

APPENDIX 5

Luminescence dates (TL) for the Volochysk samples – Gdansk laboratory

| Sample | No. lab. UG | ²²⁶ Ra [Bq/kg] | ²³² Th [Bq/kg] | ⁴⁰ K [Bq/kg] | Dose rate d_r [Gy/ka] | Equivalent dose d_e [Gy] | TL age [ky] |
|--------|----------------|------------------------------|------------------------------|----------------------------|----------------------------|-------------------------------|----------------|
| W-1 | 6565 | 33.5 ± 1.3 | 26.6 ± 1.2 | 425 ± 25 | 2.44 ± 0.30 | 45.4 ± 4.6 | 18.6 ± 2.0 |
| W-2 | 6566 | 29.2 ± 1.3 | 31.6 ± 1.3 | 416 ± 26 | 2.43 ± 0.30 | 50.0 ± 4.1 | 20.6 ± 2.0 |
| W-3 | 6567 | 33.4 ± 1.2 | 35.3 ± 1.3 | 476 ± 28 | 2.74 ± 0.31 | 66.1 ± 6.0 | 24.1 ± 3.6 |
| W-5 | 6569 | 30.9 ± 1.3 | 38.1 ± 1.5 | 506 ± 32 | 2.82 ± 0.33 | 68.7 ± 7.0 | 24.3 ± 3.8 |
| W-6 | 6570 | 25.6 ± 1.2 | 41.2 ± 1.5 | 495 ± 31 | 2.74 ± 0.31 | 117 ± 11 | 42.8 ± 6.3 |
| W-7 | 6571 | 25.0 ± 1.2 | 35.5 ± 1.5 | 442 ± 29 | 2.47 ± 0.32 | 108 ± 11 | 43.9 ± 5.9 |
| W-8 | 6572 | 26.9 ± 1.4 | 38.6 ± 1.4 | 420 ± 25 | 2.51 ± 0.30 | 215 ± 22 | 86.8 ± 9.6 |
| W-9 | 6573 | 27.0 ± 1.3 | 39.4 ± 1.5 | 433 ± 29 | 2.54 ± 0.31 | 334 ± 32 | 132 ± 20 |
| W-10 | 6574 | 23.8 ± 1.1 | 39.4 ± 1.5 | 432 ± 29 | 2.46 ± 0.30 | 268 ± 26 | 109 ± 16 |
| W-11 | 6575 | 25.1 ± 1.3 | 35.2 ± 1.5 | 442 ± 31 | 2.46 ± 0.30 | 312 ± 31 | 127 ± 18 |
| W-12 | 6576 | 25.4 ± 1.3 | 28.5 ± 1.4 | 370 ± 26 | 2.13 ± 0.29 | 361 ± 36 | 170 ± 28 |
| W-13 | 6577 | 20.3 ± 1.2 | 31.7 ± 1.5 | 384 ± 27 | 2.12 ± 0.30 | 355 ± 32 | 167 ± 26 |
| W-14 | 6578 | 28.0 ± 1.4 | 30.1 ± 1.4 | 366 ± 27 | 2.12 ± 0.30 | 379 ± 40 | 179 ± 25 |
| W-15 | 6579 | 29.7 ± 1.4 | 31.1 ± 1.4 | 429 ± 29 | 2.58 ± 0.31 | 68.4 ± 7.2 | 32.2 ± 4.7 |
| W-16 | 6580 | 20.9 ± 1.2 | 35.4 ± 1.4 | 483 ± 32 | 2.52 ± 0.34 | 43.6 ± 4.2 | 17.3 ± 2.6 |
| W-17 | 6581 | 23.4 ± 1.2 | 30.3 ± 1.3 | 469 ± 30 | 2.42 ± 0.30 | 38.9 ± 3.9 | 16.0 ± 2.4 |
| W-18 | 6582 | 24.4 ± 1.3 | 28.8 ± 1.4 | 370 ± 27 | 2.16 ± 0.32 | 31.8 ± 3.2 | 14.7 ± 2.2 |