

## Appendix 3

### A3.4 Calibrated data

#### House data set

All filter times are 50-100-50-100 in seconds. <LOD is replaced with 0.

| Duration | SAMPLE    | depth       | Sn    | Ag   | Sr     | Rb     | As    | Pb      | Zn     | Cu     | Fe       |
|----------|-----------|-------------|-------|------|--------|--------|-------|---------|--------|--------|----------|
| 300      | 1936-1-2  | depth cm 2  | 0.00  | 0.00 | 237.72 | 130.60 | 6.87  | 32.38   | 107.68 | 115.67 | 24687.74 |
| 300      | 1937-1-2  | depth cm 2  | 0.00  | 0.00 | 538.98 | 83.37  | 11.04 | 112.22  | 156.34 | 173.70 | 26216.81 |
| 300      | 1937-1-4  | depth cm 4  | 0.00  | 0.00 | 220.63 | 130.40 | 7.61  | 116.05  | 127.87 | 189.85 | 22651.55 |
| 300      | 1937-1-6  | depth cm 6  | 0.00  | 0.00 | 294.44 | 103.90 | 6.57  | 96.78   | 103.64 | 177.26 | 24173.05 |
| 300      | 1937-1-8  | depth cm 8  | 0.00  | 0.00 | 235.89 | 100.98 | 0.00  | 89.29   | 120.68 | 179.59 | 34859.98 |
| 300      | 1937-1-10 | depth cm 10 | 0.00  | 0.00 | 307.09 | 117.60 | 0.00  | 152.19  | 100.55 | 207.06 | 22107.01 |
| 300      | 1937-2-12 | depth cm 12 | 0.00  | 0.00 | 85.86  | 130.30 | 8.51  | 132.54  | 95.06  | 259.09 | 19849.21 |
| 300      | 1937-2-14 | depth cm 14 | 12.02 | 0.00 | 197.58 | 84.13  | 0.00  | 307.93  | 122.54 | 547.25 | 24340.26 |
| 300      | 1937-2-16 | depth cm 16 | 12.11 | 0.00 | 173.54 | 87.49  | 0.00  | 420.33  | 115.66 | 478.40 | 27604.08 |
| 300      | 1937-2-18 | depth cm 18 | 65.65 | 0.00 | 461.77 | 71.06  | 0.00  | 412.75  | 103.71 | 369.16 | 27893.29 |
| 300      | 1937-2-20 | depth cm 20 | 0.00  | 0.00 | 129.74 | 68.40  | 0.00  | 372.13  | 97.55  | 337.06 | 23147.31 |
| 300      | 1937-2-22 | depth cm 22 | 0.00  | 0.00 | 199.03 | 79.26  | 0.00  | 1984.13 | 140.49 | 175.17 | 22542.35 |
| 300      | 1937-2-26 | depth cm 26 | 9.03  | 0.00 | 224.58 | 85.60  | 22.65 | 258.95  | 92.44  | 181.18 | 21124.60 |
| 300.83   | 1936-2-22 | depth cm 22 | 0.00  | 0.00 | 250.61 | 103.67 | 6.85  | 6.52    | 90.33  | 33.81  | 26424.02 |
| 301.55   | 1936-2-16 | depth cm 16 | 0.00  | 0.00 | 247.03 | 117.87 | 5.51  | 10.88   | 81.07  | 49.82  | 21112.47 |
| 300.37   | 1936-2-18 | depth cm 18 | 0.00  | 0.00 | 216.69 | 86.51  | 7.68  | 5.68    | 136.04 | 58.77  | 31946.89 |
| 300.6    | 1936-2-20 | depth cm 20 | 0.00  | 0.00 | 505.81 | 88.71  | 6.08  | 11.71   | 85.77  | 38.51  | 23876.09 |
| 301.86   | 1936-2-24 | depth cm 24 | 0.00  | 0.00 | 268.64 | 96.21  | 8.02  | 9.06    | 129.91 | 41.51  | 33397.50 |
| 300.09   | 1936-2-26 | depth cm 26 | 0.00  | 0.00 | 270.07 | 90.84  | 8.20  | 8.89    | 93.77  | 32.01  | 26755.96 |
| 301.18   | 1936-1-2  | depth cm 2  | 0.00  | 0.00 | 235.35 | 125.29 | 0.00  | 52.52   | 166.94 | 159.10 | 32520.75 |
| 300.44   | 1936-2-14 | depth cm 14 | 0.00  | 0.00 | 431.16 | 102.61 | 0.00  | 13.23   | 95.26  | 56.35  | 22393.78 |
| 300.27   | 1936-1-12 | depth cm 12 | 0.00  | 0.00 | 318.09 | 109.40 | 4.62  | 19.76   | 105.97 | 58.36  | 22770.53 |

### Appendix 3

| Duration | SAMPLE    | depth              | Sn    | Ag   | Sr     | Rb     | As    | Pb      | Zn     | Cu     | Fe       |
|----------|-----------|--------------------|-------|------|--------|--------|-------|---------|--------|--------|----------|
| 300.12   | 1936-1-10 | depth cm 10        | 0.00  | 0.00 | 289.09 | 109.77 | 0.00  | 19.30   | 132.26 | 148.11 | 27141.95 |
| 301.3    | 1936-1-8  | depth cm 8         | 0.00  | 0.00 | 229.33 | 107.87 | 3.93  | 16.85   | 92.30  | 98.26  | 20396.32 |
| 301.35   | 1936-1-6  | depth cm 6         | 0.00  | 0.00 | 252.03 | 119.60 | 4.41  | 13.03   | 98.66  | 103.41 | 21670.25 |
| 301.57   | 1936-1-4  | depth cm 4         | 0.00  | 0.00 | 283.44 | 115.19 | 6.45  | 29.81   | 133.76 | 117.59 | 26773.60 |
| 301.55   | 1937-5-28 | depth cm 28        | 13.63 | 0.00 | 241.60 | 103.01 | 0.00  | 132.87  | 98.29  | 120.73 | 22176.35 |
| 300.36   | 1937-2-12 | depth cm 12        | 0.00  | 0.00 | 198.04 | 131.88 | 0.00  | 314.34  | 142.44 | 539.99 | 26316.45 |
| 300.05   | 1937-2-16 | depth cm16         | 15.39 | 4.79 | 229.33 | 102.71 | 0.00  | 496.43  | 173.52 | 783.74 | 34045.98 |
| 301.89   | 1937-1-4  | depth cm 4         | 0.00  | 0.00 | 224.42 | 100.08 | 0.00  | 158.44  | 150.47 | 276.61 | 25990.42 |
| 300.19   | 1937-1-8  | depth cm 8         | 8.74  | 0.00 | 233.77 | 100.15 | 0.00  | 219.23  | 205.65 | 451.88 | 33582.26 |
| 300.61   | 1937-2-20 | depth cm 20        | 25.24 | 0.00 | 238.90 | 90.36  | 0.00  | 815.11  | 177.54 | 645.22 | 34537.01 |
| 301.92   | 1937-3-22 | depth cm 22 (24.5) | 9.99  | 4.12 | 226.52 | 84.91  | 0.00  | 1925.24 | 214.73 | 299.42 | 33158.56 |
| 301.71   | 1937-4-26 | depth cm 26        | 58.44 | 0.00 | 238.93 | 103.64 | 20.22 | 997.47  | 144.16 | 635.16 | 28727.39 |
| 300      | 1938-1-2  | depth cm 2         | 0.00  | 0.00 | 263.24 | 79.19  | 0.00  | 97.55   | 466.69 | 303.55 | 22503.66 |
| 300      | 1938-1-4  | depth cm 4         | 0.00  | 0.00 | 237.49 | 126.68 | 8.54  | 41.82   | 199.16 | 146.21 | 17271.97 |
| 300      | 1938-1-6  | depth cm 6         | 0.00  | 0.00 | 163.73 | 90.53  | 0.00  | 142.74  | 283.35 | 346.33 | 23612.59 |
| 301.66   | 1938-1-10 | depth cm 10        | 0.00  | 0.00 | 287.41 | 115.31 | 5.29  | 13.31   | 152.97 | 98.67  | 22810.01 |
| 300.07   | 1938-1-8  | depth cm 8         | 12.47 | 0.00 | 226.56 | 97.06  | 9.01  | 91.39   | 438.74 | 437.85 | 36597.79 |
| 301.91   | 1938-1-6  | depth cm 6         | 10.16 | 5.68 | 233.32 | 89.95  | 9.93  | 260.20  | 685.99 | 870.09 | 38682.66 |
| 300.45   | 1938-2-28 | depth cm 28        | 0.00  | 0.00 | 301.47 | 113.29 | 6.41  | 8.83    | 163.89 | 23.33  | 24254.59 |
| 300.38   | 1938-2-18 | depth cm 18        | 0.00  | 0.00 | 246.87 | 94.63  | 5.60  | 8.24    | 50.66  | 22.60  | 20682.96 |
| 301.9    | 1938-2-24 | depth cm 24        | 0.00  | 0.00 | 265.20 | 108.20 | 5.43  | 4.90    | 72.89  | 19.08  | 20129.15 |
| 301.55   | 1938-2-16 | depth cm 16        | 0.00  | 0.00 | 304.90 | 108.03 | 4.67  | 7.52    | 69.99  | 28.44  | 21295.93 |
| 300.01   | 1938-2-12 | depth cm 12        | 0.00  | 0.00 | 245.47 | 100.36 | 0.00  | 9.30    | 61.85  | 15.65  | 15798.67 |
| 301.92   | 1938-2-14 | depth cm 14        | 0.00  | 0.00 | 322.29 | 113.12 | 4.62  | 5.45    | 58.12  | 27.82  | 17930.36 |
| 300      | 1943-1-2  | depth cm 2         | 7.79  | 0.00 | 200.49 | 79.04  | 10.74 | 205.70  | 126.16 | 281.00 | 24019.85 |
| 300      | 1943-1-4  | depth cm 4         | 0.00  | 0.00 | 252.00 | 66.26  | 11.48 | 157.95  | 103.12 | 230.72 | 31169.14 |
| 300      | 1943-1-6  | depth cm 6         | 0.00  | 0.00 | 256.14 | 92.21  | 6.84  | 33.95   | 97.55  | 134.57 | 25779.22 |
| 300      | 1942-1-2  | depth cm 2         | 0.00  | 0.00 | 301.61 | 64.15  | 0.00  | 293.82  | 138.06 | 159.22 | 20638.79 |

### Appendix 3

| Duration | SAMPLE    | depth                    | Sn   | Ag   | Sr     | Rb     | As    | Pb     | Zn     | Cu     | Fe       |
|----------|-----------|--------------------------|------|------|--------|--------|-------|--------|--------|--------|----------|
| 300      | 1942-1-4  | depth cm 4               | 9.53 | 0.00 | 234.68 | 85.09  | 12.02 | 185.19 | 226.15 | 429.38 | 25524.82 |
| 300      | 1942-1-6  | depth cm 6               | 0.00 | 0.00 | 181.01 | 71.72  | 9.68  | 80.84  | 183.29 | 524.57 | 27493.05 |
| 300      | 1942-2-8  | depth cm 8 gravelly lens | 0.00 | 0.00 | 676.57 | 117.75 | 5.86  | 35.45  | 72.45  | 152.20 | 26755.97 |
| 300      | 1942-2-10 | depth cm 10 humic lens   | 0.00 | 0.00 | 324.09 | 66.71  | 12.22 | 9.80   | 83.21  | 232.25 | 34370.95 |
| 301.39   | 1939-3-24 | depth cm 24              | 0.00 | 0.00 | 285.94 | 109.22 | 0.00  | 11.11  | 44.22  | 34.24  | 24458.50 |
| 300.49   | 1939-3-28 | depth cm 28              | 0.00 | 0.00 | 296.13 | 110.28 | 9.89  | 9.21   | 91.01  | 65.81  | 35528.96 |
| 302.04   | 1939-3-20 | depth cm 20              | 0.00 | 0.00 | 278.57 | 113.50 | 4.27  | 8.36   | 55.38  | 35.43  | 23583.04 |
| 300.74   | 1939-3-18 | depth cm 18              | 0.00 | 0.00 | 281.37 | 108.88 | 7.75  | 5.76   | 70.40  | 37.40  | 24531.32 |
| 300.19   | 1939-3-14 | depth cm 14              | 0.00 | 0.00 | 288.95 | 122.43 | 5.92  | 7.08   | 70.06  | 47.81  | 21222.73 |
| 300.28   | 1939-3-16 | depth cm 16              | 0.00 | 0.00 | 259.70 | 131.64 | 4.17  | 8.62   | 60.96  | 33.54  | 22747.60 |
| 302.01   | 1942-3-16 | depth cm 16              | 0.00 | 0.00 | 274.81 | 98.96  | 5.70  | 8.76   | 93.08  | 15.03  | 35785.58 |
| 302.04   | 1942-3-14 | depth cm 14              | 0.00 | 0.00 | 357.01 | 121.31 | 6.62  | 9.71   | 152.46 | 64.36  | 36431.73 |
| 300.72   | 1942-3-24 | depth cm 24              | 0.00 | 0.00 | 260.71 | 107.34 | 8.50  | 7.42   | 99.70  | 20.70  | 34111.51 |
| 302.18   | 1942-3-18 | depth cm 18              | 0.00 | 0.00 | 308.45 | 110.25 | 4.45  | 8.47   | 85.24  | 17.29  | 27364.30 |
| 300.6    | 1942-3-28 | depth cm 28              | 0.00 | 0.00 | 263.11 | 139.36 | 9.37  | 11.07  | 104.97 | 0.00   | 34551.77 |
| 300.13   | 1942-2-12 | depth cm 12              | 0.00 | 0.00 | 223.58 | 108.86 | 8.80  | 18.99  | 140.92 | 221.37 | 38970.94 |
| 300.01   | 1942-3-20 | depth cm 20              | 0.00 | 0.00 | 200.16 | 134.88 | 7.07  | 7.26   | 79.90  | 0.00   | 29491.46 |
| 301.77   | 1939-2-4  | depth cm 4               | 0.00 | 0.00 | 215.95 | 114.23 | 5.71  | 15.77  | 106.74 | 187.23 | 26417.40 |
| 301.97   | 1939-2-8  | depth cm 8               | 0.00 | 0.00 | 274.11 | 106.51 | 5.43  | 11.49  | 115.81 | 166.71 | 25371.14 |
| 301.37   | 1939-2-10 | depth cm 10              | 0.00 | 0.00 | 279.57 | 128.51 | 4.34  | 13.70  | 111.18 | 133.34 | 27358.24 |
| 300.61   | 1939-2-6  | depth cm 6               | 0.00 | 0.00 | 216.16 | 99.09  | 7.35  | 15.88  | 145.23 | 313.17 | 35917.72 |
| 300.71   | 1939-1-2  | depth cm 2               | 9.69 | 0.00 | 231.51 | 87.07  | 9.22  | 34.64  | 328.73 | 761.53 | 44831.43 |
| 301.83   | 1943-2-8  | depth cm 8               | 0.00 | 0.00 | 197.93 | 120.08 | 6.28  | 17.19  | 104.10 | 84.06  | 31634.89 |
| 302.02   | 1943-2-10 | depth cm 10              | 0.00 | 0.00 | 191.00 | 79.64  | 8.11  | 7.27   | 103.41 | 38.29  | 31514.21 |
| 300.18   | 1943-3-14 | depth cm 14              | 0.00 | 0.00 | 354.40 | 97.64  | 5.76  | 7.81   | 99.39  | 24.53  | 38919.84 |
| 300.52   | 1943-3-16 | depth cm 16              | 0.00 | 0.00 | 277.33 | 97.98  | 7.04  | 10.46  | 82.69  | 0.00   | 28935.37 |
| 300.63   | 1943-3-18 | depth cm 18              | 0.00 | 0.00 | 209.70 | 102.31 | 7.50  | 5.08   | 87.55  | 0.00   | 29606.95 |
| 300.99   | 1943-3-20 | depth cm 20              | 0.00 | 0.00 | 237.62 | 134.79 | 5.01  | 6.75   | 74.75  | 19.48  | 28208.30 |

### Appendix 3

| Duration | SAMPLE    | depth       | Sn      | Ag    | Sr     | Rb     | As    | Pb    | Zn     | Cu     | Fe       |
|----------|-----------|-------------|---------|-------|--------|--------|-------|-------|--------|--------|----------|
| 300.07   | 1943-3-28 | depth cm 28 | 0.00    | 0.00  | 194.13 | 104.12 | 7.69  | 7.58  | 66.97  | 14.08  | 26909.89 |
| 302.02   | 1943-3-24 | depth cm 24 | 0.00    | 0.00  | 219.09 | 132.66 | 7.73  | 13.80 | 85.33  | 16.85  | 26424.08 |
| 300.83   | 1943-2-12 | depth cm 12 | 0.00    | 0.00  | 376.52 | 101.27 | 7.65  | 6.03  | 90.54  | 28.48  | 36781.88 |
| 301.36   | 1940-2-26 | depth cm 26 | 33.96   | 0.00  | 307.69 | 113.75 | 5.99  | 9.04  | 86.42  | 46.94  | 28971.96 |
| 300.5    | 1940-1-22 | depth cm 22 | 16.77   | 0.00  | 236.46 | 118.08 | 5.47  | 11.71 | 94.56  | 63.47  | 31167.94 |
| 301.7    | 1940-1-14 | depth cm 14 | 22.34   | 8.33  | 244.31 | 101.52 | 10.38 | 18.43 | 142.03 | 240.55 | 51964.60 |
| 300.42   | 1940-2-24 | depth cm 24 | 36.22   | 0.00  | 242.30 | 117.83 | 6.87  | 13.50 | 94.66  | 39.08  | 28280.54 |
| 301.76   | 1940-2-28 | depth cm 28 | 11.91   | 0.00  | 332.02 | 126.98 | 4.69  | 8.42  | 53.36  | 19.72  | 20375.29 |
| 300.99   | 1940-1-18 | depth cm 18 | 2612.07 | 0.00  | 284.22 | 108.21 | 10.22 | 14.45 | 133.02 | 183.26 | 44208.23 |
| 301.88   | 1940-1-20 | depth cm 20 | 10.14   | 0.00  | 253.29 | 114.64 | 8.96  | 12.19 | 96.44  | 97.28  | 36792.33 |
| 300.4    | 1940-1-16 | depth cm 16 | 32.02   | 39.27 | 263.32 | 102.17 | 12.03 | 11.83 | 104.71 | 159.32 | 45371.63 |
| 302.1    | 1940-1-4  | depth cm 4  | 22.04   | 0.00  | 261.79 | 103.64 | 7.02  | 19.51 | 147.98 | 155.77 | 37512.47 |
| 300.95   | 1940-1-8  | depth cm 8  | 14.21   | 0.00  | 245.14 | 173.85 | 6.84  | 12.60 | 121.05 | 157.26 | 31719.58 |
| 300.84   | 1940-1-12 | depth cm 12 | 31.42   | 0.00  | 222.86 | 103.59 | 13.04 | 34.70 | 118.64 | 188.32 | 46960.83 |
| 302.05   | 1940-1-10 | depth cm 10 | 19.65   | 0.00  | 283.08 | 124.38 | 10.00 | 11.00 | 131.27 | 178.98 | 50104.91 |
| 302.09   | 1940-1A-2 | depth cm 2  | 19.07   | 0.00  | 261.58 | 104.43 | 8.55  | 23.63 | 191.16 | 209.58 | 43356.16 |
| 301.79   | 1940-1-6  | depth cm 6  | 13.45   | 0.00  | 276.41 | 126.07 | 7.53  | 19.59 | 110.96 | 150.70 | 34792.58 |
| 300.87   | 1934-1-2  | depth cm 2  | 0.00    | 0.00  | 243.72 | 117.07 | 5.35  | 17.86 | 149.29 | 54.60  | 32594.76 |
| 301      | 1934-1-4  | depth cm 4  | 0.00    | 0.00  | 216.22 | 122.50 | 6.13  | 29.87 | 170.01 | 70.01  | 37193.52 |
| 301.98   | 1934-3-28 | depth cm 28 | 0.00    | 0.00  | 280.42 | 100.81 | 7.78  | 0.00  | 76.48  | 26.03  | 32725.80 |
| 300.84   | 1934-3-18 | depth cm 18 | 0.00    | 0.00  | 285.35 | 119.01 | 8.01  | 0.00  | 72.70  | 37.20  | 29931.82 |
| 300.63   | 1934-3-16 | depth cm 16 | 0.00    | 0.00  | 218.79 | 118.10 | 3.60  | 8.25  | 79.82  | 40.93  | 24603.44 |
| 301.45   | 1934-3-24 | depth cm 24 | 0.00    | 0.00  | 266.87 | 112.10 | 0.00  | 6.33  | 51.86  | 24.07  | 24366.59 |
| 301.37   | 1934-2-6  | depth cm 6  | 0.00    | 0.00  | 277.60 | 112.89 | 7.40  | 10.76 | 92.43  | 112.77 | 22888.27 |
| 302.09   | 1934-2-8  | depth cm 8  | 0.00    | 0.00  | 251.15 | 113.72 | 4.93  | 11.39 | 111.40 | 225.09 | 21958.97 |
| 300.96   | 1934-2-10 | depth cm 10 | 0.00    | 0.00  | 226.05 | 108.05 | 3.72  | 10.75 | 88.22  | 233.69 | 20528.42 |
| 301.59   | 1934-3-12 | depth cm 12 | 0.00    | 0.00  | 239.68 | 108.45 | 0.00  | 7.58  | 90.33  | 54.69  | 26460.89 |
| 301.43   | 1934-3-20 | depth cm 20 | 0.00    | 0.00  | 252.49 | 132.83 | 7.31  | 9.28  | 106.09 | 46.23  | 34456.54 |

