0.002	0.001	0.307	0.201	0.156	0.024
150	0.003	0.003	0.002	0.002	0.184	0.168	0.097	0.028
200	0.003	0.003	0.002	0.002	0.164	0.205	0.116	0.036
250	0.003	0.003	0.002	0.002	0.271	0.155	0.128	0.037
300	0.003	0.003	0.002	0.003	0.196	0.164	0.104	0.034
350	0.003	0.003	0.002	0.003	0.206	0.223	0.170	0.023
400	0.003	0.003	0.002	0.003	0.145	0.278	0.097	0.030
450	0.003	0.003	0.002	0.003	0.152	0.226	0.110	0.026
500	0.003	0.003	0.002	0.004	0.132	0.194	0.125	0.035
500	0.003	0.003	0.002	0.002	0.182	0.200	0.098	0.025
450	0.003	0.003	0.003	0.002	0.206	0.209	0.110	0.031
400	0.003	0.003	0.002	0.003	0.161	0.179	0.101	0.033
350	0.003	0.003	0.002	0.003	0.200	0.170	0.123	0.034
300	0.003	0.003	0.002	0.003	0.194	0.185	0.072	0.027
250	0.003	0.003	0.002	0.003	0.182	0.153	0.117	0.028
200	0.003	0.003	0.002	0.002	0.184	0.178	0.119	0.034
150	0.003	0.003	0.002	0.002	0.189	0.167	0.114	0.026
100	0.003	0.003	0.002	0.002	0.156	0.204	0.109	0.024
50	0.003	0.003	0.002	0.002	0.188	0.167	0.096	0.034
0	0.003	0.003	0.002	0.002	0.204	0.199	0.117	0.024

in LNE 0.5 GPa measurements

p / MPa	S1	S2		S3	S4	S5	S6	S7	S8
0	0.003	0.003		0.002	0.002	0.189	0.197	0.103	0.031
50	0.003	0.003		0.002	0.001	0.174	0.175	0.124	0.031
100	0.003	0.003		0.002	0.001	0.217	0.165	0.112	0.027
150	0.003	0.003		0.002	0.001	0.206	0.165	0.105	0.027
200	0.003	0.003		0.002	0.002	0.209	0.194	0.130	0.030
250	0.003	0.003		0.002	0.003	0.202	0.184	0.127	0.034
300	0.003	0.003		0.002	0.005	0.156	0.170	0.088	0.037
350	0.004	0.003		0.002	0.006	0.215	0.209	0.110	0.028
400	0.004	0.004		0.003	0.007	0.235	0.216	0.097	0.035
450	0.005	0.006		0.005	0.010	0.157	0.170	0.101	0.034
500	0.005	0.003		0.003	0.006	0.211	0.185	0.134	0.035
500	0.004	0.004		0.004	0.007	0.213	0.128	0.102	0.028
450	0.003	0.004		0.003	0.005	0.154	0.193	0.073	0.032
400	0.003	0.003		0.003	0.004	0.157	0.198	0.123	0.023
350	0.003	0.003		0.002	0.001	0.192	0.186	0.121	0.026
300	0.003	0.003		0.002	0.001	0.191	0.235	0.098	0.033
250	0.003	0.003		0.002	0.001	0.188	0.173	0.134	0.031
200	0.003	0.003		0.002	0.002	0.172	0.272	0.146	0.023
150	0.003	0.003		0.002	0.002	0.175	0.157	0.125	0.028
100	0.003	0.003		0.002	0.002	0.175	0.166	0.149	0.037
50	0.003	0.003		0.002	0.003	0.231	0.215	0.126	0.025
0	0.003	0.003		0.002	0.002	0.193	0.155	0.090	0.040

