TABLE DR1.

| Kallo depth in m | C % | I % | S(I) % | K % | >K< |
|---|---|---|---|---|---|
| 376.0 | 10 | 26 | 54 | 10 | 3 |
| 376.5 | 5 | 22 | 65 | 8 | 2.7 |
| 377.5 | 5 | 19 | 72 | 4 | 2.2 |
| 379.5" | 0 | 20 | 75 | 5 | - |
| 379.5 | 0 | 21 | 74 | 5 | - |
| 380.5 | 1 | 12 | 85 | 2 | 3 |
| 381.8 | 2 | 41 | 52 | 5 | 2.2 |
| 383.0 | 3 | 26 | 66 | 5 | 2.3 |
| 384.5 | 1 | 17 | 80 | 2 | 2.2 |
| 385.0 | 2 | 8 | 87 | 3 | - |
| 385.8 | 2 | 39 | 54 | 5 | 2 |
| 386.5 | 1 | 15 | 79 | 5 | 2.2 |
| 388.0 | 7 | 40 | 40 | 13 | 3.5 |
| 389.0 | 2 | 28 | 65 | 5 | 2.5 |
| 390.0 | 3 | 7 | 72 | 18 | 5 |
| 390.5 | 3 | 11 | 68 | 18 | 6 |
| 393.0 | 4 | 13 | 47 | 36 | 6 |
| 393.5 | 3 | 23 | 62 | 12 | 3.5 |
| 394.0 | 5 | 38 | 37 | 20 | 2.2 |
| 396.0 | 4 | 28 | 55 | 13 | 2.5 |
| 397.5 | 5 | 38 | 45 | 12 | 3 |
| 397.5" | 5 | 38 | 42 | 15 | 3 |
| 398.0 | 3 | 28 | 59 | 10 | 3.5 |
| 400.0 | 6 | 25 | 53 | 16 | 2.6 |
| 401.0 | 3 | 13 | 76 | 8 | 2.5 |
| 402.2 | 3 | 9 | 88 | 0 | - |
| 403.5 | 4 | 12 | 84 | 0 | - |

TABLE DR2.

| Doel depth in m | C % | I % | S(I) % | K % | >K< |
|---|---|---|---|---|---|
| 442.53 | 2 | 15 | 76 | 7 | 4.5 |
| 443.73 | 2 | 10 | 84 | 4 | 3.5 |
| 444.01 | 1 | 9 | 87 | 3 | 3.5 |
| 445.00 | 1 | 16 | 80 | 3 | 3.0 |
| 445.94 | 1 | 10 | 88 | 1 | 3.0 |
| 447.01 | 3 | 9 | 85 | 3 | 3.0 |
| 448.07 | 1 | 8 | 90 | 1 | 3.0 |
| 449.33 | 2 | 11 | 86 | 1 | 2.7 |
| 451.23 | 1 | 8 | 90 | 1 | 2.5 |
| 452.10 | 1 | 9 | 88 | 2 | 2.0 |
| 453.00 | 1 | 14 | 82 | 3 | 3.0 |
| 453.50 | 1 | 10 | 85 | 4 | 2.5 |
| 453.98 | * | 8 | 89 | 3 | 3.0 |
| 454.87 | 1 | 9 | 88 | 2 | 2.0 |
| 455.15 | * | 6 | 93 | 1 | 2.5 |
| 455.49 | 1 | 8 | 90 | 1 | 2.5 |
| 455.85 | * | 8 | 90 | 2 | 2.5 |
| 456.08 | 1 | 8 | 90 | 1 | 3.0 |
| 456.75 | 1 | 8 | 90 | 1 | 2.5 |
| 457.61 | 6 | 5 | 57 | 32 | 4.5 |
| 458.81 | 1 | 5 | 92 | 2 | 2.5 |
| 459.59 | 1 | 10 | 87 | 2 | 2.5 |
| 460.60 | 1 | 30 | 54 | 14 | 2.7 |
| 461.58 | 4 | 25 | 62 | 9 | 3.0 |
| 462.65 | 3 | 24 | 60 | 13 | 3.2 |
| 463.62 | 2 | 15 | 74 | 9 | 3.0 |
| 464.72 | 2 | 13 | 77 | 8 | 3.2 |
| 465.78 | 2 | 14 | 77 | 7 | 3.2 |
| 466.59 | 1 | 15 | 74 | 10 | 3.2 |
| 467.60 | 1 | 13 | 79 | 7 | 2.7 |
| 468.30 | 1 | 8 | 90 | 1 | 2.5 |
| 468.78 | 1 | 9 | 90 | * | 2.5 |
| 469.39 | * | 7 | 93 | * | 2.5 |
| 470.02 | 1 | 7 | 92 | * | * |

| TABLE DR3 | | | | |
|---|---|---|---|---|
| Samples depth in m | TOC % | Sulfur % | isotopic values ‰ | $CaCO_3$ % |
| K 376 | 0.5300 | 0 | -26.27 | 0 |
| K 376.5 | 0.3100 | 0 | -26.27 | 0 |
| K 377.5 | 3.7400 | 0 | -21.61 | 41.89 |
| K 378 | 1.1150 | 0 | -24.37 | 58.20 |
| K 378.5 | 2.3000 | 0 | -25.12 | 88.50 |
| K 379 | 0.2242 | 0 | -23.79 | 36.30 |
| K 380 | 0.2300 | 0 | -24.04 | 0 |
| K 380.4 | 2.2700 | 0 | -23.46 | 0 |
| K 380.5 | 1.9400 | 0 | -23.76 | 0 |