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|        |           |             |      |      |        |        |      |      |        |       |          |
|--------|-----------|-------------|------|------|--------|--------|------|------|--------|-------|----------|
| 301.39 | 1934-3-14 | depth cm 14 | 0.00 | 0.00 | 279.46 | 118.93 | 6.21 | 4.70 | 101.46 | 47.03 | 25320.55 |
|--------|-----------|-------------|------|------|--------|--------|------|------|--------|-------|----------|

| Duration | SAMPLE    | depth       | Mn      | Cr    | V     | Ti      | Ca       | K        | Al       | P        | Si       | S       |
|----------|-----------|-------------|---------|-------|-------|---------|----------|----------|----------|----------|----------|---------|
| 300      | 1936-1-2  | depth cm 2  | 442.43  | 28.49 | 44.75 | 2753.62 | 6547.74  | 14719.63 | 23277.57 | 5511.96  | 14454.20 | 750.21  |
| 300      | 1937-1-2  | depth cm 2  | 643.35  | 23.17 | 51.77 | 2998.48 | 10102.95 | 12880.43 | 15275.33 | 5368.52  | 11606.96 | 415.32  |
| 300      | 1937-1-4  | depth cm 4  | 609.40  | 24.66 | 43.30 | 2847.41 | 8305.15  | 18149.90 | 25400.91 | 6960.97  | 17031.07 | 490.94  |
| 300      | 1937-1-6  | depth cm 6  | 537.43  | 28.65 | 51.35 | 3168.69 | 11542.89 | 13521.75 | 26070.97 | 9024.86  | 16790.35 | 602.59  |
| 300      | 1937-1-8  | depth cm 8  | 1186.16 | 33.38 | 53.41 | 1818.89 | 22076.62 | 12474.39 | 24395.01 | 21946.81 | 13887.14 | 638.63  |
| 300      | 1937-1-10 | depth cm 10 | 972.70  | 24.38 | 47.03 | 2926.62 | 15750.20 | 13291.95 | 15732.93 | 6603.98  | 12304.00 | 507.68  |
| 300      | 1937-2-12 | depth cm 12 | 1137.65 | 33.88 | 50.11 | 3797.22 | 11962.83 | 15228.21 | 20402.53 | 9127.54  | 14607.19 | 622.47  |
| 300      | 1937-2-14 | depth cm 14 | 1500.21 | 24.14 | 58.06 | 2288.87 | 11925.70 | 10694.78 | 18356.25 | 8874.61  | 13150.45 | 704.51  |
| 300      | 1937-2-16 | depth cm 16 | 1077.76 | 27.77 | 54.62 | 3050.82 | 14380.92 | 12653.99 | 19308.11 | 8857.12  | 15060.76 | 695.63  |
| 300      | 1937-2-18 | depth cm 18 | 957.56  | 33.15 | 64.07 | 2599.00 | 14924.40 | 12047.34 | 22566.44 | 12665.90 | 16407.59 | 902.70  |
| 300      | 1937-2-20 | depth cm 20 | 736.15  | 37.15 | 52.75 | 2496.18 | 11899.59 | 12464.11 | 20557.07 | 10923.92 | 18927.90 | 790.61  |
| 300      | 1937-2-22 | depth cm 22 | 1389.23 | 22.18 | 47.86 | 2385.60 | 14934.09 | 10816.04 | 13415.87 | 7423.11  | 17945.84 | 694.24  |
| 300      | 1937-2-26 | depth cm 26 | 478.65  | 22.13 | 45.87 | 2531.38 | 12739.12 | 12860.28 | 20898.97 | 8961.99  | 17147.41 | 789.05  |
| 300.83   | 1936-2-22 | depth cm 22 | 563.92  | 20.25 | 67.66 | 3830.15 | 13637.43 | 17541.65 | 43073.43 | 12280.39 | 20619.21 | 484.38  |
| 301.55   | 1936-2-16 | depth cm 16 | 529.49  | 21.49 | 54.11 | 3267.40 | 11539.60 | 18590.03 | 40119.60 | 12487.38 | 20478.45 | 759.10  |
| 300.37   | 1936-2-18 | depth cm 18 | 943.50  | 25.70 | 70.35 | 5298.09 | 17561.19 | 16281.02 | 44528.06 | 13182.97 | 19681.76 | 701.18  |
| 300.6    | 1936-2-20 | depth cm 20 | 631.34  | 22.20 | 60.22 | 4445.63 | 12996.04 | 18053.53 | 42369.73 | 12828.56 | 21038.56 | 569.82  |
| 301.86   | 1936-2-24 | depth cm 24 | 508.53  | 53.28 | 87.04 | 3336.85 | 8348.90  | 20160.55 | 55459.50 | 13834.97 | 18019.08 | 602.22  |
| 300.09   | 1936-2-26 | depth cm 26 | 623.11  | 21.29 | 63.98 | 3599.70 | 11829.13 | 18399.37 | 46578.34 | 13629.96 | 19191.82 | 512.84  |
| 301.18   | 1936-1-2  | depth cm 2  | 567.93  | 42.16 | 84.54 | 5259.88 | 10591.94 | 20590.57 | 41788.73 | 9568.87  | 20359.22 | 1013.29 |
| 300.44   | 1936-2-14 | depth cm 14 | 451.70  | 31.66 | 52.46 | 3691.22 | 13100.44 | 18732.84 | 41640.64 | 11425.67 | 20140.63 | 774.12  |
| 300.27   | 1936-1-12 | depth cm 12 | 463.30  | 30.52 | 58.37 | 4384.96 | 14111.08 | 18568.68 | 39201.98 | 8139.44  | 20842.56 | 826.75  |
| 300.12   | 1936-1-10 | depth cm 10 | 396.77  | 40.71 | 70.68 | 5183.73 | 10252.35 | 18128.52 | 41866.47 | 9176.91  | 19814.40 | 1179.17 |
| 301.3    | 1936-1-8  | depth cm 8  | 354.52  | 29.04 | 56.60 | 4088.73 | 8324.77  | 18329.06 | 38710.62 | 8339.65  | 23021.63 | 963.85  |
| 301.35   | 1936-1-6  | depth cm 6  | 298.45  | 30.04 | 56.56 | 4229.61 | 9858.33  | 18993.95 | 39855.11 | 7740.60  | 20779.55 | 1130.29 |

### Appendix 3

| Duration | SAMPLE    | depth                    | Mn      | Cr    | V     | Ti      | Ca       | K        | Al       | P        | Si       | S       |
|----------|-----------|--------------------------|---------|-------|-------|---------|----------|----------|----------|----------|----------|---------|
| 301.57   | 1936-1-4  | depth cm 4               | 428.42  | 34.71 | 76.19 | 4796.98 | 10584.50 | 18148.33 | 37715.08 | 8813.78  | 20049.98 | 1182.38 |
| 301.55   | 1937-5-28 | depth cm 28              | 335.32  | 23.98 | 53.04 | 3296.53 | 10515.46 | 17890.07 | 40858.84 | 12999.74 | 22338.05 | 1064.04 |
| 300.36   | 1937-2-12 | depth cm 12              | 711.69  | 30.63 | 65.57 | 3364.86 | 15835.60 | 16033.56 | 31477.97 | 12243.50 | 22588.94 | 908.67  |
| 300.05   | 1937-2-16 | depth cm16               | 1054.42 | 34.96 | 75.96 | 3839.57 | 18592.80 | 16048.90 | 36139.71 | 15288.62 | 22867.70 | 1135.89 |
| 301.89   | 1937-1-4  | depth cm 4               | 477.23  | 29.27 | 71.30 | 4865.51 | 14007.19 | 16071.39 | 36816.08 | 10300.01 | 23515.58 | 756.13  |
| 300.19   | 1937-1-8  | depth cm 8               | 755.47  | 40.93 | 78.31 | 4357.48 | 14783.93 | 16125.91 | 38207.20 | 13242.26 | 22436.10 | 1003.66 |
| 300.61   | 1937-2-20 | depth cm 20              | 4931.96 | 38.26 | 81.11 | 3204.97 | 17866.04 | 15745.15 | 32709.94 | 14754.75 | 22833.71 | 1047.61 |
| 301.92   | 1937-3-22 | depth cm 22 (24.5)       | 3643.26 | 38.86 | 73.29 | 2744.28 | 18506.96 | 13272.07 | 26269.68 | 12833.44 | 33938.14 | 1033.58 |
| 301.71   | 1937-4-26 | depth cm 26              | 587.15  | 35.12 | 60.09 | 3270.13 | 15980.18 | 15388.41 | 33550.63 | 15105.92 | 21440.27 | 1793.39 |
| 300      | 1938-1-2  | depth cm 2               | 622.34  | 20.86 | 37.55 | 2378.19 | 10993.71 | 11928.56 | 16933.41 | 7724.65  | 12190.58 | 597.86  |
| 300      | 1938-1-4  | depth cm 4               | 366.66  | 28.91 | 34.67 | 2383.63 | 10453.39 | 20087.20 | 25937.76 | 4211.85  | 18172.94 | 417.39  |
| 300      | 1938-1-6  | depth cm 6               | 577.90  | 25.07 | 51.53 | 3131.84 | 13215.36 | 12615.70 | 20804.71 | 6385.13  | 13339.00 | 650.90  |
| 301.66   | 1938-1-10 | depth cm 10              | 367.27  | 34.89 | 66.90 | 3966.04 | 15338.88 | 19039.04 | 39865.67 | 7746.02  | 20730.14 | 952.40  |
| 300.07   | 1938-1-8  | depth cm 8               | 492.46  | 40.36 | 82.36 | 4264.89 | 16756.05 | 15968.61 | 35622.87 | 11550.84 | 18935.17 | 1137.32 |
| 301.91   | 1938-1-6  | depth cm 6               | 750.67  | 43.00 | 73.95 | 4087.79 | 21995.34 | 14848.62 | 33673.99 | 14066.27 | 18538.56 | 1094.32 |
| 300.45   | 1938-2-28 | depth cm 28              | 715.88  | 23.89 | 67.91 | 3005.19 | 13462.34 | 17143.35 | 41544.14 | 17805.42 | 19192.32 | 599.54  |
| 300.38   | 1938-2-18 | depth cm 18              | 399.79  | 24.09 | 58.53 | 4461.06 | 13367.66 | 16335.64 | 40612.51 | 13883.45 | 21390.70 | 597.77  |
| 301.9    | 1938-2-24 | depth cm 24              | 424.73  | 18.03 | 42.80 | 2639.05 | 13665.20 | 17467.04 | 41290.77 | 14892.44 | 21419.58 | 545.39  |
| 301.55   | 1938-2-16 | depth cm 16              | 343.62  | 23.42 | 53.84 | 3348.92 | 11658.14 | 18964.74 | 45050.59 | 16009.61 | 20792.66 | 790.33  |
| 300.01   | 1938-2-12 | depth cm 12              | 249.44  | 20.33 | 49.30 | 2876.56 | 11109.27 | 18179.86 | 41517.09 | 9007.12  | 24683.58 | 554.89  |
| 301.92   | 1938-2-14 | depth cm 14              | 237.82  | 26.98 | 52.77 | 2645.02 | 9805.46  | 20048.16 | 43544.23 | 13116.77 | 21588.03 | 666.26  |
| 300      | 1943-1-2  | depth cm 2               | 302.07  | 24.66 | 52.32 | 2681.59 | 9359.58  | 11764.25 | 17873.77 | 5426.38  | 12972.09 | 765.09  |
| 300      | 1943-1-4  | depth cm 4               | 444.77  | 34.54 | 73.24 | 4487.27 | 11067.88 | 11817.07 | 21258.07 | 6956.13  | 14319.27 | 902.34  |
| 300      | 1943-1-6  | depth cm 6               | 415.92  | 31.88 | 46.07 | 3960.89 | 9910.57  | 14674.23 | 32548.88 | 6321.43  | 18085.25 | 716.87  |
| 300      | 1942-1-2  | depth cm 2               | 372.00  | 26.35 | 58.15 | 3284.05 | 15134.71 | 11417.38 | 21886.03 | 7178.56  | 14272.62 | 653.79  |
| 300      | 1942-1-4  | depth cm 4               | 376.72  | 26.02 | 57.45 | 3079.54 | 14660.03 | 11621.89 | 16802.15 | 6878.31  | 12097.20 | 686.45  |
| 300      | 1942-1-6  | depth cm 6               | 407.27  | 23.94 | 55.69 | 2400.27 | 10318.21 | 10806.28 | 16227.40 | 6849.35  | 10391.73 | 1311.09 |
| 300      | 1942-2-8  | depth cm 8 gravelly lens | 492.08  | 9.82  | 40.23 | 2322.81 | 8129.98  | 20638.94 | 30905.55 | 6351.97  | 14403.30 | 615.60  |

### Appendix 3

| Duration | SAMPLE    | depth                  | Mn      | Cr    | V      | Ti      | Ca       | K        | Al       | P        | Si       | S       |
|----------|-----------|------------------------|---------|-------|--------|---------|----------|----------|----------|----------|----------|---------|
| 300      | 1942-2-10 | depth cm 10 humic lens | 647.04  | 28.87 | 58.86  | 2247.48 | 7624.91  | 12536.07 | 28500.46 | 6549.88  | 13079.99 | 739.36  |
| 301.39   | 1939-3-24 | depth cm 24            | 909.44  | 30.84 | 60.18  | 2768.51 | 9883.79  | 15972.91 | 48936.18 | 27741.85 | 14720.27 | 1120.19 |
| 300.49   | 1939-3-28 | depth cm 28            | 547.34  | 47.81 | 81.26  | 4612.79 | 10254.84 | 15084.80 | 52500.60 | 29410.24 | 13288.21 | 1189.10 |
| 302.04   | 1939-3-20 | depth cm 20            | 685.41  | 36.76 | 65.02  | 2971.35 | 10187.86 | 18700.37 | 51078.18 | 24252.01 | 16949.87 | 972.34  |
| 300.74   | 1939-3-18 | depth cm 18            | 565.19  | 29.39 | 45.71  | 4495.96 | 11804.76 | 16103.50 | 51261.28 | 23936.71 | 16394.78 | 1086.67 |
| 300.19   | 1939-3-14 | depth cm 14            | 392.07  | 28.00 | 66.04  | 3786.97 | 11269.75 | 18756.80 | 43920.41 | 15994.77 | 17312.04 | 1070.67 |
| 300.28   | 1939-3-16 | depth cm 16            | 308.41  | 22.16 | 58.44  | 3373.39 | 9722.98  | 19072.93 | 46179.69 | 19224.47 | 17716.21 | 1000.39 |
| 302.01   | 1942-3-16 | depth cm 16            | 816.91  | 28.73 | 88.44  | 7212.54 | 16732.41 | 20660.97 | 42994.14 | 8651.04  | 21939.31 | 605.70  |
| 302.04   | 1942-3-14 | depth cm 14            | 1034.94 | 41.91 | 93.26  | 7296.17 | 16105.20 | 20889.53 | 49058.87 | 9345.92  | 20974.81 | 956.83  |
| 300.72   | 1942-3-24 | depth cm 24            | 583.68  | 34.96 | 91.27  | 5301.02 | 14244.27 | 23663.10 | 52215.91 | 4728.62  | 24966.23 | 145.56  |
| 302.18   | 1942-3-18 | depth cm 18            | 627.89  | 30.41 | 67.08  | 4971.63 | 13633.22 | 21181.67 | 46886.28 | 2822.56  | 25556.69 | 130.25  |
| 300.6    | 1942-3-28 | depth cm 28            | 595.65  | 34.66 | 87.11  | 4708.83 | 12366.33 | 24859.46 | 54222.07 | 4541.85  | 24194.62 | 151.65  |
| 300.13   | 1942-2-12 | depth cm 12            | 721.83  | 44.06 | 100.19 | 3837.87 | 10477.03 | 15944.42 | 39742.66 | 13125.11 | 16368.23 | 1292.70 |
| 300.01   | 1942-3-20 | depth cm 20            | 536.79  | 35.88 | 81.40  | 4828.23 | 14544.38 | 24336.92 | 51317.67 | 3522.77  | 27660.51 | 121.23  |
| 301.77   | 1939-2-4  | depth cm 4             | 536.95  | 34.09 | 75.63  | 4358.02 | 10589.83 | 18712.79 | 41471.21 | 8228.57  | 21049.84 | 1017.12 |
| 301.97   | 1939-2-8  | depth cm 8             | 553.33  | 40.87 | 66.60  | 5049.09 | 14541.45 | 18444.14 | 42806.02 | 12792.59 | 19187.68 | 1207.25 |
| 301.37   | 1939-2-10 | depth cm 10            | 911.98  | 29.27 | 72.46  | 4423.42 | 14355.47 | 19674.84 | 45049.81 | 11704.60 | 19267.65 | 1085.54 |
| 300.61   | 1939-2-6  | depth cm 6             | 758.31  | 42.59 | 73.69  | 3975.45 | 12131.87 | 17064.77 | 40549.05 | 12387.84 | 17699.59 | 1186.38 |
| 300.71   | 1939-1-2  | depth cm 2             | 839.76  | 44.39 | 89.70  | 3404.33 | 12087.57 | 12639.68 | 30218.24 | 12879.56 | 16340.05 | 1543.50 |
| 301.83   | 1943-2-8  | depth cm 8             | 486.08  | 39.35 | 85.87  | 5237.55 | 9733.56  | 18136.13 | 40007.77 | 7687.09  | 20594.32 | 930.89  |
| 302.02   | 1943-2-10 | depth cm 10            | 579.72  | 41.45 | 92.49  | 5876.96 | 10972.48 | 18010.95 | 40487.96 | 8002.03  | 19374.82 | 783.47  |
| 300.18   | 1943-3-14 | depth cm 14            | 696.44  | 36.65 | 86.39  | 6922.40 | 13295.38 | 20482.15 | 48441.95 | 7792.73  | 21951.59 | 454.85  |
| 300.52   | 1943-3-16 | depth cm 16            | 514.98  | 36.09 | 73.39  | 4901.61 | 14157.14 | 21438.46 | 46373.87 | 4187.12  | 24695.41 | 288.22  |
| 300.63   | 1943-3-18 | depth cm 18            | 483.35  | 38.13 | 84.27  | 4914.77 | 12797.84 | 21749.10 | 48382.53 | 4172.16  | 25053.94 | 231.84  |
| 300.99   | 1943-3-20 | depth cm 20            | 556.96  | 27.65 | 72.69  | 4945.13 | 11621.97 | 22463.83 | 45917.37 | 3712.98  | 24245.66 | 173.07  |
| 300.07   | 1943-3-28 | depth cm 28            | 521.92  | 31.16 | 71.25  | 4062.39 | 11850.45 | 23005.75 | 49950.30 | 3546.91  | 25736.89 | 109.84  |
| 302.02   | 1943-3-24 | depth cm 24            | 476.47  | 30.07 | 79.83  | 4412.10 | 11834.13 | 23772.64 | 50069.21 | 3297.32  | 26226.32 | 186.98  |
| 300.83   | 1943-2-12 | depth cm 12            | 753.51  | 46.26 | 96.19  | 7119.04 | 14640.67 | 20299.91 | 48095.27 | 15427.46 | 20138.78 | 993.25  |

### Appendix 3

| Duration | SAMPLE    | depth       | Mn      | Cr    | V      | Ti      | Ca       | K        | Al       | P        | Si       | S       |
|----------|-----------|-------------|---------|-------|--------|---------|----------|----------|----------|----------|----------|---------|
| 301.36   | 1940-2-26 | depth cm 26 | 498.69  | 42.27 | 77.94  | 4436.22 | 11241.06 | 21819.59 | 47324.91 | 7401.44  | 21983.89 | 574.41  |
| 300.5    | 1940-1-22 | depth cm 22 | 458.10  | 36.99 | 68.23  | 3557.18 | 11406.22 | 19941.08 | 46169.05 | 10111.35 | 19640.66 | 504.68  |
| 301.7    | 1940-1-14 | depth cm 14 | 435.31  | 55.47 | 94.90  | 3164.91 | 10494.65 | 17128.27 | 40462.44 | 14807.87 | 16049.86 | 750.15  |
| 300.42   | 1940-2-24 | depth cm 24 | 404.12  | 37.98 | 86.17  | 3875.82 | 10764.87 | 22390.71 | 49483.59 | 7792.49  | 22360.37 | 376.06  |
| 301.76   | 1940-2-28 | depth cm 28 | 411.04  | 23.27 | 55.63  | 2944.89 | 11710.25 | 21379.23 | 42252.35 | 6278.33  | 22826.92 | 358.14  |
| 300.99   | 1940-1-18 | depth cm 18 | 540.44  | 50.07 | 102.26 | 3636.11 | 11075.16 | 18774.59 | 45677.16 | 12517.26 | 17846.11 | 691.21  |
| 301.88   | 1940-1-20 | depth cm 20 | 512.47  | 37.17 | 80.59  | 4101.77 | 10313.33 | 19798.70 | 45588.28 | 11318.21 | 18333.82 | 631.81  |
| 300.4    | 1940-1-16 | depth cm 16 | 451.37  | 41.36 | 92.74  | 2988.00 | 11487.63 | 16518.73 | 43156.62 | 16799.05 | 16467.98 | 824.61  |
| 302.1    | 1940-1-4  | depth cm 4  | 548.59  | 39.77 | 89.24  | 3730.61 | 10650.42 | 18787.11 | 44123.52 | 10798.02 | 19759.08 | 487.68  |
| 300.95   | 1940-1-8  | depth cm 8  | 466.12  | 35.06 | 76.65  | 3737.01 | 10577.71 | 19154.18 | 41745.68 | 11572.39 | 18230.32 | 693.81  |
| 300.84   | 1940-1-12 | depth cm 12 | 426.62  | 45.87 | 91.12  | 3264.84 | 11198.22 | 16656.59 | 42264.68 | 18023.04 | 16360.60 | 893.27  |
| 302.05   | 1940-1-10 | depth cm 10 | 599.19  | 40.69 | 87.78  | 3570.48 | 9746.19  | 17273.41 | 42812.52 | 13535.10 | 17369.14 | 691.91  |
| 302.09   | 1940-1A-2 | depth cm 2  | 684.47  | 46.22 | 94.83  | 3964.64 | 11642.63 | 16381.09 | 38727.87 | 11784.60 | 17518.13 | 596.30  |
| 301.79   | 1940-1-6  | depth cm 6  | 380.05  | 41.52 | 82.76  | 3507.85 | 10404.37 | 18346.75 | 41636.31 | 11459.70 | 19327.17 | 577.00  |
| 300.87   | 1934-1-2  | depth cm 2  | 485.92  | 40.34 | 93.54  | 5103.96 | 12949.07 | 23930.05 | 52346.64 | 4173.21  | 25219.96 | 270.56  |
| 301      | 1934-1-4  | depth cm 4  | 558.32  | 45.76 | 90.91  | 5048.28 | 12357.74 | 24064.30 | 51461.95 | 4382.17  | 24497.73 | 363.74  |
| 301.98   | 1934-3-28 | depth cm 28 | 1127.88 | 36.02 | 67.26  | 5219.19 | 14554.31 | 17867.07 | 51094.04 | 7887.22  | 21963.84 | 568.46  |
| 300.84   | 1934-3-18 | depth cm 18 | 504.71  | 38.85 | 75.73  | 4433.95 | 11377.08 | 20318.39 | 47236.24 | 10540.36 | 18982.03 | 830.79  |
| 300.63   | 1934-3-16 | depth cm 16 | 429.05  | 33.40 | 61.10  | 4453.69 | 10549.75 | 20970.86 | 48872.32 | 9137.38  | 21790.43 | 804.95  |
| 301.45   | 1934-3-24 | depth cm 24 | 763.21  | 31.69 | 57.38  | 4887.15 | 13080.67 | 18867.35 | 46381.98 | 7041.01  | 22601.26 | 493.36  |
| 301.37   | 1934-2-6  | depth cm 6  | 319.47  | 37.55 | 67.46  | 4549.06 | 9398.66  | 18525.48 | 42849.69 | 9428.23  | 20461.41 | 1286.88 |
| 302.09   | 1934-2-8  | depth cm 8  | 276.38  | 40.84 | 77.27  | 4798.14 | 8449.24  | 14735.46 | 49450.32 | 13913.32 | 18645.40 | 2025.61 |
| 300.96   | 1934-2-10 | depth cm 10 | 266.71  | 35.81 | 74.04  | 4185.64 | 6953.93  | 14320.12 | 56243.03 | 17199.78 | 15713.54 | 2392.09 |
| 301.59   | 1934-3-12 | depth cm 12 | 316.24  | 42.51 | 77.99  | 4785.53 | 10302.69 | 19216.44 | 49479.13 | 8795.36  | 19518.00 | 907.54  |
| 301.43   | 1934-3-20 | depth cm 20 | 523.17  | 53.68 | 93.97  | 5373.98 | 11325.55 | 19691.41 | 53819.68 | 9621.63  | 18919.24 | 876.63  |
| 301.39   | 1934-3-14 | depth cm 14 | 520.66  | 32.09 | 62.52  | 5940.81 | 11489.21 | 20145.45 | 50766.27 | 10513.85 | 20051.41 | 928.84  |



