

P-06-161

Supplement 1

August 2007

Forsmark site investigation

Difference flow logging in borehole KFM01D

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Description

In the present supplement all groundwater head calculations have been redone on revised borehole elevation data (Z-coordinates).

Borehole coordinates that formed the basis for this revision of groundwater head data were retrieved from Sicada 2007-06-26 (#SICADA_07_263) /SKB 2007/.

Specifically the following appendices are revised and included in this supplement:

Revised appendix	Appendix number
Table of transmissivity and head of 5 m sections	Appendix 5
Transmissivity and head of 5 m sections	Appendix 6.2
Table of transmissivity and head of detected fractures	Appendix 7
Transmissivity and head of detected fractures	Appendix 8
Comparison between section transmissivity and fracture transmissivity	Appendix 9
Head in the borehole during flow logging	Appendix 10.1
Groundwater recovery after pumping	Appendix 10.3

Reference

SKB, 2007. Compilation of borehole deviation measurements in Forsmark (Nilsson, G. and Nissen, J.). SKB P-07-28, Svensk Kärnbränslehantering AB.

Table of transmissivity and head of 5 m sections

Difference flow logging – Sequential flow logging

Borehole ID	Secup L(m)	Seclow L(m)	L _w (m)	Q ₀ (m ³ /s)	h _{0FW} (masl)	Q ₁ (m ³ /s)	h _{1FW} (masl)	T _D (m ² /s)	h _i (masl)	Q-lower limit P (mL/h)	TD-meas _{L_T} (m ² /s)	TD- meas _{L_P} (m ² /s)	TD- meas _{L_U} (m ² /s)	Comments
KFM01D	83.59	88.59	5	–	–0.15	–	–10.38	–	–	30	8.1E–10	8.1E–10	8.1E–06	
KFM01D	88.59	93.59	5	–	–0.07	–	–10.24	–	–	30	8.1E–10	8.1E–10	8.1E–06	
KFM01D	93.60	98.60	5	–	0.06	–	–10.17	–	–	30	8.1E–10	8.1E–10	8.1E–06	
KFM01D	98.61	103.61	5	–	0.18	–	–10.14	–	–	30	8.0E–10	8.0E–10	8.0E–06	
KFM01D	103.62	108.62	5	1.61E–07	0.22	8.47E–07	–10.14	6.6E–08	2.6	30	8.0E–10	8.0E–10	7.9E–06	
KFM01D	108.62	113.62	5	–	0.22	–	–10.14	–	–	30	8.0E–10	8.0E–10	8.0E–06	
KFM01D	113.62	118.62	5	–	0.23	–	–10.14	–	–	30	7.9E–10	7.9E–10	7.9E–06	
KFM01D	118.63	123.63	5	1.56E–07	0.22	3.58E–06	–10.12	3.3E–07	0.7	30	8.0E–10	8.0E–10	8.0E–06	
KFM01D	123.63	128.63	5	–	0.19	3.64E–07	–10.09	3.5E–08	–	30	8.0E–10	8.0E–10	8.0E–06	
KFM01D	128.63	133.63	5	–	0.16	4.72E–07	–10.06	4.6E–08	–	30	8.1E–10	8.1E–10	8.1E–06	
KFM01D	133.63	138.63	5	–	0.14	–	–10.01	–	–	30	8.1E–10	8.1E–10	8.1E–06	
KFM01D	138.64	143.64	5	–	0.17	4.31E–08	–9.97	4.2E–09	–	30	8.1E–10	8.1E–10	8.1E–06	
KFM01D	143.64	148.64	5	–2.94E–07	0.21	4.53E–05	–9.93	4.4E–06	0.1	30	8.1E–10	8.1E–10	8.2E–06	
KFM01D	148.64	153.64	5	–2.92E–08	0.26	4.28E–06	–9.88	4.2E–07	0.2	30	8.1E–10	8.1E–10	8.1E–06	
KFM01D	153.63	158.63	5	–	0.32	3.75E–07	–9.85	3.6E–08	–	30	8.1E–10	8.1E–10	8.1E–06	
KFM01D	158.63	163.63	5	–	0.43	–	–9.83	–	–	30	8.0E–10	8.0E–10	8.0E–06	
KFM01D	163.62	168.62	5	–	0.54	–	–9.79	–	–	30	8.0E–10	8.0E–10	8.0E–06	
KFM01D	168.61	173.61	5	–	0.66	–	–9.75	–	–	30	7.9E–10	7.9E–10	7.9E–06	
KFM01D	173.61	178.61	5	–	0.72	–	–9.71	–	–	30	7.9E–10	7.9E–10	7.9E–06	
KFM01D	178.61	183.61	5	–	0.76	–	–9.68	–	–	30	7.9E–10	7.9E–10	7.9E–06	
KFM01D	183.60	188.60	5	–	0.76	–	–9.66	–	–	30	7.9E–10	7.9E–10	7.9E–06	
KFM01D	188.60	193.60	5	–	0.78	–	–9.64	–	–	30	7.9E–10	7.9E–10	7.9E–06	
KFM01D	193.59	198.59	5	–	0.80	1.06E–07	–9.60	1.0E–08	–	30	7.9E–10	7.9E–10	7.9E–06	
KFM01D	198.59	203.59	5	–	0.86	–	–9.57	–	–	30	7.9E–10	7.9E–10	7.9E–06	

