**P-05-267**

**Supplement 1**

August 2007

# Oskarshamn site investigation

# Difference flow logging of borehole KLX08

## Subarea Laxemar

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# Description

In the present supplement to SKB P-05-267 all groundwater head calculations have been redone on revised borehole elevation data (Z-coordinates).

The borehole coordinates that formed the basis for this revision of groundwater head data were retrieved from SKB Sicada 2007-03-07 EG154 (provided by SKB in file Krökdata_korrigerade_070307_KLX03-KLX29 utom KLX15,HLX13,15,26-28,32, 36-38,43.xls) /Stenberg and Håkansson 2007/.

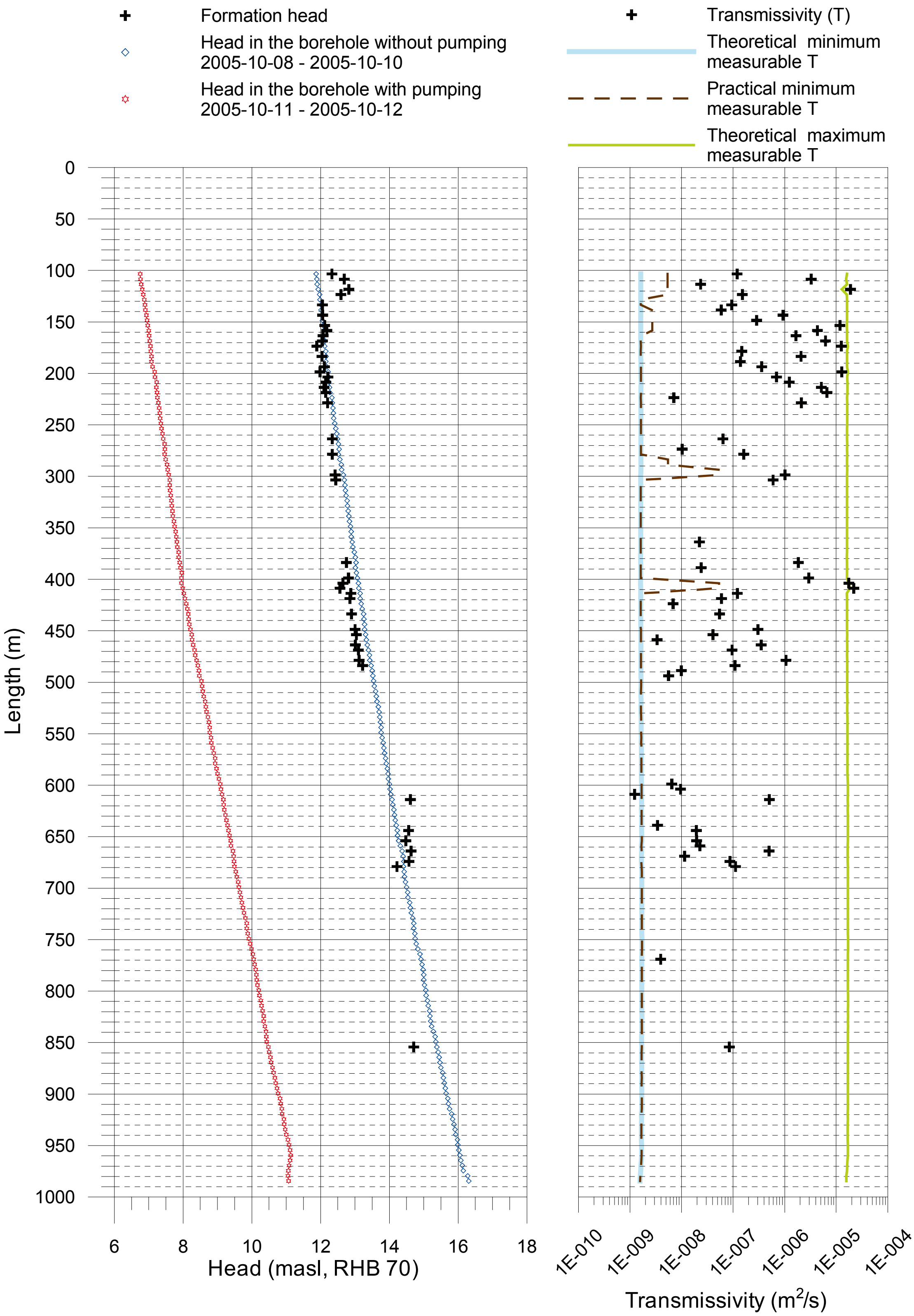
Specifically the following appendices are revised and included in this supplement:

| Revised appendices | Appendix number |
|---|---|
| Transmissivity and head of 5m sections | Appendix 4.2 |
| Transmissivity and head of detected fractures | Appendix 5 |
| Sequential flow logging | Appendix 7.1–7.6 |
| Inferred flow anomalies from overlapping flow logging | Appendix 8.1–8.4 |
| Comparison between section transmissivity and fracture transmissivity | Appendix 12 |
| Head in the borehole during flowlogging | Appendix 13.1 |
| Air pressure, water level in borehole and pumping rate during flow logging | Appendix 13.2 |
| Groundwater recovery after pumping | Appendix 13.3 |
| Vertical flow along the borehole at 100.8 m | Appendix 13.4 |

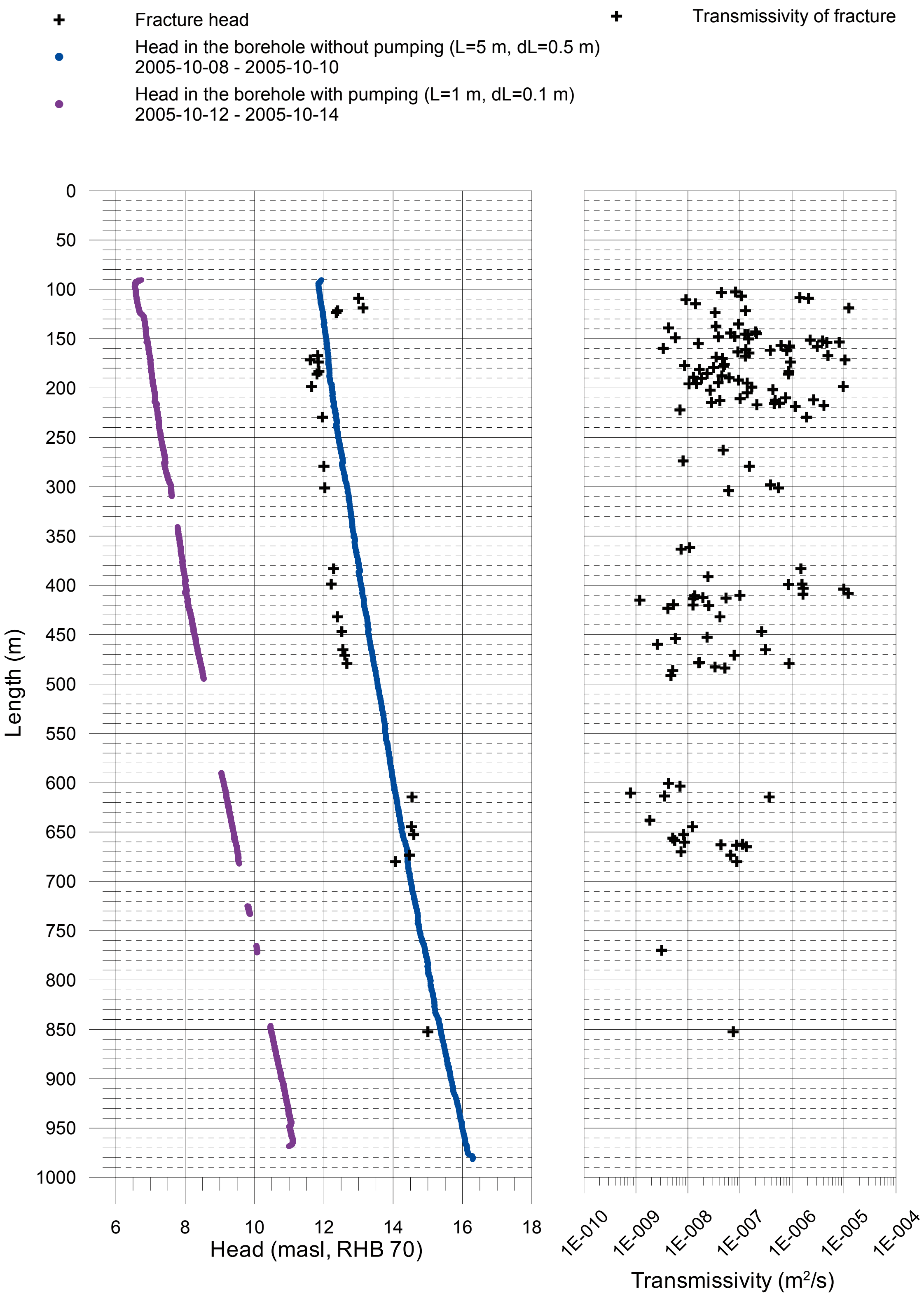
# Reference

**Stenberg L, Håkansson N, 2007.** Revision of borehole deviation measurements in Oskarshamn, Svensk Kärnbränslehantering AB (in preparation).