| K 380.7 | 1.1900 | 0 | -23.66 | 2.50 |
| K 381 | 0.7200 | 0 | -23.71 | 0 |
| K 381.6 | 0.6200 | 0 | -24.33 | 0 |
| K 381.8 | 0.3900 | 0 | -24.56 | 0 |
| K 384 | 0.0700 | 0 | -25.97 | 6.00 |
| K 384.5 | 0.0840 | 0.2992 | -25.15 | - |
| K 385.2 | 1.3530 | 0 | -26.44 | 29.30 |
| K 385.6 | 1.7810 | 0 | -27.00 | 51.75 |
| K 385.8 | 1.2350 | 0 | -23.77 | 0 |
| K 386 | 0.8500 | 0 | -23.14 | 15.20 |
| K 386.3 | 0.9500 | 0 | -23.12 | 3.20 |
| K 386.7 | 0.1455 | 0 | -23.53 | 0 |
| K 387 | 0.0500 | 0 | -24.46 | - |
| K 387.8 | 1.0400 | 0 | -24.75 | 0 |
| K 388.2 | 2.2300 | 0 | -25.03 | 0 |
| K 388.6 | 3.1800 | 0 | -25.22 | 0 |
| K 389 | 2.3100 | 0 | -24.98 | 0 |
| K 389.15 | 1.4900 | 0 | -25.24 | 0 |
| K 389.5 | 3.3600 | 0 | -25.39 | 0 |
| K 389.9 | 0.1300 | 0 | -26.68 | 0 |
| K 390.5 | 0.9464 | 0.03605 | -26.68 | - |
| K 393.5 | 0.9936 | 0 | -27.14 | - |
| K 394 | 2.6441 | 0 | -27.25 | - |
| K 395 | 0.1800 | 0 | -27.22 | 0 |
| K 397.5 | 0.9755 | 3.6170 | -28.23 | 0 |
| K 398 | 0.8822 | 2.2140 | -28.67 | - |
| K 398.5 | 1.2000 | 0 | -28.83 | 0 |
| K 399 | 1.1800 | 0 | -29.09 | 0 |
| K 400.5 | 0.8800 | 0 | -28.28 | 0 |
| K 401 | 0.9100 | 0 | -27.91 | 1.60 |
| K 402 | 0.7000 | 0 | -27.89 | 0 |
| K 403 | 0.2000 | 0 | -25.80 | 3.00 |
| K 404.5 | 0.1310 | 0 | -25.41 | 0.50 |

| TABLE DR4 | | | | |
|---|---|---|---|---|
| Samples depth in m | TOC % | Sulfur % | isotopic values ‰ | $CaCO_3$ % |
| DL443.73 | 0.9842 | 0.2581 | -25.74 | 0 |
| DL443.89 | 1.0800 | 0.5232 | -24.31 | - |
| DL444.01 | 0.5067 | 0.7504 | -23.00 | 0 |
| DL444.18 | 0.2708 | 0.5046 | -24.30 | - |
| DL445 | 0.2417 | 0.4407 | -22.77 | 0 |
| DL445.5 | 0.3022 | 0.6235 | -22.88 | - |
| DL446.28 | 0.2139 | 0.6269 | -23.45 | - |
| DL447.32 | 0.1490 | 0.5330 | -23.77 | - |
| DL447.62 | 0.2309 | 1.2410 | -24.05 | - |
| DL448.07 | 0.2417 | 0.3423 | -24.42 | 0 |
| DL448.44 | 0.1927 | 0.2559 | -24.48 | - |
| DL449 | 0.0533 | 0.1877 | -23.60 | - |
| DL449.75 | 0.1196 | 0.1505 | -23.69 | - |
| DL450.73 | 0.1289 | 0.0885 | -23.67 | - |
| DL451.58 | 0.1596 | 0.2140 | -23.54 | 2.20 |
| DL452.59 | 1.1800 | 1.5720 | -24.10 | - |
| DL453 | 0.0200 | 0.1839 | -25.42 | 0 |
| DL453.27 | 0.0686 | 0.5861 | -25.33 | - |
| DL453.5 | 2.1070 | 0.3597 | -24.97 | 0.4 |
| DL453.6 | 5.2560 | 0.7295 | -24.85 | - |
| DL453.70 | 1.3880 | 0.3692 | -25.03 | - |
| DL455 | 2.7910 | 3.7560 | -25.19 | - |
| DL455.15 | 0.1643 | 0.7582 | -25.05 | 0 |
| DL455.86 | 2.9490 | 1.2480 | -24.70 | 0 |
| DL456.99 | 28.1000 | 12.1200 | -24.29 | - |
| DL456.08 | 0.2931 | 0.6430 | -24.90 | 0 |
| DL456.95 | 18.1100 | 16.4700 | -24.63 | - |
| DL457.33 | 1.4340 | 1.3670 | -24.85 | - |
| DL457.45 | 2.3620 | 1.8510 | -24.48 | - |
| DL457.61 | 0.1457 | 0.1083 | -24.56 | 0 |
| DL457.8 | 0.1855 | 0.3664 | -24.60 | - |