### Appendix 3

#### Smithy samples, calibrated

All filter times 50-100-50-100 in seconds

| Duration | sample no | Sn     | Cd    | Ag    | Sr     | Rb     | As     | Pb      | Zn     | Cu      | Fe       |
|----------|-----------|--------|-------|-------|--------|--------|--------|---------|--------|---------|----------|
| 300.51   | 2790      | 14.54  | 0.00  | 10.02 | 371.06 | 97.22  | 0.00   | 222.04  | 208.84 | 1270.96 | 36325.65 |
| 300.02   | 2789      | 88.10  | 0.00  | 16.17 | 276.54 | 108.32 | 0.00   | 1912.84 | 288.55 | 2243.90 | 34098.68 |
| 300.4    | 2791      | 141.16 | 0.00  | 16.61 | 241.57 | 88.56  | 62.12  | 1606.08 | 298.46 | 1227.75 | 32448.93 |
| 300.92   | 2792      | 43.15  | 0.00  | 14.59 | 322.55 | 106.66 | 0.00   | 2349.82 | 403.69 | 3843.48 | 32591.12 |
| 300.84   | 2793      | 340.51 | 11.33 | 28.98 | 348.74 | 91.73  | 25.07  | 2887.80 | 418.48 | 5809.70 | 36812.80 |
| 300.95   | 2800      | 304.31 | 0.00  | 16.75 | 334.85 | 80.77  | 0.00   | 1994.61 | 358.52 | 5009.40 | 33061.19 |
| 300.83   | 2796      | 329.40 | 0.00  | 35.42 | 288.95 | 84.82  | 0.00   | 1628.94 | 488.23 | 3691.31 | 37229.04 |
| 300.37   | 2803      | 67.28  | 0.00  | 17.59 | 369.99 | 82.01  | 19.67  | 740.34  | 475.07 | 4837.99 | 28947.82 |
| 300.21   | 2794      | 176.73 | 9.52  | 27.32 | 323.64 | 94.91  | 0.00   | 3063.81 | 327.45 | 6305.49 | 32315.04 |
| 300.76   | 2795      | 746.68 | 0.00  | 23.20 | 355.47 | 86.26  | 0.00   | 7680.06 | 797.12 | 9448.64 | 39971.24 |
| 300.14   | 2806      | 248.00 | 0.00  | 22.90 | 322.79 | 79.93  | 0.00   | 6371.00 | 591.93 | 7857.28 | 40039.11 |
| 300.42   | 2797      | 0.00   | 0.00  | 0.00  | 452.94 | 121.23 | 5.19   | 24.23   | 85.60  | 120.76  | 20723.27 |
| 300.01   | 2798      | 67.43  | 0.00  | 9.73  | 308.00 | 84.59  | 0.00   | 1603.60 | 327.38 | 3306.76 | 30440.92 |
| 300.54   | 2805      | 186.72 | 0.00  | 9.67  | 272.94 | 101.65 | 17.34  | 974.58  | 258.58 | 1056.47 | 32914.15 |
| 300.71   | 2799      | 194.63 | 0.00  | 14.59 | 311.88 | 98.11  | 46.14  | 2555.97 | 440.44 | 4461.97 | 34634.85 |
| 300.01   | 2802      | 850.98 | 13.21 | 19.78 | 374.82 | 76.68  | 28.09  | 2072.41 | 485.26 | 6079.19 | 38254.37 |
| 300.28   | 2801      | 213.37 | 0.00  | 39.93 | 321.28 | 98.98  | 0.00   | 3305.86 | 405.61 | 5469.43 | 32566.68 |
| 300.29   | 2804      | 124.17 | 0.00  | 15.12 | 330.31 | 90.15  | 46.07  | 1323.74 | 306.27 | 3790.45 | 35921.47 |
| 301.87   | 3112      | 206.82 | 0.00  | 11.96 | 268.97 | 86.64  | 107.06 | 3704.25 | 342.49 | 5269.03 | 42723.30 |
| 301.93   | 3161      | 57.66  | 0.00  | 9.93  | 238.19 | 116.32 | 0.00   | 452.98  | 187.65 | 3163.03 | 27503.10 |
| 300.95   | 3159      | 446.05 | 0.00  | 24.44 | 245.79 | 126.42 | 21.70  | 493.74  | 125.78 | 3067.98 | 23547.77 |
| 301.71   | 3160      | 152.94 | 0.00  | 17.93 | 245.50 | 107.04 | 16.12  | 507.70  | 186.65 | 3449.08 | 32076.51 |

### Appendix 3

| Duration | sample no | Mn      | Cr    | V     | Ti      | Ca       | K        | Al       | P        | Si       | S       |
|----------|-----------|---------|-------|-------|---------|----------|----------|----------|----------|----------|---------|
| 300.51   | 2790      | 1229.22 | 35.31 | 59.64 | 6630.77 | 19716.24 | 19498.94 | 42810.76 | 13493.98 | 21928.95 | 780.80  |
| 300.02   | 2789      | 2018.82 | 35.27 | 67.57 | 3216.67 | 32010.47 | 17890.19 | 32869.16 | 16648.73 | 19527.22 | 1909.39 |
| 300.4    | 2791      | 1705.94 | 34.52 | 60.44 | 4322.91 | 24475.64 | 18151.96 | 35674.70 | 12335.69 | 21061.80 | 1460.51 |
| 300.92   | 2792      | 4231.75 | 33.18 | 68.72 | 4131.88 | 23615.43 | 16900.14 | 35853.72 | 7316.00  | 19301.38 | 1422.24 |
| 300.84   | 2793      | 2342.89 | 31.24 | 78.72 | 3449.78 | 36711.04 | 16954.59 | 37912.46 | 16156.51 | 17989.24 | 2014.93 |
| 300.95   | 2800      | 2072.80 | 26.17 | 58.48 | 4180.22 | 27599.64 | 16274.30 | 35029.29 | 11111.61 | 18241.42 | 1494.62 |
| 300.83   | 2796      | 4355.95 | 32.69 | 80.87 | 3385.67 | 29782.08 | 15344.60 | 29755.16 | 13600.57 | 16861.40 | 1666.12 |
| 300.37   | 2803      | 4085.83 | 24.46 | 57.02 | 2779.22 | 33074.25 | 15683.73 | 20004.21 | 9444.00  | 12802.99 | 957.60  |
| 300.21   | 2794      | 1655.22 | 29.26 | 60.86 | 3038.64 | 29848.79 | 16082.70 | 34288.00 | 10451.76 | 18133.84 | 2061.05 |
| 300.76   | 2795      | 3817.80 | 28.27 | 68.93 | 2946.57 | 29927.30 | 15844.32 | 34881.80 | 12154.45 | 16883.85 | 3635.63 |
| 300.14   | 2806      | 4724.95 | 29.80 | 73.76 | 3035.67 | 27173.32 | 14139.56 | 30791.25 | 11211.04 | 16024.25 | 2974.05 |
| 300.42   | 2797      | 1010.10 | 21.42 | 57.09 | 4919.72 | 15094.18 | 20034.07 | 41581.12 | 5442.46  | 23719.05 | 288.18  |
| 300.01   | 2798      | 3282.02 | 30.02 | 63.38 | 3679.43 | 25076.34 | 16166.16 | 32320.85 | 9845.69  | 18013.89 | 1613.68 |
| 300.54   | 2805      | 1265.42 | 29.85 | 57.72 | 3679.78 | 22632.75 | 17799.42 | 37634.25 | 12444.37 | 21024.61 | 1231.50 |
| 300.71   | 2799      | 1523.62 | 30.95 | 63.53 | 3509.46 | 31144.94 | 16662.67 | 34098.89 | 13373.59 | 18421.38 | 2075.83 |
| 300.01   | 2802      | 4726.02 | 82.09 | 61.90 | 3275.24 | 32975.07 | 15303.51 | 33304.58 | 13961.23 | 18204.64 | 1621.15 |
| 300.28   | 2801      | 4384.72 | 24.50 | 61.84 | 3029.21 | 33451.88 | 16416.86 | 34900.62 | 13544.03 | 18433.72 | 2350.41 |
| 300.29   | 2804      | 2505.20 | 35.13 | 73.67 | 4168.61 | 26178.91 | 15647.71 | 34270.60 | 12602.29 | 16680.38 | 1396.96 |
| 301.87   | 3112      | 2904.38 | 39.05 | 71.72 | 2827.10 | 20006.11 | 14425.42 | 30186.29 | 7556.03  | 13863.56 | 2776.73 |
| 301.93   | 3161      | 2200.05 | 36.52 | 53.35 | 4077.14 | 18305.53 | 19876.63 | 40242.71 | 8430.85  | 20393.33 | 760.50  |
| 300.95   | 3159      | 1430.82 | 18.46 | 44.58 | 3341.44 | 18034.46 | 18976.35 | 36816.96 | 10545.68 | 20339.60 | 1003.02 |
| 301.71   | 3160      | 1447.66 | 30.99 | 75.42 | 5411.08 | 17565.44 | 20485.57 | 45124.74 | 7030.23  | 21678.13 | 667.64  |

### Appendix 3

#### Cores 1891 and 1892, calibrated

| Duration | SAMPLE               | INSPECTOR   | NOTE        | Ba     | Sb | Sn    | Cd | Pd | Ag    | Bal      | Mo   | Nb     | Zr     | Sr     | Rb    |
|----------|----------------------|-------------|-------------|--------|----|-------|----|----|-------|----------|------|--------|--------|--------|-------|
| 301.04   | K8                   | core 1891-2 | depth cm 8  | 646.45 | 0  | 25.6  | 0  | 0  | 8.21  | 706533.6 | 5.73 | 59.47  | 358.66 | 214.18 | 55.9  |
| 301.21   | K16                  | core 1891-2 | depth cm16  | 511.81 | 0  | 53.41 | 0  | 0  | 43.21 | 702524.5 | 2.91 | 29.36  | 292.72 | 182.56 | 57.94 |
| 301.54   | K24                  | core 1891-4 | depth cm 24 | 488.87 | 0  | 0     | 0  | 0  | 0     | 742755.8 | 3.44 | 43.44  | 276.6  | 144.62 | 63.89 |
| 300.26   | K24 reshaken to test | core 1891-4 | depth cm 24 | 505.65 | 0  | 0     | 0  | 0  | 0     | 739332.1 | 3.38 | 40.29  | 274.34 | 155.01 | 67.04 |
| 301.56   | K28                  | core 1891-4 | depth cm 28 | 478.56 | 0  | 0     | 0  | 0  | 0     | 740655.4 | 2.58 | 49.39  | 320.79 | 190.72 | 60.21 |
| 300.14   | K4                   | core 1891-1 | depth cm 4  | 654.45 | 0  | 16.5  | 0  | 0  | 4.95  | 684334.2 | 5.83 | 87.27  | 351.02 | 195.18 | 51.45 |
| 301.05   | K10                  | core 1891-2 | depth cm 10 | 543.35 | 0  | 25.01 | 0  | 0  | 29.74 | 698295.8 | 3.52 | 26.24  | 212.58 | 199.97 | 50.51 |
| 301.63   | K12                  | core 1892-1 | depth cm 12 | 536.54 | 0  | 62.74 | 0  | 0  | 8.98  | 695797.8 | 2.99 | 21.74  | 197.52 | 184.49 | 64.04 |
| 301.71   | K18                  | core 1891-3 | depth cm 18 | 572.88 | 0  | 113.8 | 0  | 0  | 13.55 | 682485.2 | 4    | 24.55  | 236.36 | 188.64 | 61.78 |
| 301.4    | K26                  | core 1892-2 | depth cm 26 | 454.8  | 0  | 0     | 0  | 0  | 0     | 767119.7 | 2.13 | 16.52  | 152.81 | 171.57 | 66.44 |
| 301.67   | K22                  | core 1892-2 | depth cm 22 | 506.47 | 0  | 0     | 0  | 0  | 0     | 705675.1 | 2.95 | 42.8   | 256.95 | 152.12 | 72.44 |
| 301.15   | K24                  | core 1892-2 | depth cm 24 | 681.54 | 0  | 0     | 0  | 0  | 0     | 754211.6 | 0    | 27.58  | 189.97 | 200.04 | 58.71 |
| 302.28   | K22                  | core 1891-3 | depth cm 22 | 448.73 | 0  | 0     | 0  | 0  | 0     | 720350.1 | 0    | 28.52  | 203.23 | 143.33 | 58.48 |
| 300.97   | K28                  | core 1892-2 | depth cm 28 | 521.85 | 0  | 0     | 0  | 0  | 0     | 783662.9 | 0    | 30.63  | 196.63 | 153.91 | 64.41 |
| 300.35   | K6                   | core 1891-1 | depth cm 6  | 856.45 | 0  | 13.49 | 0  | 0  | 0     | 636983.6 | 6.98 | 161.05 | 392.23 | 287.99 | 51.77 |
| 302.06   | K6 reshaken          | core 1891-1 | depth cm 6  | 783.38 | 0  | 0     | 0  | 0  | 0     | 657171.6 | 5.59 | 165.42 | 405.59 | 286.89 | 42.5  |
| 301.49   | K20                  | core 1891-3 | depth cm 20 | 438.5  | 0  | 20.08 | 0  | 0  | 7.38  | 709493.3 | 0    | 20.96  | 192.8  | 140.48 | 60.31 |
| 301.73   | K6                   | core 1892-1 | depth cm 6  | 731.71 | 0  | 10.97 | 0  | 0  | 6.32  | 650469.5 | 5.23 | 30.29  | 293.45 | 188.66 | 57.19 |
| 301.62   | K18                  | core 1892-1 | depth cm 18 | 475.42 | 0  | 27.24 | 0  | 0  | 6.03  | 698152.7 | 3.64 | 33.29  | 251.08 | 172.99 | 58.37 |
| 300.43   | K12                  | core 1892-1 | depth cm 12 | 528.38 | 0  | 48.07 | 0  | 0  | 24.07 | 696983.1 | 4.1  | 32.2   | 239.67 | 188.51 | 61.69 |

### Appendix 3

| Duration | SAMPLE               | INSPECTOR   | NOTE        | Bi    | As    | Se | Au | Pb      | W | Zn     | Cu      | Ni    | Co | Fe       | Mn      |
|----------|----------------------|-------------|-------------|-------|-------|----|----|---------|---|--------|---------|-------|----|----------|---------|
| 301.04   | K8                   | core 1891-2 | depth cm 8  | 9.73  | 18.43 | 0  | 0  | 403.51  | 0 | 373.9  | 1318.34 | 36.12 | 0  | 59642.52 | 4105.82 |
| 301.21   | K16                  | core 1891-2 | depth cm16  | 16.75 | 0     | 0  | 0  | 1161.93 | 0 | 310.95 | 750.41  | 0     | 0  | 40715.55 | 2691.62 |
| 301.54   | K24                  | core 1891-4 | depth cm 24 | 18.63 | 10.12 | 0  | 0  | 43.43   | 0 | 112.31 | 46.27   | 0     | 0  | 32939.5  | 1117.72 |
| 300.26   | K24 reshaken to test | core 1891-4 | depth cm 24 | 16.2  | 13    | 0  | 0  | 39.88   | 0 | 120.85 | 69.38   | 0     | 0  | 33327.55 | 1132.55 |
| 301.56   | K28                  | core 1891-4 | depth cm 28 | 9.11  | 8.79  | 0  | 0  | 10.93   | 0 | 66.35  | 19.71   | 0     | 0  | 26461.84 | 586.58  |
| 300.14   | K4                   | core 1891-1 | depth cm 4  | 17.93 | 0     | 0  | 0  | 426.47  | 0 | 371.69 | 733.7   | 31.53 | 0  | 51833.69 | 2647.12 |
| 301.05   | K10                  | core 1891-2 | depth cm 10 | 12    | 0     | 0  | 0  | 506.09  | 0 | 276.86 | 917.12  | 0     | 0  | 37446.06 | 1919.15 |
| 301.63   | K12                  | core 1892-1 | depth cm 12 | 12.85 | 0     | 0  | 0  | 585.77  | 0 | 262.88 | 1214.21 | 0     | 0  | 37642.49 | 2446.24 |
| 301.71   | K18                  | core 1891-3 | depth cm 18 | 19.83 | 0     | 0  | 0  | 961.47  | 0 | 218.23 | 354.06  | 0     | 0  | 42749.95 | 1149.97 |
| 301.4    | K26                  | core 1892-2 | depth cm 26 | 9.65  | 12.79 | 0  | 0  | 22.09   | 0 | 52.84  | 0       | 0     | 0  | 30778.31 | 645.55  |
| 301.67   | K22                  | core 1892-2 | depth cm 22 | 15.88 | 0     | 0  | 0  | 37.68   | 0 | 70.76  | 29.36   | 0     | 0  | 20838.73 | 549.07  |
| 301.15   | K24                  | core 1892-2 | depth cm 24 | 6.04  | 18.92 | 0  | 0  | 55.04   | 0 | 90.04  | 31.72   | 51.44 | 0  | 57783.71 | 1595.09 |
| 302.28   | K22                  | core 1891-3 | depth cm 22 | 7.89  | 11.7  | 0  | 0  | 108.92  | 0 | 120.85 | 96.59   | 0     | 0  | 26772.59 | 1232.94 |
| 300.97   | K28                  | core 1892-2 | depth cm 28 | 9.21  | 16.83 | 0  | 0  | 13.94   | 0 | 65.09  | 19.77   | 0     | 0  | 41101.18 | 1644.25 |
| 300.35   | K6                   | core 1891-1 | depth cm 6  | 17.93 | 19.23 | 0  | 0  | 194.99  | 0 | 437.86 | 615.7   | 86.81 | 0  | 89865.61 | 3469.77 |
| 302.06   | K6 reshaken          | core 1891-1 | depth cm 6  | 13.42 | 23.04 | 0  | 0  | 175.61  | 0 | 407.64 | 650.85  | 81.04 | 0  | 82721.24 | 3296.89 |
| 301.49   | K20                  | core 1891-3 | depth cm 20 | 9.38  | 0     | 0  | 0  | 254.15  | 0 | 146.73 | 165.77  | 0     | 0  | 27676.04 | 891.55  |
| 301.73   | K6                   | core 1892-1 | depth cm 6  | 20.04 | 0     | 0  | 0  | 893.58  | 0 | 417.16 | 688.45  | 0     | 0  | 35766.81 | 3734.97 |
| 301.62   | K18                  | core 1892-1 | depth cm 18 | 22.45 | 0     | 0  | 0  | 955.52  | 0 | 179.71 | 414.6   | 0     | 0  | 31403.13 | 935.75  |
| 300.43   | K12                  | core 1892-1 | depth cm 12 | 17.1  | 0     | 0  | 0  | 741.69  | 0 | 288.68 | 1026.51 | 0     | 0  | 39249.09 | 3885.82 |

### Appendix 3

| Duration | SAMPLE               | INSPECTOR   | NOTE        | Cr     | V      | Ti       | Ca       | K        | Al       | P        | Si       | Cl     | S       | Mg      |
|----------|----------------------|-------------|-------------|--------|--------|----------|----------|----------|----------|----------|----------|--------|---------|---------|
| 301.04   | K8                   | core 1891-2 | depth cm 8  | 112.74 | 140.82 | 4074.33  | 34294.14 | 12750.61 | 18755.73 | 21109.36 | 129464.7 | 251.48 | 2975.64 | 0       |
| 301.21   | K16                  | core 1891-2 | depth cm16  | 116.29 | 134.81 | 2832.8   | 29349.58 | 14030.19 | 21982.54 | 14501.29 | 165585.7 | 198.65 | 1920.46 | 0       |
| 301.54   | K24                  | core 1891-4 | depth cm 24 | 112.26 | 129.74 | 3864.86  | 13845.55 | 13103.04 | 25224.81 | 14882.36 | 146578.5 | 191.51 | 2459.69 | 0       |
| 300.26   | K24 reshaken to test | core 1891-4 | depth cm 24 | 100.5  | 122.2  | 4218.82  | 15084.66 | 13021.34 | 26356.2  | 14556.93 | 145767.2 | 184.68 | 2437.61 | 3052.72 |
| 301.56   | K28                  | core 1891-4 | depth cm 28 | 82.1   | 116.05 | 4174.45  | 13905.76 | 13080.52 | 27753.25 | 14395.64 | 155419.5 | 192.82 | 1958.89 | 0       |
| 300.14   | K4                   | core 1891-1 | depth cm 4  | 126.41 | 134.05 | 5339.06  | 29736.91 | 12383.4  | 20700.74 | 17686.16 | 169265.2 | 198.96 | 2652.19 | 0       |
| 301.05   | K10                  | core 1891-2 | depth cm 10 | 85.97  | 105.31 | 2735.89  | 24760.79 | 14271.78 | 21197.78 | 13924.02 | 180181.9 | 173.29 | 2099.2  | 0       |
| 301.63   | K12                  | core 1892-1 | depth cm 12 | 97.38  | 107.35 | 2668.72  | 21842.77 | 14686.79 | 22302.78 | 12202.33 | 185126.3 | 208.2  | 1713.66 | 0       |
| 301.71   | K18                  | core 1891-3 | depth cm 18 | 90.74  | 106.06 | 3290.07  | 22147.04 | 15062    | 24546    | 12887.28 | 186729.7 | 178.19 | 1985.84 | 3822.77 |
| 301.4    | K26                  | core 1892-2 | depth cm 26 | 78.36  | 108.79 | 1286.3   | 7245.62  | 13000.38 | 22930.62 | 33495.23 | 120351.8 | 170.42 | 1814.46 | 0       |
| 301.67   | K22                  | core 1892-2 | depth cm 22 | 68.85  | 61.87  | 2340.23  | 9588.18  | 18219.25 | 25654.64 | 8225.75  | 204515.4 | 87.81  | 1513.89 | 0       |
| 301.15   | K24                  | core 1892-2 | depth cm 24 | 107.99 | 163.92 | 2901.26  | 9232.38  | 9913.83  | 21405.61 | 34493.63 | 104527.8 | 203.89 | 2046.58 | 0       |
| 302.28   | K22                  | core 1891-3 | depth cm 22 | 68.56  | 100.63 | 3194.59  | 14843.31 | 14203.6  | 24974.96 | 11053.78 | 179694.3 | 132.37 | 2148.4  | 0       |
| 300.97   | K28                  | core 1892-2 | depth cm 28 | 98.24  | 133.38 | 1865.18  | 6421.51  | 10474.56 | 22473.32 | 37131.36 | 91954.3  | 217.27 | 1728.58 | 0       |
| 300.35   | K6                   | core 1891-1 | depth cm 6  | 152.76 | 254.31 | 11289.97 | 42422.5  | 14508.66 | 24201.53 | 29270.6  | 138330.4 | 290.44 | 3300.4  | 0       |
| 302.06   | K6 reshaken          | core 1891-1 | depth cm 6  | 164.75 | 214.52 | 7733.3   | 42901.62 | 13621.57 | 22463.57 | 28463.65 | 134519.1 | 316.91 | 3366.93 | 0       |
| 301.49   | K20                  | core 1891-3 | depth cm 20 | 74.77  | 84.52  | 3024.75  | 15791.76 | 15127.99 | 24847.81 | 10245.09 | 186794.3 | 149.54 | 1964.79 | 2366.23 |
| 301.73   | K6                   | core 1892-1 | depth cm 6  | 88.62  | 96.56  | 2928.01  | 32939.08 | 13853.44 | 23019.96 | 16126    | 212037.6 | 192.83 | 1889.61 | 3513.96 |
| 301.62   | K18                  | core 1892-1 | depth cm 18 | 84.22  | 91.82  | 3014.19  | 20702.3  | 14964.53 | 23401.98 | 12306.7  | 187259.9 | 164.61 | 2123.63 | 2794.17 |
| 300.43   | K12                  | core 1892-1 | depth cm 12 | 98.32  | 127.96 | 2999.86  | 31160.75 | 14305.5  | 22519.37 | 16595.71 | 166693.6 | 244.4  | 1933.02 | 0       |