Laxemar, borehole KLX08
Transmissivity and head of 5 m sections



Laxemar, borehole KLX08
Transmissivity and head of detected fractures



# Appendix 7.1

## Difference flow logging – Sequential flow logging

| Borehole ID | Secup L(m) | Seclow L(m) | Lw (m) | Q0 (m³/s) | dh0 (m.a.s.l.) | Q1 (m³/s) | dh1 (m.a.s.l.) | TD (m²/s) | hi (m.a.s.l.) | Q-lower limit P (mL/h) | TD-measlLT (m²/s) | TD-measlLP (m²/s) | TD-measlU (m²/s) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| KLX08 | 100.88 | 105.88 | 5 | 5.56E–08 | 11.87 | 6.75E–07 | 6.75 | 1.2E–07 | 12.3 | 100 | 1.6E–09 | 5.4E–09 | 1.6E–05 | |
| KLX08 | 105.89 | 110.89 | 5 | 2.66E–06 | 11.89 | 1.97E–05 | 6.76 | 3.3E–06 | 12.7 | 100 | 1.6E–09 | 5.4E–09 | 1.6E–05 | |
| KLX08 | 110.89 | 115.89 | 5 | – | 11.90 | 1.22E–07 | 6.78 | 2.4E–08 | – | 100 | 1.6E–09 | 5.4E–09 | 1.6E–05 | |
| KLX08 | 115.89 | 120.89 | 5 | 1.70E–05 | 11.93 | 1.15E–04 | 6.81 | 1.9E–05 | 12.8 | 100 | 1.6E–09 | 5.4E–09 | 1.3E–05 | ** |
| KLX08 | 120.90 | 125.90 | 5 | 9.50E–08 | 11.97 | 8.81E–07 | 6.84 | 1.5E–07 | 12.6 | 100 | 1.6E–09 | 5.4E–09 | 1.6E–05 | |
| KLX08 | 125.90 | 130.90 | 5 | – | 11.98 | – | 6.87 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 130.90 | 135.90 | 5 | 4.17E–09 | 12.01 | 4.92E–07 | 6.89 | 9.4E–08 | 12.1 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 135.91 | 140.91 | 5 | – | 12.01 | 3.03E–07 | 6.90 | 5.9E–08 | – | 50 | 1.6E–09 | 2.7E–09 | 1.6E–05 | |
| KLX08 | 140.91 | 145.91 | 5 | 2.75E–08 | 12.03 | 4.81E–06 | 6.93 | 9.3E–07 | 12.1 | 50 | 1.6E–09 | 2.7E–09 | 1.6E–05 | |
| KLX08 | 145.91 | 150.91 | 5 | – | 12.05 | 1.48E–06 | 6.95 | 2.9E–07 | – | 50 | 1.6E–09 | 2.7E–09 | 1.6E–05 | |
| KLX08 | 150.91 | 155.91 | 5 | 5.56E–07 | 12.07 | 6.14E–05 | 6.97 | 1.2E–05 | 12.1 | 50 | 1.6E–09 | 2.7E–09 | 1.6E–05 | |
| KLX08 | 155.92 | 160.92 | 5 | 3.33E–07 | 12.10 | 2.26E–05 | 7.00 | 4.3E–06 | 12.2 | 50 | 1.6E–09 | 2.7E–09 | 1.6E–05 | |
| KLX08 | 160.93 | 165.93 | 5 | –4.64E–08 | 12.10 | 8.50E–06 | 7.01 | 1.7E–06 | 12.1 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 165.95 | 170.95 | 5 | –5.28E–07 | 12.13 | 3.14E–05 | 7.03 | 6.2E–06 | 12.1 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 170.96 | 175.96 | 5 | –2.92E–06 | 12.12 | 6.17E–05 | 7.05 | 1.3E–05 | 11.9 | 30 | 1.6E–09 | 1.6E–09 | 1.7E–05 | |
| KLX08 | 175.97 | 180.97 | 5 | – | 12.15 | 7.58E–07 | 7.06 | 1.5E–07 | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 180.98 | 185.98 | 5 | –2.50E–07 | 12.16 | 1.04E–05 | 7.08 | 2.1E–06 | 12.0 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 185.99 | 190.99 | 5 | – | 12.15 | 7.11E–07 | 7.08 | 1.4E–07 | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 191.00 | 196.00 | 5 | –2.61E–08 | 12.18 | 1.81E–06 | 7.11 | 3.6E–07 | 12.1 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 196.01 | 201.01 | 5 | –3.06E–06 | 12.22 | 6.25E–05 | 7.17 | 1.3E–05 | 12.0 | 30 | 1.6E–09 | 1.6E–09 | 1.7E–05 | |
| KLX08 | 201.02 | 206.02 | 5 | –2.28E–08 | 12.24 | 3.53E–06 | 7.18 | 6.9E–07 | 12.2 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 206.03 | 211.03 | 5 | –1.08E–07 | 12.24 | 6.11E–06 | 7.23 | 1.2E–06 | 12.2 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 211.03 | 216.03 | 5 | –8.33E–07 | 12.26 | 2.54E–05 | 7.22 | 5.2E–06 | 12.1 | 30 | 1.6E–09 | 1.6E–09 | 1.7E–05 | |
| KLX08 | 216.04 | 221.04 | 5 | –8.33E–07 | 12.27 | 3.28E–05 | 7.24 | 6.6E–06 | 12.2 | 30 | 1.6E–09 | 1.6E–09 | 1.7E–05 | |
| KLX08 | 221.05 | 226.05 | 5 | – | 12.33 | 3.64E–08 | 7.25 | 7.1E–09 | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 226.06 | 231.06 | 5 | –2.92E–07 | 12.34 | 1.05E–05 | 7.28 | 2.1E–06 | 12.2 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 231.06 | 236.06 | 5 | – | 12.36 | – | 7.30 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 236.07 | 241.07 | 5 | – | 12.37 | – | 7.32 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 241.08 | 246.08 | 5 | – | 12.38 | – | 7.33 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |

# Appendix 7.2

| Borehole ID | Secup L(m) | Seclow L(m) | Lw (m) | Q0 (m³/s) | dh0 (m.a.s.l.) | Q1 (m³/s) | dh1 (m.a.s.l.) | TD (m²/s) | hi (m.a.s.l.) | Q-lower limit P (mL/h) | TD-measlLT (m²/s) | TD-measlLP (m²/s) | TD-measlU (m²/s) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| KLX08 | 246.08 | 251.08 | 5 | – | 12.41 | – | 7.35 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 251.09 | 256.09 | 5 | – | 12.44 | – | 7.37 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 256.09 | 261.09 | 5 | – | 12.47 | – | 7.40 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 261.09 | 266.09 | 5 | –9.44E–09 | 12.49 | 3.17E–07 | 7.42 | 6.4E–08 | 12.3 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 266.09 | 271.09 | 5 | – | 12.52 | – | 7.46 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 271.09 | 276.09 | 5 | – | 12.54 | 5.28E–08 | 7.47 | 1.0E–08 | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 276.08 | 281.08 | 5 | –2.92E–08 | 12.52 | 7.94E–07 | 7.46 | 1.6E–07 | 12.3 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 281.08 | 286.08 | 5 | – | 12.56 | – | 7.49 | – | – | 100 | 1.6E–09 | 5.4E–09 | 1.6E–05 | |
| KLX08 | 286.08 | 291.08 | 5 | – | 12.60 | – | 7.53 | – | – | 100 | 1.6E–09 | 5.4E–09 | 1.6E–05 | |
| KLX08 | 291.08 | 296.08 | 5 | – | 12.61 | – | 7.55 | – | – | 1,000 | 1.6E–09 | 5.4E–08 | 1.6E–05 | |
| KLX08 | 296.07 | 301.07 | 5 | –2.50E–07 | 12.66 | 5.00E–06 | 7.58 | 1.0E–06 | 12.4 | 1,000 | 1.6E–09 | 5.4E–08 | 1.6E–05 | |
| KLX08 | 301.07 | 306.07 | 5 | –1.48E–07 | 12.69 | 2.92E–06 | 7.61 | 6.0E–07 | 12.4 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 306.08 | 311.08 | 5 | – | 12.71 | – | 7.61 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 311.10 | 316.10 | 5 | – | 12.72 | – | 7.62 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 316.11 | 321.11 | 5 | – | 12.74 | – | 7.64 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 321.12 | 326.12 | 5 | – | 12.77 | – | 7.66 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 326.13 | 331.13 | 5 | – | 12.78 | – | 7.67 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 331.15 | 336.15 | 5 | – | 12.80 | – | 7.69 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 336.16 | 341.16 | 5 | – | 12.82 | – | 7.70 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 341.17 | 346.17 | 5 | – | 12.84 | – | 7.73 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 346.17 | 351.17 | 5 | – | 12.87 | – | 7.75 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 351.18 | 356.18 | 5 | – | 12.89 | – | 7.78 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 356.18 | 361.18 | 5 | – | 12.89 | – | 7.80 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 361.18 | 366.18 | 5 | – | 12.92 | 1.14E–07 | 7.82 | 2.2E–08 | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 366.19 | 371.19 | 5 | – | 12.94 | – | 7.83 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 371.19 | 376.19 | 5 | – | 12.98 | – | 7.87 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 376.19 | 381.19 | 5 | – | 13.01 | – | 7.87 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 381.19 | 386.19 | 5 | –5.22E–07 | 13.03 | 9.06E–06 | 7.90 | 1.8E–06 | 12.8 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 386.19 | 391.19 | 5 | – | 13.01 | 1.24E–07 | 7.92 | 2.4E–08 | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |

# Appendix 7.3

| Borehole ID | Secup L(m) | Seclow L(m) | Lw (m) | Q0 ($m^3/s$) | dh0 (m.a.s.l.) | Q1 ($m^3/s$) | dh1 (m.a.s.l.) | TD ($m^2/s$) | hi (m.a.s.l.) | Q-lower limit P (mL/h) | TD-measlLT ($m^2/s$) | TD-measlLP ($m^2/s$) | TD-measlU ($m^2/s$) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| KLX08 | 391.20 | 396.20 | 5 | – | 13.04 | – | 7.96 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 396.20 | 401.20 | 5 | –7.58E–07 | 13.07 | 1.44E–05 | 7.95 | 2.9E–06 | 12.8 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 401.20 | 406.20 | 5 | –8.03E–06 | 13.10 | 8.36E–05 | 7.95 | 1.8E–05 | 12.7 | 1,000 | 1.6E–09 | 5.3E–08 | 1.8E–05 | ** |
| KLX08 | 406.20 | 411.20 | 5 | –1.22E–05 | 13.11 | 1.02E–04 | 7.99 | 2.2E–05 | 12.6 | 1,000 | 1.6E–09 | 5.4E–08 | 1.8E–05 | ** |
| KLX08 | 411.21 | 416.21 | 5 | –3.33E–08 | 13.15 | 5.94E–07 | 8.02 | 1.2E–07 | 12.9 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 416.21 | 421.21 | 5 | –1.78E–08 | 13.15 | 2.89E–07 | 8.05 | 5.9E–08 | 12.9 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 421.21 | 426.21 | 5 | – | 13.18 | 3.53E–08 | 8.09 | 6.9E–09 | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 426.21 | 431.21 | 5 | – | 13.21 | – | 8.12 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 431.21 | 436.21 | 5 | –1.94E–08 | 13.25 | 2.61E–07 | 8.15 | 5.4E–08 | 12.9 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 436.22 | 441.22 | 5 | – | 13.26 | – | 8.16 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 441.22 | 446.22 | 5 | – | 13.28 | – | 8.18 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 446.22 | 451.22 | 5 | –8.67E–08 | 13.28 | 1.46E–06 | 8.21 | 3.0E–07 | 13.0 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 451.22 | 456.22 | 5 | –1.11E–08 | 13.31 | 1.97E–07 | 8.25 | 4.1E–08 | 13.0 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 456.22 | 461.22 | 5 | – | 13.33 | 1.72E–08 | 8.26 | 3.4E–09 | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 461.22 | 466.22 | 5 | –1.26E–07 | 13.36 | 1.68E–06 | 8.29 | 3.5E–07 | 13.0 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 466.22 | 471.22 | 5 | –2.78E–08 | 13.39 | 4.61E–07 | 8.33 | 9.6E–08 | 13.1 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 471.22 | 476.22 | 5 | – | 13.42 | – | 8.35 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 476.22 | 481.22 | 5 | –3.28E–07 | 13.43 | 5.08E–06 | 8.39 | 1.1E–06 | 13.1 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 481.22 | 486.22 | 5 | –2.78E–08 | 13.47 | 5.28E–07 | 8.43 | 1.1E–07 | 13.2 | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 486.23 | 491.23 | 5 | – | 13.50 | 5.06E–08 | 8.46 | 9.9E–09 | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 491.24 | 496.24 | 5 | – | 13.52 | 2.86E–08 | 8.47 | 5.6E–09 | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 496.25 | 501.25 | 5 | – | 13.54 | – | 8.53 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 501.26 | 506.26 | 5 | – | 13.56 | – | 8.55 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 506.27 | 511.27 | 5 | – | 13.60 | – | 8.57 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 511.28 | 516.28 | 5 | – | 13.62 | – | 8.60 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 516.29 | 521.29 | 5 | – | 13.64 | – | 8.64 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 521.29 | 526.29 | 5 | – | 13.68 | – | 8.66 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 526.30 | 531.30 | 5 | – | 13.70 | – | 8.68 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 531.31 | 536.31 | 5 | – | 13.72 | – | 8.72 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 536.32 | 541.32 | 5 | – | 13.74 | – | 8.75 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |

| Borehole ID | Secup L(m) | Seclow L(m) | Lw (m) | Q0 ($m^3/s$) | dh0 (m.a.s.l.) | Q1 ($m^3/s$) | dh1 (m.a.s.l.) | TD ($m^2/s$) | hi (m.a.s.l.) | Q-lower limit P (mL/h) | TD-measlLT ($m^2/s$) | TD-measlLP ($m^2/s$) | TD-measlU ($m^2/s$) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| KLX08 | 541.33 | 546.33 | 5 | – | 13.76 | – | 8.77 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 546.33 | 551.33 | 5 | – | 13.76 | – | 8.77 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 551.34 | 556.34 | 5 | – | 13.79 | – | 8.81 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 556.35 | 561.35 | 5 | – | 13.82 | – | 8.82 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 561.36 | 566.36 | 5 | – | 13.84 | – | 8.86 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 566.36 | 571.36 | 5 | – | 13.86 | – | 8.89 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 571.37 | 576.37 | 5 | – | 13.89 | – | 8.93 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 576.37 | 581.37 | 5 | – | 13.91 | – | 8.93 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 581.38 | 586.38 | 5 | – | 13.94 | – | 8.97 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 586.39 | 591.39 | 5 | – | 13.96 | – | 9.00 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 591.40 | 596.40 | 5 | – | 13.97 | – | 9.04 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 596.40 | 601.40 | 5 | – | 14.00 | 3.22E–08 | 9.08 | 6.5E–09 | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 601.41 | 606.41 | 5 | – | 14.02 | 4.75E–08 | 9.10 | 9.6E–09 | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 606.42 | 611.42 | 5 | – | 14.04 | 6.11E–09 | 9.13 | 1.2E–09 | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 611.42 | 616.42 | 5 | 2.69E–07 | 14.08 | 2.78E–06 | 9.17 | 5.1E–07 | 14.6 | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 616.43 | 621.43 | 5 | – | 14.10 | – | 9.18 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 621.43 | 626.43 | 5 | – | 14.13 | – | 9.20 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 626.43 | 631.43 | 5 | – | 14.15 | – | 9.23 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 631.44 | 636.44 | 5 | – | 14.17 | – | 9.26 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 636.45 | 641.45 | 5 | – | 14.20 | 1.69E–08 | 9.29 | 3.4E–09 | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 641.45 | 646.45 | 5 | 6.39E–09 | 14.23 | 1.03E–07 | 9.32 | 1.9E–08 | 14.6 | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 646.46 | 651.46 | 5 | – | 14.24 | – | 9.35 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 651.47 | 656.47 | 5 | 4.17E–09 | 14.27 | 1.01E–07 | 9.38 | 2.0E–08 | 14.5 | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 656.47 | 661.47 | 5 | – | 14.32 | 1.13E–07 | 9.39 | 2.3E–08 | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 661.46 | 666.46 | 5 | 1.32E–07 | 14.37 | 2.61E–06 | 9.45 | 5.0E–07 | 14.6 | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 666.46 | 671.46 | 5 | – | 14.40 | 5.72E–08 | 9.47 | 1.1E–08 | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 671.48 | 676.48 | 5 | 1.31E–08 | 14.42 | 4.47E–07 | 9.48 | 8.7E–08 | 14.6 | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 676.50 | 681.50 | 5 | –2.14E–08 | 14.41 | 5.33E–07 | 9.49 | 1.1E–07 | 14.2 | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 681.52 | 686.52 | 5 | – | 14.43 | – | 9.53 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 686.52 | 691.52 | 5 | – | 14.44 | – | 9.56 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |

# Appendix 7.5

| Borehole ID | Secup L(m) | Seclow L(m) | Lw (m) | Q0 (m³/s) | dh0 (m.a.s.l.) | Q1 (m³/s) | dh1 (m.a.s.l.) | TD (m²/s) | hi (m.a.s.l.) | Q-lower limit P (mL/h) | TD-measlLT (m²/s) | TD- measlLP (m²/s) | TD-measlU (m²/s) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| KLX08 | 691.52 | 696.52 | 5 | – | 14.47 | – | 9.60 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 696.53 | 701.53 | 5 | – | 14.50 | – | 9.62 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 701.53 | 706.53 | 5 | – | 14.53 | – | 9.65 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 706.53 | 711.53 | 5 | – | 14.54 | – | 9.68 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 711.54 | 716.54 | 5 | – | 14.59 | – | 9.71 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 716.55 | 721.55 | 5 | – | 14.61 | – | 9.74 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 721.55 | 726.55 | 5 | – | 14.64 | – | 9.77 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 726.56 | 731.56 | 5 | – | 14.68 | – | 9.81 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 731.56 | 736.56 | 5 | – | 14.71 | – | 9.85 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 736.57 | 741.57 | 5 | – | 14.71 | – | 9.85 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 741.58 | 746.58 | 5 | – | 14.74 | – | 9.88 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 746.58 | 751.58 | 5 | – | 14.75 | – | 9.91 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 751.59 | 756.59 | 5 | – | 14.78 | – | 9.95 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 756.59 | 761.59 | 5 | – | 14.83 | – | 9.99 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 761.59 | 766.59 | 5 | – | 14.89 | – | 10.03 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 766.59 | 771.59 | 5 | – | 14.92 | 1.94E–08 | 10.05 | 4.0E–09 | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 771.59 | 776.59 | 5 | – | 14.95 | – | 10.08 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 776.60 | 781.60 | 5 | – | 14.98 | – | 10.11 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 781.62 | 786.62 | 5 | – | 15.00 | – | 10.13 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 786.63 | 791.63 | 5 | – | 15.00 | – | 10.14 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 791.65 | 796.65 | 5 | – | 15.02 | – | 10.16 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 796.66 | 801.66 | 5 | – | 15.06 | – | 10.20 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 801.68 | 806.68 | 5 | – | 15.07 | – | 10.22 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 806.70 | 811.70 | 5 | – | 15.11 | – | 10.26 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 811.70 | 816.70 | 5 | – | 15.13 | – | 10.28 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 816.71 | 821.71 | 5 | – | 15.17 | – | 10.31 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 821.72 | 826.72 | 5 | – | 15.18 | – | 10.34 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 826.73 | 831.73 | 5 | – | 15.20 | – | 10.34 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 831.74 | 836.74 | 5 | – | 15.23 | – | 10.38 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 836.75 | 841.75 | 5 | – | 15.28 | – | 10.41 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |

| Borehole ID | Secup L(m) | Seclow L(m) | Lw (m) | Q0 (m³/s) | dh0 (m.a.s.l.) | Q1 (m³/s) | dh1 (m.a.s.l.) | TD (m²/s) | hi (m.a.s.l.) | Q-lower limit P (mL/h) | TD-measlLT (m²/s) | TD-measlLP (m²/s) | TD-measlU (m²/s) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| KLX08 | 841.76 | 846.76 | 5 | – | 15.33 | – | 10.42 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 846.77 | 851.77 | 5 | – | 15.35 | – | 10.43 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 851.78 | 856.78 | 5 | –5.72E–08 | 15.38 | 3.61E–07 | 10.48 | 8.4E–08 | 14.7 | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 856.79 | 861.79 | 5 | – | 15.42 | – | 10.50 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 861.79 | 866.79 | 5 | – | 15.45 | – | 10.54 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 866.80 | 871.80 | 5 | – | 15.47 | – | 10.56 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 871.81 | 876.81 | 5 | – | 15.50 | – | 10.60 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 876.81 | 881.81 | 5 | – | 15.55 | – | 10.63 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 881.82 | 886.82 | 5 | – | 15.57 | – | 10.67 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 886.82 | 891.82 | 5 | – | 15.60 | – | 10.69 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 891.83 | 896.83 | 5 | – | 15.63 | – | 10.73 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 896.84 | 901.84 | 5 | – | 15.65 | – | 10.76 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 901.84 | 906.84 | 5 | – | 15.70 | – | 10.82 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 906.85 | 911.85 | 5 | – | 15.72 | – | 10.84 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 911.85 | 916.85 | 5 | – | 15.75 | – | 10.87 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 916.86 | 921.86 | 5 | – | 15.81 | – | 10.88 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 921.87 | 926.87 | 5 | – | 15.84 | – | 10.93 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 926.88 | 931.88 | 5 | – | 15.88 | – | 10.94 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 931.88 | 936.88 | 5 | – | 15.91 | – | 10.97 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 936.89 | 941.89 | 5 | – | 15.93 | – | 11.00 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 941.90 | 946.90 | 5 | – | 15.98 | – | 11.05 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 946.91 | 951.91 | 5 | – | 15.99 | – | 11.08 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 951.91 | 956.91 | 5 | – | 16.02 | – | 11.11 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 956.92 | 961.92 | 5 | – | 16.05 | – | 11.13 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 961.92 | 966.92 | 5 | – | 16.08 | – | 11.11 | – | – | 30 | 1.7E–09 | 1.7E–09 | 1.7E–05 | |
| KLX08 | 966.95 | 971.95 | 5 | – | 16.12 | – | 11.08 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 971.97 | 976.97 | 5 | – | 16.15 | – | 11.06 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 976.99 | 981.99 | 5 | – | 16.28 | – | 11.05 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |
| KLX08 | 982.00 | 987.00 | 5 | – | 16.31 | – | 11.07 | – | – | 30 | 1.6E–09 | 1.6E–09 | 1.6E–05 | |

** Flow over measurement limit

# Appendix 8.1

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

| Borehole ID | Length to flow anom. L (m) | Lw (m) | dL (m) | Q0 (m³/s) | dh0 (m.a.s.l.) | Q1 (m³/s) | dh1 (m.a.s.l.) | Ta (m²/s) | hi (m.a.s.l.) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| KLX08 | 102.7 | 1 | 0.1 | – | 11.87 | 4.39E–07 | 6.58 | 8.2E–08 | – | |
| KLX08 | 103.3 | 1 | 0.1 | – | 11.88 | 2.36E–07 | 6.58 | 4.4E–08 | – | |
| KLX08 | 106.8 | 1 | 0.1 | – | 11.89 | 5.72E–07 | 6.59 | 1.1E–07 | – | |
| KLX08 | 108.4 | 1 | 0.1 | – | 11.90 | 7.58E–06 | 6.60 | 1.4E–06 | – | |
| KLX08 | 109.1 | 1 | 0.1 | 2.59E–06 | 11.89 | 1.37E–05 | 6.60 | 2.1E–06 | 13.1 | |
| KLX08 | 110.5 | 1 | 0.1 | – | 11.90 | 4.89E–08 | 6.61 | 9.1E–09 | – | * |
| KLX08 | 114.7 | 1 | 0.1 | – | 11.92 | 7.47E–08 | 6.63 | 1.4E–08 | – | * |
| KLX08 | 118.9 | 1 | 0.1 | 1.66E–05 | 11.94 | 8.28E–05 | 6.66 | 1.2E–05 | 13.3 | |
| KLX08 | 121.6 | 1 | 0.1 | 7.47E–08 | 11.96 | 7.61E–07 | 6.67 | 1.3E–07 | 12.5 | * |
| KLX08 | 123.6 | 1 | 0.1 | 1.78E–08 | 11.97 | 1.95E–07 | 6.70 | 3.3E–08 | 12.5 | |
| KLX08 | 135.2 | 1 | 0.1 | – | 12.00 | 4.92E–07 | 6.84 | 9.4E–08 | – | |
| KLX08 | 137.3 | 1 | 0.1 | – | 12.01 | 1.80E–07 | 6.85 | 3.5E–08 | – | |
| KLX08 | 139.0 | 1 | 0.1 | – | 12.03 | 2.22E–08 | 6.85 | 4.2E–09 | – | |
| KLX08 | 143.0 | 1 | 0.1 | – | 12.05 | 1.06E–06 | 6.86 | 2.0E–07 | – | |
| KLX08 | 144.3 | 1 | 0.1 | – | 12.04 | 3.44E–07 | 6.87 | 6.6E–08 | – | * |
| KLX08 | 144.9 | 1 | 0.1 | – | 12.05 | 1.09E–06 | 6.87 | 2.1E–07 | – | |
| KLX08 | 145.4 | 1 | 0.1 | – | 12.04 | 6.53E–07 | 6.87 | 1.3E–07 | – | * |
| KLX08 | 145.7 | 1 | 0.1 | – | 12.05 | 7.50E–07 | 6.87 | 1.4E–07 | – | |
| KLX08 | 147.8 | 1 | 0.1 | – | 12.05 | 4.19E–07 | 6.88 | 8.0E–08 | – | |
| KLX08 | 148.0 | 1 | 0.1 | – | 12.05 | 2.01E–07 | 6.89 | 3.9E–08 | – | * |
| KLX08 | 149.1 | 1 | 0.1 | – | 12.07 | 3.00E–08 | 6.89 | 5.7E–09 | – | |
| KLX08 | 150.3 | 1 | 0.1 | – | 12.07 | 7.72E–07 | 6.90 | 1.5E–07 | – | |
| KLX08 | 151.3 | 1 | 0.1 | – | 12.07 | 1.17E–05 | 6.91 | 2.3E–06 | – | |
| KLX08 | 152.2 | 1 | 0.1 | – | 12.08 | 2.05E–05 | 6.91 | 3.9E–06 | – | |
| KLX08 | 153.5 | 1 | 0.1 | – | 12.08 | 4.28E–05 | 6.89 | 8.2E–06 | – | |
| KLX08 | 153.9 | 1 | 0.1 | – | 12.08 | 2.46E–05 | 6.92 | 4.7E–06 | – | |
| KLX08 | 154.8 | 1 | 0.1 | – | 12.10 | 8.28E–08 | 6.93 | 1.6E–08 | – | |
| KLX08 | 156.9 | 1 | 0.1 | – | 12.09 | 3.22E–06 | 6.93 | 6.2E–07 | – | |
| KLX08 | 157.3 | 1 | 0.1 | – | 12.09 | 4.67E–06 | 6.94 | 9.0E–07 | – | * |
| KLX08 | 157.9 | 1 | 0.1 | – | 12.10 | 1.60E–05 | 6.94 | 3.1E–06 | – | |
| KLX08 | 158.3 | 1 | 0.1 | – | 12.10 | 4.69E–06 | 6.94 | 9.0E–07 | – | * |
| KLX08 | 159.8 | 1 | 0.1 | – | 12.10 | 1.75E–08 | 6.94 | 3.4E–09 | – | * |
| KLX08 | 161.1 | 1 | 0.1 | – | 12.11 | 6.78E–07 | 6.94 | 1.3E–07 | – | * |
| KLX08 | 161.7 | 1 | 0.1 | – | 12.12 | 2.00E–06 | 6.95 | 3.8E–07 | – | * |
| KLX08 | 161.9 | 1 | 0.1 | – | 12.11 | 4.17E–06 | 6.95 | 8.0E–07 | – | |
| KLX08 | 163.5 | 1 | 0.1 | – | 12.10 | 4.72E–07 | 6.96 | 9.1E–08 | – | |
| KLX08 | 164.6 | 1 | 0.1 | – | 12.12 | 7.78E–07 | 6.96 | 1.5E–07 | – | |
| KLX08 | 167.1 | 1 | 0.1 | –5.78E–07 | 12.12 | 2.49E–05 | 6.98 | 4.9E–06 | 12.0 | |
| KLX08 | 167.7 | 1 | 0.1 | – | 12.13 | 6.64E–07 | 6.98 | 1.3E–07 | – | * |
| KLX08 | 168.7 | 1 | 0.1 | – | 12.13 | 1.81E–07 | 6.98 | 3.5E–08 | – | |
| KLX08 | 170.0 | 1 | 0.1 | – | 12.14 | 2.41E–07 | 6.98 | 4.6E–08 | – | |
| KLX08 | 171.5 | 1 | 0.1 | –3.64E–06 | 12.13 | 5.06E–05 | 7.01 | 1.1E–05 | 11.8 | |
| KLX08 | 173.7 | 1 | 0.1 | –1.06E–07 | 12.13 | 4.72E–06 | 7.00 | 9.3E–07 | 12.0 | |
| KLX08 | 176.0 | 1 | 0.1 | – | 12.14 | 2.62E–07 | 7.00 | 5.0E–08 | – | |