| DL458.81 | 0.0728 | 0.4338 | -24.98 | 0 |
| DL459.22 | 0.0667 | 0.0837 | -24.82 | - |
| DL459.78 | 0.0707 | 0.0679 | -24.97 | - |
| DL460.28 | 0.1372 | 0.1156 | -25.16 | - |
| DL460.6 | 0.3076 | 0.1076 | -25.67 | 0.4 |
| DL461.08 | 0.3178 | 2.3980 | -26.30 | - |
| DL461.58 | 0.8954 | 2.4370 | -27.51 | 0 |
| DL462.28 | 0.6599 | 0.7659 | -28.02 | - |
| DL462.65 | 0.7431 | 1.5220 | -28.08 | 0 |
| DL463.04 | 0.7841 | 1.3290 | -28.51 | - |
| DL463.17 | 0.9677 | 2.4330 | -28.04 | - |
| DL463.27 | 3.1980 | 4.7680 | -29.18 | - |
| DL463.62 | 1.0850 | 3.8580 | -28.54 | 0 |
| DL464.22 | 1.5570 | 2.1580 | -28.75 | 0 |
| DL464.4 | 1.2050 | 1.9320 | -28.22 | - |
| DL464.71 | 1.2600 | 1.9150 | -29.01 | 6.70 |
| DL464.73 | 0.4122 | 0.8010 | -27.89 | 19.40 |
| DL465.05 | 1.3802 | 0 | -28.46 | 4.50 |
| DL465.78 | 1.4610 | 2.4920 | -28.57 | 1.70 |
| DL466.1 | 1.2220 | 1.7750 | -28.08 | 0 |
| DL466.97 | 0.9269 | 1.1790 | -28.25 | 2.10 |
| DL467.59 | 0.8818 | 0.6242 | -27.76 | 16.40 |
| DL467.61 | 0.9294 | 0.8673 | -28.18 | 8.6 |
| DL468.54 | 0.8818 | 0.9568 | -27.41 | 0 |
| DL468.78 | 0.3784 | 0.6363 | -26.07 | 0 |
| DL470.02 | 0.1696 | 0.1523 | -24.13 | 2.20 |
| DL471.47 | 0.0471 | 0.1070 | -23.08 | 2.40 |
| DL471.80 | 0.1473 | 0.2205 | -24.01 | 2.40 |
| DL472.80 | 0.1340 | 0.2663 | -23.78 | 6.30 |

TABLE DR5

| Kallo borehole samples (depth in m) | | % total palynomorphs | | | | number of specimens counted | % total pollen + spores | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Pollen | Spores | Pollen + Spores | Aquatic palynomorphs | | Bisaccate pollen | Palmae | Myriaceae | Taxodiaceae | Restionaceae | Normapolles | Juglandaceae | Tiliaceae | Caryas | ? Caryas | small pollen |
| 404.00 | | 41.5 | 3 | 44.4 | 55.6 | 270 | 20.8 | 1.6 | 0.8 | 14.1 | 0 | 1.6 | 1.6 | 0.8 | 0.8 | 5.9 | 10.7 |
| 402.50 | | 37.0 | 2.4 | 39.4 | 60.6 | 330 | 16.9 | 1.5 | 0 | 11.5 | 2.3 | 0 | 4.5 | 0.7 | 0.7 | 6.0 | 18.0 |
| 402.00 | | 32.7 | 4.4 | 37.1 | 62.9 | 620 | 10.8 | 4.3 | 9.9 | 6.5 | 6.5 | 7.2 | 11.7 | 0.4 | 0.4 | 5.1 | 19.2 |
| 401.50 | KP 1a | 50.3 | 7.3 | 57.6 | 42.4 | 330 | 14.7 | 5.8 | 2.1 | 8.3 | 3.1 | 2.5 | 10.5 | 0 | 0.5 | 3.6 | 21.1 |
| 401.00 | | 47.2 | 8.3 | 55.6 | 44.4 | 360 | 7.5 | 5.0 | 0 | 6.5 | 3.5 | 2.0 | 10.5 | 0.5 | 1.5 | 4.5 | 18.8 |
| 400.50 | | 40.0 | 5.1 | 45.1 | 54.9 | 510 | 7.8 | 4.7 | 0 | 7.3 | 6.5 | 2.6 | 7.3 | 0 | 0.8 | 12.9 | 15.7 |
| 399.80 | | 33.6 | 6.4 | 40.0 | 60.0 | 360 | 6.9 | 8.3 | 0 | 7.6 | 4.1 | 3.4 | 11.8 | 0 | 1.4 | 8.3 | 19.3 |
| 399.50 | | 27.3 | 4.4 | 31.7 | 68.3 | 520 | 4.8 | 9.0 | 0 | 7.8 | 4.8 | 2.4 | 12.1 | 1.2 | 0 | 8.4 | 18.3 |
| 399.00 | KP 1b | 23.4 | 1.6 | 25.0 | 75.0 | 820 | 5.0 | 7.5 | 0 | 4.5 | 6.5 | 0.5 | 11.0 | 1.5 | 1.5 | 12.0 | 19.3 |