## Appendix 3

### A3.5 Uncalibrated data

#### House data set

| Duration | SAMPLE    | Depth   | NOTE                | Ba     | Ba Error | S b | Sb Error | Sn    | Sn Error | Cd | Cd Error | Pd | Pd Error | Ag | Ag Error |
|----------|-----------|---------|---------------------|--------|----------|-----|----------|-------|----------|----|----------|----|----------|----|----------|
| 300      | 1936      | cm 2    | context 1           | 524.83 | 26.43    | 0   | 10.77    | 0     | 14.4     | 0  | 4.53     | 0  | 1.87     | 0  | 1.97     |
| 300      | 1937      | cm 2    | context 1           | 448.07 | 25.15    | 0   | 10.75    | 0     | 12.44    | 0  | 4.19     | 0  | 1.77     | 0  | 1.87     |
| 300      | 1937      | cm 4    | context 1           | 516.75 | 26.64    | 0   | 8.9      | 0     | 9.72     | 0  | 4.47     | 0  | 1.86     | 0  | 2.04     |
| 300      | 1937      | cm 6    | context 1           | 606.76 | 28.5     | 0   | 9.45     | 0     | 14.4     | 0  | 4.79     | 0  | 2.02     | 0  | 2.15     |
| 300      | 1937      | cm 8    | context 1           | 653.67 | 28.88    | 0   | 9.43     | 0     | 10.31    | 0  | 4.78     | 0  | 2.08     | 0  | 2.19     |
| 300      | 1937-1-10 | cm 10   | core 1937 context 1 | 594.49 | 27.76    | 0   | 10.23    | 0     | 11.12    | 0  | 4.56     | 0  | 1.89     | 0  | 2.14     |
| 300      | 1937-2-12 | cm 12   | core 1937 context 2 | 333.86 | 27.25    | 0   | 9.45     | 0     | 12.11    | 0  | 4.8      | 0  | 1.95     | 0  | 2.14     |
| 300      | 1937-2-14 | cm 14   | core 1937 context 2 | 482.97 | 24.91    | 0   | 8.71     | 15.41 | 6.17     | 0  | 4.17     | 0  | 1.74     | 0  | 2.02     |
| 300      | 1937-2-16 | cm 16   | core 1937 context 2 | 456.51 | 24.95    | 0   | 9.4      | 15.53 | 6.22     | 0  | 4.21     | 0  | 2.79     | 0  | 3.18     |
| 300      | 1937-2-18 | cm 18   | core 1937 context 2 | 775.49 | 27.82    | 0   | 8.79     | 84.15 | 7.31     | 0  | 4.34     | 0  | 1.84     | 0  | 1.96     |
| 300      | 1937-2-20 | cm 20   | core 1937 context 2 | 428.95 | 25.39    | 0   | 9.23     | 0     | 9.4      | 0  | 4.4      | 0  | 2.67     | 0  | 1.88     |
| 300      | 1937-2-22 | cm 22   | core 1937 context 3 | 350.16 | 26.96    | 0   | 15.96    | 0     | 11.76    | 0  | 5.36     | 0  | 2.37     | 0  | 2.17     |
| 300      | 1937-2-26 | cm 26   | core 1937 context 4 | 417.48 | 25.16    | 0   | 8.48     | 11.58 | 6.28     | 0  | 4.34     | 0  | 3.05     | 0  | 1.91     |
| 300.83   | 1936-2-22 | cm 22   | core 1936 context 2 | 499.86 | 27.77    | 0   | 9.37     | 0     | 9.03     | 0  | 4.8      | 0  | 2.02     | 0  | 2.15     |
| 301.55   | 1936-2-16 | cm 16   | core 1936 context 2 | 462.49 | 26.66    | 0   | 10.36    | 0     | 8.73     | 0  | 4.46     | 0  | 1.93     | 0  | 1.99     |
| 300.37   | 1936-2-18 | cm 18   | core 1936 context 2 | 475.82 | 28.58    | 0   | 9.71     | 0     | 9.34     | 0  | 4.8      | 0  | 2.05     | 0  | 2.14     |
| 300.6    | 1936-2-20 | cm 20   | core 1936 context 2 | 899.41 | 30.54    | 0   | 9.57     | 0     | 9.77     | 0  | 4.89     | 0  | 2.05     | 0  | 2.16     |
| 301.86   | 1936-2-24 | cm 24   | core 1936 context 2 | 489.03 | 28.59    | 0   | 9.69     | 0     | 11.98    | 0  | 4.87     | 0  | 2.11     | 0  | 2.2      |
| 300.09   | 1936-2-26 | cm 26   | core 1936 context 2 | 536.55 | 28.3     | 0   | 9.49     | 0     | 14.76    | 0  | 4.78     | 0  | 2.07     | 0  | 2.15     |
| 301.18   | 1936-1-2  | cm 2    | core 1936 context 1 | 566.11 | 28.04    | 0   | 9.28     | 0     | 14.01    | 0  | 4.68     | 0  | 2.01     | 0  | 2.62     |
| 300.44   | 1936-2-14 | cm 14   | core 1936 context 2 | 599.75 | 28.09    | 0   | 9.28     | 0     | 8.93     | 0  | 4.61     | 0  | 2.02     | 0  | 2.1      |
| 300.27   | 1936-1-12 | . cm 12 | core 1936 context 1 | 452.57 | 26.5     | 0   | 8.96     | 0     | 10.56    | 0  | 4.58     | 0  | 2.64     | 0  | 2.06     |
| 300.12   | 1936-1-10 | . cm 10 | core 1936 context 1 | 538.86 | 27.21    | 0   | 9.06     | 0     | 11.31    | 0  | 4.58     | 0  | 1.93     | 0  | 2.02     |
| 301.3    | 1936-1-8  | . cm 8  | core 1936 context 1 | 466.62 | 26.36    | 0   | 8.86     | 0     | 13.62    | 0  | 4.48     | 0  | 1.9      | 0  | 1.96     |

### Appendix 3

| Duration | SAMPLE                | Depth             | NOTE                | Ba     | Ba<br>Error | S<br>b | Sb<br>Error | Sn    | Sn<br>Error | Cd | Cd<br>Error | Pd | Pd<br>Error | Ag   | Ag<br>Error |
|----------|-----------------------|-------------------|---------------------|--------|-------------|--------|-------------|-------|-------------|----|-------------|----|-------------|------|-------------|
| 301.35   | 1936-1-6              | . cm 6            | core 1936 context 1 | 498.76 | 27.28       | 0      | 9.1         | 0     | 8.85        | 0  | 4.57        | 0  | 1.94        | 0    | 2.02        |
| 301.57   | 1936-1-4              | . cm 4            | core 1936 context 1 | 644.72 | 28.56       | 0      | 9.34        | 0     | 13.52       | 0  | 4.78        | 0  | 2.04        | 0    | 2.12        |
| 301.55   | 1937-5-28             | . cm 28           | core 1937 context 5 | 396.16 | 26.09       | 0      | 9.63        | 17.47 | 6.61        | 0  | 4.51        | 0  | 2.73        | 0    | 2.05        |
| 300.36   | 1937-2-12             | . cm 12           | core 1937 context 2 | 389.02 | 27.3        | 0      | 10.42       | 0     | 15.49       | 0  | 4.72        | 0  | 2.01        | 0    | 3.43        |
| 300.05   | 1937-2-16             | . cm16            | core 1937 context 2 | 426.86 | 27.08       | 0      | 11.34       | 19.73 | 6.85        | 0  | 6.08        | 0  | 3.62        | 4.39 | 2.15        |
| 301.89   | 1937-1-4              | . cm 4            | core 1937 context 1 | 520.15 | 27.6        | 0      | 9.21        | 0     | 10.09       | 0  | 4.65        | 0  | 2.01        | 0    | 2.15        |
| 300.19   | 1937-1-8              | . cm 8            | core 1937 context 1 | 499.56 | 28.1        | 0      | 10.25       | 11.21 | 6.91        | 0  | 4.82        | 0  | 3.57        | 0    | 3.27        |
| 300.61   | 1937-2-20             | . cm 20           | core 1937 context 2 | 473.39 | 27.89       | 0      | 15.33       | 32.35 | 7.13        | 0  | 4.79        | 0  | 2.01        | 0    | 2.74        |
| 301.74   | 1937-3-22             | . cm 22<br>(24.5) | core 1937 context 3 | 352.54 | 27.54       | 0      | 9.48        | 15.53 | 7           | 0  | 6.92        | 0  | 3.12        | 3.99 | 2.2         |
| 301.92   | 1937-3-22<br>reshaken | . cm 22<br>(24.5) | core 1937 context 3 | 317.05 | 27.32       | 0      | 10.12       | 12.81 | 6.94        | 0  | 5.52        | 0  | 2.57        | 3.78 | 2.19        |
| 301.71   | 1937-4-26             | . cm 26           | core 1937 context 4 | 431.21 | 26.7        | 0      | 9.02        | 74.92 | 7.41        | 0  | 4.56        | 0  | 2.97        | 0    | 4.12        |
| 300      | 1938-1-2              | . cm 2            | core 1938 context 1 | 577.18 | 29.2        | 0      | 9.77        | 0     | 12.35       | 0  | 4.91        | 0  | 2.09        | 0    | 2.23        |
| 300      | 1938-1-4              | . cm 2            | core 1938 context 1 | 619.56 | 27.82       | 0      | 9.08        | 0     | 9.68        | 0  | 4.5         | 0  | 1.95        | 0    | 2.11        |
| 300      | 1938-1-6              | . cm 6            | core 1938 context 1 | 457.66 | 26.5        | 0      | 8.96        | 0     | 9.79        | 0  | 4.48        | 0  | 1.89        | 0    | 2.04        |
| 301.66   | 1938-1-10             | . cm 10           | core 193 context 1  | 573.22 | 27.39       | 0      | 12.33       | 0     | 12.93       | 0  | 4.54        | 0  | 1.92        | 0    | 2.05        |
| 300.07   | 1938-1-8              | . cm 8            | core 1938 context 1 | 486.05 | 27.76       | 0      | 9.35        | 15.99 | 6.9         | 0  | 4.73        | 0  | 2.22        | 0    | 3.23        |
| 301.91   | 1938-1-6              | . cm 6            | core 1938 context 1 | 439.17 | 27.28       | 0      | 9.26        | 13.02 | 6.8         | 0  | 4.69        | 0  | 1.98        | 5.21 | 2.18        |
| 300.45   | 1938-2-28             | . cm 28           | core 1938 context 2 | 537.62 | 28.06       | 0      | 9.82        | 0     | 13.68       | 0  | 4.74        | 0  | 2.35        | 0    | 2.11        |
| 300.38   | 1938-2-18             | . cm 18           | core 1938 context 2 | 521.91 | 27.09       | 0      | 9.07        | 0     | 11.38       | 0  | 4.53        | 0  | 1.97        | 0    | 2.01        |
| 301.9    | 1938-2-24             | . cm 24           | core 1938 context 2 | 550.49 | 27.56       | 0      | 12.13       | 0     | 8.89        | 0  | 4.51        | 0  | 1.87        | 0    | 2.13        |
| 301.55   | 1938-2-16             | . cm 16           | core 1938 context 2 | 562.16 | 27.67       | 0      | 9.22        | 0     | 9.37        | 0  | 4.61        | 0  | 1.97        | 0    | 2.01        |
| 300.01   | 1938-2-12             | . cm 12           | core 1938 context 2 | 468.62 | 26.93       | 0      | 9.12        | 0     | 8.8         | 0  | 4.6         | 0  | 1.99        | 0    | 2           |
| 301.92   | 1938-2-14             | . cm 14           | core 1938 context 2 | 550.56 | 27.17       | 0      | 9.02        | 0     | 9.07        | 0  | 4.55        | 0  | 2.16        | 0    | 1.98        |
| 300      | 1943-1-2              | . cm 2            | core 1943 context 1 | 454.22 | 26.28       | 0      | 9.78        | 9.99  | 6.49        | 0  | 4.56        | 0  | 2.83        | 0    | 2.04        |
| 300      | 1943-1-4              | . cm 4            | core 1943 context 1 | 574.54 | 32.73       | 0      | 11.06       | 0     | 17.96       | 0  | 5.64        | 0  | 2.47        | 0    | 2.66        |
| 300      | 1943-1-6              | . cm 6            | core 1943 context 1 | 493.17 | 27.38       | 0      | 9.15        | 0     | 11.7        | 0  | 4.58        | 0  | 2.57        | 0    | 2.08        |

### Appendix 3

| Duration | SAMPLE    | Depth                   | NOTE                | Ba     | Ba Error | S b | Sb Error | Sn    | Sn Error | Cd | Cd Error | Pd | Pd Error | Ag | Ag Error |
|----------|-----------|-------------------------|---------------------|--------|----------|-----|----------|-------|----------|----|----------|----|----------|----|----------|
| 300      | 1942-1-2  | . cm 2                  | core 1942 context 1 | 602.34 | 28.24    | 0   | 9.33     | 0     | 10.72    | 0  | 4.75     | 0  | 2.01     | 0  | 2.15     |
| 300      | 1942-1-4  | . cm 4                  | core 1942 context 1 | 581.35 | 25.75    | 0   | 8.31     | 12.22 | 6.2      | 0  | 4.23     | 0  | 1.74     | 0  | 1.86     |
| 300      | 1942-1-6  | . cm 6                  | core 1942 context 1 | 415.32 | 24.66    | 0   | 8.81     | 0     | 10.71    | 0  | 4.22     | 0  | 2.63     | 0  | 1.8      |
| 300      | 1942-2-8  | . cm 8<br>gravelly lens | core 1942 context 2 | 952.47 | 33.14    | 0   | 10.4     | 0     | 10.1     | 0  | 5.28     | 0  | 2.38     | 0  | 2.46     |
| 300      | 1942-2-10 | . cm 10<br>humic lens   | core 1942 context 2 | 466.18 | 25.65    | 0   | 8.59     | 0     | 14.46    | 0  | 4.34     | 0  | 1.77     | 0  | 1.89     |
| 301.39   | 1939-3-24 | . cm 24                 | core 1939 context 3 | 597.28 | 27.98    | 0   | 9.21     | 0     | 9.96     | 0  | 4.64     | 0  | 1.96     | 0  | 2.09     |
| 300.49   | 1939-3-28 | . cm 28                 | core 1939 context 3 | 560.41 | 28.79    | 0   | 9.54     | 0     | 12.18    | 0  | 4.74     | 0  | 2.06     | 0  | 2.16     |
| 302.04   | 1939-3-20 | . cm 20                 | core 1939 context 3 | 593.96 | 28.51    | 0   | 9.42     | 0     | 9.14     | 0  | 4.68     | 0  | 2.04     | 0  | 2.16     |
| 300.74   | 1939-3-18 | . cm 18                 | core 1939 context 3 | 641.35 | 28.26    | 0   | 9.23     | 0     | 8.93     | 0  | 4.67     | 0  | 2        | 0  | 2.09     |
| 300.19   | 1939-3-14 | . cm 14                 | core 1939 context 3 | 558.49 | 27.3     | 0   | 9.08     | 0     | 9.54     | 0  | 4.62     | 0  | 2.11     | 0  | 1.98     |
| 300.28   | 1939-3-16 | . cm 16                 | core 1939 context 3 | 519.89 | 27.82    | 0   | 13.3     | 0     | 9.03     | 0  | 4.59     | 0  | 2.04     | 0  | 2.1      |
| 302.01   | 1942-3-16 | . cm 16                 | core 1942 context 3 | 504.39 | 30.94    | 0   | 10.47    | 0     | 10.24    | 0  | 5.2      | 0  | 2.25     | 0  | 2.43     |
| 302.04   | 1942-3-14 | . cm 14                 | core 1942 context 3 | 641.17 | 30.71    | 0   | 10.06    | 0     | 9.82     | 0  | 5.06     | 0  | 2.18     | 0  | 2.33     |
| 300.72   | 1942-3-24 | . cm 24                 | core 1942 context 3 | 603.45 | 30.03    | 0   | 10.73    | 0     | 9.6      | 0  | 4.95     | 0  | 2.13     | 0  | 2.25     |
| 302.18   | 1942-3-18 | . cm 18                 | core 1942 context 3 | 562.7  | 28.35    | 0   | 9.44     | 0     | 14.26    | 0  | 4.76     | 0  | 2.06     | 0  | 2.17     |
| 300.6    | 1942-3-28 | . cm 28                 | core 1942 context 3 | 501.4  | 29.46    | 0   | 9.92     | 0     | 10.27    | 0  | 5.03     | 0  | 2.21     | 0  | 2.29     |
| 300.13   | 1942-2-12 | . cm 12                 | core 1942 context 2 | 517.47 | 27.79    | 0   | 12.39    | 0     | 10.11    | 0  | 4.67     | 0  | 2        | 0  | 2.13     |
| 300.01   | 1942-3-20 | . cm 20                 | core 1942 context 3 | 548.93 | 29.66    | 0   | 11.59    | 0     | 16.35    | 0  | 5.13     | 0  | 2.16     | 0  | 2.32     |
| 301.77   | 1939-2-4  | . cm 4                  | core 1939 context 2 | 447.84 | 26.64    | 0   | 9        | 0     | 9.83     | 0  | 4.55     | 0  | 1.89     | 0  | 2.09     |
| 301.97   | 1939-2-8  | . cm 8                  | core 1939 context 2 | 537.14 | 28.05    | 0   | 9.38     | 0     | 9.8      | 0  | 4.7      | 0  | 2.06     | 0  | 2.13     |
| 301.37   | 1939-2-10 | . cm 10                 | core 1939 context 2 | 538.4  | 28.16    | 0   | 9.31     | 0     | 11.85    | 0  | 4.71     | 0  | 2.03     | 0  | 2.14     |
| 300.61   | 1939-2-6  | . cm 6                  | core 1939 context 2 | 695.31 | 29.05    | 0   | 9.44     | 0     | 9.88     | 0  | 4.75     | 0  | 2.05     | 0  | 2.13     |
| 300.71   | 1939-1-2  | . cm 2                  | core 1939 context 1 | 411.25 | 26.33    | 0   | 11.5     | 12.42 | 6.55     | 0  | 7.81     | 0  | 3.08     | 0  | 2.31     |
| 301.83   | 1943-2-8  | . cm 8                  | core 1943 context 2 | 452.06 | 26.78    | 0   | 9.05     | 0     | 9.87     | 0  | 4.6      | 0  | 3.9      | 0  | 2.06     |
| 302.02   | 1943-2-10 | . cm 10                 | core 1943 context 2 | 370.59 | 26.84    | 0   | 9.89     | 0     | 14.1     | 0  | 4.63     | 0  | 1.97     | 0  | 2.1      |