Borehole ID	Secup L(m)	Seclow L(m)	L _w (m)	Q ₀ (m ³ /s)	h _{0FW} (masl)	Q ₁ (m ³ /s)	h _{1FW} (masl)	T _D (m ² /s)	h _i (masl)	Q-lower limit P (mL/h)	TD-meas _L _T (m ² /s)	TD- meas _L _P (m ² /s)	TD- meas _L _U (m ² /s)	Comments
KFM01D	203.60	208.60	5	-	0.89	-	-9.54	-	-	30	7.9E-10	7.9E-10	7.9E-06	
KFM01D	208.60	213.60	5	-	0.94	-	-9.52	-	-	30	7.9E-10	7.9E-10	7.9E-06	
KFM01D	213.60	218.60	5	-	0.96	-	-9.48	-	-	30	7.9E-10	7.9E-10	7.9E-06	
KFM01D	218.61	223.61	5	-	1.00	-	-9.46	-	-	30	7.9E-10	7.9E-10	7.9E-06	
KFM01D	223.61	228.61	5	-	1.02	-	-9.43	-	-	30	7.9E-10	7.9E-10	7.9E-06	
KFM01D	228.62	233.62	5	-	1.04	-	-9.41	-	-	30	7.9E-10	7.9E-10	7.9E-06	
KFM01D	233.62	238.62	5	-	1.07	-	-9.39	-	-	30	7.9E-10	7.9E-10	7.9E-06	
KFM01D	238.63	243.63	5	-	1.11	-	-9.36	-	-	30	7.9E-10	7.9E-10	7.9E-06	
KFM01D	243.63	248.63	5	-	1.15	-	-9.33	-	-	30	7.9E-10	7.9E-10	7.9E-06	
KFM01D	248.64	253.64	5	-	1.18	-	-9.31	-	-	30	7.9E-10	7.9E-10	7.9E-06	
KFM01D	253.64	258.64	5	-	1.21	-	-9.27	-	-	30	7.9E-10	7.9E-10	7.9E-06	
KFM01D	258.65	263.65	5	-	1.23	-	-9.27	-	-	30	7.9E-10	7.9E-10	7.9E-06	
KFM01D	263.65	268.65	5	4.25E-08	1.28	1.00E-07	-9.22	5.4E-09	9.0	30	7.9E-10	7.9E-10	7.8E-06	
KFM01D	268.66	273.66	5	-	1.32	-	-9.20	-	-	30	7.8E-10	7.8E-10	7.8E-06	
KFM01D	273.66	278.66	5	-	1.35	-	-9.17	-	-	30	7.8E-10	7.8E-10	7.8E-06	
KFM01D	278.67	283.67	5	-	1.38	-	-9.14	-	-	30	7.8E-10	7.8E-10	7.8E-06	
KFM01D	283.67	288.67	5	-	1.41	-	-9.13	-	-	30	7.8E-10	7.8E-10	7.8E-06	
KFM01D	288.68	293.68	5	-	1.44	-	-9.12	-	-	30	7.8E-10	7.8E-10	7.8E-06	
KFM01D	293.68	298.68	5	-	1.45	-	-9.09	-	-	30	7.8E-10	7.8E-10	7.8E-06	
KFM01D	298.69	303.69	5	-	1.47	-	-9.07	-	-	30	7.8E-10	7.8E-10	7.8E-06	
KFM01D	303.69	308.69	5	7.83E-08	1.51	6.31E-07	-9.04	5.2E-08	3.0	30	7.8E-10	7.8E-10	7.8E-06	
KFM01D	308.69	313.69	5	-	1.55	-	-9.03	-	-	30	7.8E-10	7.8E-10	7.8E-06	
KFM01D	313.69	318.69	5	8.44E-08	1.60	3.17E-06	-8.99	2.9E-07	1.9	30	7.8E-10	7.8E-10	7.8E-06	
KFM01D	318.70	323.70	5	-	1.62	-	-8.96	-	-	30	7.8E-10	7.8E-10	7.8E-06	
KFM01D	323.70	328.70	5	-	1.66	-	-8.92	-	-	30	7.8E-10	7.8E-10	7.8E-06	
KFM01D	328.71	333.71	5	-	1.69	-	-8.89	-	-	30	7.8E-10	7.8E-10	7.8E-06	
KFM01D	333.71	338.71	5	-	1.73	-	-8.85	-	-	30	7.8E-10	7.8E-10	7.8E-06	
KFM01D	338.71	343.71	5	-	1.80	-	-8.84	-	-	30	7.7E-10	7.7E-10	7.7E-06	
KFM01D	343.72	348.72	5	-	1.84	-	-8.80	-	-	30	7.7E-10	7.7E-10	7.7E-06	
KFM01D	348.72	353.72	5	-	1.88	4.78E-08	-8.77	4.4E-09	-	50	7.7E-10	1.3E-09	7.7E-06	