# Appendix 8.2

| Borehole ID | Length to flow anom. L (m) | Lw (m) | dL (m) | Q0 (m³/s) | dh0 (m.a.s.l.) | Q1 (m³/s) | dh1 (m.a.s.l.) | Ta (m²/s) | hi (m.a.s.l.) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| KLX08 | 177.3 | 1 | 0.1 | – | 12.14 | 4.47E–08 | 7.01 | 8.6E–09 | – | |
| KLX08 | 178.0 | 1 | 0.1 | – | 12.15 | 2.49E–07 | 7.01 | 4.8E–08 | – | |
| KLX08 | 179.3 | 1 | 0.1 | – | 12.15 | 1.62E–07 | 7.02 | 3.1E–08 | – | |
| KLX08 | 181.1 | 1 | 0.1 | – | 12.16 | 8.61E–08 | 7.02 | 1.7E–08 | – | |
| KLX08 | 183.1 | 1 | 0.1 | –9.94E–08 | 12.16 | 4.42E–06 | 7.03 | 8.7E–07 | 12.1 | |
| KLX08 | 185.3 | 1 | 0.1 | – | 12.16 | 1.22E–07 | 7.03 | 2.4E–08 | – | * |
| KLX08 | 185.8 | 1 | 0.1 | –1.45E–07 | 12.16 | 4.31E–06 | 7.04 | 8.6E–07 | 12.0 | |
| KLX08 | 187.7 | 1 | 0.1 | – | 12.16 | 2.32E–07 | 7.04 | 4.5E–08 | – | |
| KLX08 | 189.0 | 1 | 0.1 | – | 12.16 | 6.61E–08 | 7.04 | 1.3E–08 | – | * |
| KLX08 | 189.7 | 1 | 0.1 | – | 12.17 | 3.22E–07 | 7.05 | 6.2E–08 | – | |
| KLX08 | 190.1 | 1 | 0.1 | – | 12.17 | 9.42E–08 | 7.05 | 1.8E–08 | – | |
| KLX08 | 192.0 | 1 | 0.1 | – | 12.19 | 4.86E–07 | 7.06 | 9.4E–08 | – | |
| KLX08 | 194.5 | 1 | 0.1 | – | 12.19 | 1.98E–07 | 7.07 | 3.8E–08 | – | |
| KLX08 | 195.0 | 1 | 0.1 | – | 12.19 | 7.14E–07 | 7.06 | 1.4E–07 | – | |
| KLX08 | 195.5 | 1 | 0.1 | – | 12.21 | 7.61E–08 | 7.07 | 1.5E–08 | – | * |
| KLX08 | 195.8 | 1 | 0.1 | – | 12.22 | 5.47E–08 | 7.07 | 1.1E–08 | – | * |
| KLX08 | 198.5 | 1 | 0.1 | –3.78E–06 | 12.23 | 4.67E–05 | 7.10 | 9.7E–06 | 11.9 | |
| KLX08 | 199.0 | 1 | 0.1 | – | 12.24 | 8.81E–07 | 7.10 | 1.7E–07 | – | |
| KLX08 | 201.7 | 1 | 0.1 | – | 12.23 | 2.23E–06 | 7.10 | 4.3E–07 | – | |
| KLX08 | 202.2 | 1 | 0.1 | – | 12.24 | 1.39E–07 | 7.11 | 2.7E–08 | – | |
| KLX08 | 204.9 | 1 | 0.1 | – | 12.25 | 7.14E–07 | 7.12 | 1.4E–07 | – | |
| KLX08 | 210.0 | 1 | 0.1 | – | 12.26 | 3.92E–06 | 7.13 | 7.6E–07 | – | |
| KLX08 | 210.8 | 1 | 0.1 | – | 12.26 | 5.22E–07 | 7.13 | 1.0E–07 | – | * |
| KLX08 | 211.9 | 1 | 0.1 | – | 12.26 | 1.36E–05 | 7.13 | 2.6E–06 | – | |
| KLX08 | 212.3 | 1 | 0.1 | – | 12.26 | 2.48E–06 | 7.13 | 4.8E–07 | – | |
| KLX08 | 212.7 | 1 | 0.1 | – | 12.26 | 2.13E–07 | 7.14 | 4.1E–08 | – | |
| KLX08 | 214.6 | 1 | 0.1 | – | 12.30 | 1.48E–07 | 7.13 | 2.8E–08 | – | * |
| KLX08 | 215.2 | 1 | 0.1 | – | 12.29 | 3.00E–06 | 7.15 | 5.8E–07 | – | |
| KLX08 | 215.8 | 1 | 0.1 | – | 12.28 | 2.36E–06 | 7.18 | 4.6E–07 | – | |
| KLX08 | 216.9 | 1 | 0.1 | – | 12.29 | 1.09E–06 | 7.18 | 2.1E–07 | – | * |
| KLX08 | 217.6 | 1 | 0.1 | – | 12.29 | 2.14E–05 | 7.15 | 4.1E–06 | – | |
| KLX08 | 218.7 | 1 | 0.1 | – | 12.28 | 6.00E–06 | 7.16 | 1.2E–06 | – | |
| KLX08 | 222.2 | 1 | 0.1 | – | 12.31 | 3.64E–08 | 7.19 | 7.0E–09 | – | * |
| KLX08 | 229.5 | 1 | 0.1 | –3.31E–07 | 12.36 | 9.58E–06 | 7.22 | 1.9E–06 | 12.2 | |
| KLX08 | 262.9 | 1 | 0.1 | – | 12.48 | 2.46E–07 | 7.38 | 4.8E–08 | – | * |
| KLX08 | 273.9 | 1 | 0.1 | – | 12.55 | 4.19E–08 | 7.42 | 8.1E–09 | – | * |
| KLX08 | 279.2 | 1 | 0.1 | –4.25E–08 | 12.54 | 7.42E–07 | 7.41 | 1.5E–07 | 12.3 | |
| KLX08 | 298.2 | 1 | 0.1 | – | 12.66 | 1.99E–06 | 7.58 | 3.9E–07 | – | |
| KLX08 | 301.2 | 1 | 0.1 | –2.03E–07 | 12.67 | 2.61E–06 | 7.60 | 5.5E–07 | 12.3 | |
| KLX08 | 303.9 | 1 | 0.1 | – | 12.69 | 3.11E–07 | 7.60 | 6.1E–08 | – | * |
| KLX08 | 361.8 | 1 | 0.1 | – | 12.90 | 5.50E–08 | 7.88 | 1.1E–08 | – | |
| KLX08 | 363.3 | 1 | 0.1 | – | 12.92 | 3.78E–08 | 7.87 | 7.4E–09 | – | * |
| KLX08 | 383.2 | 1 | 0.1 | –5.83E–07 | 13.03 | 7.06E–06 | 7.94 | 1.5E–06 | 12.6 | |
| KLX08 | 391.2 | 1 | 0.1 | – | 13.03 | 1.24E–07 | 7.99 | 2.4E–08 | – | * |
| KLX08 | 398.7 | 1 | 0.1 | –7.83E–07 | 13.08 | 7.22E–06 | 8.01 | 1.6E–06 | 12.6 | |
| KLX08 | 399.2 | 1 | 0.1 | – | 13.08 | 4.36E–06 | 8.01 | 8.5E–07 | – | |