### Appendix 3

| Duration | SAMPLE    | Depth   | NOTE                | Ba      | Ba<br>Error | S<br>b | Sb<br>Error | Sn          | Sn<br>Error | Cd       | Cd<br>Error | Pd | Pd<br>Error | Ag        | Ag<br>Error |
|----------|-----------|---------|---------------------|---------|-------------|--------|-------------|-------------|-------------|----------|-------------|----|-------------|-----------|-------------|
| 300.18   | 1943-3-14 | . cm 14 | core 1943 context 3 | 549.42  | 28.95       | 0      | 9.66        | 0           | 13.54       | 0        | 4.95        | 0  | 2.54        | 0         | 2.19        |
| 300.52   | 1943-3-16 | . cm 16 | core 1943 context 3 | 481.61  | 27.89       | 0      | 9.34        | 0           | 11.37       | 0        | 4.8         | 0  | 2.68        | 0         | 2.18        |
| 300.63   | 1943-3-18 | . cm 18 | core 1943 context 3 | 534.12  | 27.89       | 0      | 9.33        | 0           | 9.04        | 0        | 4.72        | 0  | 2.01        | 0         | 2.17        |
| 300.99   | 1943-3-20 | . cm 20 | core 1943 context 3 | 533.12  | 28.35       | 0      | 9.52        | 0           | 9.15        | 0        | 4.79        | 0  | 2.09        | 0         | 2.11        |
| 300.07   | 1943-3-28 | . cm 28 | core 1943 context 3 | 423.13  | 26.87       | 0      | 9.12        | 0           | 11.65       | 0        | 4.55        | 0  | 1.92        | 0         | 2.04        |
| 302.02   | 1943-3-24 | . cm 24 | core 1943 context 3 | 764.98  | 29.58       | 0      | 10.98       | 0           | 15.42       | 0        | 4.78        | 0  | 2.35        | 0         | 2.13        |
| 300.83   | 1943-2-12 | . cm 12 | core 1943 context 2 | 522.35  | 29.11       | 0      | 13.35       | 0           | 9.5         | 0        | 4.93        | 0  | 2.18        | 0         | 2.25        |
| 301.36   | 1940-2-26 | . cm 26 | core 1940 context 2 | 519.01  | 27.54       | 0      | 9.19        | 43.53       | 7.14        | 0        | 4.61        | 0  | 1.99        | 0         | 2.14        |
| 300.5    | 1940-1-22 | . cm 22 | core 1940 context 1 | 483.84  | 27.61       | 0      | 14.16       | 21.5        | 6.93        | 0        | 4.77        | 0  | 3.15        | 0         | 2.14        |
| 301.7    | 1940-1-14 | . cm 14 | core 1940 context 1 | 499.58  | 28.39       | 0      | 9.5         | 28.64       | 7.21        | 0        | 4.79        | 0  | 2.07        | 7.64      | 2.29        |
| 300.42   | 1940-2-24 | . cm 24 | core 1940 context 2 | 495.14  | 27.36       | 0      | 12.89       | 46.43       | 7.16        | 0        | 4.7         | 0  | 2.29        | 0         | 2.1         |
| 301.76   | 1940-2-28 | . cm 28 | core 1940 context 2 | 586     | 27.52       | 0      | 9.03        | 15.27       | 6.71        | 0        | 4.57        | 0  | 1.9         | 0         | 2.03        |
| 300.99   | 1940-1-18 | . cm 18 | core 1940 context 1 | 457.4   | 30.95       | 0      | 10.17       | 3348.3<br>9 | 33.33       | 17.<br>9 | 4.63        | 0  | 3.67        | 0         | 3.47        |
| 301.88   | 1940-1-20 | . cm 20 | core 1940 context 1 | 525.38  | 27.91       | 0      | 9.3         | 13          | 6.84        | 0        | 4.69        | 0  | 2.04        | 0         | 2.15        |
| 300.4    | 1940-1-16 | . cm 16 | core 1940 context 1 | 583.77  | 28.8        | 0      | 14.12       | 41.04       | 7.47        | 0        | 4.79        | 0  | 2.05        | 36.0<br>2 | 2.86        |
| 302.1    | 1940-1-4  | . cm 4  | core 1940 context 1 | 1212.84 | 31.83       | 0      | 9.44        | 28.25       | 7.1         | 0        | 4.76        | 0  | 1.95        | 0         | 2.14        |
| 300.95   | 1940-1-8  | . cm 8  | core 1940 context 1 | 487.6   | 27.28       | 0      | 9.17        | 18.21       | 6.81        | 0        | 4.58        | 0  | 1.96        | 0         | 3.77        |
| 300.84   | 1940-1-12 | . cm 12 | core 1940 context 1 | 490.02  | 27.59       | 0      | 9.23        | 40.28       | 7.15        | 0        | 4.71        | 0  | 3.02        | 0         | 4.02        |
| 302.05   | 1940-1-10 | . cm 10 | core 1940 context 1 | 576.48  | 29.47       | 0      | 9.83        | 25.19       | 7.31        | 0        | 4.92        | 0  | 2.17        | 0         | 2.22        |
| 302.09   | 1940-1A-2 | . cm 2  | core 1940 context 1 | 607     | 28.51       | 0      | 9.34        | 24.44       | 7.01        | 0        | 4.78        | 0  | 2.01        | 0         | 2.19        |
| 301.79   | 1940-1-6  | . cm 6  | core 1940 context 1 | 549.44  | 27.93       | 0      | 9.76        | 17.24       | 6.87        | 0        | 4.77        | 0  | 1.95        | 0         | 2.13        |
| 300.87   | 1934-1-2  | . cm 2  | core 1934 context 1 | 496.79  | 27.91       | 0      | 13          | 0           | 13.29       | 0        | 5.23        | 0  | 2.93        | 0         | 2.11        |
| 301      | 1934-1-4  | . cm 4  | core 1934 context 1 | 517.64  | 29.36       | 0      | 9.9         | 0           | 13.6        | 0        | 5.13        | 0  | 3.51        | 0         | 3.15        |
| 301.98   | 1934-3-28 | . cm 28 | core 1934 context 3 | 540.66  | 29.3        | 0      | 16.07       | 0           | 11.29       | 0        | 4.96        | 0  | 2.09        | 0         | 2.32        |
| 300.84   | 1934-3-18 | . cm 18 | core 1934 context 3 | 500.86  | 27.59       | 0      | 9.27        | 0           | 10.06       | 0        | 4.69        | 0  | 2.37        | 0         | 2.17        |
| 300.63   | 1934-3-16 | . cm 16 | core 1934 context 3 | 399.96  | 26.49       | 0      | 9.04        | 0           | 9.35        | 0        | 4.59        | 0  | 3.24        | 0         | 1.93        |

### Appendix 3

| Duration | SAMPLE    | Depth   | NOTE                | Ba     | Ba Error | S b | Sb Error | Sn | Sn Error | Cd | Cd Error | Pd | Pd Error | Ag | Ag Error |
|----------|-----------|---------|---------------------|--------|----------|-----|----------|----|----------|----|----------|----|----------|----|----------|
| 301.45   | 1934-3-24 | . cm 24 | core 1934 context 3 | 457.06 | 27.5     | 0   | 9.36     | 0  | 9.02     | 0  | 4.69     | 0  | 1.91     | 0  | 2.12     |
| 301.37   | 1934-2-6  | . cm 6  | core 1934 context 2 | 446.22 | 26.39    | 0   | 8.89     | 0  | 10.9     | 0  | 4.51     | 0  | 1.89     | 0  | 1.97     |
| 302.09   | 1934-2-8  | . cm 8  | core 1934 context 2 | 417.78 | 26.39    | 0   | 8.95     | 0  | 8.61     | 0  | 4.63     | 0  | 1.9      | 0  | 2.06     |
| 300.96   | 1934-2-10 | . cm 10 | core 1934 context 2 | 468.46 | 25.98    | 0   | 12.92    | 0  | 8.42     | 0  | 4.45     | 0  | 1.84     | 0  | 1.94     |
| 301.59   | 1934-3-12 | . cm 12 | core 1934 context 3 | 460.38 | 27.37    | 0   | 9.27     | 0  | 9.01     | 0  | 4.6      | 0  | 2.03     | 0  | 2.1      |
| 301.43   | 1934-3-20 | . cm 20 | core 1934 context 3 | 530.67 | 28.28    | 0   | 9.44     | 0  | 10.55    | 0  | 4.86     | 0  | 2.02     | 0  | 2.17     |
| 301.39   | 1934-3-14 | . cm 14 | core 1934 context 3 | 454.23 | 27.09    | 0   | 9.18     | 0  | 8.9      | 0  | 4.58     | 0  | 1.94     | 0  | 2.05     |

| Duration | SAMPLE    | Depth | NOTE                | Ba       | Ba Error | Mo   | Mo Error | Nb    | Nb Error | Zr     | Zr Error | Sr     | Sr Error | Rb    | Rb Error |
|----------|-----------|-------|---------------------|----------|----------|------|----------|-------|----------|--------|----------|--------|----------|-------|----------|
| 300      | 1936      | cm 2  | context 1           | 800883.6 | 798.42   | 0    | 2.3      | 32    | 1.44     | 205.03 | 3.37     | 149.31 | 2.49     | 79.01 | 1.89     |
| 300      | 1937      | cm 2  | context 1           | 829816.4 | 715.34   | 3.91 | 1.48     | 41.87 | 1.62     | 211.86 | 3.79     | 338.53 | 4.07     | 50.44 | 1.61     |
| 300      | 1937      | cm 4  | context 1           | 773419.8 | 891.73   | 0    | 2.02     | 27.8  | 1.4      | 134.95 | 2.83     | 138.58 | 2.41     | 78.89 | 1.89     |
| 300      | 1937      | cm 6  | context 1           | 771447.5 | 902.73   | 0    | 2.03     | 31.02 | 1.45     | 135.4  | 2.92     | 184.94 | 2.82     | 62.86 | 1.71     |
| 300      | 1937      | cm 8  | context 1           | 767565.9 | 907.14   | 0    | 2.06     | 18.35 | 1.31     | 141.93 | 2.96     | 148.16 | 2.54     | 61.09 | 1.71     |
| 300      | 1937-1-10 | cm 10 | core 1937 context 1 | 820200.8 | 734.37   | 0    | 2.1      | 28.99 | 1.44     | 185.04 | 3.33     | 192.88 | 2.9      | 71.15 | 1.83     |
| 300      | 1937-2-12 | cm 12 | core 1937 context 2 | 797742.4 | 825.29   | 0    | 1.5      | 35.54 | 1.51     | 116.81 | 2.59     | 53.93  | 1.56     | 78.83 | 1.92     |
| 300      | 1937-2-14 | cm 14 | core 1937 context 2 | 811305.1 | 748.44   | 2.88 | 1.43     | 18.43 | 1.28     | 278.9  | 3.84     | 124.1  | 2.25     | 50.9  | 1.53     |
| 300      | 1937-2-16 | cm 16 | core 1937 context 2 | 785361.9 | 828.46   | 0    | 1.58     | 18.74 | 1.28     | 147.03 | 2.87     | 109    | 2.12     | 52.93 | 1.56     |
| 300      | 1937-2-18 | cm 18 | core 1937 context 2 | 767964.5 | 916.4    | 0    | 2.1      | 23.03 | 1.38     | 174.88 | 3.43     | 290.04 | 3.69     | 42.99 | 1.49     |
| 300      | 1937-2-20 | cm 20 | core 1937 context 2 | 757257.8 | 918.51   | 0    | 1.97     | 16.55 | 1.25     | 125.38 | 2.64     | 81.49  | 1.83     | 41.38 | 1.4      |
| 300      | 1937-2-22 | cm 22 | core 1937 context 3 | 771236.5 | 861.49   | 3.69 | 1.39     | 18.4  | 1.3      | 150.96 | 2.98     | 125.01 | 2.3      | 47.95 | 1.56     |
| 300      | 1937-2-26 | cm 26 | core 1937 context 4 | 774664.4 | 874.44   | 0    | 2        | 21.73 | 1.31     | 161.36 | 3.01     | 141.06 | 2.4      | 51.79 | 1.55     |
| 300.83   | 1936-2-22 | cm 22 | core 1936 context 2 | 714441.8 | 1098.28  | 2.53 | 1.39     | 60.3  | 1.76     | 157.69 | 3.09     | 157.41 | 2.61     | 62.72 | 1.73     |
| 301.55   | 1936-2-16 | cm 16 | core 1936 context 2 | 725209.2 | 1052.5   | 2.77 | 1.34     | 16.39 | 1.26     | 122.15 | 2.74     | 155.16 | 2.54     | 71.31 | 1.79     |
| 300.37   | 1936-2-18 | cm 18 | core 1936 context 2 | 711263.9 | 1116.95  | 2.61 | 1.44     | 34.99 | 1.53     | 200.31 | 3.44     | 136.1  | 2.46     | 52.34 | 1.62     |
| 300.6    | 1936-2-20 | cm 20 | core 1936 context 2 | 713315.4 | 1120.21  | 0    | 1.88     | 77.99 | 1.97     | 221.74 | 3.82     | 317.7  | 3.91     | 53.67 | 1.64     |
| 301.86   | 1936-2-24 | cm 24 | core 1936 context 2 | 721724.9 | 1089.97  | 0    | 2.08     | 21.89 | 1.35     | 168.42 | 3.18     | 168.73 | 2.7      | 58.21 | 1.67     |

### Appendix 3

| Duration | SAMPLE                | Depth          | NOTE                | Bal      | Bal Error | Mo   | Mo Error | Nb    | Nb Error | Zr     | Zr Error | Sr     | Sr Error | Rb    | Rb Error |
|----------|-----------------------|----------------|---------------------|----------|-----------|------|----------|-------|----------|--------|----------|--------|----------|-------|----------|
| 300.09   | 1936-2-26             | cm 26          | core 1936 context 2 | 724930.2 | 1091.72   | 4.58 | 1.64     | 60.32 | 1.81     | 467.76 | 5.33     | 169.63 | 2.77     | 54.96 | 1.67     |
| 301.18   | 1936-1-2              | cm 2           | core 1936 context 1 | 712373.1 | 1100.14   | 2.42 | 1.45     | 48.24 | 1.66     | 232.21 | 3.67     | 147.82 | 2.55     | 75.8  | 1.91     |
| 300.44   | 1936-2-14             | cm 14          | core 1936 context 2 | 726527.3 | 1046.18   | 2.41 | 1.36     | 16.92 | 1.27     | 151.41 | 3.14     | 270.81 | 3.46     | 62.08 | 1.7      |
| 300.27   | 1936-1-12             | . cm 12        | core 1936 context 1 | 722002.5 | 1056.43   | 0    | 2.44     | 29.4  | 1.42     | 200.03 | 3.41     | 199.79 | 2.92     | 66.19 | 1.74     |
| 300.12   | 1936-1-10             | . cm 10        | core 1936 context 1 | 725797.3 | 1051.07   | 0    | 2.43     | 23.19 | 1.36     | 221.29 | 3.56     | 181.58 | 2.79     | 66.41 | 1.76     |
| 301.3    | 1936-1-8              | . cm 8         | core 1936 context 1 | 711135.9 | 1076.14   | 0    | 1.99     | 22.82 | 1.32     | 146.74 | 2.88     | 144.04 | 2.42     | 65.26 | 1.7      |
| 301.35   | 1936-1-6              | . cm 6         | core 1936 context 1 | 728393.2 | 1038.99   | 0    | 2.1      | 30.05 | 1.42     | 220.84 | 3.5      | 158.3  | 2.58     | 72.36 | 1.81     |
| 301.57   | 1936-1-4              | . cm 4         | core 1936 context 1 | 727228.1 | 1040.06   | 2.38 | 1.41     | 32.9  | 1.46     | 216.36 | 3.52     | 178.03 | 2.76     | 69.69 | 1.8      |
| 301.55   | 1937-5-28             | . cm 28        | core 1937 context 5 | 706602.9 | 1083.53   | 2.67 | 1.35     | 25.28 | 1.34     | 175.06 | 3.09     | 151.75 | 2.47     | 62.32 | 1.66     |
| 300.36   | 1937-2-12             | . cm 12        | core 1937 context 2 | 705357.6 | 1064.78   | 0    | 2.08     | 30.63 | 1.42     | 211.64 | 3.37     | 124.39 | 2.26     | 79.79 | 1.89     |
| 300.05   | 1937-2-16             | . cm16         | core 1937 context 2 | 680930.9 | 1157.4    | 5.04 | 1.58     | 31.31 | 1.47     | 403.71 | 4.8      | 144.04 | 2.5      | 62.14 | 1.73     |
| 301.89   | 1937-1-4              | . cm 4         | core 1937 context 1 | 695911.6 | 1100.54   | 2.79 | 1.41     | 32.5  | 1.44     | 240.22 | 3.58     | 140.96 | 2.4      | 60.55 | 1.65     |
| 300.19   | 1937-1-8              | . cm 8         | core 1937 context 1 | 693918.9 | 1109.96   | 4.6  | 1.5      | 28.79 | 1.42     | 317.88 | 4.18     | 146.83 | 2.48     | 60.59 | 1.68     |
| 300.61   | 1937-2-20             | . cm 20        | core 1937 context 2 | 684826.2 | 1147.35   | 3.57 | 1.46     | 22.97 | 1.38     | 210.56 | 3.53     | 150.05 | 2.58     | 54.67 | 1.66     |
| 301.74   | 1937-3-22             | . cm 22 (24.5) | core 1937 context 3 | 609606.1 | 1277.76   | 8.65 | 1.55     | 33.56 | 1.49     | 298.56 | 4.13     | 157.79 | 2.62     | 54.31 | 1.66     |
| 301.92   | 1937-3-22<br>reshaken | . cm 22 (24.5) | core 1937 context 3 | 596328.5 | 1295.53   | 8.46 | 1.51     | 20.53 | 1.34     | 223.35 | 3.6      | 142.28 | 2.49     | 51.37 | 1.63     |
| 301.71   | 1937-4-26             | . cm 26        | core 1937 context 4 | 706872.3 | 1064.38   | 3.57 | 1.4      | 21.33 | 1.32     | 196.28 | 3.33     | 150.07 | 2.51     | 62.7  | 1.72     |
| 300      | 1938-1-2              | . cm 2         | core 1938 context 1 | 824654.1 | 724.79    | 3.13 | 1.45     | 16.05 | 1.29     | 228.82 | 3.62     | 165.34 | 2.68     | 47.91 | 1.52     |
| 300      | 1938-1-4              | . cm 2         | core 1938 context 1 | 767559.8 | 931.14    | 0    | 2.08     | 18.98 | 1.31     | 181.46 | 3.23     | 149.17 | 2.52     | 76.64 | 1.88     |
| 300      | 1938-1-6              | . cm 6         | core 1938 context 1 | 809075.1 | 778.32    | 3.07 | 1.52     | 41.94 | 1.58     | 355.55 | 4.44     | 102.84 | 2.1      | 54.77 | 1.63     |
| 301.66   | 1938-1-10             | . cm 10        | core 193 context 1  | 721539.4 | 1071.65   | 2.85 | 1.42     | 25.23 | 1.39     | 201.03 | 3.43     | 180.52 | 2.8      | 69.76 | 1.81     |
| 300.07   | 1938-1-8              | . cm 8         | core 1938 context 1 | 720052.6 | 1064.74   | 0    | 2.2      | 28.74 | 1.45     | 261.77 | 3.87     | 142.3  | 2.5      | 58.72 | 1.69     |
| 301.91   | 1938-1-6              | . cm 6         | core 1938 context 1 | 716795.2 | 1045.23   | 0    | 2.39     | 30.08 | 1.44     | 221.21 | 3.52     | 146.55 | 2.49     | 54.42 | 1.61     |
| 300.45   | 1938-2-28             | . cm 28        | core 1938 context 2 | 726788.5 | 1061.28   | 0    | 2.09     | 29.04 | 1.43     | 181.53 | 3.3      | 189.35 | 2.87     | 68.54 | 1.79     |
| 300.38   | 1938-2-18             | . cm 18        | core 1938 context 2 | 717121.7 | 1076.14   | 0    | 2.42     | 20.27 | 1.32     | 246.56 | 3.71     | 155.06 | 2.57     | 57.25 | 1.64     |
| 301.9    | 1938-2-24             | . cm 24        | core 1938 context 2 | 716162.8 | 1068.59   | 0    | 2.07     | 22.97 | 1.33     | 168.85 | 3.09     | 166.57 | 2.62     | 65.46 | 1.71     |
| 301.55   | 1938-2-16             | . cm 16        | core 1938 context 2 | 713907.8 | 1097.6    | 3.64 | 1.42     | 27.31 | 1.39     | 215.75 | 3.51     | 191.51 | 2.85     | 65.36 | 1.73     |

### Appendix 3

| Duratio<br>n | SAMPLE    | Depth                   | NOTE                | Bal      | Bal<br>Error | Mo   | Mo<br>Error | Nb    | Nb<br>Error | Zr     | Zr<br>Error | Sr     | Sr<br>Error | Rb    | Rb<br>Error |
|--------------|-----------|-------------------------|---------------------|----------|--------------|------|-------------|-------|-------------|--------|-------------|--------|-------------|-------|-------------|
| 300.01       | 1938-2-12 | . cm 12                 | core 1938 context 2 | 697621.1 | 1123.43      | 0    | 1.51        | 24.15 | 1.33        | 160.96 | 3           | 154.18 | 2.5         | 60.72 | 1.64        |
| 301.92       | 1938-2-14 | . cm 14                 | core 1938 context 2 | 715492.9 | 1087.55      | 0    | 2.07        | 18.93 | 1.28        | 160.6  | 3.08        | 202.43 | 2.91        | 68.44 | 1.75        |
| 300          | 1943-1-2  | . cm 2                  | core 1943 context 1 | 819659.4 | 716.69       | 0    | 2.09        | 22.4  | 1.32        | 232.28 | 3.49        | 125.93 | 2.25        | 47.82 | 1.48        |
| 300          | 1943-1-4  | . cm 4                  | core 1943 context 1 | 793419.1 | 836.73       | 0    | 2.17        | 28.48 | 1.46        | 204.7  | 3.51        | 158.28 | 2.66        | 40.09 | 1.44        |
| 300          | 1943-1-6  | . cm 6                  | core 1943 context 1 | 757326.9 | 947.16       | 2.26 | 1.41        | 33.81 | 1.47        | 220.03 | 3.52        | 160.88 | 2.61        | 55.79 | 1.62        |
| 300          | 1942-1-2  | . cm 2                  | core 1942 context 1 | 801694.2 | 780.46       | 0    | 1.81        | 18.2  | 1.26        | 143.25 | 2.91        | 189.44 | 2.78        | 38.81 | 1.36        |
| 300          | 1942-1-4  | . cm 4                  | core 1942 context 1 | 819647.2 | 719.43       | 4.29 | 1.45        | 23.57 | 1.34        | 268.78 | 3.81        | 147.4  | 2.47        | 51.48 | 1.54        |
| 300          | 1942-1-6  | . cm 6                  | core 1942 context 1 | 837650.1 | 648.9        | 3.38 | 1.36        | 21.17 | 1.3         | 175.75 | 3.05        | 113.69 | 2.13        | 43.39 | 1.41        |
| 300          | 1942-2-8  | . cm 8 gravelly<br>lens | core 1942 context 2 | 788472.3 | 868.56       | 0    | 2.24        | 48.88 | 1.69        | 262.59 | 4.21        | 424.95 | 4.65        | 71.24 | 1.88        |
| 300          | 1942-2-10 | . cm 10 humic<br>lens   | core 1942 context 2 | 801574.2 | 782.93       | 0    | 1.5         | 17.15 | 1.26        | 136.67 | 2.91        | 203.56 | 2.92        | 40.36 | 1.38        |
| 301.39       | 1939-3-24 | . cm 24                 | core 1939 context 3 | 756137.4 | 978.15       | 3.29 | 1.44        | 29.97 | 1.44        | 226.02 | 3.62        | 179.6  | 2.79        | 66.08 | 1.77        |
| 300.49       | 1939-3-28 | . cm 28                 | core 1939 context 3 | 751255.8 | 1004.26      | 2.6  | 1.42        | 24.58 | 1.4         | 179.88 | 3.33        | 186    | 2.88        | 66.72 | 1.8         |
| 302.04       | 1939-3-20 | . cm 20                 | core 1939 context 3 | 735829.1 | 1054.29      | 3.55 | 1.43        | 23.46 | 1.37        | 203.69 | 3.45        | 174.97 | 2.76        | 68.67 | 1.8         |
| 300.74       | 1939-3-18 | . cm 18                 | core 1939 context 3 | 738791.1 | 1038.31      | 2.71 | 1.39        | 24.65 | 1.37        | 176.68 | 3.23        | 176.73 | 2.76        | 65.87 | 1.75        |
| 300.19       | 1939-3-14 | . cm 14                 | core 1939 contxt 3  | 744544.5 | 1007.64      | 0    | 2           | 16.46 | 1.26        | 130.61 | 2.85        | 181.49 | 2.77        | 74.07 | 1.83        |
| 300.28       | 1939-3-16 | . cm 16                 | core 1939 contxt 3  | 739807.4 | 1017.37      | 3.01 | 1.37        | 23.36 | 1.35        | 158.15 | 3.04        | 163.12 | 2.62        | 79.64 | 1.9         |
| 302.01       | 1942-3-16 | . cm 16                 | core 1942 context 3 | 689266.2 | 1180.13      | 6.6  | 1.88        | 52.7  | 1.76        | 804.72 | 7.5         | 172.61 | 2.84        | 59.87 | 1.75        |
| 302.04       | 1942-3-14 | . cm 14                 | core 1942 context 3 | 691068.1 | 1195.35      | 4.33 | 1.77        | 44.6  | 1.68        | 618.36 | 6.45        | 224.24 | 3.29        | 73.39 | 1.94        |
| 300.72       | 1942-3-24 | . cm 24                 | core 1942 context 3 | 664607.6 | 1245.58      | 2.47 | 1.47        | 35.12 | 1.54        | 239.5  | 3.79        | 163.75 | 2.72        | 64.94 | 1.79        |
| 302.18       | 1942-3-18 | . cm 18                 | core 1942 context 3 | 673378.6 | 1190.5       | 2.71 | 1.45        | 33.82 | 1.48        | 274.35 | 3.94        | 193.74 | 2.89        | 66.7  | 1.76        |
| 300.6        | 1942-3-28 | . cm 28                 | core 1942 context 3 | 668613.1 | 1217.17      | 4.76 | 1.5         | 38.71 | 1.54        | 298.41 | 4.11        | 165.26 | 2.68        | 84.31 | 1.99        |
| 300.13       | 1942-2-12 | . cm 12                 | core 1942 context 2 | 744781.5 | 972.23       | 0    | 2.08        | 24.31 | 1.36        | 194.93 | 3.3         | 140.43 | 2.42        | 65.86 | 1.74        |
| 300.01       | 1942-3-20 | . cm 20                 | core 1942 context 3 | 645183.2 | 1288.29      | 3.86 | 1.56        | 36.67 | 1.54        | 373    | 4.63        | 125.72 | 2.35        | 81.6  | 1.98        |
| 301.77       | 1939-2-4  | . cm 4                  | core 1939 context 2 | 719095.9 | 1051.86      | 3.32 | 1.41        | 23.93 | 1.35        | 215.37 | 3.42        | 135.64 | 2.37        | 69.11 | 1.77        |
| 301.97       | 1939-2-8  | . cm 8                  | core 1939 context 2 | 724187.2 | 1051.07      | 0    | 2.1         | 23.79 | 1.35        | 228.92 | 3.56        | 172.17 | 2.68        | 64.44 | 1.71        |
| 301.37       | 1939-2-10 | . cm 10                 | core 1939 context 2 | 721515.1 | 1074.83      | 3.23 | 1.44        | 31.55 | 1.46        | 220.48 | 3.58        | 175.6  | 2.76        | 77.75 | 1.91        |