Borehole ID	Secup L(m)	Seclow L(m)	L _w (m)	Q ₀ (m ³ /s)	h _{0FW} (masl)	Q ₁ (m ³ /s)	h _{1FW} (masl)	T _D (m ² /s)	h _i (masl)	Q-lower limit P (mL/h)	TD-measl _{LT} (m ² /s)	TD- measl _{LP} (m ² /s)	TD- measl _U (m ² /s)	Comments
KFM01D	353.73	358.73	5	-	1.91	3.72E-08	-8.76	3.5E-09	-	50	7.7E-10	1.3E-09	7.7E-06	
KFM01D	358.73	363.73	5	-	1.93	-	-8.80	-	-	50	7.7E-10	1.3E-09	7.7E-06	
KFM01D	363.73	368.73	5	-	1.94	-	-8.78	-	-	50	7.7E-10	1.3E-09	7.7E-06	
KFM01D	368.73	373.73	5	-	1.95	2.70E-07	-8.73	2.5E-08	-	50	7.7E-10	1.3E-09	7.7E-06	
KFM01D	373.74	378.74	5	-2.06E-08	1.96	1.34E-06	-8.70	1.3E-07	1.8	50	7.7E-10	1.3E-09	7.7E-06	
KFM01D	378.74	383.74	5	-6.94E-09	1.99	4.25E-07	-8.64	4.0E-08	1.8	50	7.8E-10	1.3E-09	7.8E-06	
KFM01D	383.74	388.74	5	-	2.00	-	-8.64	-	-	50	7.7E-10	1.3E-09	7.7E-06	
KFM01D	388.74	393.74	5	-	2.02	-	-8.60	-	-	50	7.8E-10	1.3E-09	7.8E-06	
KFM01D	393.75	398.75	5	-	2.04	-	-8.58	-	-	50	7.8E-10	1.3E-09	7.8E-06	
KFM01D	398.75	403.75	5	-	2.06	-	-8.53	-	-	50	7.8E-10	1.3E-09	7.8E-06	
KFM01D	403.75	408.75	5	-	2.08	-	-8.48	-	-	50	7.8E-10	1.3E-09	7.8E-06	
KFM01D	408.76	413.76	5	-	2.11	-	-8.43	-	-	50	7.8E-10	1.3E-09	7.8E-06	
KFM01D	413.76	418.76	5	-	2.15	-	-8.37	-	-	50	7.8E-10	1.3E-09	7.8E-06	
KFM01D	418.76	423.76	5	-	2.21	-	-8.32	-	-	50	7.8E-10	1.3E-09	7.8E-06	
KFM01D	423.76	428.76	5	-	2.21	-	-8.31	-	-	100	7.8E-10	2.6E-09	7.8E-06	
KFM01D	428.77	433.77	5	2.31E-07	2.22	1.63E-06	-8.30	1.3E-07	4.0	100	7.8E-10	2.6E-09	7.8E-06	
KFM01D	433.77	438.77	5	-	2.31	-	-8.27	-	-	100	7.8E-10	2.6E-09	7.8E-06	
KFM01D	438.77	443.77	5	-	2.23	-	-8.24	-	-	100	7.9E-10	2.6E-09	7.9E-06	
KFM01D	443.77	448.77	5	-	2.26	-	-8.19	-	-	100	7.9E-10	2.6E-09	7.9E-06	
KFM01D	448.77	453.77	5	-	2.29	-	-8.14	-	-	100	7.9E-10	2.6E-09	7.9E-06	
KFM01D	453.77	458.77	5	-	2.31	-	-8.12	-	-	100	7.9E-10	2.6E-09	7.9E-06	
KFM01D	458.77	463.77	5	-	2.34	-	-8.08	-	-	100	7.9E-10	2.6E-09	7.9E-06	
KFM01D	463.77	468.77	5	-	2.37	-	-8.04	-	-	100	7.9E-10	2.6E-09	7.9E-06	
KFM01D	468.77	473.77	5	-	2.41	-	-8.01	-	-	100	7.9E-10	2.6E-09	7.9E-06	
KFM01D	473.77	478.77	5	-	2.44	-	-7.97	-	-	100	7.9E-10	2.6E-09	7.9E-06	
KFM01D	478.77	483.77	5	-	2.47	-	-7.93	-	-	100	7.9E-10	2.6E-09	7.9E-06	
KFM01D	483.77	488.77	5	-	2.50	-	-7.90	-	-	100	7.9E-10	2.6E-09	7.9E-06	
KFM01D	488.77	493.77	5	-	2.53	-	-7.85	-	-	100	7.9E-10	2.6E-09	7.9E-06	
KFM01D	493.77	498.77	5	-	2.56	-	-7.80	-	-	100	8.0E-10	2.7E-09	8.0E-06	
KFM01D	498.78	503.78	5	-	2.59	-	-7.78	-	-	100	7.9E-10	2.6E-09	7.9E-06	