| 398.50 | | 21.8 | 1.3 | 23.1 | 76.9 | 780 | 2.7 | 7.7 | 0 | 4.9 | 5.5 | 3.5 | 8.3 | 2.0 | 2.2 | 11.6 | 15.9 |
| 397.50 | | 18.2 | 3.0 | 21.2 | 78.8 | 660 | 3.6 | 7.8 | 0 | 7.1 | 7.1 | 0 | 17.9 | 0 | 0.7 | 11.4 | 25.0 |
| 396.00 | | 18.3 | 0.8 | 19.1 | 80.9 | 600 | 2.6 | 0.8 | 2.5 | 4.3 | 1.7 | 1.6 | 8.6 | 2.5 | 0.8 | 12.1 | 27.3 |
| 395.00 | | 14.3 | 0.7 | 15.0 | 85.0 | 700 | 2.0 | 7.0 | 5.0 | 3.0 | 0 | 2.0 | 8.0 | 5.0 | 1.0 | 10.0 | 29.0 |
| 393.00 | | 11.0 | 1.0 | 12.0 | 88.0 | 500 | 1.6 | 11.6 | 0 | 0 | 0 | 0 | 19.9 | 0 | 0 | 9.9 | 40.0 |
| 390.00 | KP 2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 389.90 | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 389.50 | | 66.6 | 12.0 | 78.8 | 21.4 | 350 | 1.8 | 1.1 | 7.6 | 2.9 | 7.2 | 0.7 | 7.6 | 0.4 | 1.5 | 11.7 | 15.5 |
| 389.15 | | 75.2 | 17.8 | 93.0 | 7.0 | 290 | 1.8 | 3.0 | 7.0 | 5.5 | 2.9 | 3.4 | 5.1 | 0.7 | 0.7 | 9.9 | 13.8 |
| 389.10 | | 78.0 | 10.0 | 88.0 | 12.0 | 250 | 1.8 | 3.2 | 5.9 | 5.4 | 5.0 | 4.1 | 5.8 | 0.5 | 1.4 | 10.1 | 15.9 |
| 389.00 | | 75.7 | 10.5 | 86.2 | 13.8 | 325 | 2.8 | 4.7 | 7.1 | 8.2 | 3.9 | 3.8 | 6.7 | 2.8 | 1.8 | 7.3 | 15.4 |
| 388.80 | | 70.0 | 22.5 | 92.5 | 7.5 | 200 | 2.7 | 7.5 | 2.0 | 8.6 | 2.7 | 2.0 | 3.2 | 0 | 1.0 | 4.7 | 15.8 |
| 388.60 | | 56.8 | 36.4 | 93.2 | 6.8 | 220 | 1.5 | 2.0 | 1.5 | 3.4 | 4.8 | 2.5 | 3.4 | 1.0 | 2.0 | 6.9 | 14.4 |
| 388.60* | KP 3 | ? | ? | 100 | 0 | 184 | ? | ? | ? | ? | ? | ? | ? | ? | ? | ? | ? |
| 388.50 | | 58.2 | 7.9 | 66.1 | 33.9 | 280 | 2.7 | 4.3 | 3.0 | 7.5 | 5.4 | 2.0 | 6.4 | 1.0 | 2.7 | 14.2 | 14.7 |
| 388.40 | | 59.3 | 29.6 | 88.9 | 11.1 | 270 | 1.6 | 4.1 | 3.2 | 4.9 | 5.0 | 2.0 | 4.9 | 0.8 | 0.8 | 8.3 | 11.9 |
| 388.30 | | 81.5 | 11.0 | 92.5 | 7.5 | 200 | 1.6 | 5.3 | 3.1 | 3.1 | 5.4 | 1.0 | 3.7 | 1.0 | 1.0 | 4.7 | 7.3 |
| 388.20 | | 83.3 | 11.1 | 94.4 | 5.6 | 180 | 1.2 | 4.6 | 2.4 | 3.6 | 6.0 | 2.4 | 4.1 | 1.2 | 4.7 | 14.7 | 6.8 |
| 388.20* | | 67.8 | 32.2 | 100 | 0 | 329 | ? | ? | ? | ? | ? | ? | ? | ? | ? | ? | ? |
| 388.00 | | 86.3 | 8.5 | 94.8 | 5.2 | 211 | 1.0 | 2.0 | 3.5 | 4.0 | 5.0 | 3.0 | 5.5 | 0 | 2.5 | 11.0 | 15.4 |
| 387.80 | | 39.0 | 4.8 | 43.8 | 56.2 | 400 | 4.0 | 4.0 | 0 | 10.8 | 8.6 | 0.6 | 5.7 | 1.2 | 1.1 | 7.4 | 16.0 |
| 386.50 | | 70.4 | 6.5 | 76.9 | 23.1 | 260 | 2.5 | 4.5 | 0 | 11.0 | 6.5 | 0.5 | 8.0 | 1.0 | 1.5 | 8.0 | 21.9 |
| 386.30 | KP 4a | 72.5 | 6.7 | 79.2 | 20.8 | 240 | 1.1 | 3.1 | 4.8 | 4.2 | 3.1 | 2.1 | 5.7 | 1.0 | 1.6 | 8.5 | 15.5 |
| 386.00 | | 65.9 | 6.8 | 72.7 | 27.3 | 440 | 2.5 | 3.7 | 6.0 | 7.2 | 5.0 | 3.3 | 8.0 | 0.9 | 1.6 | 7.2 | 16.0 |
| 385.80 | | 52.5 | 6.6 | 59.1 | 40.9 | 440 | 1.9 | 7.0 | 6.1 | 7.6 | 3.8 | 4.5 | 7.7 | 4.7 | 1.5 | 6.5 | 16.9 |
| 385.60 | KP 4b | 26.5 | 5.8 | 32.3 | 67.7 | 480 | 1.9 | 12.8 | 1.3 | 20.6 | 4.5 | 2.4 | 5.1 | 3.1 | 0.6 | 6.4 | 11.8 |