### Appendix 3

| Duration | SAMPLE    | Depth   | NOTE                | Bal      | Bal Error | Mo   | Mo Error | Nb    | Nb Error | Zr     | Zr Error | Sr     | Sr Error | Rb     | Rb Error |
|----------|-----------|---------|---------------------|----------|-----------|------|----------|-------|----------|--------|----------|--------|----------|--------|----------|
| 300.61   | 1939-2-6  | . cm 6  | core 1939 context 2 | 733371   | 1027.15   | 0    | 2.4      | 25.18 | 1.39     | 215.84 | 3.5      | 135.77 | 2.42     | 59.95  | 1.69     |
| 300.71   | 1939-1-2  | . cm 2  | core 1939 context 1 | 747045.4 | 958.88    | 0    | 2.09     | 25.44 | 1.38     | 191.08 | 3.31     | 145.41 | 2.49     | 52.68  | 1.59     |
| 301.83   | 1943-2-8  | . cm 8  | core 1943 context 2 | 717800.1 | 1047.93   | 0    | 1.5      | 27.77 | 1.38     | 200.92 | 3.29     | 124.32 | 2.25     | 72.65  | 1.8      |
| 302.02   | 1943-2-10 | . cm 10 | core 1943 context 2 | 726613   | 1033.78   | 0    | 1.5      | 27.56 | 1.39     | 159.76 | 2.99     | 119.97 | 2.23     | 48.18  | 1.5      |
| 300.18   | 1943-3-14 | . cm 14 | core 1943 context 3 | 686259.1 | 1164.83   | 3.44 | 1.57     | 35.78 | 1.53     | 403.3  | 4.89     | 222.6  | 3.17     | 59.07  | 1.69     |
| 300.52   | 1943-3-16 | . cm 16 | core 1943 context 3 | 678476.6 | 1168.05   | 2.17 | 1.44     | 29.88 | 1.42     | 270.24 | 3.87     | 174.19 | 2.72     | 59.28  | 1.66     |
| 300.63   | 1943-3-18 | . cm 18 | core 1943 context 3 | 673160.5 | 1192.85   | 0    | 2.07     | 29    | 1.42     | 187.56 | 3.25     | 131.71 | 2.36     | 61.9   | 1.7      |
| 300.99   | 1943-3-20 | . cm 20 | core 1943 context 3 | 685979   | 1157.12   | 0    | 2.34     | 26.22 | 1.39     | 225.89 | 3.56     | 149.25 | 2.52     | 81.55  | 1.94     |
| 300.07   | 1943-3-28 | . cm 28 | core 1943 context 3 | 669980   | 1215.46   | 2.64 | 1.47     | 37.97 | 1.53     | 282.01 | 3.94     | 121.93 | 2.28     | 62.99  | 1.72     |
| 302.02   | 1943-3-24 | . cm 24 | core 1943 context 3 | 666749.6 | 1218.12   | 0    | 2.18     | 41.48 | 1.57     | 271.56 | 3.89     | 137.61 | 2.43     | 80.26  | 1.93     |
| 300.83   | 1943-2-12 | . cm 12 | core 1943 context 2 | 693432.4 | 1183.23   | 2.78 | 1.74     | 47.7  | 1.7      | 621.68 | 6.41     | 236.49 | 3.36     | 61.27  | 1.77     |
| 301.36   | 1940-2-26 | . cm 26 | core 1940 context 2 | 701417.8 | 1124.7    | 3.01 | 1.42     | 28.24 | 1.42     | 207.36 | 3.49     | 193.26 | 2.9      | 68.82  | 1.8      |
| 300.5    | 1940-1-22 | . cm 22 | core 1940 context 1 | 718953.9 | 1059.61   | 0    | 2.06     | 56.68 | 1.69     | 196.1  | 3.3      | 148.52 | 2.48     | 71.44  | 1.8      |
| 301.7    | 1940-1-14 | . cm 14 | core 1940 context 1 | 732732.4 | 1034.34   | 0    | 2.19     | 26.55 | 1.44     | 220.93 | 3.64     | 153.45 | 2.64     | 61.42  | 1.75     |
| 300.42   | 1940-2-24 | . cm 24 | core 1940 context 2 | 696580.4 | 1129.11   | 0    | 2.05     | 25.17 | 1.36     | 180.74 | 3.2      | 152.19 | 2.52     | 71.29  | 1.8      |
| 301.76   | 1940-2-28 | . cm 28 | core 1940 context 2 | 710097.4 | 1080.35   | 0    | 2.01     | 27.29 | 1.37     | 163.42 | 3.11     | 208.54 | 2.95     | 76.82  | 1.85     |
| 300.99   | 1940-1-18 | . cm 18 | core 1940 context 1 | 719636.3 | 1123.23   | 2.66 | 1.5      | 24.82 | 1.47     | 187.27 | 3.54     | 178.52 | 2.96     | 65.47  | 1.88     |
| 301.88   | 1940-1-20 | . cm 20 | core 1940 context 1 | 725199   | 1041.77   | 5.93 | 1.49     | 22.53 | 1.35     | 291.01 | 4.02     | 159.09 | 2.6      | 69.36  | 1.79     |
| 300.4    | 1940-1-16 | . cm 16 | core 1940 context 1 | 729397   | 1068.75   | 0    | 2.22     | 29.49 | 1.48     | 249.01 | 3.88     | 165.39 | 2.76     | 61.81  | 1.76     |
| 302.1    | 1940-1-4  | . cm 4  | core 1940 context 1 | 712707.4 | 1090.17   | 2.33 | 1.43     | 25.33 | 1.4      | 219.85 | 3.57     | 164.43 | 2.68     | 62.7   | 1.73     |
| 300.95   | 1940-1-8  | . cm 8  | core 1940 context 1 | 735785.5 | 1014.71   | 0    | 2.1      | 28.48 | 1.42     | 202.83 | 3.4      | 153.97 | 2.56     | 105.18 | 2.2      |
| 300.84   | 1940-1-12 | . cm 12 | core 1940 context 1 | 731656.1 | 1029.61   | 3.72 | 1.47     | 23.22 | 1.38     | 227.57 | 3.63     | 139.98 | 2.48     | 62.67  | 1.75     |
| 302.05   | 1940-1-10 | . cm 10 | core 1940 context 1 | 723067.9 | 1067.84   | 2.33 | 1.43     | 21.57 | 1.38     | 170.79 | 3.3      | 177.8  | 2.86     | 75.25  | 1.93     |
| 302.09   | 1940-1A-2 | . cm 2  | core 1940 context 1 | 733078.7 | 1024.33   | 0    | 2.12     | 28.54 | 1.44     | 191.15 | 3.38     | 164.3  | 2.7      | 63.18  | 1.75     |
| 301.79   | 1940-1-6  | . cm 6  | core 1940 context 1 | 724439.2 | 1043.08   | 2.55 | 1.41     | 48.16 | 1.63     | 195.4  | 3.37     | 173.61 | 2.73     | 76.27  | 1.88     |
| 300.87   | 1934-1-2  | . cm 2  | core 1934 context 1 | 665510.2 | 1203.62   | 2.66 | 1.45     | 33.91 | 1.47     | 272.07 | 3.88     | 153.08 | 2.54     | 70.83  | 1.81     |
| 301      | 1934-1-4  | . cm 4  | core 1934 context 1 | 667856.8 | 1211.17   | 4.4  | 1.53     | 37.38 | 1.54     | 323.94 | 4.29     | 135.81 | 2.44     | 74.11  | 1.88     |

### Appendix 3

| Duration | SAMPLE    | Depth   | NOTE                | Bal      | Bal Error | Mo   | Mo Error | Nb    | Nb Error | Zr     | Zr Error | Sr     | Sr Error | Rb    | Rb Error |
|----------|-----------|---------|---------------------|----------|-----------|------|----------|-------|----------|--------|----------|--------|----------|-------|----------|
| 301.98   | 1934-3-28 | . cm 28 | core 1934 context 3 | 692148.1 | 1158.52   | 4.12 | 1.5      | 34.16 | 1.5      | 295.14 | 4.12     | 176.13 | 2.78     | 60.99 | 1.71     |
| 300.84   | 1934-3-18 | . cm 18 | core 1934 context 3 | 724760.8 | 1058.1    | 0    | 1.5      | 23.38 | 1.36     | 162.42 | 3.12     | 179.23 | 2.78     | 72    | 1.83     |
| 300.63   | 1934-3-16 | . cm 16 | core 1934 context 3 | 705697.9 | 1091.84   | 0    | 2.11     | 30.18 | 1.4      | 271.19 | 3.77     | 137.42 | 2.35     | 71.45 | 1.77     |
| 301.45   | 1934-3-24 | . cm 24 | core 1934 context 3 | 703529.5 | 1108.45   | 2.57 | 1.39     | 30    | 1.42     | 189.42 | 3.29     | 167.62 | 2.66     | 67.82 | 1.76     |
| 301.37   | 1934-2-6  | . cm 6  | core 1934 context 2 | 725259.9 | 1028.38   | 0    | 2.44     | 27.5  | 1.37     | 246.8  | 3.63     | 174.36 | 2.66     | 68.3  | 1.73     |
| 302.09   | 1934-2-8  | . cm 8  | core 1934 context 2 | 735772.6 | 1013.99   | 3.46 | 1.41     | 36.35 | 1.46     | 249.35 | 3.63     | 157.75 | 2.52     | 68.8  | 1.74     |
| 300.96   | 1934-2-10 | . cm 10 | core 1934 context 2 | 758039.3 | 942.79    | 4.73 | 1.44     | 35.64 | 1.44     | 311.42 | 3.96     | 141.98 | 2.35     | 65.37 | 1.67     |
| 301.59   | 1934-3-12 | . cm 12 | core 1934 context 3 | 723658.1 | 1068.23   | 0    | 2.08     | 25.09 | 1.38     | 194.47 | 3.32     | 150.54 | 2.52     | 65.61 | 1.74     |
| 301.43   | 1934-3-20 | . cm 20 | core 1934 context 3 | 714778.4 | 1098.75   | 3.71 | 1.45     | 26.36 | 1.41     | 226.92 | 3.61     | 158.59 | 2.62     | 80.36 | 1.94     |
| 301.39   | 1934-3-14 | . cm 14 | core 1934 context 3 | 716158.9 | 1081.55   | 6.82 | 1.47     | 34.53 | 1.48     | 254.1  | 3.76     | 175.53 | 2.72     | 71.95 | 1.81     |

| Duration | SAMPLE    | Depth | NOTE                | Bi    | Bi Error | As    | As Error | Se | Se Error | Au | Au Error | Pb      | Pb Error | W | W Error |
|----------|-----------|-------|---------------------|-------|----------|-------|----------|----|----------|----|----------|---------|----------|---|---------|
| 300      | 1936      | cm 2  | context 1           | 18.92 | 3.46     | 8.83  | 3.97     | 0  | 1.5      | 0  | 5.6      | 37.48   | 4.5      | 0 | 40.31   |
| 300      | 1937      | cm 2  | context 1           | 8.28  | 3.38     | 14.18 | 6.16     | 0  | 1.65     | 0  | 6.26     | 129.9   | 6.89     | 0 | 43.18   |
| 300      | 1937      | cm 4  | context 1           | 10.99 | 3.46     | 9.77  | 5.94     | 0  | 2.63     | 0  | 5.85     | 134.34  | 6.72     | 0 | 41.29   |
| 300      | 1937      | cm 6  | context 1           | 10.21 | 3.32     | 8.44  | 5.56     | 0  | 2.75     | 0  | 5.92     | 112.03  | 6.32     | 0 | 41.13   |
| 300      | 1937      | cm 8  | context 1           | 7.53  | 3.29     | 0     | 8.15     | 0  | 1.72     | 0  | 6.18     | 103.36  | 6.21     | 0 | 41.94   |
| 300      | 1937-1-10 | cm 10 | core 1937 context 1 | 10.82 | 3.55     | 0     | 9.13     | 0  | 1.51     | 0  | 6.06     | 176.17  | 7.56     | 0 | 41.29   |
| 300      | 1937-2-12 | cm 12 | core 1937 context 2 | 10.74 | 3.53     | 10.93 | 6.37     | 0  | 1.52     | 0  | 6.03     | 153.42  | 7.17     | 0 | 41.93   |
| 300      | 1937-2-14 | cm 14 | core 1937 context 2 | 9.64  | 3.68     | 0     | 12.32    | 0  | 1.5      | 0  | 6.06     | 356.45  | 10.06    | 0 | 40.65   |
| 300      | 1937-2-16 | cm 16 | core 1937 context 2 | 0     | 5.77     | 0     | 14.32    | 0  | 1.9      | 0  | 6.34     | 486.57  | 11.67    | 0 | 40.9    |
| 300      | 1937-2-18 | cm 18 | core 1937 context 2 | 11.36 | 4.08     | 0     | 15.67    | 0  | 2.55     | 0  | 6.48     | 477.79  | 11.99    | 0 | 42.27   |
| 300      | 1937-2-20 | cm 20 | core 1937 context 2 | 8.2   | 3.71     | 0     | 13.5     | 0  | 1.5      | 0  | 6.31     | 430.77  | 10.96    | 0 | 40.58   |
| 300      | 1937-2-22 | cm 22 | core 1937 context 3 | 19.46 | 6.6      | 0     | 30.4     | 0  | 2.14     | 0  | 8.97     | 2296.79 | 26.16    | 0 | 46.52   |
| 300      | 1937-2-26 | cm 26 | core 1937 context 4 | 11.59 | 3.61     | 29.09 | 8.39     | 0  | 1.89     | 0  | 6.21     | 299.76  | 9.31     | 0 | 39.44   |
| 300.83   | 1936-2-22 | cm 22 | core 1936 context 2 | 11.39 | 3.14     | 8.8   | 3.16     | 0  | 2.36     | 0  | 6.06     | 7.55    | 3.59     | 0 | 41.93   |
| 301.55   | 1936-2-16 | cm 16 | core 1936 context 2 | 8.5   | 3.04     | 7.08  | 3.17     | 0  | 1.5      | 0  | 5.75     | 12.6    | 3.64     | 0 | 39.89   |

### Appendix 3

| Duration | SAMPLE             | Depth          | NOTE                | Bi    | Bi Error | As    | As Error | Se | Se Error | Au | Au Error | Pb      | Pb Error | W | W Error |
|----------|--------------------|----------------|---------------------|-------|----------|-------|----------|----|----------|----|----------|---------|----------|---|---------|
| 300.37   | 1936-2-18          | cm 18          | core 1936 context 2 | 15.48 | 3.25     | 9.87  | 3.23     | 0  | 2.5      | 0  | 5.97     | 6.58    | 3.65     | 0 | 43.49   |
| 300.6    | 1936-2-20          | cm 20          | core 1936 context 2 | 10.03 | 3.14     | 7.81  | 3.39     | 0  | 1.64     | 0  | 6.1      | 13.55   | 3.87     | 0 | 43.1    |
| 301.86   | 1936-2-24          | cm 24          | core 1936 context 2 | 10.37 | 3.11     | 10.3  | 3.29     | 0  | 1.5      | 0  | 5.82     | 10.49   | 3.68     | 0 | 42.42   |
| 300.09   | 1936-2-26          | cm 26          | core 1936 context 2 | 25    | 3.57     | 10.53 | 3.46     | 0  | 1.75     | 0  | 5.84     | 10.29   | 3.85     | 0 | 41.93   |
| 301.18   | 1936-1-2           | cm 2           | core 1936 context 1 | 19.86 | 3.64     | 0     | 6.9      | 0  | 1.62     | 0  | 6        | 60.8    | 5.3      | 0 | 43.31   |
| 300.44   | 1936-2-14          | cm 14          | core 1936 context 2 | 10.43 | 3.08     | 0     | 4.77     | 0  | 1.5      | 0  | 5.59     | 15.31   | 3.77     | 0 | 40.83   |
| 300.27   | 1936-1-12          | . cm 12        | core 1936 context 1 | 11.72 | 3.16     | 5.94  | 3.5      | 0  | 1.83     | 0  | 5.61     | 22.87   | 4.04     | 0 | 41.62   |
| 300.12   | 1936-1-10          | . cm 10        | core 1936 context 1 | 15.07 | 3.28     | 0     | 5.21     | 0  | 2.35     | 0  | 5.74     | 22.34   | 4.09     | 0 | 41.73   |
| 301.3    | 1936-1-8           | . cm 8         | core 1936 context 1 | 7.83  | 2.96     | 5.05  | 3.28     | 0  | 1.5      | 0  | 5.56     | 19.51   | 3.81     | 0 | 39.98   |
| 301.35   | 1936-1-6           | . cm 6         | core 1936 context 1 | 11.94 | 3.17     | 5.67  | 3.25     | 0  | 1.5      | 0  | 5.53     | 15.08   | 3.76     | 0 | 40.81   |
| 301.57   | 1936-1-4           | . cm 4         | core 1936 context 1 | 11.63 | 3.24     | 8.29  | 3.88     | 0  | 1.5      | 0  | 8.16     | 34.51   | 4.4      | 0 | 42.45   |
| 301.55   | 1937-5-28          | . cm 28        | core 1937 context 5 | 8.38  | 3.25     | 0     | 11.31    | 0  | 1.5      | 0  | 5.83     | 153.81  | 6.9      | 0 | 40.48   |
| 300.36   | 1937-2-12          | . cm 12        | core 1937 context 2 | 13.45 | 3.95     | 0     | 13.4     | 0  | 1.62     | 0  | 6.38     | 363.87  | 10.18    | 0 | 42.38   |
| 300.05   | 1937-2-16          | . cm16         | core 1937 context 2 | 15.76 | 4.42     | 0     | 18.78    | 0  | 1.73     | 0  | 6.66     | 574.66  | 12.96    | 0 | 43.96   |
| 301.89   | 1937-1-4           | . cm 4         | core 1937 context 1 | 13.34 | 3.48     | 0     | 12.64    | 0  | 2.05     | 0  | 5.88     | 183.41  | 7.52     | 0 | 41.45   |
| 300.19   | 1937-1-8           | . cm 8         | core 1937 context 1 | 14.22 | 3.72     | 0     | 11.49    | 0  | 2.37     | 0  | 6.05     | 253.78  | 8.77     | 0 | 45.4    |
| 300.61   | 1937-2-20          | . cm 20        | core 1937 context 2 | 11.56 | 4.94     | 0     | 20.64    | 0  | 2.69     | 0  | 7.41     | 943.55  | 16.79    | 0 | 45.54   |
| 301.74   | 1937-3-22          | . cm 22 (24.5) | core 1937 context 3 | 17.59 | 6.27     | 0     | 28.68    | 0  | 2.28     | 0  | 8.6      | 1910.92 | 24.03    | 0 | 78.97   |
| 301.92   | 1937-3-22 reshaken | . cm 22 (24.5) | core 1937 context 3 | 12.98 | 6.58     | 0     | 32.44    | 0  | 2.24     | 0  | 9.18     | 2228.62 | 26.21    | 0 | 65.05   |
| 301.71   | 1937-4-26          | . cm 26        | core 1937 context 4 | 10.06 | 5.11     | 25.98 | 15.38    | 0  | 3.07     | 0  | 7.51     | 1154.65 | 18.07    | 0 | 44.39   |
| 300      | 1938-1-2           | . cm 2         | core 1938 context 1 | 6.57  | 3.14     | 0     | 8.38     | 0  | 1.58     | 0  | 6.01     | 112.92  | 6.35     | 0 | 47.18   |
| 300      | 1938-1-4           | . cm 2         | core 1938 context 1 | 13.75 | 3.34     | 10.97 | 4.32     | 0  | 1.65     | 0  | 5.83     | 48.41   | 4.82     | 0 | 42.87   |
| 300      | 1938-1-6           | . cm 6         | core 1938 context 1 | 28.46 | 3.86     | 0     | 8.85     | 0  | 1.57     | 0  | 5.82     | 165.23  | 7.43     | 0 | 44.24   |
| 301.66   | 1938-1-10          | . cm 10        | core 193 context 1  | 11.85 | 3.21     | 6.79  | 3.34     | 0  | 1.72     | 0  | 5.76     | 15.41   | 3.85     | 0 | 42.85   |
| 300.07   | 1938-1-8           | . cm 8         | core 1938 context 1 | 13.26 | 3.46     | 11.57 | 5.59     | 0  | 1.99     | 0  | 6.13     | 105.79  | 6.32     | 0 | 47.63   |
| 301.91   | 1938-1-6           | . cm 6         | core 1938 context 1 | 11.24 | 3.74     | 12.76 | 8.32     | 0  | 1.59     | 0  | 6.15     | 301.2   | 9.5      | 0 | 51.13   |
| 300.45   | 1938-2-28          | . cm 28        | core 1938 context 2 | 11.96 | 3.19     | 8.24  | 3.23     | 0  | 2.4      | 0  | 5.89     | 10.22   | 3.68     | 0 | 42.96   |
| 300.38   | 1938-2-18          | . cm 18        | core 1938 context 2 | 13.45 | 3.12     | 7.19  | 3.15     | 0  | 2.29     | 0  | 5.85     | 9.54    | 3.61     | 0 | 40.34   |