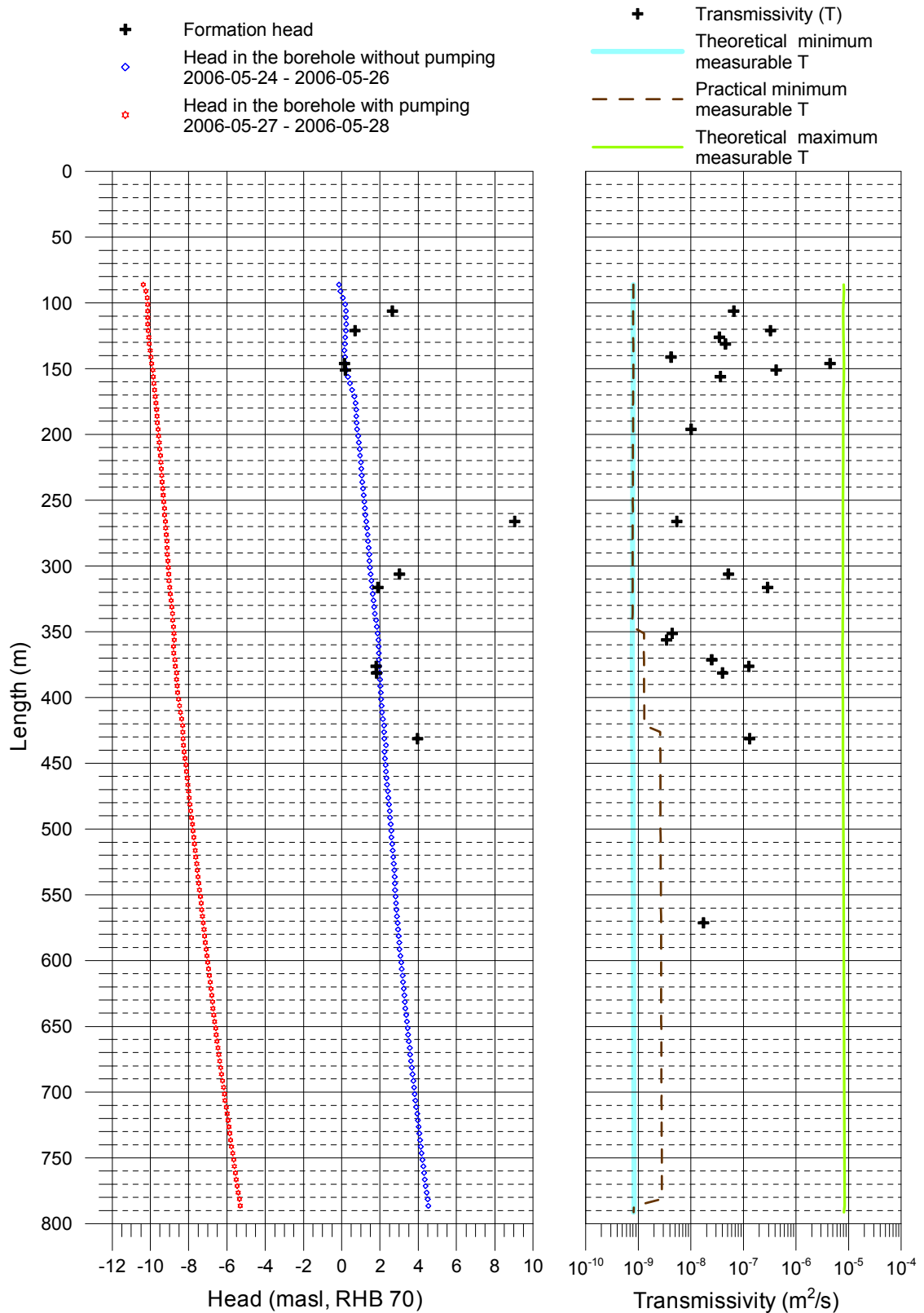
Borehole ID	Secup L(m)	Seclow L(m)	L _w (m)	Q ₀ (m ³ /s)	h _{0FW} (masl)	Q ₁ (m ³ /s)	h _{1FW} (masl)	T _D (m ² /s)	h _i (masl)	Q-lower limit P (mL/h)	TD-meas _L _T (m ² /s)	TD- meas _L _P (m ² /s)	TD- meas _L _U (m ² /s)	Comments
KFM01D	503.78	508.78	5	-	2.60	-	-7.74	-	-	100	8.0E-10	2.7E-09	8.0E-06	
KFM01D	508.78	513.78	5	-	2.64	-	-7.70	-	-	100	8.0E-10	2.7E-09	8.0E-06	
KFM01D	513.79	518.79	5	-	2.66	-	-7.66	-	-	100	8.0E-10	2.7E-09	8.0E-06	
KFM01D	518.79	523.79	5	-	2.69	-	-7.63	-	-	100	8.0E-10	2.7E-09	8.0E-06	
KFM01D	523.80	528.80	5	-	2.72	-	-7.58	-	-	100	8.0E-10	2.7E-09	8.0E-06	
KFM01D	528.80	533.80	5	-	2.75	-	-7.55	-	-	100	8.0E-10	2.7E-09	8.0E-06	
KFM01D	533.80	538.80	5	-	2.77	-	-7.51	-	-	100	8.0E-10	2.7E-09	8.0E-06	
KFM01D	538.80	543.80	5	-	2.78	-	-7.48	-	-	100	8.0E-10	2.7E-09	8.0E-06	
KFM01D	543.81	548.81	5	-	2.79	-	-7.44	-	-	100	8.1E-10	2.7E-09	8.1E-06	
KFM01D	548.81	553.81	5	-	2.82	-	-7.39	-	-	100	8.1E-10	2.7E-09	8.1E-06	
KFM01D	553.81	558.81	5	-	2.84	-	-7.35	-	-	100	8.1E-10	2.7E-09	8.1E-06	
KFM01D	558.81	563.81	5	-	2.86	-	-7.32	-	-	100	8.1E-10	2.7E-09	8.1E-06	
KFM01D	563.82	568.82	5	-	2.89	-	-7.28	-	-	100	8.1E-10	2.7E-09	8.1E-06	
KFM01D	568.82	573.82	5	-	2.92	1.79E-07	-7.24	1.7E-08	-	100	8.1E-10	2.7E-09	8.1E-06	
KFM01D	573.82	578.82	5	-	2.94	-	-7.20	-	-	100	8.1E-10	2.7E-09	8.1E-06	
KFM01D	578.83	583.83	5	-	2.98	-	-7.17	-	-	100	8.1E-10	2.7E-09	8.1E-06	
KFM01D	583.83	588.83	5	-	3.01	-	-7.13	-	-	100	8.1E-10	2.7E-09	8.1E-06	
KFM01D	588.84	593.84	5	-	3.02	-	-7.09	-	-	100	8.2E-10	2.7E-09	8.2E-06	
KFM01D	593.84	598.84	5	-	3.07	-	-7.05	-	-	100	8.1E-10	2.7E-09	8.1E-06	
KFM01D	598.84	603.84	5	-	3.11	-	-7.01	-	-	100	8.1E-10	2.7E-09	8.1E-06	
KFM01D	603.84	608.84	5	-	3.13	-	-6.97	-	-	100	8.2E-10	2.7E-09	8.2E-06	
KFM01D	608.85	613.85	5	-	3.18	-	-6.92	-	-	100	8.2E-10	2.7E-09	8.2E-06	
KFM01D	613.85	618.85	5	-	3.21	-	-6.88	-	-	100	8.2E-10	2.7E-09	8.2E-06	
KFM01D	618.86	623.86	5	-	3.24	-	-6.84	-	-	100	8.2E-10	2.7E-09	8.2E-06	
KFM01D	623.86	628.86	5	-	3.27	-	-6.80	-	-	100	8.2E-10	2.7E-09	8.2E-06	
KFM01D	628.87	633.87	5	-	3.30	-	-6.76	-	-	100	8.2E-10	2.7E-09	8.2E-06	
KFM01D	633.87	638.87	5	-	3.32	-	-6.73	-	-	100	8.2E-10	2.7E-09	8.2E-06	
KFM01D	638.88	643.88	5	-	3.37	-	-6.69	-	-	100	8.2E-10	2.7E-09	8.2E-06	
KFM01D	643.88	648.88	5	-	3.41	-	-6.65	-	-	100	8.2E-10	2.7E-09	8.2E-06	
KFM01D	648.88	653.88	5	-	3.45	-	-6.59	-	-	100	8.2E-10	2.7E-09	8.2E-06	