in METAS 0.5 GPa measurements

p / MPa	S1	S2	S3	S4	S5	S6	S7	S8
0	0.003	0.003	0.002	0.002	0.149	0.184	0.135	0.029
50	0.003	0.003	0.002	0.001	0.186	0.227	0.084	0.027
100	0.003	0.003	0.002	0.001	0.188	0.148	0.116	0.031
150	0.003	0.003	0.002	0.001	0.246	0.178	0.118	0.024
200	0.003	0.003	0.002	0.001	0.145	0.137	0.105	0.033
250	0.003	0.003	0.002	0.002	0.202	0.158	0.120	0.030
300	0.003	0.003	0.002	0.002	0.179	0.164	0.095	0.025
350	0.003	0.003	0.002	0.003	0.198	0.168	0.131	0.028
400	0.003	0.003	0.002	0.003	0.191	0.141	0.132	0.026
450	0.003	0.003	0.002	0.003	0.228	0.151	0.092	0.021
500	0.003	0.003	0.002	0.002	0.173	0.202	0.085	0.028
500	0.003	0.003	0.002	0.001	0.159	0.302	0.114	0.028
450	0.003	0.003	0.002	0.001	0.164	0.206	0.112	0.033
400	0.003	0.003	0.002	0.001	0.171	0.152	0.108	0.024
350	0.003	0.003	0.002	0.001	0.192	0.234	0.101	0.023
300	0.003	0.003	0.002	0.002	0.175	0.175	0.086	0.033
250	0.003	0.003	0.002	0.002	0.200	0.167	0.098	0.031
200	0.003	0.003	0.002	0.002	0.183	0.201	0.084	0.029
150	0.003	0.003	0.002	0.002	0.210	0.189	0.095	0.033
100	0.003	0.003	0.002	0.002	0.166	0.136	0.148	0.027
50	0.003	0.003	0.002	0.002	0.192	0.172	0.144	0.025
0	0.003	0.003	0.002	0.002	0.193	0.152	0.093	0.027

in CMI 0.5 GPa measurements

p / MPa	S1	S2	S3	S4	S5	S6	S7	S8
0	0.003	0.003	0.002	0.001	0.079	0.075	0.049	0.012
50	0.003	0.003	0.002	0.001	0.079	0.066	0.035	0.012
100	0.003	0.003	0.002	0.001	0.070	0.060	0.044	0.011
150	0.003	0.003	0.002	0.001	0.063	0.066	0.042	0.012
200	0.003	0.003	0.002	0.001	0.065	0.075	0.043	0.011
250	0.003	0.003	0.002	0.001	0.080	0.066	0.052	0.011
300	0.003	0.003	0.002	0.001	0.072	0.076	0.048	0.011
350	0.003	0.003	0.002	0.001	0.058	0.054	0.044	0.008
400	0.003	0.003	0.002	0.001	0.071	0.076	0.058	0.010
450	0.003	0.003	0.002	0.001	0.091	0.068	0.066	0.012
500	0.003	0.003	0.002	0.001	0.066	0.074	0.046	0.011
500	0.003	0.003	0.002	0.001	0.059	0.052	0.046	0.011
450	0.003	0.003	0.002	0.001	0.065	0.056	0.050	0.014
400	0.003	0.003	0.002	0.001	0.066	0.090	0.054	0.008
350	0.003	0.003	0.002	0.001	0.079	0.082	0.043	0.014
300	0.003	0.003	0.002	0.001	0.068	0.062	0.051	0.012
250	0.003	0.003	0.002	0.001	0.070	0.085	0.052	0.011
200	0.003	0.003	0.002	0.001	0.069	0.069	0.044	0.013
150	0.003	0.003	0.002	0.001	0.084	0.066	0.040	0.012
100	0.003	0.003	0.002	0.001	0.061	0.068	0.049	0.009
50	0.003	0.003	0.002	0.001	0.069	0.065	0.050	0.011
0	0.003	0.003	0.002	0.001	0.075	0.071	0.046	0.013

in PTB 1 GPa measurements

p / MPa	S1	S2	S3	S4	S5	S6	S7	S8
0	0.003	0.003	0.002		0.169	0.182	0.131	
100	0.003	0.003	0.002		0.194	0.193	0.118	
200	0.003	0.003	0.002		0.250	0.137	0.165	
300	0.003	0.003	0.002		0.141	0.213	0.107	
400	0.003	0.003	0.002		0.179	0.188	0.138	
500	0.003	0.003	0.002		0.143	0.198	0.100	
600	0.003	0.003	0.002		0.217	0.201	0.131	
700	0.003	0.003	0.002		0.155	0.140	0.129	
800	0.003	0.003	0.002		0.218	0.192	0.107	
900	0.003	0.003	0.002		0.165	0.152	0.114	
1000	0.003	0.003	0.002		0.240	0.134	0.093	
1000	0.003	0.003	0.002		0.199	0.196	0.157	
900	0.003	0.003	0.002		0.224	0.236	0.143	
800	0.003	0.003	0.002		0.206	0.168	0.133	
700	0.003	0.003	0.002		0.134	0.160	0.119	
600	0.003	0.003	0.002		0.241	0.179	0.139	
500	0.003	0.003	0.002		0.200	0.213	0.117	
400	0.003	0.003	0.002		0.195	0.194	0.093	
300	0.003	0.003	0.002		0.166	0.162	0.123	
200	0.003	0.003	0.002		0.197	0.233	0.117	
100	0.003	0.003	0.002		0.261	0.165	0.113	
0	0.003	0.003	0.002		0.195	0.198	0.080	