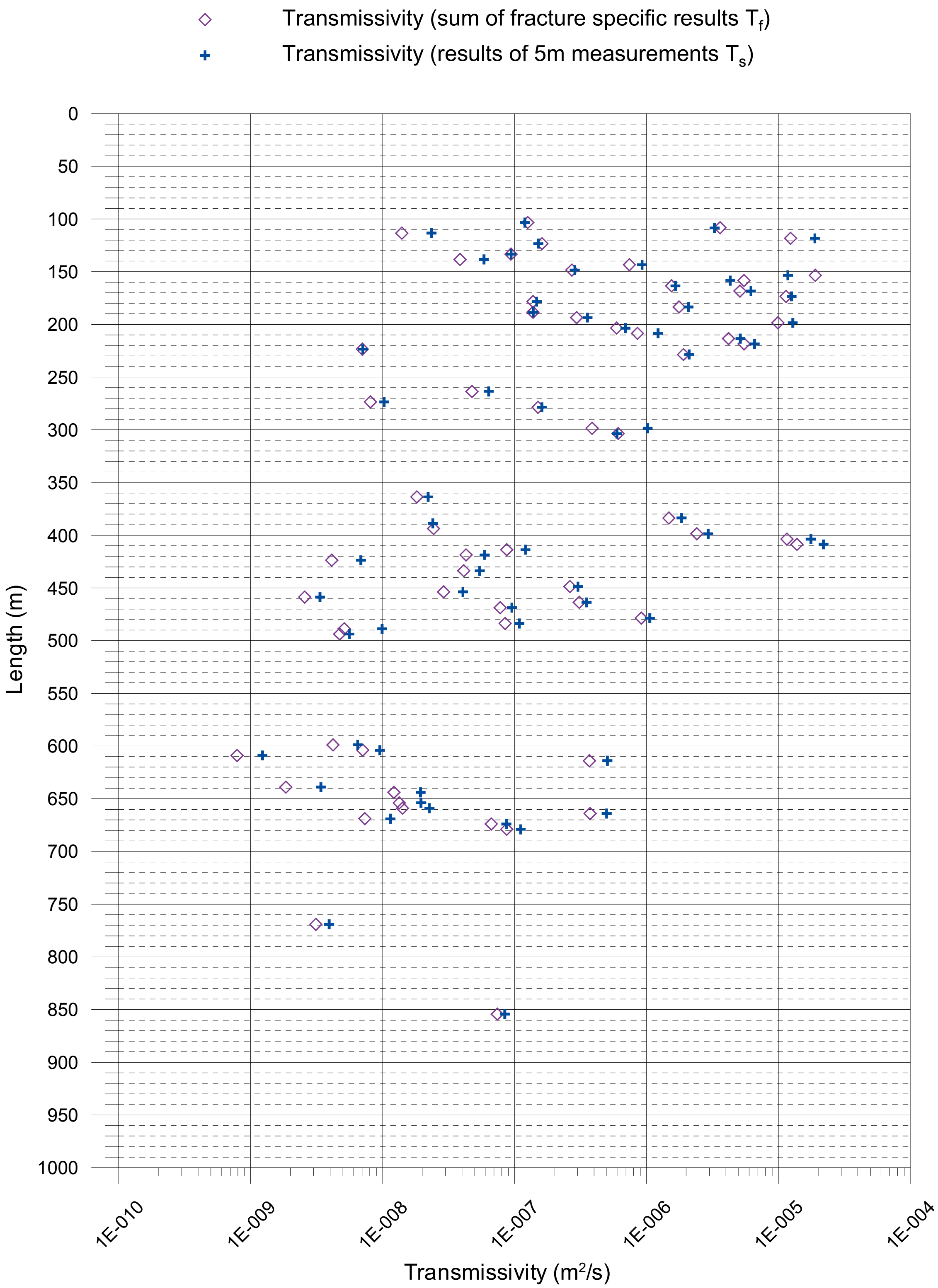
| Borehole ID | Length to flow anom. L (m) | Lw (m) | dL (m) | Q0 (m³/s) | dh0 (m.a.s.l.) | Q1 (m³/s) | dh1 (m.a.s.l.) | Ta (m²/s) | hi (m.a.s.l.) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| KLX08 | 403.0 | 1 | 0.1 | – | 13.10 | 8.44E–06 | 8.02 | 1.6E–06 | – | |
| KLX08 | 403.8 | 1 | 0.1 | – | 13.10 | 5.11E–05 | 8.03 | 1.0E–05 | – | |
| KLX08 | 408.1 | 1 | 0.1 | – | 13.10 | 6.19E–05 | 8.04 | 1.2E–05 | – | |
| KLX08 | 409.0 | 1 | 0.1 | – | 13.11 | 8.39E–06 | 8.03 | 1.6E–06 | – | * |
| KLX08 | 410.1 | 1 | 0.1 | – | 13.12 | 5.14E–07 | 8.04 | 1.0E–07 | – | |
| KLX08 | 410.6 | 1 | 0.1 | – | 13.13 | 6.94E–08 | 8.04 | 1.4E–08 | – | * |
| KLX08 | 412.3 | 1 | 0.1 | – | 13.15 | 1.00E–07 | 8.06 | 1.9E–08 | – | |
| KLX08 | 412.8 | 1 | 0.1 | – | 13.14 | 2.78E–07 | 8.06 | 5.4E–08 | – | |
| KLX08 | 413.5 | 1 | 0.1 | – | 13.15 | 6.50E–08 | 8.07 | 1.3E–08 | – | * |
| KLX08 | 415.0 | 1 | 0.1 | – | 13.16 | 6.11E–09 | 8.08 | 1.2E–09 | – | * |
| KLX08 | 419.5 | 1 | 0.1 | – | 13.16 | 2.69E–08 | 8.09 | 5.3E–09 | – | |
| KLX08 | 420.0 | 1 | 0.1 | – | 13.16 | 6.42E–08 | 8.09 | 1.3E–08 | – | |
| KLX08 | 420.6 | 1 | 0.1 | – | 13.16 | 1.29E–07 | 8.10 | 2.5E–08 | – | |
| KLX08 | 423.3 | 1 | 0.1 | – | 13.18 | 2.11E–08 | 8.11 | 4.1E–09 | – | |
| KLX08 | 431.9 | 1 | 0.1 | –1.86E–08 | 13.24 | 1.92E–07 | 8.18 | 4.1E–08 | 12.8 | |
| KLX08 | 446.8 | 1 | 0.1 | –9.61E–08 | 13.28 | 1.24E–06 | 8.24 | 2.6E–07 | 12.9 | |
| KLX08 | 452.5 | 1 | 0.1 | – | 13.31 | 1.18E–07 | 8.29 | 2.3E–08 | – | |
| KLX08 | 454.0 | 1 | 0.1 | – | 13.31 | 2.92E–08 | 8.29 | 5.8E–09 | – | |
| KLX08 | 459.8 | 1 | 0.1 | – | 13.34 | 1.31E–08 | 8.32 | 2.6E–09 | – | |
| KLX08 | 465.2 | 1 | 0.1 | –1.35E–07 | 13.38 | 1.44E–06 | 8.36 | 3.1E–07 | 13.0 | |
| KLX08 | 470.8 | 1 | 0.1 | –3.11E–08 | 13.40 | 3.64E–07 | 8.38 | 7.8E–08 | 13.0 | |
| KLX08 | 478.2 | 1 | 0.1 | – | 13.43 | 8.47E–08 | 8.43 | 1.7E–08 | – | * |
| KLX08 | 478.5 | 1 | 0.1 | – | 13.43 | 8.11E–08 | 8.44 | 1.6E–08 | – | * |
| KLX08 | 479.2 | 1 | 0.1 | –3.36E–07 | 13.44 | 4.11E–06 | 8.45 | 8.8E–07 | 13.1 | |
| KLX08 | 482.8 | 1 | 0.1 | – | 13.46 | 1.68E–07 | 8.47 | 3.3E–08 | – | |
| KLX08 | 483.8 | 1 | 0.1 | – | 13.47 | 2.61E–07 | 8.47 | 5.2E–08 | – | |
| KLX08 | 486.3 | 1 | 0.1 | – | 13.49 | 2.58E–08 | 8.50 | 5.1E–09 | – | |
| KLX08 | 491.4 | 1 | 0.1 | – | 13.51 | 2.39E–08 | 8.51 | 4.7E–09 | – | |
| KLX08 | 600.6 | 1 | 0.1 | – | 14.01 | 2.08E–08 | 9.12 | 4.2E–09 | – | |
| KLX08 | 603.5 | 1 | 0.1 | – | 14.02 | 3.50E–08 | 9.13 | 7.1E–09 | – | |
| KLX08 | 610.4 | 1 | 0.1 | – | 14.06 | 3.89E–09 | 9.18 | 7.9E–10 | – | * |
| KLX08 | 613.5 | 1 | 0.1 | – | 14.08 | 1.75E–08 | 9.19 | 3.5E–09 | – | |
| KLX08 | 614.5 | 1 | 0.1 | 2.68E–07 | 14.08 | 2.08E–06 | 9.18 | 3.7E–07 | 14.8 | |
| KLX08 | 638.0 | 1 | 0.1 | – | 14.20 | 9.17E–09 | 9.31 | 1.9E–09 | – | |
| KLX08 | 644.6 | 1 | 0.1 | 6.11E–09 | 14.24 | 6.64E–08 | 9.36 | 1.2E–08 | 14.7 | |
| KLX08 | 652.5 | 1 | 0.1 | 4.17E–09 | 14.28 | 4.47E–08 | 9.41 | 8.2E–09 | 14.8 | |
| KLX08 | 656.1 | 1 | 0.1 | – | 14.30 | 2.53E–08 | 9.42 | 5.1E–09 | – | |
| KLX08 | 658.5 | 1 | 0.1 | – | 14.32 | 2.75E–08 | 9.43 | 5.6E–09 | – | |
| KLX08 | 660.2 | 1 | 0.1 | – | 14.35 | 4.25E–08 | 9.46 | 8.6E–09 | – | |
| KLX08 | 662.3 | 1 | 0.1 | – | 14.36 | 5.53E–07 | 9.47 | 1.1E–07 | – | |
| KLX08 | 662.9 | 1 | 0.1 | – | 14.36 | 2.14E–07 | 9.47 | 4.3E–08 | – | * |
| KLX08 | 663.3 | 1 | 0.1 | – | 14.37 | 4.25E–07 | 9.47 | 8.6E–08 | – | |
| KLX08 | 664.8 | 1 | 0.1 | – | 14.38 | 6.56E–07 | 9.49 | 1.3E–07 | – | |
| KLX08 | 670.0 | 1 | 0.1 | – | 14.41 | 3.64E–08 | 9.50 | 7.3E–09 | – | |
| KLX08 | 673.3 | 1 | 0.1 | 1.28E–08 | 14.42 | 3.42E–07 | 9.53 | 6.7E–08 | 14.6 | |
| KLX08 | 679.9 | 1 | 0.1 | –2.17E–08 | 14.42 | 4.08E–07 | 9.54 | 8.7E–08 | 14.2 | |

