**SUPPLEMENTAL MATERIAL**

**Table .** Correlative sedimentary event deposits with depth as in core Hz2007-2-LG-4.9m with all radiocarbon dating samples with depth location in original cores and in the composite core (corrected from event deposit thickness); in grey samples from site 2; in bold, plant remains.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name  | Type | Original Depth1 (mm) | Depth 2(mm) | Age yr BP | Age Error  |
| Hz2007-2-LG-4.9m | Sediment\* | 4988 | 5081 | 4820 | 35 |
| *Event P* | *Sedimentary event* | *4760* | *4853* |  |  |
| *Event O* | *Sedimentary event* | *4560* | *4653* |  |  |
| Hz2007-2-LG-4.9m | Sediment\* | 4213 | 4306 | 4390 | 40 |
| *Event N* | *Sedimentary event* | *4210* | *4303* |  |  |
| **Hz2007-2-LG-4.9m** | **Plant remains** | **4190** | **4298** | **2860** | **30** |
| *Event M* | *Sedimentary event* | *4090* | *4198* |  |  |
| Hz2007-2-LG-4.9m | Sediment\* | 3988 | 4126 | 4230 | 30 |
| Hz2007-2-LG-4.9m | Sediment\* | 3723 | 3866 | 3570 | 35 |
| *Event L* | *Sedimentary event* | *3720* | *3858* |  |  |
| Hz2007-2-LG-4.9m | Sediments | 3688 | 3856 | 3430 | 35 |
| *Event K* | *Sedimentary event* | *3470* | *3638* |  |  |
| Hz2007-1-LG-4.5m | Sediment\* | 4655 | 3605 | 3460 | 30 |
| **Hz2007-2-LG-4.9m** | **Plant remains** | **3325** | **3503** | **2000** | **25** |
| Hz2007-1-LG-4.5m | Sediment\* | 4508 | 3499 | 3270 | 30 |
| Hz2007-1-LG-4.5m | Sediment\* | 4363 | 3388 | 3150 | 25 |
| *Event J* | *Sedimentary event* | *3200* | *3378* |  |  |
| **Hz2007-1-LG-4.5m** | **Plant remains** | **4240** | **3305** | **1760** | **30** |
| Hz2007-1-LG-4.5m | Sediment | 4198 | 3276 | 2530 | 35 |
| **Hz2007-1-LG-4.5m** | **Plant remains** | **4130** | **3232** | **1595** | **30** |
| Hz2007-1-LG-4.5m | Sediment | 4128 | 3230 | 2740 | 30 |
| *Event I* | *Sedimentary event* | *3050* | *3228* |  |  |
| Hz2007-1-LG-4.5m | Sediment | 4075 | 3206 | 2530 | 30 |
| Hz2007-1-LG-4.5m | Sediment | 4023 | 3137 | 2620 | 25 |
| **Hz2007-2-LG-4.9m** | **Plant remains** | **2915** | **3103** | **1635** | **20** |
| **Hz2007-1-LG-4.5m** | **Plant remains** | **3995** | **3078** | **1600** | **25** |
| Hz2007-1-LG-4.5m | Sediment\* | 3923 | 3025 | 2800 | 30 |
| Hz2007-2-LG-4.9m | Sediment | 2833 | 3023 | 2690 | 35 |
| *Event H* | *Sedimentary event* | *2822* | *3012* |  |  |
| Hz2007-1-LG-4.5m | Sediment | 3868 | 2996 | 2950 | 35 |
| **Hz2007-1-LG-4.5m** | **Plant remains** | **3860** | **2993** | **1560** | **30** |
| Hz2007-1-LG-4.5m | Sediment | 3758 | 2934 | 2760 | 30 |
| Hz2007-1-LG-4.5m | Sediment | 3723 | 2914 | 2910 | 35 |
| Hz2007-1-LG-4.5m | Sediment | 3628 | 2854 | 2880 | 35 |
| Hz2007-1-LG-4.5m | Sediment | 3523 | 2783 | 2830 | 35 |
| *Event G* | *Sedimentary event* | *2822* | *2790* |  |  |
| Hz2007-1-LG-4.5m | Sediment\* | 3413 | 2727 | 2710 | 30 |
| **Hz2007-2-LG-4.9m** | **Plant remains** | **2255** | **2464** | **1420** | **30** |
| Hz2007-2-LG-4.9m | Sediment | 2238 | 2447 | 2220 | 30 |
| *Event F2* | *Sedimentary event* | *2210* | *2388* |  |  |
| **Hz2007-1-LG-4.5m** | **Plant remains** | **2820** | **2356** | **1340** | **35** |