| 385.20 | | 24.5 | 3.8 | 28.3 | 71.7 | 600 | 1.2 | 4.7 | 6.9 | 11.7 | 4.7 | 6.4 | 4.7 | 2.4 | 1.2 | 7.6 | 15.0 |
| 382.00 | KP 4c | 66.6 | 5.9 | 72.4 | 27.6 | 290 | 2.4 | 3.8 | 3.7 | 7.6 | 4.3 | 1.5 | 8.0 | 2.8 | 5.7 | 8.1 | 7.8 |
| 381.80 | | 77.1 | 5.7 | 82.8 | 17.2 | 350 | 3.4 | 6.2 | 5.9 | 4.8 | 3.4 | 1.8 | 12.0 | 3.7 | 3.4 | 8.2 | 18.7 |
| 381.60 | | 69.4 | 4.8 | 74.2 | 25.8 | 310 | 2.6 | 7.8 | 6.5 | 7.4 | 4.3 | 2.0 | 9.5 | 3.8 | 1.7 | 5.6 | 22.7 |
| 381.30 | | 63.0 | 3.7 | 66.7 | 33.3 | 270 | 2.2 | 6.6 | 7.1 | 6.0 | 2.2 | 1.7 | 13.3 | 2.2 | 1.6 | 7.7 | 21.3 |
| 381.20 | | 60.0 | 3.6 | 63.6 | 33.4 | 330 | 2.9 | 5.7 | 4.7 | 5.2 | 4.8 | 3.2 | 10.0 | 2.7 | 0.9 | 8.0 | 19.3 |
| 381.00 | | 64.9 | 4.6 | 69.6 | 30.4 | 345 | 3.3 | 6.3 | 7.9 | 4.5 | 8.3 | 2.9 | 10.0 | 2.8 | 1.7 | 8.3 | 15.9 |
| 380.90 | | 70.3 | 3.9 | 74.2 | 25.8 | 310 | 2.6 | 8.2 | 3.9 | 5.2 | 5.2 | 2.2 | 7.4 | 2.5 | 1.3 | 10.8 | 17.0 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 380.70 | | 70.4 | 5.6 | 76.1 | 23.9 | 355 | 1.8 | 5.5 | 3.7 | 5.5 | 3.7 | 2.2 | 8.9 | 2.2 | 3.1 | 7.4 | 23.0 |
| 380.50 | | 72.2 | 9.3 | 81.5 | 18.5 | 270 | 2.3 | 8.7 | 7.3 | 4.5 | 3.6 | 3.7 | 9.1 | 3.1 | 0.9 | 5.0 | 17.8 |
| 380.40 | | 69.7 | 6.8 | 76.5 | 23.5 | 340 | 2.7 | 11.8 | 5.1 | 7.7 | 3.0 | 6.9 | 13.0 | 2.2 | 1.9 | 3.8 | 20.2 |
| 380.00 | | 75.3 | 9.7 | 85.0 | 15.0 | 300 | 1.9 | 6.3 | 5.0 | 6.3 | 1.9 | 3.2 | 15.3 | 1.6 | 1.6 | 5.5 | 27.4 |
| 379.00 | | 59.0 | 5.2 | 64.3 | 35.7 | 210 | 7.4 | 7.3 | 5.9 | 7.4 | 3.7 | 2.1 | 8.9 | 2.8 | 2.2 | 7.4 | 17.7 |
| 378.50 | KP 4d | 63.1 | 6.0 | 69.0 | 31.0 | 420 | 3.4 | 6.9 | 5.5 | 6.8 | 6.9 | 2.0 | 6.9 | 3.4 | 1.0 | 6.9 | 15.1 |
| 378.00 | | 66.4 | 8.6 | 75.0 | 25.0 | 280 | 8.1 | 4.7 | 6.0 | 7.1 | 7.1 | 2.3 | 7.1 | 3.2 | 1.9 | 5.2 | 17.6 |
| 377.50 | KP4e | 48.1 | 3.8 | 51.9 | 48.1 | 520 | 5.9 | 7.4 | 8.2 | 4.8 | 3.0 | 0 | 11.0 | 0.8 | 3.7 | 8.1 | 19.1 |
| 377.35 | | 43.0 | 5.5 | 48.5 | 51.5 | 330 | 14.4 | 6.2 | 3.6 | 10.0 | 2.5 | 1.2 | 11.2 | 2.4 | 3.1 | 5.0 | 19.9 |
| 376.50 | | 43.8 | 3.1 | 46.9 | 53.1 | 320 | 26.6 | 8.7 | 6.2 | 11.9 | 3.3 | 1.4 | 5.3 | 3.9 | 3.3 | 4.0 | 10.7 |
| 376.00 | | 38.7 | 6.5 | 45.2 | 54.8 | 310 | 21.4 | 5.7 | 2.1 | 8.5 | 3.6 | 0.7 | 4.3 | 3.5 | 2.1 | 2.8 | 10.0 |

TABLE DR6

| Percentages of dinoflagellate cysts and green algae in the Paleocene/Eocene boundary section of the Kallo borehole | Gra Sd | TIENEN FORMATION | | | | | | | | | | | | | Mont-Héribu Clay | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DB 1 | | DB2 | DB 3 | | DB 4 | | | | DB 5 | | DB 6 | | | | |
| | Kallo 403.5 | Kallo 402 | Kallo 398,5 | Kallo 395 | Kallo 389.15 | Kallo 388.3 | Kallo 386,5 | Kallo 385,6 | Kallo 384 | Kallo 381,8 | Kallo 380 | Kallo 379 | Kallo 378 | Kallo 377,5 | Kallo 377.35 | Kallo 376.5 | Kallo 376 |