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Borehole ID	Secup L(m)	Seclow L(m)	L _w (m)	Q ₀ (m ³ /s)	h _{0FW} (masl)	Q ₁ (m ³ /s)	h _{1FW} (masl)	T _D (m ² /s)	h _i (masl)	Q-lower limit P (mL/h)	TD-measl _{LT} (m ² /s)	TD- measl _{LP} (m ² /s)	TD- measl _U (m ² /s)	Comments
KFM01D	653.89	658.89	5	-	3.47	-	-6.56	-	-	100	8.2E-10	2.7E-09	8.2E-06	
KFM01D	658.89	663.89	5	-	3.51	-	-6.52	-	-	100	8.2E-10	2.7E-09	8.2E-06	
KFM01D	663.88	668.88	5	-	3.56	-	-6.47	-	-	100	8.2E-10	2.7E-09	8.2E-06	
KFM01D	668.88	673.88	5	-	3.57	-	-6.43	-	-	100	8.2E-10	2.7E-09	8.2E-06	
KFM01D	673.88	678.88	5	-	3.61	-	-6.38	-	-	100	8.3E-10	2.8E-09	8.3E-06	
KFM01D	678.88	683.88	5	-	3.66	-	-6.33	-	-	100	8.3E-10	2.8E-09	8.3E-06	
KFM01D	683.88	688.88	5	-	3.70	-	-6.29	-	-	100	8.3E-10	2.8E-09	8.3E-06	
KFM01D	688.87	693.87	5	-	3.74	-	-6.23	-	-	100	8.3E-10	2.8E-09	8.3E-06	
KFM01D	693.87	698.87	5	-	3.78	-	-6.17	-	-	100	8.3E-10	2.8E-09	8.3E-06	
KFM01D	698.87	703.87	5	-	3.81	-	-6.13	-	-	100	8.3E-10	2.8E-09	8.3E-06	
KFM01D	703.88	708.88	5	-	3.85	-	-6.10	-	-	100	8.3E-10	2.8E-09	8.3E-06	
KFM01D	708.88	713.88	5	-	3.89	-	-6.04	-	-	100	8.3E-10	2.8E-09	8.3E-06	
KFM01D	713.88	718.88	5	-	3.95	-	-5.99	-	-	100	8.3E-10	2.8E-09	8.3E-06	
KFM01D	718.88	723.88	5	-	3.98	-	-5.94	-	-	100	8.3E-10	2.8E-09	8.3E-06	
KFM01D	723.89	728.89	5	-	4.02	-	-5.90	-	-	100	8.3E-10	2.8E-09	8.3E-06	
KFM01D	728.89	733.89	5	-	4.06	-	-5.86	-	-	100	8.3E-10	2.8E-09	8.3E-06	
KFM01D	733.89	738.89	5	-	4.10	-	-5.81	-	-	100	8.3E-10	2.8E-09	8.3E-06	
KFM01D	738.89	743.89	5	-	4.13	-	-5.76	-	-	100	8.3E-10	2.8E-09	8.3E-06	
KFM01D	743.90	748.90	5	-	4.17	-	-5.70	-	-	100	8.4E-10	2.8E-09	8.4E-06	
KFM01D	748.90	753.90	5	-	4.22	-	-5.65	-	-	100	8.4E-10	2.8E-09	8.4E-06	
KFM01D	753.90	758.90	5	-	4.27	-	-5.61	-	-	100	8.3E-10	2.8E-09	8.3E-06	
KFM01D	758.90	763.90	5	-	4.30	-	-5.56	-	-	100	8.4E-10	2.8E-09	8.4E-06	
KFM01D	763.90	768.90	5	-	4.34	-	-5.52	-	-	100	8.4E-10	2.8E-09	8.4E-06	
KFM01D	768.90	773.90	5	-	4.38	-	-5.47	-	-	100	8.4E-10	2.8E-09	8.4E-06	
KFM01D	773.90	778.90	5	-	4.44	-	-5.41	-	-	100	8.4E-10	2.8E-09	8.4E-06	
KFM01D	778.90	783.90	5	-	4.49	-	-5.35	-	-	100	8.4E-10	2.8E-09	8.4E-06	
KFM01D	783.90	788.90	5	-	4.53	-	-5.31	-	-	30	8.4E-10	8.4E-10	8.4E-06	
KFM01D	788.90	793.90	5	-	4.56	-	-5.53	-	-	30	8.2E-10	8.2E-10	8.2E-06	

Transmissivity and head of 5 m sections

Forsmark, borehole KFM01D
 Transmissivity and head of 5 m sections



Appendix 7

Table of transmissivity and head of detected fractures

PFL – Difference flow logging – Inferred flow anomalies from overlapping flow logging