### Appendix 3

| Duration | SAMPLE    | Depth                | NOTE                | Bi    | Bi Error | As    | As Error | Se | Se Error | Au | Au Error | Pb     | Pb Error | W | W Error |
|----------|-----------|----------------------|---------------------|-------|----------|-------|----------|----|----------|----|----------|--------|----------|---|---------|
| 301.9    | 1938-2-24 | . cm 24              | core 1938 context 2 | 13.66 | 3.11     | 6.97  | 2.95     | 0  | 1.5      | 0  | 5.68     | 5.67   | 3.39     | 0 | 40.08   |
| 301.55   | 1938-2-16 | . cm 16              | core 1938 context 2 | 8.53  | 3.02     | 6     | 3.05     | 0  | 1.52     | 0  | 5.69     | 8.7    | 3.53     | 0 | 40.08   |
| 300.01   | 1938-2-12 | . cm 12              | core 1938 context 2 | 8.17  | 2.89     | 0     | 4.43     | 0  | 1.5      | 0  | 5.58     | 10.76  | 3.47     | 0 | 39.11   |
| 301.92   | 1938-2-14 | . cm 14              | core 1938 context 2 | 10.38 | 3.04     | 5.93  | 2.93     | 0  | 1.5      | 0  | 5.48     | 6.31   | 3.39     | 0 | 39.52   |
| 300      | 1943-1-2  | . cm 2               | core 1943 context 1 | 12.29 | 3.47     | 13.8  | 7.4      | 0  | 1.51     | 0  | 5.75     | 238.11 | 8.34     | 0 | 39.48   |
| 300      | 1943-1-4  | . cm 4               | core 1943 context 1 | 11.74 | 3.49     | 14.75 | 6.99     | 0  | 1.8      | 0  | 6.35     | 182.84 | 7.85     | 0 | 44.8    |
| 300      | 1943-1-6  | . cm 6               | core 1943 context 1 | 12.29 | 3.16     | 8.78  | 4.02     | 0  | 2.18     | 0  | 5.59     | 39.3   | 4.55     | 0 | 39.57   |
| 300      | 1942-1-2  | . cm 2               | core 1942 context 1 | 12.02 | 3.6      | 0     | 12.01    | 0  | 1.52     | 0  | 6.22     | 340.12 | 9.76     | 0 | 41.41   |
| 300      | 1942-1-4  | . cm 4               | core 1942 context 1 | 13.33 | 3.5      | 15.44 | 7.16     | 0  | 1.5      | 0  | 5.82     | 214.37 | 8.05     | 0 | 41.34   |
| 300      | 1942-1-6  | . cm 6               | core 1942 context 1 | 10.68 | 3.06     | 12.44 | 5.11     | 0  | 1.5      | 0  | 5.28     | 93.58  | 5.72     | 0 | 39.65   |
| 300      | 1942-2-8  | . cm 8 gravelly lens | core 1942 context 2 | 19.64 | 3.63     | 7.53  | 4.22     | 0  | 2.04     | 0  | 6.18     | 41.04  | 4.85     | 0 | 42.32   |
| 300      | 1942-2-10 | . cm 10 humic lens   | core 1942 context 2 | 6.03  | 2.78     | 15.7  | 3.36     | 0  | 1.83     | 0  | 5.4      | 11.34  | 3.61     | 0 | 38.31   |
| 301.39   | 1939-3-24 | . cm 24              | core 1939 context 3 | 15.06 | 3.27     | 0     | 4.78     | 0  | 1.66     | 0  | 5.73     | 12.86  | 3.78     | 0 | 40.81   |
| 300.49   | 1939-3-28 | . cm 28              | core 1939 context 3 | 16.78 | 3.41     | 12.7  | 3.45     | 0  | 1.65     | 0  | 5.94     | 10.66  | 3.82     | 0 | 42.33   |
| 302.04   | 1939-3-20 | . cm 20              | core 1939 context 3 | 10.19 | 3.14     | 5.48  | 3.12     | 0  | 1.56     | 0  | 5.83     | 9.68   | 3.64     | 0 | 41.68   |
| 300.74   | 1939-3-18 | . cm 18              | core 1939 context 3 | 12.19 | 3.16     | 9.96  | 3.15     | 0  | 1.73     | 0  | 5.72     | 6.67   | 3.52     | 0 | 41.36   |
| 300.19   | 1939-3-14 | . cm 14              | core 1939 context 3 | 8.92  | 3.08     | 7.6   | 3.06     | 0  | 1.5      | 0  | 5.6      | 8.2    | 3.5      | 0 | 40.13   |
| 300.28   | 1939-3-16 | . cm 16              | core 1939 context 3 | 12.15 | 3.22     | 5.36  | 3.08     | 0  | 1.5      | 0  | 5.51     | 9.98   | 3.6      | 0 | 40.7    |
| 302.01   | 1942-3-16 | . cm 16              | core 1942 context 3 | 15.19 | 3.43     | 7.32  | 3.45     | 0  | 2.69     | 0  | 5.98     | 10.14  | 3.96     | 0 | 43.82   |
| 302.04   | 1942-3-14 | . cm 14              | core 1942 context 3 | 14.01 | 3.52     | 8.51  | 3.51     | 0  | 1.8      | 0  | 6.49     | 11.24  | 4.01     | 0 | 46.01   |
| 300.72   | 1942-3-24 | . cm 24              | core 1942 context 3 | 12.57 | 3.3      | 10.92 | 3.35     | 0  | 1.82     | 0  | 5.94     | 8.59   | 3.75     | 0 | 58.3    |
| 302.18   | 1942-3-18 | . cm 18              | core 1942 context 3 | 15.06 | 3.26     | 5.72  | 3.14     | 0  | 1.57     | 0  | 5.68     | 9.81   | 3.66     | 0 | 41.57   |
| 300.6    | 1942-3-28 | . cm 28              | core 1942 context 3 | 19.95 | 3.56     | 12.03 | 3.48     | 0  | 1.64     | 0  | 5.81     | 12.82  | 3.88     | 0 | 42.71   |
| 300.13   | 1942-2-12 | . cm 12              | core 1942 context 2 | 11.87 | 3.21     | 11.3  | 3.62     | 0  | 1.51     | 0  | 5.72     | 21.98  | 4.06     | 0 | 41.94   |
| 300.01   | 1942-3-20 | . cm 20              | core 1942 context 3 | 14.66 | 3.42     | 9.08  | 3.27     | 0  | 1.61     | 0  | 5.83     | 8.4    | 3.7      | 0 | 42.87   |
| 301.77   | 1939-2-4  | . cm 4               | core 1939 context 2 | 15.49 | 3.26     | 7.34  | 3.39     | 0  | 1.5      | 0  | 5.57     | 18.25  | 3.89     | 0 | 39.6    |
| 301.97   | 1939-2-8  | . cm 8               | core 1939 context 2 | 10.51 | 3.08     | 6.97  | 3.23     | 0  | 2.45     | 0  | 5.71     | 13.3   | 3.72     | 0 | 40.8    |
| 301.37   | 1939-2-10 | . cm 10              | core 1939 context 2 | 14.8  | 3.36     | 5.57  | 3.35     | 0  | 2.36     | 0  | 5.54     | 15.86  | 3.93     | 0 | 40.94   |



### Appendix 3

| Duration | SAMPLE    | Depth   | NOTE                | Bi    | Bi Error | As    | As Error | Se | Se Error | Au | Au Error | Pb    | Pb Error | W | W Error |
|----------|-----------|---------|---------------------|-------|----------|-------|----------|----|----------|----|----------|-------|----------|---|---------|
| 300.61   | 1939-2-6  | . cm 6  | core 1939 context 2 | 12.56 | 3.21     | 9.44  | 3.51     | 0  | 1.71     | 0  | 5.69     | 18.38 | 3.99     | 0 | 41.59   |
| 300.71   | 1939-1-2  | . cm 2  | core 1939 context 1 | 9.05  | 3.12     | 11.85 | 4.11     | 0  | 1.5      | 0  | 5.78     | 40.1  | 4.63     | 0 | 43.82   |
| 301.83   | 1943-2-8  | . cm 8  | core 1943 context 2 | 13.82 | 3.23     | 8.07  | 3.44     | 0  | 2.41     | 0  | 5.54     | 19.9  | 3.95     | 0 | 40.62   |
| 302.02   | 1943-2-10 | . cm 10 | core 1943 context 2 | 10.88 | 2.98     | 10.42 | 3.17     | 0  | 2.2      | 0  | 5.55     | 8.41  | 3.55     | 0 | 40.94   |
| 300.18   | 1943-3-14 | . cm 14 | core 1943 context 3 | 9.75  | 3.17     | 7.4   | 3.23     | 0  | 1.78     | 0  | 5.8      | 9.04  | 3.75     | 0 | 41.78   |
| 300.52   | 1943-3-16 | . cm 16 | core 1943 context 3 | 9.85  | 3.05     | 9.04  | 3.26     | 0  | 1.5      | 0  | 5.51     | 12.11 | 3.68     | 0 | 40.65   |
| 300.63   | 1943-3-18 | . cm 18 | core 1943 context 3 | 12.41 | 3.13     | 9.64  | 3.1      | 0  | 1.54     | 0  | 5.52     | 5.88  | 3.49     | 0 | 41.03   |
| 300.99   | 1943-3-20 | . cm 20 | core 1943 context 3 | 24.66 | 3.6      | 6.43  | 3.13     | 0  | 1.57     | 0  | 5.6      | 7.81  | 3.65     | 0 | 41.35   |
| 300.07   | 1943-3-28 | . cm 28 | core 1943 context 3 | 12.22 | 3.16     | 9.88  | 3.23     | 0  | 1.88     | 0  | 5.84     | 8.78  | 3.62     | 0 | 41.13   |
| 302.02   | 1943-3-24 | . cm 24 | core 1943 context 3 | 14.12 | 3.35     | 9.93  | 3.47     | 0  | 2.05     | 0  | 6        | 15.97 | 3.9      | 0 | 41.69   |
| 300.83   | 1943-2-12 | . cm 12 | core 1943 context 2 | 16.02 | 3.45     | 9.83  | 3.39     | 0  | 2.59     | 0  | 6        | 6.98  | 3.83     | 0 | 43.1    |
| 301.36   | 1940-2-26 | . cm 26 | core 1940 context 2 | 10.32 | 3.17     | 7.7   | 3.21     | 0  | 1.5      | 0  | 5.55     | 10.47 | 3.67     | 0 | 40.76   |
| 300.5    | 1940-1-22 | . cm 22 | core 1940 context 1 | 14.96 | 3.26     | 7.03  | 3.24     | 0  | 1.5      | 0  | 5.65     | 13.55 | 3.75     | 0 | 40.62   |
| 301.7    | 1940-1-14 | . cm 14 | core 1940 context 1 | 11.02 | 3.34     | 13.33 | 3.82     | 0  | 1.6      | 0  | 6.02     | 21.33 | 4.27     | 0 | 43.25   |
| 300.42   | 1940-2-24 | . cm 24 | core 1940 context 2 | 11.67 | 3.17     | 8.83  | 3.35     | 0  | 1.6      | 0  | 5.7      | 15.63 | 3.81     | 0 | 41.35   |
| 301.76   | 1940-2-28 | . cm 28 | core 1940 context 2 | 8.84  | 3.07     | 6.03  | 3.04     | 0  | 1.5      | 0  | 5.49     | 9.75  | 3.53     | 0 | 47.99   |
| 300.99   | 1940-1-18 | . cm 18 | core 1940 context 1 | 12.1  | 3.54     | 13.13 | 3.94     | 0  | 1.82     | 0  | 6.47     | 16.73 | 4.39     | 0 | 45.94   |
| 301.88   | 1940-1-20 | . cm 20 | core 1940 context 1 | 16.51 | 3.35     | 11.51 | 3.44     | 0  | 1.52     | 0  | 5.84     | 14.11 | 3.85     | 0 | 41.73   |
| 300.4    | 1940-1-16 | . cm 16 | core 1940 context 1 | 10.56 | 3.29     | 15.45 | 3.66     | 0  | 1.6      | 0  | 5.94     | 13.69 | 3.99     | 0 | 42.62   |
| 302.1    | 1940-1-4  | . cm 4  | core 1940 context 1 | 11.21 | 3.23     | 9.02  | 3.65     | 0  | 2.17     | 0  | 5.68     | 22.59 | 4.17     | 0 | 49.58   |
| 300.95   | 1940-1-8  | . cm 8  | core 1940 context 1 | 13.43 | 3.5      | 8.78  | 3.39     | 0  | 1.54     | 0  | 5.76     | 14.59 | 3.88     | 0 | 41.44   |
| 300.84   | 1940-1-12 | . cm 12 | core 1940 context 1 | 14.16 | 3.41     | 16.75 | 4.34     | 0  | 1.56     | 0  | 5.73     | 40.17 | 4.76     | 0 | 42.37   |
| 302.05   | 1940-1-10 | . cm 10 | core 1940 context 1 | 11.35 | 3.42     | 12.84 | 3.57     | 0  | 2.37     | 0  | 6.08     | 12.73 | 4.02     | 0 | 43.63   |
| 302.09   | 1940-1A-2 | . cm 2  | core 1940 context 1 | 11.55 | 3.28     | 10.98 | 3.84     | 0  | 2.09     | 0  | 5.88     | 27.35 | 4.35     | 0 | 43.54   |
| 301.79   | 1940-1-6  | . cm 6  | core 1940 context 1 | 11.41 | 3.29     | 9.67  | 3.64     | 0  | 1.56     | 0  | 5.79     | 22.68 | 4.13     | 0 | 41.6    |
| 300.87   | 1934-1-2  | . cm 2  | core 1934 context 1 | 16.34 | 3.35     | 6.87  | 3.5      | 0  | 1.57     | 0  | 5.75     | 20.68 | 4.04     | 0 | 51.49   |
| 301      | 1934-1-4  | . cm 4  | core 1934 context 1 | 19.38 | 3.57     | 7.87  | 4        | 0  | 2.5      | 0  | 5.95     | 34.58 | 4.6      | 0 | 43.92   |
| 301.98   | 1934-3-28 | . cm 28 | core 1934 context 3 | 15.24 | 3.28     | 9.99  | 3.15     | 0  | 1.61     | 0  | 7.02     | 0     | 5.31     | 0 | 42.51   |

### Appendix 3

|          |           |         |                     |       |          |       |          |    |          |    |          |       |          |   |         |
|----------|-----------|---------|---------------------|-------|----------|-------|----------|----|----------|----|----------|-------|----------|---|---------|
| 300.84   | 1934-3-18 | . cm 18 | core 1934 context 3 | 16.21 | 3.32     | 10.29 | 3.1      | 0  | 1.61     | 0  | 5.71     | 0     | 5.23     | 0 | 40.79   |
| Duration | SAMPLE    | Depth   | NOTE                | Bi    | Bi Error | As    | As Error | Se | Se Error | Au | Au Error | Pb    | Pb Error | W | W Error |
| 300.63   | 1934-3-16 | . cm 16 | core 1934 context 3 | 18.64 | 3.29     | 4.63  | 3.03     | 0  | 1.5      | 0  | 5.74     | 9.55  | 3.56     | 0 | 40.09   |
| 301.45   | 1934-3-24 | . cm 24 | core 1934 context 3 | 12.19 | 3.15     | 0     | 4.45     | 0  | 2.05     | 0  | 7.35     | 7.33  | 3.52     | 0 | 40.39   |
| 301.37   | 1934-2-6  | . cm 6  | core 1934 context 2 | 16.33 | 3.21     | 9.5   | 3.24     | 0  | 1.92     | 0  | 5.26     | 12.45 | 3.65     | 0 | 39.82   |
| 302.09   | 1934-2-8  | . cm 8  | core 1934 context 2 | 27.02 | 3.48     | 6.33  | 3.21     | 0  | 2.35     | 0  | 5.69     | 13.19 | 3.72     | 0 | 40.47   |
| 300.96   | 1934-2-10 | . cm 10 | core 1934 context 2 | 28.18 | 3.43     | 4.78  | 3.1      | 0  | 1.98     | 0  | 5.62     | 12.44 | 3.63     | 0 | 39.52   |
| 301.59   | 1934-3-12 | . cm 12 | core 1934 context 3 | 13.75 | 3.2      | 0     | 4.55     | 0  | 2.61     | 0  | 5.46     | 8.78  | 3.61     | 0 | 40.52   |
| 301.43   | 1934-3-20 | . cm 20 | core 1934 context 3 | 16.16 | 3.43     | 9.39  | 3.32     | 0  | 1.7      | 0  | 5.86     | 10.74 | 3.78     | 0 | 41.52   |
| 301.39   | 1934-3-14 | . cm 14 | core 1934 context 3 | 16.5  | 3.3      | 7.98  | 3.05     | 0  | 1.53     | 0  | 5.68     | 5.44  | 3.48     | 0 | 41.3    |

|          |           |       |                     |        |          |        |          |    |          |    |          |          |          |         |
|----------|-----------|-------|---------------------|--------|----------|--------|----------|----|----------|----|----------|----------|----------|---------|
| Duration | SAMPLE    | Depth | NOTE                | Zn     | Zn Error | Cu     | Cu Error | Ni | Ni Error | Co | Co Error | Fe       | Fe Error | Mn      |
| 300      | 1936      | cm 2  | context 1           | 100.35 | 7.93     | 143.33 | 12.8     | 0  | 24.63    | 0  | 74.32    | 24763.77 | 198.01   | 430.5   |
| 300      | 1937      | cm 2  | context 1           | 145.7  | 9.29     | 215.23 | 14.91    | 0  | 26.05    | 0  | 80.8     | 26297.55 | 212.04   | 626     |
| 300      | 1937      | cm 4  | context 1           | 119.17 | 8.44     | 235.25 | 14.6     | 0  | 24.82    | 0  | 72.84    | 22721.31 | 190.13   | 592.97  |
| 300      | 1937      | cm 6  | context 1           | 96.59  | 7.96     | 219.65 | 14.46    | 0  | 25.52    | 0  | 74.7     | 24247.49 | 198.03   | 522.94  |
| 300      | 1937      | cm 8  | context 1           | 112.47 | 8.36     | 222.54 | 14.63    | 0  | 25.64    | 0  | 87.53    | 34967.33 | 243.28   | 1154.18 |
| 300      | 1937-1-10 | cm 10 | core 1937 context 1 | 93.71  | 7.92     | 256.57 | 15.2     | 0  | 24.35    | 0  | 72.33    | 22175.09 | 189.84   | 946.47  |
| 300      | 1937-2-12 | cm 12 | core 1937 context 2 | 88.59  | 7.93     | 321.04 | 16.41    | 0  | 25.93    | 0  | 70.13    | 19910.34 | 180.99   | 1106.98 |
| 300      | 1937-2-14 | cm 14 | core 1937 context 2 | 114.2  | 8.4      | 678.11 | 20.8     | 0  | 23.83    | 0  | 73.58    | 24415.22 | 193.91   | 1459.76 |
| 300      | 1937-2-16 | cm 16 | core 1937 context 2 | 107.79 | 8.22     | 592.8  | 19.69    | 0  | 24.11    | 0  | 77.5     | 27689.09 | 208.07   | 1048.7  |
| 300      | 1937-2-18 | cm 18 | core 1937 context 2 | 96.65  | 8.21     | 457.43 | 18.45    | 0  | 26       | 0  | 81.06    | 27979.19 | 215.85   | 931.74  |
| 300      | 1937-2-20 | cm 20 | core 1937 context 2 | 90.91  | 7.73     | 417.66 | 17.19    | 0  | 24.33    | 0  | 71.33    | 23218.59 | 189.41   | 716.3   |
| 300      | 1937-2-22 | cm 22 | core 1937 context 3 | 130.93 | 8.61     | 217.06 | 14.05    | 0  | 23.28    | 0  | 71.75    | 22611.77 | 187      | 1351.77 |
| 300      | 1937-2-26 | cm 26 | core 1937 context 4 | 86.15  | 7.47     | 224.51 | 14.09    | 0  | 23.88    | 0  | 69.2     | 21189.66 | 181.53   | 465.74  |
| 300.83   | 1936-2-22 | cm 22 | core 1936 context 2 | 84.18  | 7.66     | 41.9   | 10.91    | 0  | 25.83    | 0  | 78.91    | 26505.4  | 210.07   | 548.72  |
| 301.55   | 1936-2-16 | cm 16 | core 1936 context 2 | 75.55  | 7.24     | 61.73  | 11.12    | 0  | 25.31    | 0  | 70.35    | 21177.49 | 183.4    | 515.21  |
| 300.37   | 1936-2-18 | cm 18 | core 1936 context 2 | 126.78 | 8.83     | 72.82  | 11.91    | 0  | 26.97    | 0  | 85.33    | 32045.27 | 235.72   | 918.06  |
| 300.6    | 1936-2-20 | cm 20 | core 1936 context 2 | 79.93  | 7.74     | 47.72  | 11.38    | 0  | 32.32    | 0  | 77.03    | 23949.62 | 202.43   | 614.32  |