| *Alisocysta margarita* | 1.9 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *Apectodinium homomorphum* | - | A | A | 13.1 | - | - | R | 1.9 | 5.9 | 33.7 | 60.2 | 38 | 27.7 | 43.3 | - | - | <1 |
| *Apectodinium* spp. | - | R | F | 70.2 | - | - | R | 23.4 | 26.3 | 4.8 | 7.8 | 25 | 8.0 | 9.9 | - | - | - |
| *Areoligera senonensis* | 66.2 | - | - | - | - | - | - | - | - | 3.8 | - | - | - | - | - | - | - |
| *Botryococcus* spp. | - | - | - | - | - | - | - | 17.1 | 3.4 | 4.8 | 19.5 | 31 | - | 2.7 | - | - | - |
| *Cerodinium wardenense* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | F |
| *Cribroperidinium tenuitabulatum* | - | - | - | - | - | - | - | - | - | - | - | - | 2.7 | - | - | - | - |
| *Cyclopsiella* spp. | - | - | - | - | - | - | - | - | 0.9 | - | - | - | - | - | - | - | - |
| *Deflandrea oebisfeldensis* | - | - | - | - | - | - | - | - | - | 1.0 | - | - | - | - | - | <1 | - |
| *Diphyes colligerum* | x | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4 | 1 |
| *Eocladopyxis peniculata* | - | - | - | - | - | - | R | - | - | 1.9 | - | - | 4.5 | 20.8 | - | - | - |
| foraminiferal testlinings | - | - | - | - | - | - | - | - | - | - | 4.7 | - | - | - | ? | ? | ? |
| *Glaphyrocysta divaricata* | - | - | - | 8.8 | - | - | - | - | - | 1.0 | 0.8 | - | - | - | - | - | - |
| *Glaphyrocysta ordinata* | - | - | - | - | - | - | - | - | - | 1.0 | - | - | - | - | - | - | - |
| *Glaphyrocysta pastielsii* | - | - | - | 6.1 | - | - | - | - | - | 1.0 | - | - | - | - | - | - | - |
| *Glaphyrocysta* ? *reticulosa* | x | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 |
| *Homotryblium* spp. | - | - | - | - | - | - | F | 0.6 | 0.9 | 9.6 | 0.8 | - | - | - | - | - | - |
| *Hystrichosphaeridium tubiferum* | 5.3 | - | - | - | - | - | - | - | - | - | - | - | - | - | 5 | 4 | 2 |
| *Fibrocysta vectense* | - | - | - | - | - | - | - | - | - | - | 0.8 | - | - | 0.9 | - | - | - |
| *Lingulodinium machaerophorum* | - | - | - | - | - | - | - | - | - | 13.5 | - | 6 | - | - | 4 | 2 | <1 |
| *Melitasphaer.* cf. *pseudorecurvatum* | x | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3 | <1 |
| *Muratodinium fimbriatum* | - | - | - | 1.8 | - | - | - | - | - | 1.9 | - | - | 57.2 | 21.6 | - | - | - |
| *Nematosphaeropsis* spp. | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | <1 | <1 |
| *Operculodinium centrocarpum* | - | - | R | - | - | - | - | - | - | 1.9 | - | - | - | - | 2 | <1 | 1 |
| *Palambages* spp. | x | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *Paralecaniella indentata* | - | - | - | - | - | - | - | - | 40.7 | 2.9 | 3.1 | - | - | - | - | - | - |
| *Paucisphaeridium inversibuccinum* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | <1 | <1 |