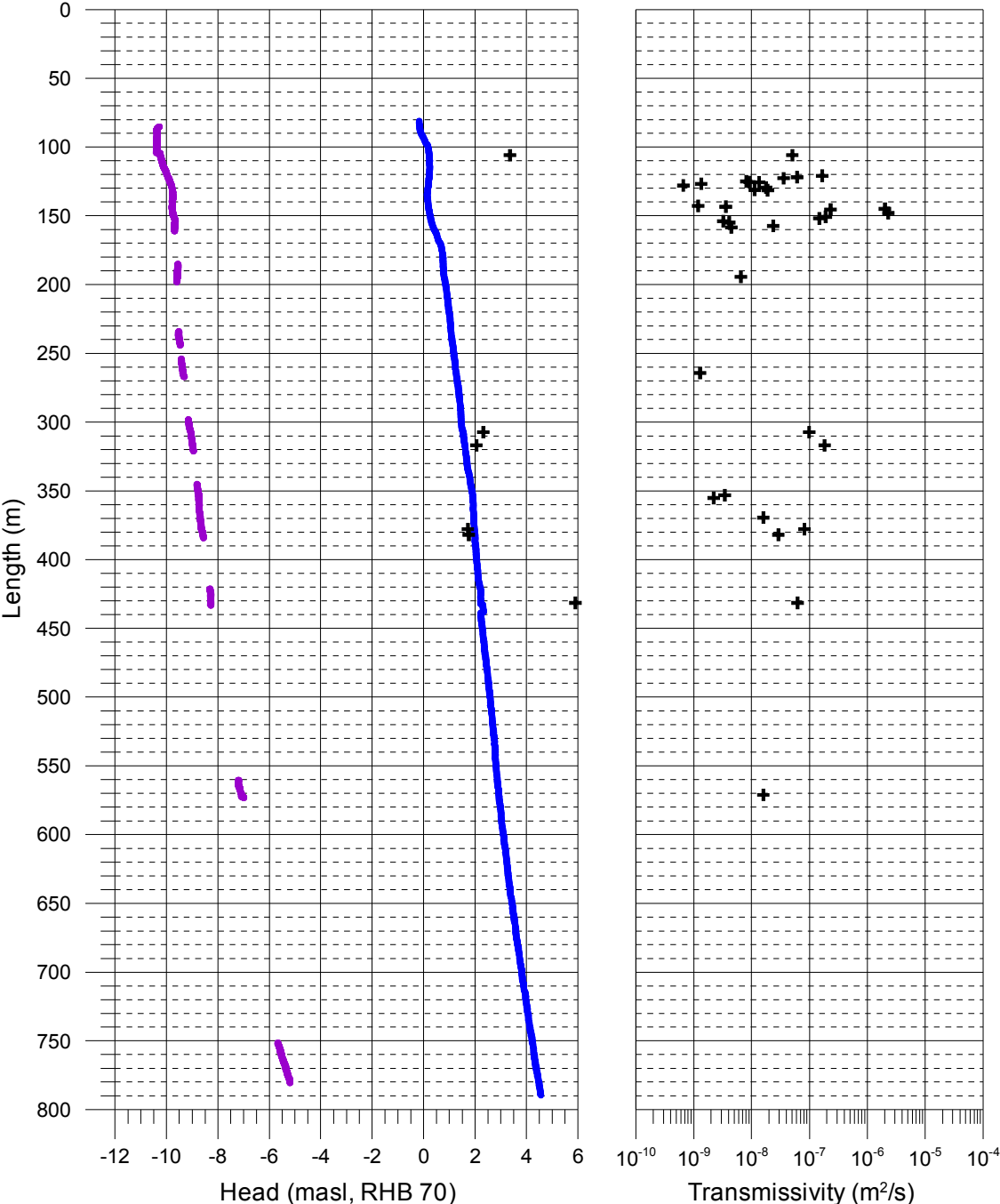
Borehole ID	Length to flow anom. L (m)	L _w (m)	dL (m)	Q ₀ (m ³ /s)	h _{0FW} (masl)	Q ₁ (m ³ /s)	h _{1FW} (masl)	T _D (m ² /s)	h _i (masl)	Comments
KFM01D	106.0	1	0.1	1.61E-07	0.22	6.94E-07	-10.23	5.1E-08	3.4	
KFM01D	120.9	1	0.1	–	0.22	1.71E-06	-9.97	1.7E-07	–	
KFM01D	121.9	1	0.1	–	0.22	6.28E-07	-9.95	6.1E-08	–	
KFM01D	122.7	1	0.1	–	0.21	3.64E-07	-9.91	3.6E-08	–	
KFM01D	125.0	1	0.1	–	0.20	8.22E-08	-9.86	8.1E-09	–	
KFM01D	125.5	1	0.1	–	0.19	9.33E-08	-9.85	9.2E-09	–	
KFM01D	125.7	1	0.1	–	0.19	1.37E-07	-9.86	1.4E-08	–	
KFM01D	126.7	1	0.1	–	0.20	1.36E-08	-9.83	1.3E-09	–	
KFM01D	128.0	1	0.1	–	0.20	6.67E-09	-9.81	6.6E-10	–	*
KFM01D	129.5	1	0.1	–	0.17	1.79E-07	-9.79	1.8E-08	–	
KFM01D	131.2	1	0.1	–	0.16	1.14E-07	-9.77	1.1E-08	–	
KFM01D	131.4	1	0.1	–	0.16	1.91E-07	-9.77	1.9E-08	–	
KFM01D	142.8	1	0.1	–	0.19	1.19E-08	-9.78	1.2E-09	–	*
KFM01D	143.4	1	0.1	–	0.19	3.61E-08	-9.78	3.6E-09	–	
KFM01D	144.9	1	0.1	–	0.20	2.04E-05	-9.78	2.0E-06	–	
KFM01D	145.5	1	0.1	–	0.21	2.34E-06	-9.77	2.3E-07	–	
KFM01D	148.0	1	0.1	–	0.23	2.32E-05	-9.75	2.3E-06	–	
KFM01D	150.8	1	0.1	–	0.26	1.93E-06	-9.71	1.9E-07	–	
KFM01D	151.9	1	0.1	–	0.27	1.49E-06	-9.68	1.5E-07	–	
KFM01D	153.9	1	0.1	–	0.29	3.25E-08	-9.66	3.2E-09	–	*
KFM01D	154.9	1	0.1	–	0.30	4.11E-08	-9.67	4.1E-09	–	
KFM01D	157.4	1	0.1	–	0.35	2.39E-07	-9.67	2.4E-08	–	
KFM01D	158.4	1	0.1	–	0.37	4.53E-08	-9.67	4.5E-09	–	
KFM01D	194.4	1	0.1	–	0.79	6.86E-08	-9.57	6.6E-09	–	
KFM01D	264.3	1	0.1	–	1.27	1.39E-08	-9.35	1.3E-09	–	
KFM01D	307.4	1	0.1	7.83E-08	1.54	1.14E-06	-9.05	9.9E-08	2.3	
KFM01D	316.9	1	0.1	8.44E-08	1.59	2.04E-06	-8.98	1.8E-07	2.1	
KFM01D	353.2	1	0.1	–	1.91	3.69E-08	-8.75	3.4E-09	–	*
KFM01D	355.2	1	0.1	–	1.91	2.39E-08	-8.74	2.2E-09	–	*
KFM01D	369.5	1	0.1	–	1.95	1.72E-07	-8.69	1.6E-08	–	
KFM01D	377.9	1	0.1	-2.06E-08	1.97	8.61E-07	-8.64	8.2E-08	1.7	
KFM01D	382.0	1	0.1	-6.94E-09	2.00	3.03E-07	-8.58	2.9E-08	1.8	
KFM01D	431.5	1	0.1	2.31E-07	2.23	8.92E-07	-8.28	6.2E-08	5.9	
KFM01D	571.2	1	0.1	–	2.92	1.61E-07	-7.07	1.6E-08	–	