in LNE 1 GPa measurements

p / MPa	S1	S2	S3	S4	S5	S6	S7	S8
0	0.003	0.003	0.002		0.189	0.230	0.101	
100	0.003	0.003	0.002		0.171	0.209	0.086	
200	0.003	0.003	0.002		0.219	0.149	0.100	
300	0.011	0.003	0.002		0.195	0.211	0.068	
400	0.004	0.004	0.003		0.168	0.187	0.115	
500	0.018	0.009	0.006		0.263	0.234	0.113	
600	0.061	0.027	0.011		0.249	0.176	0.149	
700	0.076	0.095	0.124		0.177	0.198	0.185	
800	0.288	0.254	0.251		0.356	0.359	0.339	
900	0.255	0.281	0.291		0.347	0.414	0.330	
1000	0.267	0.251	0.240		0.358	0.347	0.277	
1000	0.038	0.036	0.036		0.211	0.241	0.131	
900	0.117	0.107	0.094		0.299	0.204	0.138	
800	0.194	0.151	0.118		0.267	0.314	0.242	
700	0.033	0.029	0.023		0.212	0.240	0.132	
600	0.013	0.014	0.013		0.200	0.140	0.143	
500	0.012	0.013	0.013		0.169	0.204	0.099	
400	0.003	0.003	0.002		0.195	0.119	0.122	
300	0.003	0.003	0.002		0.155	0.182	0.124	
200	0.011	0.011	0.010		0.150	0.210	0.102	
100	0.003	0.003	0.002		0.228	0.243	0.105	
0	0.003	0.003	0.002		0.218	0.193	0.136	

in METAS 1 GPa measurements

p / MPa	S1	S2	S3	S4	S5	S6	S7	S8
0	0.003	0.003	0.002		0.144	0.180	0.091	
100	0.003	0.007	0.016		0.176	0.160	0.106	
200	0.003	0.011	0.002		0.232	0.204	0.136	
300	0.003	0.003	0.003		0.195	0.162	0.112	
400	0.013	0.022	0.020		0.166	0.186	0.139	
500	0.017	0.020	0.003		0.173	0.176	0.140	
600								
700								
800								
900								
1000								
1000								
900								
800								
700								
600								
500	0.019	0.009	0.007		0.140	0.173	0.126	
400	0.005	0.008	0.003		0.188	0.171	0.094	
300	0.006	0.020	0.007		0.208	0.202	0.132	
200	0.005	0.006	0.005		0.169	0.211	0.093	
100	0.004	0.004	0.005		0.175	0.173	0.099	
0	0.003	0.003	0.002		0.158	0.207	0.108	