| *Pediastrum* spp. | - | - | - | - | - | - | R | 57.0 | 17.0 | 2.9 | - | - | - | - | - | <1 | - |
| *Pseudomasia trinema* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 | <1 |
| *Phthanoperidinium crenulatum* | 1.3 | - | - | - | - | - | - | - | 0.9 | - | - | - | - | - | - | - | - |
| *Polysphaeridium zoharyi* | - | - | - | - | - | - | F | - | - | 10.6 | 2.4 | - | - | - | - | - | - |
| *Spiniferites* spp. | 23.8 | - | R | - | - | - | R | - | 4.2 | 3.9 | - | - | - | 0.9 | 24 | 40 | 18 |
| *Surculosphaeridium oceaniae* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 12 | 3 | 9 |
| species diversity | 9 | ? | ? | 5 | 0 | 0 | 7 | 5 | 9 | 17 | 9 | 4 | 5 | 7 | *19* | *50* | *48* |
| number of specimens counted | 149 | A | A | 114 | 0 | 0 | 13 | 158 | 118 | 104 | 128 | 16 | 112 | 111 | 50 | 500 | 400 |

TABLE DR7

| Percentages of dinoflagellate cysts and green algae in the Paleocene/Eocene boundary section of the Doel borehole | TIENEN FORMATION | | | | | | | | | Zoute | Mont-Héribu Clay | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DB1 | | DB2 | DB3 | | DB4 | | | | Silt | sandy | clay |
| | Doel 468.70 | Doel 465.05 | Doel 462.05 | Doel 459.70 | Doel 455.75 | Doel 450.88 | Doel 447.02 | Doel 445.60 | Doel 445,04 | Doel 444,09 | Doel 443,58 | Doel 442.49 |
| *Adnatosphaeridium multispinosum* | - | - | 0.7 | - | - | - | - | - | - | - | - | - |
| *Amphorosphaeridium ? multispinosum* | x | - | - | - | - | 0.6 | 1.1 | 0.9 | 0.5 | x | - | x |
| *Apectodinium augustum* | 24.7 | 6.4 | 3.7 | - | - | x | - | - | - | - | - | - |
| *Apectodinium homomorphum* | 38.7 | 58.7 | 19.2 | - | 99.0 | 2.8 | 24.0 | 22.7 | 28.9 | 21.3 | 4.2 | x |
| *Apectodinium paniculatum* | 25.8 | - | 23.7 | - | - | - | - | - | - | - | - | - |
| *Apectodinium parvum* | 5.7 | 32.9 | 30.3 | - | - | 5.0 | 1.1 | 2.8 | 3.7 | 6.2 | 7.8 | - |
| *Areoligera senonensis* | x | - | - | - | - | 3.4 | 3.9 | 2.3 | 2.6 | - | - | - |
| *Botryococcus* spp. | - | - | - | - | - | - | 3.3 | 1.4 | 3.9 | 0.9 | - | 0.8 |
| *Cordosphaeridium fibrospinosum* | - | - | - | - | - | 0.6 | - | - | - | x | - | 0.8 |
| *Cordosphaeridium gracile* | - | - | - | - | - | - | 0.6 | - | 1.4 | x | - | x |
| *Cordosphaeridium inodes* | x | - | 1.5 | - | - | 2.2 | - | - | - | - | 1.4 | 1.6 |
| *Cribroperidinium tenuitabulatum* | x | - | - | - | - | 1.1 | 5.0 | 1.9 | 2.6 | - | 1.9 | - |
| *Cyclopsiella* spp. | - | - | - | - | - | - | 0.6 | - | - | 0.5 | - | - |
| *Dapsilidinium pastielsii* | - | - | - | - | - | - | - | - | - | - | - | 0.8 |
| *Deflandrea denticulata* | - | - | - | - | - | - | 1.6 | - | - | - | x | - |
| *Deflandrea oebisfeldensis* | - | - | - | - | - | - | - | x | x | x | 2.8 | 0.8 |
| *Dinopterygium cladoides* | - | - | - | - | - | - | - | 1.9 | x | - | 0.5 | 0.8 |