* Uncertain = The flow rate is less than 30 mL/h or the flow anomalies are overlapping or they are unclear because of noise.

Transmissivity and head of detected fractures

Forsmark, borehole KFM01D
Transmissivity and head of detected fractures

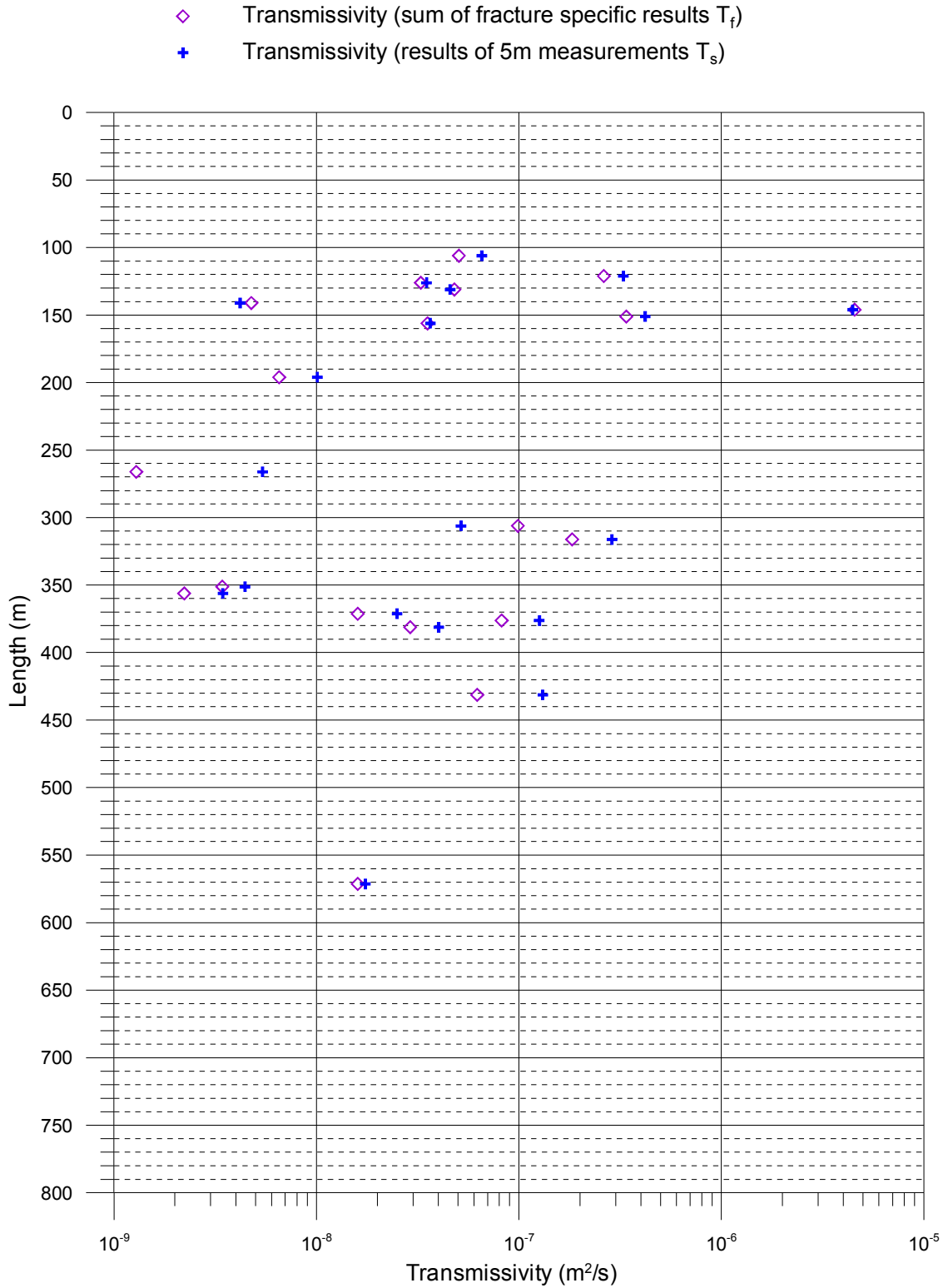
- + Fracture head
- + Transmissivity of fracture
- Head in the borehole without pumping (L=5 m, dL=0.5 m)
2006-05-24 - 2006-05-26
- Head in the borehole with pumping (L=1 m, dL=0.1 m)
2006-05-28 - 2006-05-30