# Appendix 8.4

| Borehole ID | Length to flow anom. L (m) | Lw (m) | dL (m) | Q0 ($m^3/s$) | dh0 (m.a.s.l.) | Q1 ($m^3/s$) | dh1 (m.a.s.l.) | Ta ($m^2/s$) | hi (m.a.s.l.) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| KLX08 | 769.9 | 1 | 0.1 | – | 14.92 | 1.53E–08 | 10.08 | 3.1E–09 | – | |
| KLX08 | 852.4 | 1 | 0.1 | –6.36E–08 | 15.38 | 3.03E–07 | 10.48 | 7.4E–08 | 14.5 | |

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

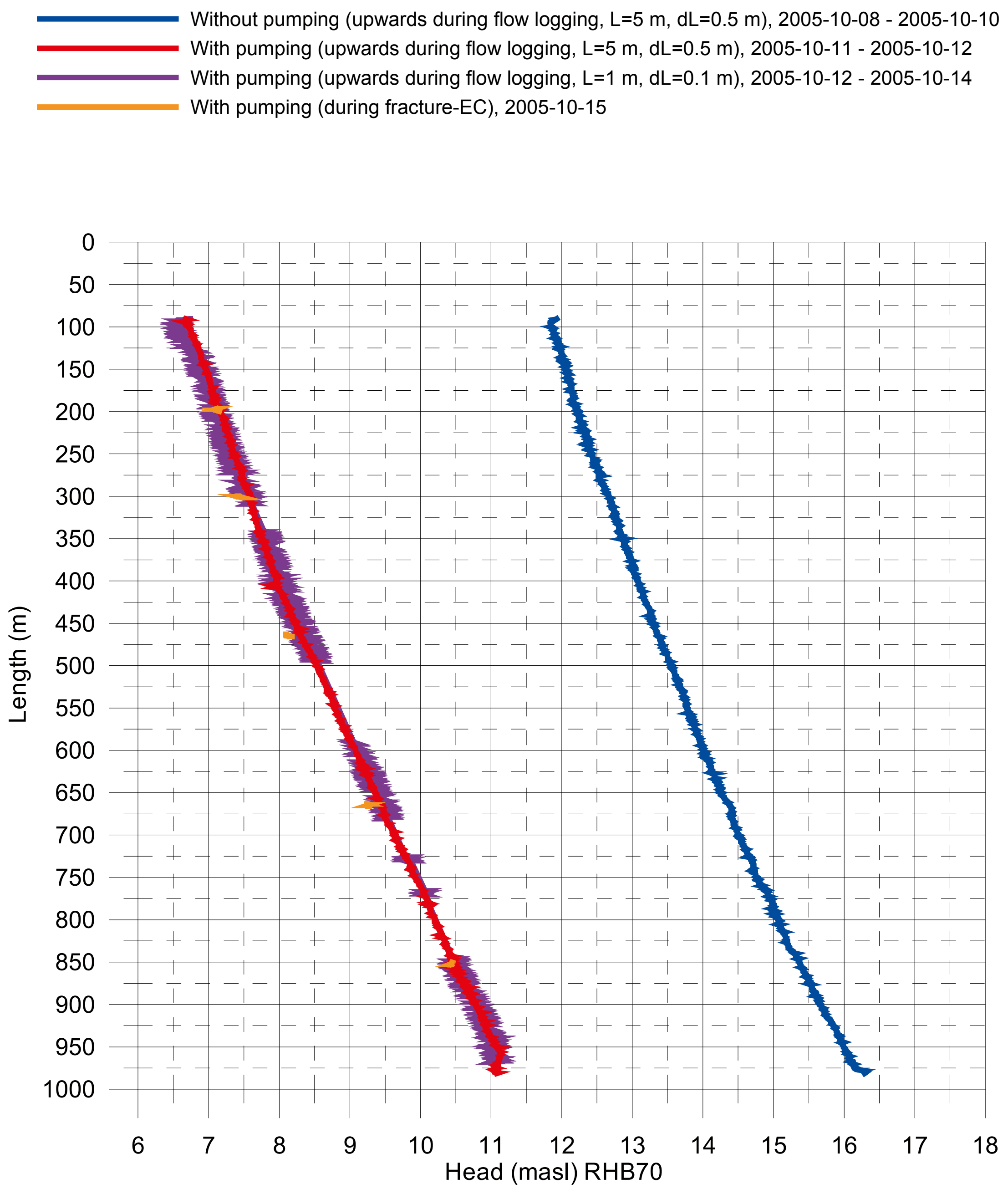
Laxemar, borehole KLX08
Comparison between section transmissivity and fracture transmissivity



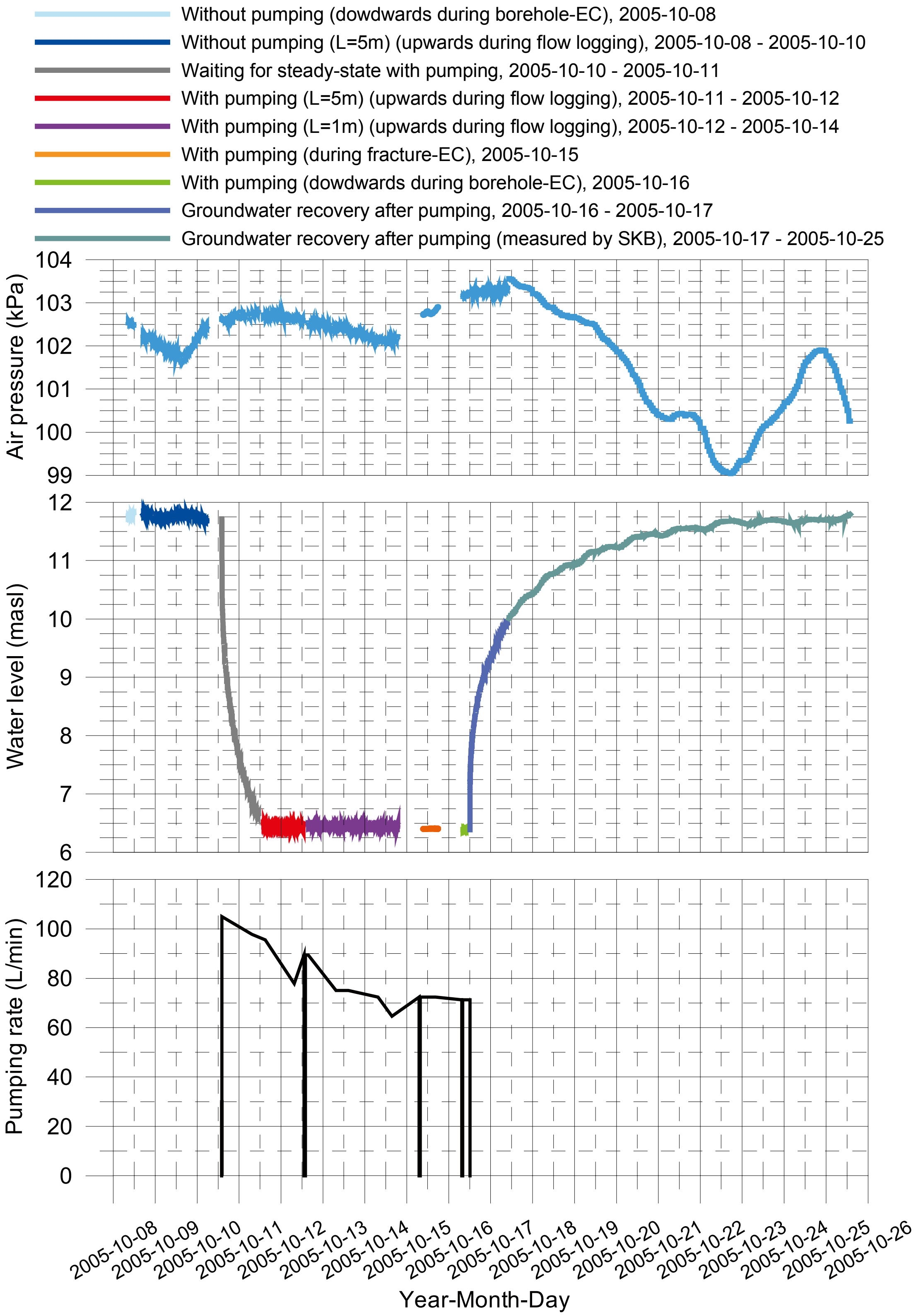
# Appendix 13.1

Laxemar, borehole KLX08
Head in the borehole during flow logging

Head(masl)= (Absolute pressure (Pa) - Airpressure (Pa) + Offset) /(1000 kg/m$^3$ * 9.80665 m/s$^2$) + Elevation (m)
Offset = 2460 Pa (Correction for absolut pressure sensor)