| Hz2007-1-LG-4.5m | Sediment\* | 2803 | 2342 | 2090 | 30 |
| *Event F1* | *Sedimentary event* | *2210* | *2248* |  |  |
| Hz2007-1-LG-4.5m | Sediment\* | 2593 | 2114 | 1950 | 30 |
| **Hz2007-2-LG-4.9m** | **Plant remains** | **2255** | **2011** | **1160** | **20** |
| *Event E2* | *Sedimentary event* | *2238* | *1996* |  |  |
| *Event E1* | *Sedimentary event* | *2210* | *1952* |  |  |
| Hz2007-1-LG-4.5m | Sediment | 2403 | 1937 | 1950 | 25 |
| **Hz2007-1-LG-4.5m** | **Plant remains** | **2400** | **1935** | **985** | **25** |
| Hz2007-2-LG-4.9m | Sediments | 1498 | 1694 | 1870 | 30 |
| Hz2007-1-LG-4.5m | Sediment | 2103 | 1672 | 1780 | 40 |
| *Event D2* | *Sedimentary event* | *1478* | *1670* |  |  |
| Hz2007-1-LG-4.5m | Sediment | 2023 | 1636 | 1680 | 30 |
| Hz2007-2-LG-4.9m | Sediments | 1413 | 1624 | 1950 | 35 |
| *Event D1* | *Sedimentary event* | *1478* | *1614* |  |  |
| Hz2007-2-LG-4.9m | Sediments | 1358 | 1602 | 1870 | 35 |
| Hz2007-1-LG-4.5m | Sediment | 1942 | 1600 | 750 | 25 |
| **Hz2007-1-LG-4.5m** | **Plant remains** | **1570** | **1367** | **235** | **30** |
| **Hz2007-1-LG-4.5m** | **Plant remains** | **1530** | **1342** | **475** | **30** |
| Hz2007-1-LG-4.5m | Sediment | 1493 | 1319 | 1310 | 30 |
| Hz2007-1-LG-4.5m | Sediment | 1408 | 1269 | 1230 | 30 |
| *Event C* | *Sedimentary event* | *840* | *1247* |  |  |
| Hz2007-2-LG-4.9m | Sediment | 839 | 1246 | 1620 | 35 |
| **Hz2007-2-LG-4.9m** | **Plant remains** | **825** | **1237** | **260** | **25** |
| **Hz2007-1-LG-4.5m** | **Plant remains** | **1170** | **973** | **340** | **30** |
| Hz2007-1-LG-4.5m | Sediment | 1113 | 890 | 1070 | 30 |
| **Hz2007-1-LG-4.5m** | **Plant remains** | **1095** | **864** | **230** | **30** |
| Hz2007-2-LG-4.9m | Sediment | 558 | 863 | 1550 | 30 |
| *Event B* | *Sedimentary event* | *825* | *841* |  |  |
| Hz2007-1-LG-4.5m | Sediment | 978 | 745 | 1130 | 30 |
| Hz2007-2-LG-4.9m | Sediment | 413 | 679 | 1440 | 30 |
| Hz2007-2-LG-4.9m | Sediment | 338 | 578 | 1390 | 35 |
| Hz2007-2-LG-4.9m | Sediment | 308 | 514 | 1950 | 35 |
| Hz2007-2-LG-4.9m | Sediment | 273 | 438 | 1410 | 35 |
| *Event A2* | *Sedimentary event* | *270* | *432* |  |  |
| Hz2007-2-LG-4.9m | Sediment | 839 | 426 | 1260 | 30 |
| Hz2007-1-LG-4.5m | Sediment | 653 | 390 | 1750 | 30 |
| Hz2007-1-LG-4.5m | Sediment | 548 | 325 | 1200 | 25 |
| Hz2007-1-LG-4.5m | Sediment | 513 | 291 | 1190 | 25 |
| Hz2007-2-LG-4.9m | Sediment | 148 | 289 | 1320 | 35 |
| *Event A1* | *Sedimentary event* | *145* | *285* |  |  |
| Hz2007-1-LG-4.5m | Sediment | 484 | 264 | 1110 | 40 |
| Hz2007-2-LG-4.9m | Sediment | 126 | 261 | 1180 | 30 |
| Hz2007-2-LG-4.9m | Sediment | 26 | 173 | 1540 | 30 |
| Hz2007-1-LG-4.5m | Sediment | 221 | 150 | 1050 | 30 |
| *Event Z* | *Sedimentary event* |  | *149* |  |  |
| Hz2007-1-LG-4.5m | Sediment | 113 | 95 | 770 | 40 |
| Hz2007-1-LG-4.5m | Sediment | 68 | 67 | 850 | 35 |
| Hz2007-1-LG-4.5m | Sediment | 28 | 38 | 655 | 30 |

1: Sedimentary Event depth taken in Hz2007-2-LG-4.9m ; 2 : Depth in Composite core corrected from event deposit thickness and top core (mm) ; \* : bulk sample used in the age model