**A5.4. Uncertainty of the transfer standard, $u_{TS}(x)$ /MPa
in PTB 0.5 GPa measurements**

p / MPa	S1	S2	S3	S4	S5	S6	S7	S8
0	0.005	0.007	0.003	0.018	0.234	0.175	0.137	0.033
50	0.005	0.007	0.003	0.018	0.197	0.235	0.100	0.033
100	0.005	0.007	0.003	0.018	0.342	0.246	0.173	0.033
150	0.005	0.007	0.003	0.018	0.246	0.247	0.120	0.031
200	0.005	0.007	0.004	0.018	0.229	0.281	0.122	0.038
250	0.005	0.007	0.004	0.018	0.332	0.204	0.131	0.040
300	0.005	0.007	0.004	0.018	0.290	0.214	0.123	0.036
350	0.005	0.007	0.005	0.019	0.360	0.284	0.174	0.032
400	0.007	0.008	0.005	0.019	0.284	0.319	0.113	0.034
450	0.009	0.010	0.006	0.019	0.301	0.256	0.128	0.032
500	0.015	0.014	0.009	0.020	0.269	0.288	0.158	0.041
500	0.015	0.014	0.009	0.019	0.310	0.297	0.125	0.030
450	0.014	0.014	0.009	0.019	0.422	0.331	0.167	0.034
400	0.016	0.014	0.009	0.019	0.341	0.316	0.167	0.036
350	0.014	0.012	0.008	0.019	0.404	0.256	0.150	0.041
300	0.011	0.011	0.007	0.019	0.337	0.326	0.124	0.033
250	0.011	0.011	0.007	0.019	0.323	0.218	0.147	0.034
200	0.009	0.009	0.007	0.019	0.319	0.258	0.136	0.036
150	0.008	0.008	0.006	0.019	0.281	0.240	0.124	0.034
100	0.006	0.008	0.006	0.019	0.317	0.237	0.129	0.028
50	0.005	0.007	0.004	0.019	0.219	0.227	0.119	0.041
0	0.006	0.008	0.004	0.019	0.280	0.256	0.126	0.030

in LNE 0.5 GPa measurements

p / MPa	S1	S2	S3	S4	S5	S6	S7	S8
0	0.008	0.008	0.005	0.024	0.204	0.208	0.119	0.032
50	0.008	0.008	0.005	0.024	0.197	0.195	0.149	0.040
100	0.009	0.008	0.005	0.024	0.246	0.254	0.156	0.032
150	0.010	0.009	0.005	0.024	0.245	0.255	0.156	0.030
200	0.009	0.008	0.005	0.024	0.233	0.273	0.162	0.037
250	0.011	0.010	0.010	0.025	0.274	0.339	0.146	0.036
300	0.009	0.008	0.006	0.024	0.301	0.267	0.160	0.042
350	0.012	0.012	0.006	0.028	0.293	0.353	0.218	0.034
400	0.009	0.009	0.008	0.025	0.356	0.379	0.186	0.039
450	0.011	0.011	0.010	0.027	0.340	0.392	0.143	0.037
500	0.011	0.009	0.007	0.026	0.344	0.521	0.206	0.039
500	0.017	0.015	0.011	0.027	0.437	0.419	0.228	0.039
450	0.015	0.014	0.011	0.026	0.380	0.528	0.210	0.043
400	0.013	0.013	0.012	0.025	0.350	0.471	0.224	0.029
350	0.013	0.011	0.010	0.024	0.355	0.459	0.226	0.032
300	0.017	0.017	0.015	0.038	0.397	0.417	0.182	0.044
250	0.020	0.019	0.023	0.038	0.331	0.367	0.197	0.036
200	0.019	0.015	0.013	0.029	0.281	0.417	0.226	0.027
150	0.017	0.012	0.006	0.025	0.275	0.309	0.215	0.033
100	0.018	0.013	0.008	0.027	0.257	0.316	0.216	0.039
50	0.027	0.026	0.026	0.037	0.299	0.321	0.185	0.027
0	0.016	0.012	0.006	0.026	0.250	0.197	0.156	0.044

in METAS 0.5 GPa measurements

p / MPa	S1	S2	S3	S4	S5	S6	S7	S8
0	0.004	0.005	0.004	0.021	0.168	0.199	0.140	0.030
50	0.005	0.005	0.004	0.021	0.203	0.263	0.101	0.040
100	0.005	0.005	0.004	0.021	0.233	0.192	0.125	0.035
150	0.005	0.005	0.004	0.021	0.281	0.209	0.140	0.036
200	0.007	0.006	0.007	0.021	0.223	0.182	0.116	0.037
250	0.010	0.009	0.011	0.023	0.233	0.206	0.160	0.035
300	0.006	0.006	0.005	0.021	0.221	0.212	0.139	0.032
350	0.007	0.006	0.005	0.021	0.224	0.234	0.154	0.037
400	0.008	0.007	0.006	0.021	0.218	0.198	0.163	0.034
450	0.009	0.008	0.006	0.021	0.310	0.222	0.110	0.025
500	0.011	0.011	0.008	0.022	0.243	0.313	0.117	0.037
500	0.013	0.012	0.008	0.023	0.221	0.420	0.126	0.042
450	0.014	0.012	0.008	0.023	0.221	0.340	0.151	0.038
400	0.013	0.012	0.007	0.022	0.235	0.342	0.132	0.033
350	0.013	0.010	0.006	0.022	0.249	0.382	0.181	0.027
300	0.011	0.006	0.005	0.021	0.249	0.288	0.129	0.033
250	0.011	0.009	0.007	0.022	0.253	0.294	0.138	0.035
200	0.010	0.008	0.006	0.022	0.210	0.267	0.107	0.036
150	0.009	0.007	0.006	0.022	0.250	0.254	0.132	0.040
100	0.008	0.006	0.005	0.022	0.238	0.200	0.161	0.030
50	0.006	0.006	0.004	0.021	0.232	0.246	0.165	0.034
0	0.005	0.005	0.004	0.021	0.242	0.192	0.127	0.032