Comparison between section transmissivity and fracture transmissivity

Forsmark, borehole KFM01D

Comparison between section transmissivity and fracture transmissivity



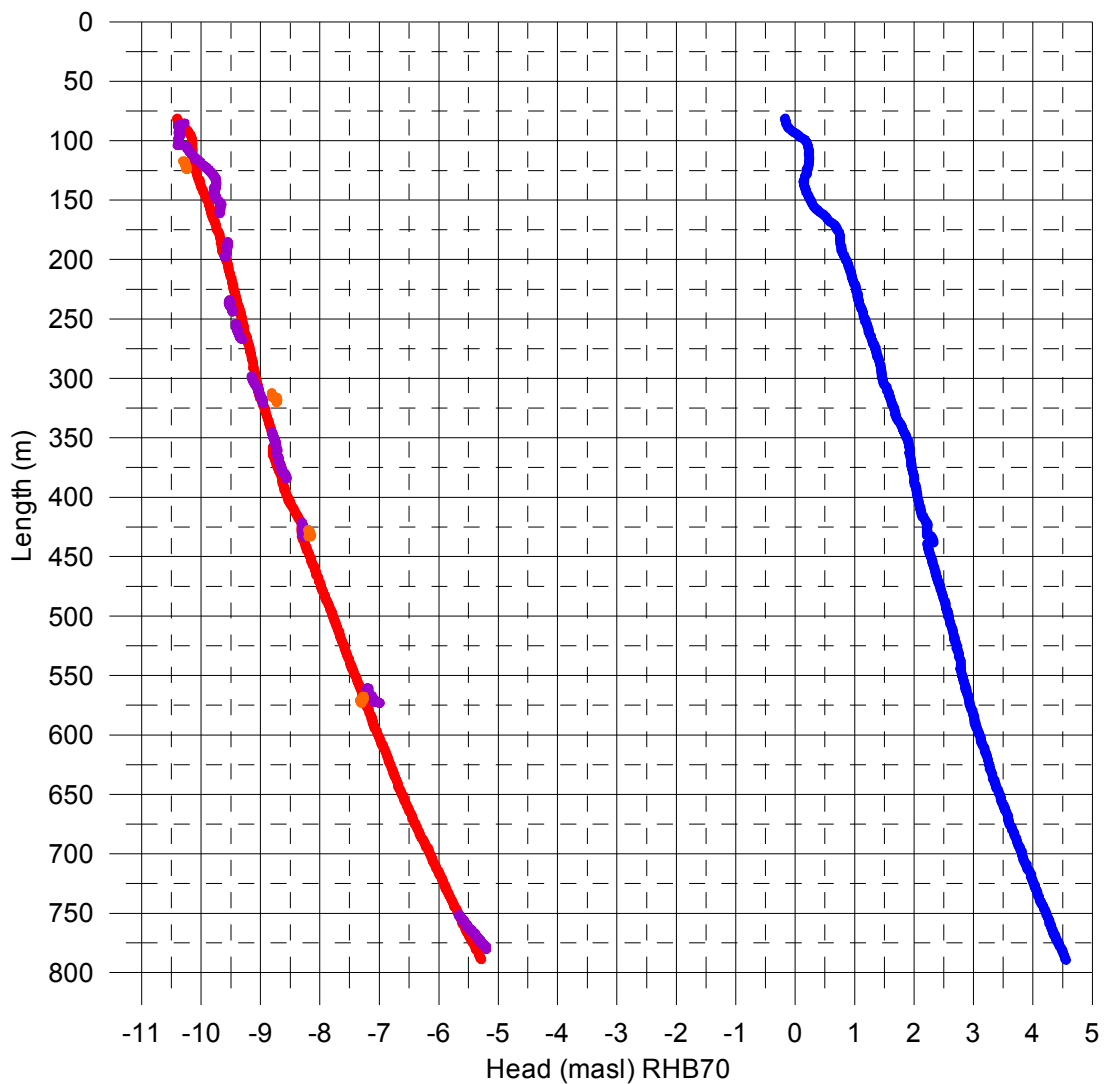
Head in the borehole during flow logging

Forsmark, borehole KFM01D

Head in the borehole during flow logging

Head(masl)= (Absolute pressure (Pa) - Airpressure (Pa) + Offset) / (1000 kg/m³ * 9.80665 m/s²) + Elevation (m)
 Offset = 2300 Pa (Correction for absolut pressure sensor)

- Without pumping (upwards during flow logging, L=5 m, dL=0.5 m), 2006-05-24 - 2006-05-26
- With pumping (upwards during flow logging, L=5 m, dL=0.5 m), 2006-05-27 - 2006-05-28
- With pumping (upwards during flow logging, L=1 m, dL=0.1 m), 2006-05-28 - 2006-05-30
- With pumping (upwards during flow logging, L=0.5 m, dL=0.1 m), 2006-05-30 - 2006-05-31



Groundwater recovery after pumping

Forsmark, borehole KFM01D
Groundwater recovery after pumping

Head(masl) = (Absolute pressure (Pa) - Airpressure (Pa) + Offset) / (1000 kg/m³ * 9.80665 m/s²) + Elevation (m)
Offset = 2300 Pa (Correction for absolut pressure sensor)

- Measured at the length of 21.60 m using water level pressure sensor
- Corrected pressure measured at the length of 33.16 m using absolute pressure sensor
- Measured by SKB using water level pressure sensor