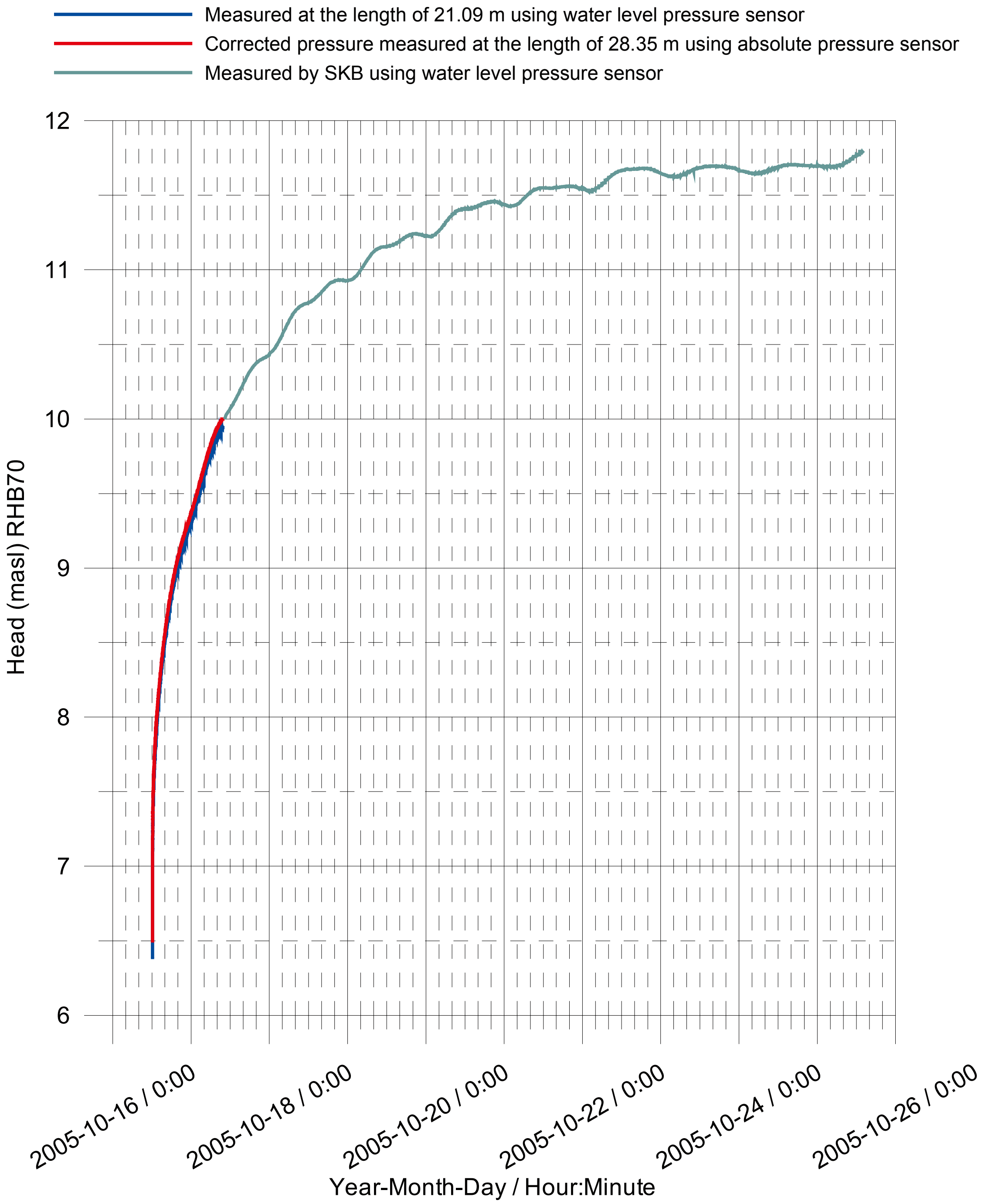
Laxemar, borehole KLX08
Air pressure, water level in the borehole and pumping rate during flow logging



# Appendix 13.3

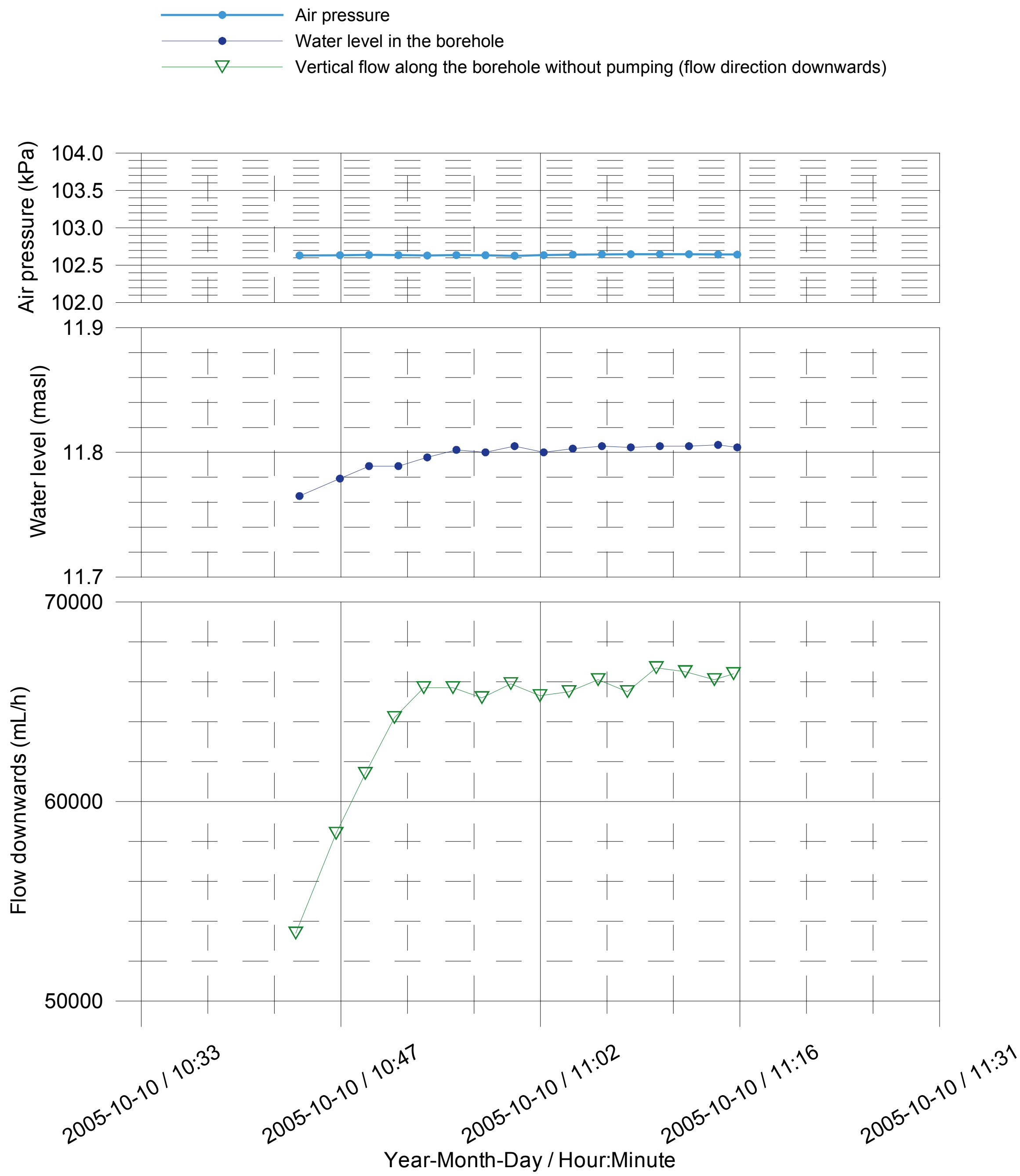
Laxemar, borehole KLX08
Groundwater recovery after pumping

Head(masl)= (Absolute pressure (Pa) - Airpressure (Pa) + Offset) /(1000 kg/m$^3$ * 9.80665 m/s$^2$) + Elevation (m)
Offset = 2460 Pa (Correction for absolut pressure sensor)



# Appendix 13.4

Laxemar, borehole KLX08
Vertical flow along the borehole at the length of 100.8 m



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