| *Diphyes colligerum* | 1.4 | 1.2 | x | - | - | - | 1.6 | x | 2.6 | 2.4 | 3.8 | 0.8 |
| foraminiferal testlining | - | - | - | - | - | 0.6 | - | 1.9 | 0.5 | 0.9 | - | - |
| *Glaphyrocysta divaricata* | - | - | x | - | - | 1.6 | - | x | x | 3.8 | 6.6 | x |
| *Glaphyrocysta ordinata* | - | - | - | - | - | - | - | - | - | - | 3.3 | - |
| *Glaphyrocysta pastielsii* | - | x | 5.2 | - | - | 2.2 | - | x | - | 1.4 | 0.5 | x |
| *Glaphyrocysta ? reticulosa* | 1.5 | - | - | - | - | - | - | - | - | - | - | - |
| *Homotryblium* spp. | - | - | - | - | - | 70.9 | 24.9 | 27.8 | 12.9 | - | 1.4 | - |
| *Hystrichokolpoma granulata* | 1.4 | - | 0.7 | - | - | - | - | - | 1.4 | - | - | - |
| *Hystrichosphaeridium tubiferum* | x | - | - | - | - | - | 0.6 | - | x | 6.2 | 6.1 | x |
| *Impagidinium* spp. | - | - | - | - | - | - | - | - | - | x | 0.5 | - |
| *Fibrocysta vectense* | x | - | - | - | - | - | - | - | - | - | - | - |
| *Lejeunecysta hyalina* | 0.5 | - | - | - | - | - | - | - | 0.5 | x | 0.5 | - |
| *Lingulodinium machaerophorum* | - | - | - | - | - | 0.6 | 8.8 | 18.6 | 13.9 | 4.3 | 1.4 | x |
| *Melitasphaer.* cf *pseudorecurvatum* | - | - | - | - | - | - | - | - | x | - | 0.5 | 6.2 |
| *Muratodinium fimbriatum* | 1.4 | x | 12.6 | - | - | 8.4 | - | 1.9 | 3.7 | - | 0.5 | x |
| *Nematosphaeropsis* spp. | - | - | - | - | - | - | 0.6 | - | - | - | 0.5 | x |
| *Operculodinium centrocarpum* | x | - | - | - | - | - | 2.2 | 1.4 | 1.5 | - | 1.4 | 1.6 |
| *Palaeocystodinium golzowenze* | - | x | - | - | - | - | - | - | - | - | - | x |
| *Paralecaniella indentata* | - | - | - | - | - | - | 1.1 | 1.9 | 2.6 | - | 0.9 | - |
| *Pediastrum* spp. | x | 0.6 | 2.2 | - | 1.0 | - | 1.6 | 2.3 | 5.7 | 25.1 | 2.8 | - |
| *Phthanoperidinium crenulatum* | - | - | - | - | - | 0.6 | 0.6 | 0.9 | - | - | - | x |
| *Polysphaeridium zoharyi* | - | - | - | - | - | 1.7 | 5.5 | 6.5 | 6.7 | - | 0.9 | - |
| *Rottnestia borussica* | - | - | - | - | - | - | - | - | - | - | x | x |
| *Spinidinium* spp. | - | - | - | - | - | - | - | - | - | - | - | x |
| *Spiniferites* spp. | - | - | - | - | - | 2.2 | 6.1 | 3.7 | 7.2 | 26.5 | 50.0 | 83.7 |
| *Tectatodinium pellitum* | - | - | - | - | - | - | - | - | - | - | x | x |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Thalassiphora delicata* | - | - | - | - | - | - | - | - | - | 0.5 | 0.5 | x |
| *Thalassiphora pelagica* | - | - | - | - | - | - | - | - | - | - | - | 2.3 |
| *Turbiosphaera galatea* | - | - | - | - | - | - | - | - | - | - | x | - |
| *Wetzeliella astra* | - | - | - | - | - | - | - | - | - | - | - | x |
| species diversity | 17 | 8 | 13 | - | 2 | 14 | 23 | 21 | 24 | 19 | 28 | 8 |
| number of specimens counted | 194 | 155 | 135 | - | 70 | 179 | 181 | 216 | 194 | 211 | 212 | 129 |