in CMI 0.5 GPa measurements

p / MPa	S1	S2	S3	S4	S5	S6	S7	S8
0	0.017	0.008	0.005	0.020	0.117	0.094	0.055	0.012
50	0.018	0.009	0.005	0.020	0.143	0.156	0.092	0.017
100	0.018	0.009	0.005	0.020	0.128	0.106	0.097	0.020
150	0.019	0.011	0.006	0.021	0.133	0.142	0.094	0.013
200	0.020	0.011	0.006	0.020	0.163	0.160	0.065	0.021
250	0.021	0.012	0.006	0.021	0.183	0.150	0.092	0.017
300	0.023	0.013	0.007	0.021	0.194	0.126	0.085	0.018
350	0.023	0.013	0.007	0.021	0.155	0.142	0.073	0.018
400	0.024	0.014	0.007	0.020	0.186	0.143	0.089	0.026
450	0.024	0.013	0.008	0.020	0.248	0.164	0.074	0.020
500	0.026	0.016	0.006	0.020	0.197	0.186	0.103	0.026
500	0.027	0.016	0.006	0.020	0.123	0.193	0.118	0.029
450	0.029	0.017	0.006	0.020	0.153	0.218	0.094	0.021
400	0.028	0.016	0.007	0.020	0.167	0.240	0.071	0.022
350	0.030	0.019	0.008	0.021	0.178	0.206	0.088	0.021
300	0.029	0.018	0.007	0.020	0.186	0.218	0.076	0.023
250	0.024	0.011	0.014	0.022	0.159	0.189	0.113	0.014
200	0.030	0.019	0.011	0.022	0.127	0.169	0.085	0.020
150	0.050	0.039	0.020	0.044	0.205	0.200	0.063	0.017
100	0.028	0.016	0.007	0.020	0.169	0.196	0.071	0.018
50	0.026	0.014	0.008	0.020	0.154	0.183	0.097	0.013
0	0.028	0.016	0.006	0.021	0.198	0.148	0.091	0.016

in PTB 1 GPa measurements

p / MPa	S1	S2	S3	S4	S5	S6	S7	S8
0	0.011	0.013	0.006		0.215	0.228	0.147	
100	0.011	0.014	0.007		0.236	0.256	0.148	
200	0.011	0.014	0.006		0.291	0.205	0.183	
300	0.012	0.014	0.007		0.236	0.265	0.129	
400	0.011	0.014	0.006		0.247	0.250	0.161	
500	0.013	0.015	0.008		0.222	0.277	0.141	
600	0.012	0.014	0.008		0.263	0.316	0.181	
700	0.014	0.016	0.009		0.247	0.211	0.155	
800	0.016	0.018	0.012		0.267	0.273	0.159	
900	0.016	0.016	0.010		0.246	0.266	0.189	
1000	0.018	0.017	0.008		0.289	0.216	0.202	
1000	0.027	0.024	0.011		0.294	0.332	0.250	
900	0.024	0.022	0.010		0.284	0.336	0.272	
800	0.023	0.022	0.008		0.296	0.306	0.232	
700	0.020	0.019	0.007		0.226	0.326	0.223	
600	0.067	0.059	0.031		0.332	0.457	0.286	
500	0.018	0.017	0.007		0.271	0.346	0.211	
400	0.020	0.019	0.007		0.285	0.331	0.182	
300	0.019	0.018	0.007		0.234	0.311	0.205	
200	0.019	0.017	0.007		0.247	0.300	0.150	
100	0.018	0.018	0.006		0.296	0.244	0.148	
0	0.017	0.017	0.006		0.252	0.254	0.114	

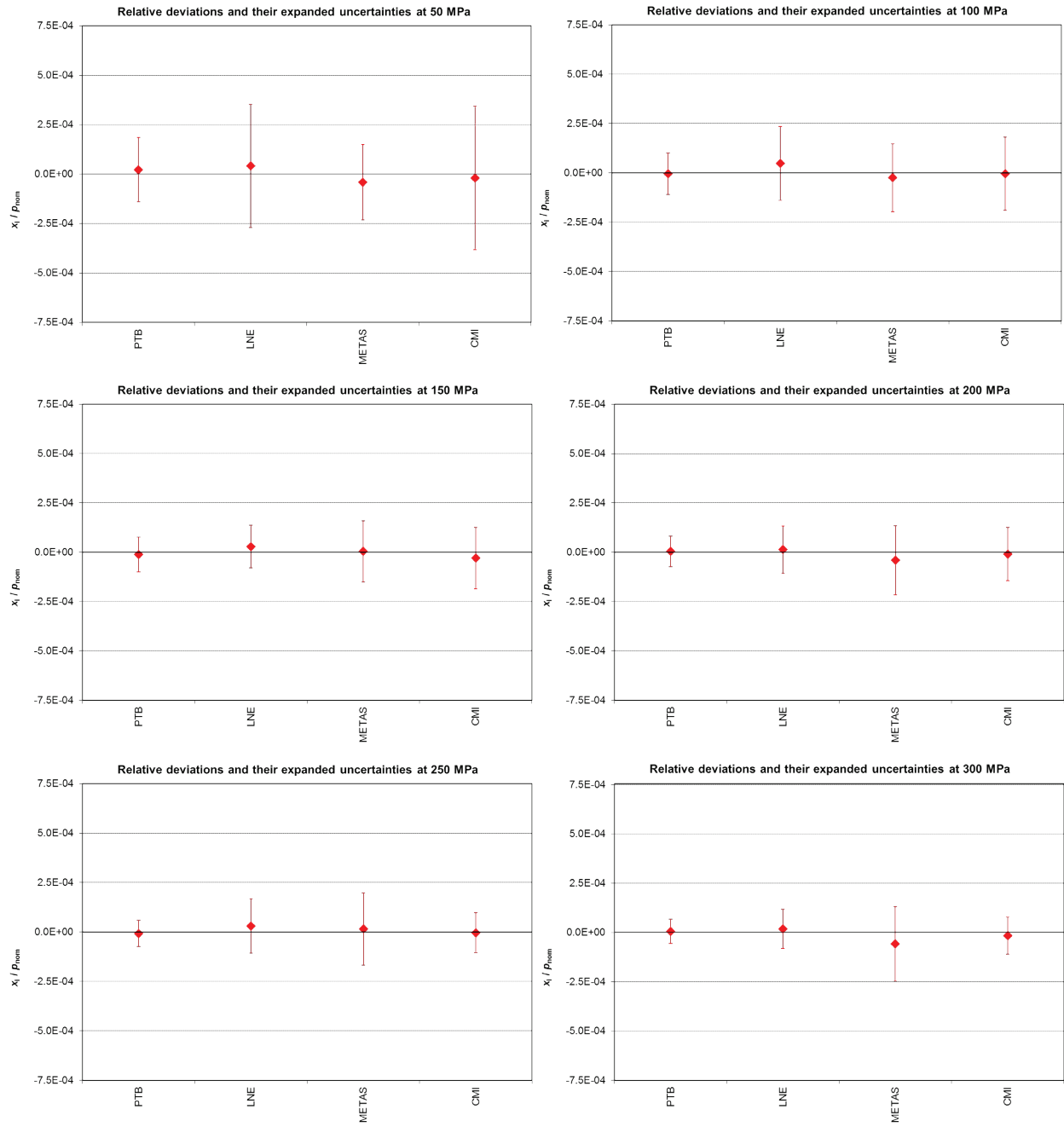
in LNE 1 GPa measurements

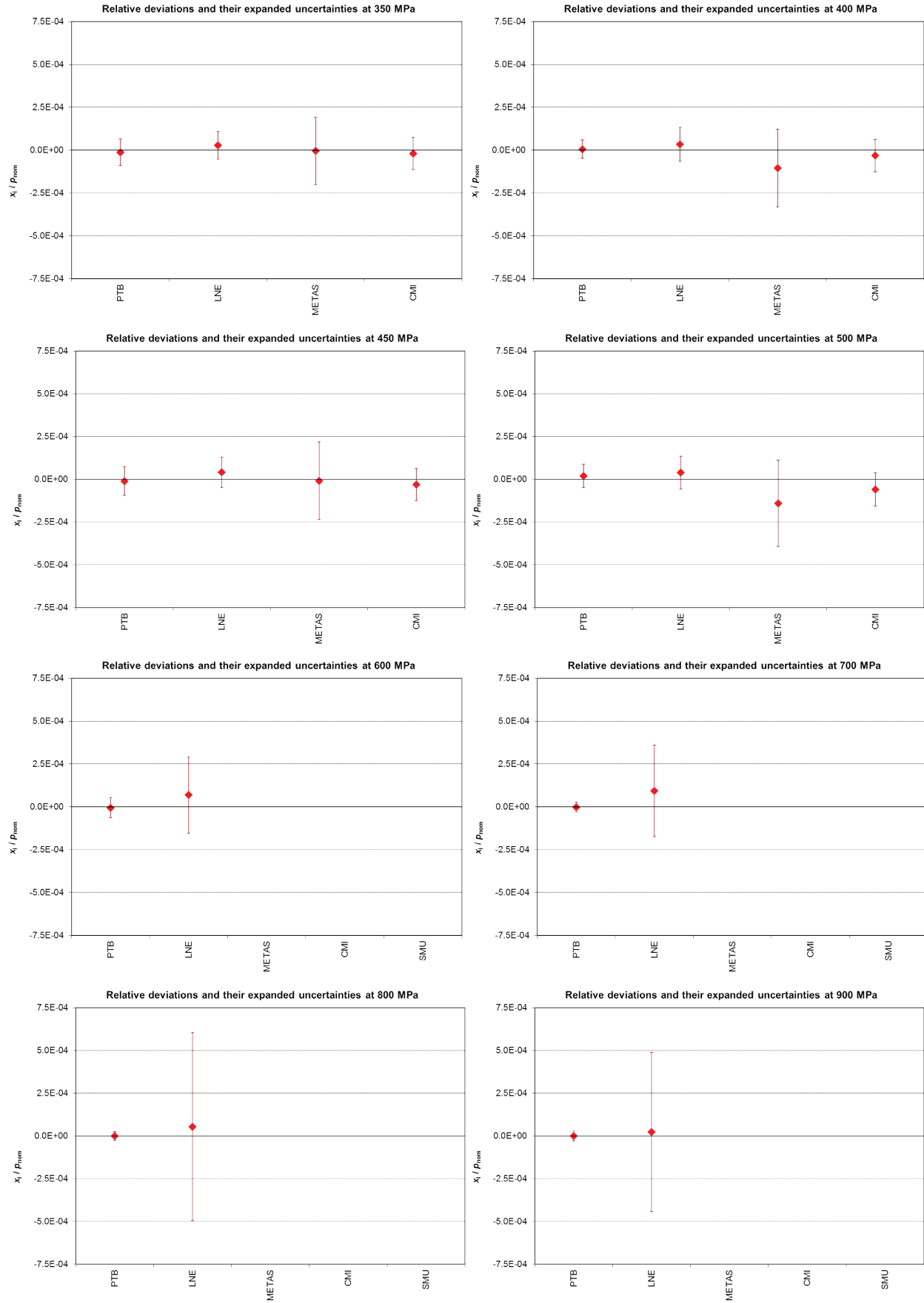
p / MPa	S1	S2	S3	S4	S5	S6	S7	S8
0	0.048	0.033	0.026		0.261	0.267	0.135	
100	0.099	0.042	0.047		0.253	0.272	0.147	
200	0.101	0.043	0.048		0.327	0.206	0.136	
300	0.108	0.043	0.051		0.295	0.272	0.129	
400	0.107	0.047	0.051		0.262	0.260	0.154	
500	0.095	0.040	0.045		0.338	0.321	0.168	
600	0.092	0.046	0.042		0.334	0.243	0.192	
700	0.104	0.116	0.142		0.285	0.258	0.276	
800	0.307	0.266	0.253		0.407	0.405	0.372	
900	0.267	0.305	0.300		0.396	0.484	0.401	
1000	0.292	0.302	0.292		0.412	0.396	0.317	
1000	0.109	0.103	0.054		0.466	0.441	0.377	
900	0.156	0.163	0.122		0.548	0.430	0.266	
800	0.203	0.166	0.123		0.394	0.418	0.364	
700	0.096	0.065	0.051		0.365	0.339	0.271	
600	0.095	0.087	0.061		0.375	0.305	0.259	
500	0.116	0.072	0.062		0.314	0.304	0.210	
400	0.063	0.076	0.041		0.370	0.243	0.184	
300	0.101	0.050	0.053		0.311	0.241	0.183	
200	0.095	0.052	0.047		0.319	0.258	0.163	
100	0.093	0.047	0.044		0.332	0.304	0.140	
0	0.130	0.059	0.074		0.367	0.258	0.192	

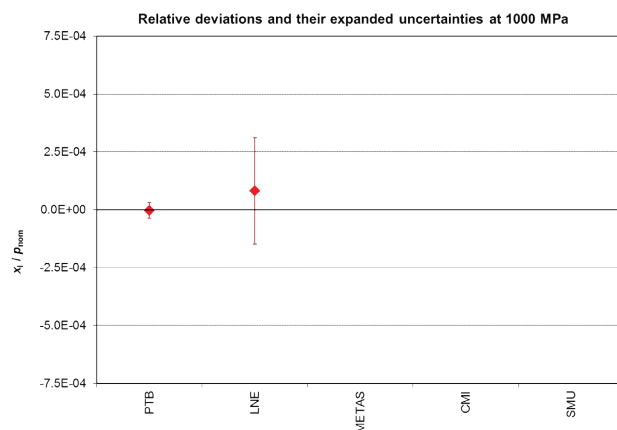
in METAS 1 GPa measurements

p / MPa	S1	S2	S3	S4	S5	S6	S7	S8
0	0.009	0.012	0.006		0.213	0.203	0.118	
100	0.010	0.013	0.017		0.252	0.203	0.146	
200	0.010	0.018	0.007		0.326	0.247	0.158	
300	0.010	0.012	0.008		0.280	0.202	0.150	
400	0.019	0.031	0.023		0.233	0.236	0.188	
500	0.020	0.024	0.008		0.248	0.212	0.193	
600								
700								
800								
900								
1000								
1000								
900								
800								
700								
600								
500	0.038	0.031	0.016		0.290	0.208	0.218	
400	0.028	0.029	0.015		0.355	0.201	0.232	
300	0.025	0.036	0.019		0.368	0.233	0.212	
200	0.020	0.020	0.020		0.261	0.233	0.189	
100	0.013	0.013	0.008		0.275	0.204	0.162	
0	0.011	0.013	0.006		0.234	0.235	0.140	

A6 Degrees of equivalence







A7 References

¹ Könemann J., Gluscho A., Konczak T., and Sabuga W., Investigation of high-pressure transducers as transfer standards evaluated by a 1 GPa pressure comparison, *PTB-Bericht* Th-6, November 2015, p. 57-79

² Cox M.G., The Evaluation of Key Comparison Data, *Metrologia*, 2002, **39**, p. 589-595

³ Jäger J., Sabuga W., Wassmann D., Piston-cylinder assemblies of 5 cm² cross-sectional area used in an oil-operated primary pressure balance standard for the 10 MPa range, *Metrologia*, 1999, **36**, p. 541-544

⁴ Sabuga W., Molinar G., Buonanno G., Esward T., Legras J.C., Yagmur L., Finite element method used for calculation of the distortion coefficient and associated uncertainty of a PTB 1 GPa pressure balance – EUROMET project 463, *Metrologia*, 2006, **43**, p. 311-325

⁵ Legras J.C., Huot A., Delajoud P., La référence nationale de pression du BNM dans le domaine de 5 à 200 MPa, *Bulletin BNM*, 1982, No. 48, p. 9-33