### Appendix 3

| Duration | SAMPLE             | Depth          | NOTE                | Zn     | Zn Error | Cu      | Cu Error | Ni    | Ni Error | Co | Co Error | Fe       | Fe Error | Mn      |
|----------|--------------------|----------------|---------------------|--------|----------|---------|----------|-------|----------|----|----------|----------|----------|---------|
| 301.86   | 1936-2-24          | cm 24          | core 1936 context 2 | 121.07 | 8.52     | 51.43   | 11.22    | 46.14 | 18.11    | 0  | 85.49    | 33500.35 | 236.38   | 494.82  |
| 300.09   | 1936-2-26          | cm 26          | core 1936 context 2 | 87.39  | 7.88     | 39.66   | 11.33    | 0     | 26.56    | 0  | 80.55    | 26838.36 | 215.12   | 606.31  |
| 301.18   | 1936-1-2           | cm 2           | core 1936 context 1 | 155.58 | 9.4      | 197.15  | 14.36    | 0     | 36.6     | 0  | 85.62    | 32620.9  | 235.78   | 552.62  |
| 300.44   | 1936-2-14          | cm 14          | core 1936 context 2 | 88.78  | 7.68     | 69.82   | 11.44    | 0     | 37.11    | 0  | 71.43    | 22462.74 | 189.73   | 439.52  |
| 300.27   | 1936-1-12          | . cm 12        | core 1936 context 1 | 98.76  | 7.97     | 72.31   | 11.5     | 0     | 25.37    | 0  | 72.28    | 22840.65 | 191.32   | 450.81  |
| 300.12   | 1936-1-10          | . cm 10        | core 1936 context 1 | 123.26 | 8.56     | 183.53  | 13.82    | 0     | 30.26    | 0  | 77.28    | 27225.54 | 210.25   | 386.07  |
| 301.3    | 1936-1-8           | . cm 8         | core 1936 context 1 | 86.02  | 7.5      | 121.76  | 12.29    | 0     | 24.51    | 0  | 67.43    | 20459.13 | 177.99   | 344.96  |
| 301.35   | 1936-1-6           | . cm 6         | core 1936 context 1 | 91.95  | 7.79     | 128.14  | 12.66    | 0     | 24.87    | 0  | 70.77    | 21736.99 | 186.29   | 290.4   |
| 301.57   | 1936-1-4           | . cm 4         | core 1936 context 1 | 124.66 | 8.56     | 145.71  | 13.1     | 0     | 30.09    | 0  | 77.15    | 26856.05 | 208.68   | 416.87  |
| 301.55   | 1937-5-28          | . cm 28        | core 1937 context 5 | 91.6   | 7.61     | 149.6   | 12.77    | 0     | 24.33    | 0  | 69.85    | 22244.64 | 184.23   | 326.28  |
| 300.36   | 1937-2-12          | . cm 12        | core 1937 context 2 | 132.75 | 8.82     | 669.12  | 20.78    | 0     | 24.92    | 0  | 75.72    | 26397.49 | 202.98   | 692.5   |
| 300.05   | 1937-2-16          | . cm16         | core 1937 context 2 | 161.71 | 9.73     | 971.15  | 24.85    | 0     | 25.24    | 0  | 85.93    | 34150.83 | 237.82   | 1025.99 |
| 301.89   | 1937-1-4           | . cm 4         | core 1937 context 1 | 140.23 | 8.81     | 342.75  | 16.25    | 0     | 24.69    | 0  | 75.86    | 26070.46 | 201.54   | 464.36  |
| 300.19   | 1937-1-8           | . cm 8         | core 1937 context 1 | 191.66 | 10.07    | 559.94  | 19.62    | 0     | 25.26    | 0  | 84.82    | 33685.68 | 233.41   | 735.1   |
| 300.61   | 1937-2-20          | . cm 20        | core 1937 context 2 | 165.46 | 9.83     | 799.51  | 23.03    | 0     | 25.33    | 0  | 87.21    | 34643.37 | 241.44   | 4798.99 |
| 301.74   | 1937-3-22          | . cm 22 (24.5) | core 1937 context 3 | 188.44 | 10.06    | 349.54  | 16.7     | 0     | 25.05    | 0  | 83.71    | 31980.34 | 228.32   | 3119.21 |
| 301.92   | 1937-3-22 reshaken | . cm 22 (24.5) | core 1937 context 3 | 200.12 | 10.27    | 371.02  | 16.98    | 0     | 24.89    | 0  | 84.94    | 33260.68 | 232.82   | 3545.03 |
| 301.71   | 1937-4-26          | . cm 26        | core 1937 context 4 | 134.35 | 8.97     | 787.04  | 22.21    | 0     | 24.63    | 0  | 78.65    | 28815.86 | 212.88   | 571.32  |
| 300      | 1938-1-2           | . cm 2         | core 1938 context 1 | 434.94 | 14.01    | 376.14  | 17.34    | 0     | 25.77    | 0  | 74.13    | 22572.96 | 191.49   | 605.56  |
| 300      | 1938-1-4           | . cm 2         | core 1938 context 1 | 185.61 | 9.88     | 181.17  | 13.83    | 0     | 38.05    | 0  | 66.01    | 17325.16 | 167.69   | 356.77  |
| 300      | 1938-1-6           | . cm 6         | core 1938 context 1 | 264.07 | 11.43    | 429.15  | 17.99    | 0     | 25.47    | 0  | 75.65    | 23685.31 | 196.18   | 562.32  |
| 301.66   | 1938-1-10          | . cm 10        | core 193 context 1  | 142.56 | 9.06     | 122.26  | 12.72    | 0     | 25.56    | 0  | 73.57    | 22880.26 | 194.06   | 357.37  |
| 300.07   | 1938-1-8           | . cm 8         | core 1938 context 1 | 408.89 | 13.77    | 542.55  | 19.76    | 0     | 25.5     | 0  | 88.82    | 36710.5  | 250.26   | 479.18  |
| 301.91   | 1938-1-6           | . cm 6         | core 1938 context 1 | 639.32 | 16.61    | 1078.15 | 25.72    | 0     | 24.97    | 0  | 89.5     | 38801.79 | 253.08   | 730.43  |
| 300.45   | 1938-2-28          | . cm 28        | core 1938 context 2 | 152.74 | 9.21     | 28.91   | 10.62    | 0     | 30.61    | 0  | 75.42    | 24329.28 | 200.18   | 696.58  |
| 300.38   | 1938-2-18          | . cm 18        | core 1938 context 2 | 47.21  | 6.59     | 28.01   | 10.53    | 0     | 25.6     | 0  | 70.39    | 20746.66 | 183.59   | 389.01  |
| 301.9    | 1938-2-24          | . cm 24        | core 1938 context 2 | 67.93  | 7.03     | 23.64   | 10.23    | 0     | 25.13    | 0  | 67.91    | 20191.14 | 177.6    | 413.28  |
| 301.55   | 1938-2-16          | . cm 16        | core 1938 context 2 | 65.23  | 7.02     | 35.24   | 10.7     | 0     | 25.63    | 0  | 70.53    | 21361.51 | 184.9    | 334.36  |

### Appendix 3

| Duration | SAMPLE    | Depth                | NOTE                | Zn     | Zn Error | Cu     | Cu Error | Ni    | Ni Error | Co | Co Error | Fe       | Fe Error | Mn      |
|----------|-----------|----------------------|---------------------|--------|----------|--------|----------|-------|----------|----|----------|----------|----------|---------|
| 300.01   | 1938-2-12 | . cm 12              | core 1938 context 2 | 57.64  | 6.68     | 19.39  | 9.98     | 0     | 24.22    | 0  | 61.94    | 15847.32 | 156.49   | 242.71  |
| 301.92   | 1938-2-14 | . cm 14              | core 1938 context 2 | 54.17  | 6.69     | 34.47  | 10.46    | 0     | 24.86    | 0  | 65.28    | 17985.58 | 167.84   | 231.41  |
| 300      | 1943-1-2  | . cm 2               | core 1943 context 1 | 117.58 | 8.23     | 348.19 | 16.25    | 0     | 24.05    | 0  | 73.4     | 24093.82 | 191.91   | 293.93  |
| 300      | 1943-1-4  | . cm 4               | core 1943 context 1 | 96.1   | 8.31     | 285.89 | 16.45    | 0     | 36.88    | 0  | 86.44    | 31265.13 | 231.39   | 432.78  |
| 300      | 1943-1-6  | . cm 6               | core 1943 context 1 | 90.91  | 7.71     | 166.75 | 13.36    | 0     | 24.97    | 0  | 76.15    | 25858.61 | 203.88   | 404.71  |
| 300      | 1942-1-2  | . cm 2               | core 1942 context 1 | 128.67 | 8.45     | 197.29 | 13.67    | 0     | 24.78    | 0  | 68.53    | 20702.35 | 177.82   | 361.97  |
| 300      | 1942-1-4  | . cm 4               | core 1942 context 1 | 210.76 | 10.2     | 532.06 | 18.97    | 0     | 24.64    | 0  | 75.66    | 25603.43 | 199.36   | 366.56  |
| 300      | 1942-1-6  | . cm 6               | core 1942 context 1 | 170.82 | 9.4      | 650.01 | 20.21    | 0     | 37.82    | 0  | 77.23    | 27577.72 | 204.18   | 396.29  |
| 300      | 1942-2-8  | . cm 8 gravelly lens | core 1942 context 2 | 67.52  | 7.43     | 188.6  | 14.56    | 0     | 26.98    | 0  | 79.9     | 26838.37 | 213.61   | 478.81  |
| 300      | 1942-2-10 | . cm 10 humic lens   | core 1942 context 2 | 77.55  | 7.3      | 287.79 | 15.19    | 0     | 24.14    | 0  | 84.58    | 34476.8  | 232.94   | 629.59  |
| 301.39   | 1939-3-24 | . cm 24              | core 1939 context 3 | 41.21  | 6.52     | 42.43  | 10.97    | 0     | 25.69    | 0  | 75.58    | 24533.82 | 200.99   | 884.92  |
| 300.49   | 1939-3-28 | . cm 28              | core 1939 context 3 | 84.82  | 7.78     | 81.55  | 12.03    | 0     | 26.87    | 0  | 87.92    | 35638.38 | 247.53   | 532.58  |
| 302.04   | 1939-3-20 | . cm 20              | core 1939 context 3 | 51.61  | 6.86     | 43.9   | 11.07    | 0     | 25.99    | 0  | 74.91    | 23655.67 | 197.58   | 666.93  |
| 300.74   | 1939-3-18 | . cm 18              | core 1939 context 3 | 65.61  | 7.19     | 46.34  | 11.01    | 0     | 41.94    | 0  | 75.52    | 24606.87 | 200.38   | 549.95  |
| 300.19   | 1939-3-14 | . cm 14              | core 1939 context 3 | 65.29  | 7.05     | 59.24  | 11.1     | 0     | 25.31    | 0  | 69.69    | 21288.09 | 184.3    | 381.5   |
| 300.28   | 1939-3-16 | . cm 16              | core 1939 context 3 | 56.81  | 6.9      | 41.56  | 10.76    | 0     | 25.18    | 0  | 72.51    | 22817.65 | 191.06   | 300.09  |
| 302.01   | 1942-3-16 | . cm 16              | core 1942 context 3 | 86.75  | 8.03     | 18.63  | 11.52    | 0     | 39.78    | 0  | 92.36    | 35895.79 | 254.34   | 794.88  |
| 302.04   | 1942-3-14 | . cm 14              | core 1942 context 3 | 142.09 | 9.41     | 79.75  | 12.79    | 0     | 28.24    | 0  | 93.32    | 36543.93 | 258.9    | 1007.04 |
| 300.72   | 1942-3-24 | . cm 24              | core 1942 context 3 | 92.92  | 8.14     | 25.65  | 10.99    | 0     | 27.55    | 0  | 89.96    | 34216.56 | 245.55   | 567.94  |
| 302.18   | 1942-3-18 | . cm 18              | core 1942 context 3 | 79.44  | 7.51     | 21.43  | 10.41    | 0     | 30.29    | 0  | 78.97    | 27448.57 | 211.45   | 610.96  |
| 300.6    | 1942-3-28 | . cm 28              | core 1942 context 3 | 97.83  | 8.02     | 0      | 15.74    | 0     | 31.53    | 0  | 87.83    | 34658.18 | 241.26   | 579.59  |
| 300.13   | 1942-2-12 | . cm 12              | core 1942 context 2 | 131.33 | 8.71     | 274.31 | 15.3     | 0     | 28.1     | 0  | 89.37    | 39090.95 | 253.19   | 702.37  |
| 300.01   | 1942-3-20 | . cm 20              | core 1942 context 3 | 74.46  | 7.56     | 0      | 15.98    | 0     | 26.74    | 0  | 84.8     | 29582.28 | 224.68   | 522.32  |
| 301.77   | 1939-2-4  | . cm 4               | core 1939 context 2 | 99.48  | 7.87     | 232    | 14.51    | 0     | 24.61    | 0  | 75.9     | 26498.76 | 205.23   | 522.47  |
| 301.97   | 1939-2-8  | . cm 8               | core 1939 context 2 | 107.93 | 8.12     | 206.57 | 14.11    | 0     | 25.13    | 0  | 74.87    | 25449.27 | 201.15   | 538.41  |
| 301.37   | 1939-2-10 | . cm 10              | core 1939 context 2 | 103.62 | 8.16     | 165.22 | 13.6     | 0     | 32.96    | 0  | 78.67    | 27442.49 | 213.26   | 887.39  |
| 300.61   | 1939-2-6  | . cm 6               | core 1939 context 2 | 135.35 | 8.92     | 388.05 | 17.37    | 0     | 26.17    | 0  | 86.59    | 36028.33 | 245.27   | 737.86  |
| 300.71   | 1939-1-2  | . cm 2               | core 1939 context 1 | 306.36 | 12.08    | 943.63 | 24.36    | 67.11 | 17.89    | 0  | 94.17    | 44969.49 | 273.46   | 817.12  |

### Appendix 3

| Duration | SAMPLE    | Depth   | NOTE                | Zn     | Zn Error | Cu     | Cu Error | Ni | Ni Error | Co | Co Error | Fe       | Fe Error | Mn      |
|----------|-----------|---------|---------------------|--------|----------|--------|----------|----|----------|----|----------|----------|----------|---------|
| 301.83   | 1943-2-8  | . cm 8  | core 1943 context 2 | 97.02  | 7.8      | 104.16 | 12.01    | 0  | 26.93    | 0  | 81.39    | 31732.31 | 224.11   | 472.97  |
| 302.02   | 1943-2-10 | . cm 10 | core 1943 context 2 | 96.37  | 7.83     | 47.45  | 10.81    | 0  | 25.09    | 0  | 82.61    | 31611.26 | 226.01   | 564.09  |
| 300.18   | 1943-3-14 | . cm 14 | core 1943 context 3 | 92.63  | 7.88     | 30.39  | 10.94    | 0  | 26.84    | 0  | 91.32    | 39039.7  | 259.13   | 677.66  |
| 300.52   | 1943-3-16 | . cm 16 | core 1943 context 3 | 77.06  | 7.36     | 0      | 15.25    | 0  | 29.61    | 0  | 80.04    | 29024.48 | 216.69   | 501.1   |
| 300.63   | 1943-3-18 | . cm 18 | core 1943 context 3 | 81.59  | 7.52     | 0      | 15.33    | 0  | 41.13    | 0  | 81.57    | 29698.13 | 220.42   | 470.32  |
| 300.99   | 1943-3-20 | . cm 20 | core 1943 context 3 | 69.66  | 7.27     | 24.14  | 10.48    | 0  | 25.72    | 0  | 80.17    | 28295.17 | 215.23   | 541.94  |
| 300.07   | 1943-3-28 | . cm 28 | core 1943 context 3 | 62.41  | 7.06     | 17.45  | 10.36    | 0  | 27.99    | 0  | 78.68    | 26992.76 | 210.89   | 507.85  |
| 302.02   | 1943-3-24 | . cm 24 | core 1943 context 3 | 79.52  | 7.49     | 20.88  | 10.48    | 0  | 31.66    | 0  | 78.54    | 26505.46 | 208.96   | 463.62  |
| 300.83   | 1943-2-12 | . cm 12 | core 1943 context 2 | 84.38  | 7.91     | 35.29  | 11.51    | 0  | 38.3     | 0  | 91.22    | 36895.15 | 257.65   | 733.19  |
| 301.36   | 1940-2-26 | . cm 26 | core 1940 context 2 | 80.54  | 7.53     | 58.16  | 11.24    | 0  | 25.26    | 0  | 80.71    | 29061.18 | 219.16   | 485.24  |
| 300.5    | 1940-1-22 | . cm 22 | core 1940 context 1 | 88.13  | 7.59     | 78.65  | 11.56    | 0  | 26.07    | 0  | 81.3     | 31263.92 | 223.47   | 445.75  |
| 301.7    | 1940-1-14 | . cm 14 | core 1940 context 1 | 132.37 | 9.03     | 298.07 | 16.26    | 0  | 33.9     | 0  | 104.05   | 52124.63 | 309.33   | 423.57  |
| 300.42   | 1940-2-24 | . cm 24 | core 1940 context 2 | 88.22  | 7.66     | 48.43  | 10.88    | 0  | 25.28    | 0  | 78.86    | 28367.63 | 213.26   | 393.22  |
| 301.76   | 1940-2-28 | . cm 28 | core 1940 context 2 | 49.73  | 6.65     | 24.43  | 10.24    | 0  | 25.02    | 0  | 67.38    | 20438.04 | 178.7    | 399.96  |
| 300.99   | 1940-1-18 | . cm 18 | core 1940 context 1 | 123.97 | 9.28     | 227.08 | 15.73    | 0  | 27.85    | 0  | 101.3    | 44344.37 | 292.95   | 525.87  |
| 301.88   | 1940-1-20 | . cm 20 | core 1940 context 1 | 89.88  | 7.76     | 120.54 | 12.55    | 0  | 38.6     | 0  | 87.5     | 36905.64 | 246.8    | 498.65  |
| 300.4    | 1940-1-16 | . cm 16 | core 1940 context 1 | 97.59  | 8.22     | 197.42 | 14.53    | 0  | 26.89    | 0  | 98.12    | 45511.36 | 286.45   | 439.2   |
| 302.1    | 1940-1-4  | . cm 4  | core 1940 context 1 | 137.91 | 9.03     | 193.02 | 14.17    | 0  | 31.9     | 0  | 89.4     | 37627.99 | 253.08   | 533.8   |
| 300.95   | 1940-1-8  | . cm 8  | core 1940 context 1 | 112.81 | 8.32     | 194.87 | 14.04    | 0  | 29.12    | 0  | 82.72    | 31817.26 | 228.84   | 453.55  |
| 300.84   | 1940-1-12 | . cm 12 | core 1940 context 1 | 110.57 | 8.45     | 233.35 | 14.96    | 0  | 36.7     | 0  | 96.68    | 47105.45 | 288.56   | 415.12  |
| 302.05   | 1940-1-10 | . cm 10 | core 1940 context 1 | 122.34 | 8.82     | 221.78 | 14.93    | 0  | 27.03    | 0  | 102.34   | 50259.21 | 303.45   | 583.03  |
| 302.09   | 1940-1A-2 | . cm 2  | core 1940 context 1 | 178.15 | 9.84     | 259.7  | 15.35    | 0  | 37.33    | 0  | 94.2     | 43489.68 | 273.92   | 666.02  |
| 301.79   | 1940-1-6  | . cm 6  | core 1940 context 1 | 103.41 | 8.13     | 186.74 | 13.9     | 0  | 41.12    | 0  | 85.58    | 34899.73 | 240.59   | 369.8   |
| 300.87   | 1934-1-2  | . cm 2  | core 1934 context 1 | 139.13 | 8.91     | 67.66  | 11.57    | 0  | 31.9     | 0  | 85.09    | 32695.14 | 231.41   | 472.82  |
| 301      | 1934-1-4  | . cm 4  | core 1934 context 1 | 158.44 | 9.42     | 86.75  | 12.25    | 0  | 26.35    | 0  | 92       | 37308.06 | 252.92   | 543.27  |
| 301.98   | 1934-3-28 | . cm 28 | core 1934 context 3 | 71.28  | 7.36     | 32.25  | 10.89    | 0  | 41.64    | 0  | 85.3     | 32826.58 | 235.19   | 1097.47 |
| 300.84   | 1934-3-18 | . cm 18 | core 1934 context 3 | 67.75  | 7.17     | 46.09  | 10.9     | 0  | 27.58    | 0  | 81.51    | 30024    | 221.94   | 491.1   |
| 300.63   | 1934-3-16 | . cm 16 | core 1934 context 3 | 74.39  | 7.15     | 50.72  | 10.84    | 0  | 24.98    | 0  | 74.21    | 24679.21 | 195.36   | 417.48  |

### Appendix 3

| Duration | SAMPLE    | Depth   | NOTE                | Zn     | Zn Error | Cu     | Cu Error | Ni | Ni Error | Co | Co Error | Fe       | Fe Error | Mn     |
|----------|-----------|---------|---------------------|--------|----------|--------|----------|----|----------|----|----------|----------|----------|--------|
| 301.45   | 1934-3-24 | . cm 24 | core 1934 context 3 | 48.33  | 6.54     | 29.83  | 10.48    | 0  | 25.14    | 0  | 74.76    | 24441.63 | 198.1    | 742.63 |
| 301.37   | 1934-2-6  | . cm 6  | core 1934 context 2 | 86.14  | 7.52     | 139.73 | 12.67    | 0  | 24.58    | 0  | 71.6     | 22958.76 | 187.59   | 310.86 |
| 302.09   | 1934-2-8  | . cm 8  | core 1934 context 2 | 103.82 | 7.95     | 278.92 | 15.13    | 0  | 24.2     | 0  | 69.86    | 22026.59 | 183.23   | 268.93 |
| 300.96   | 1934-2-10 | . cm 10 | core 1934 context 2 | 82.22  | 7.35     | 289.57 | 15.08    | 0  | 23.66    | 0  | 67.82    | 20591.64 | 174.32   | 259.52 |
| 301.59   | 1934-3-12 | . cm 12 | core 1934 context 3 | 84.18  | 7.6      | 67.77  | 11.43    | 0  | 25.43    | 0  | 77.19    | 26542.38 | 207.49   | 307.71 |
| 301.43   | 1934-3-20 | . cm 20 | core 1934 context 3 | 98.87  | 7.97     | 57.29  | 11.34    | 0  | 36.08    | 0  | 87.78    | 34562.65 | 240.98   | 509.06 |
| 301.39   | 1934-3-14 | . cm 14 | core 1934 context 3 | 94.56  | 7.82     | 58.27  | 11.17    | 0  | 25.07    | 0  | 75.7     | 25398.53 | 201.9    | 506.62 |

| Duration | SAMPLE    | Depth | NOTE                | Mn Error | Cr     | Cr Error | V          | V Error | Ti      | Ti Error | Ca       | Ca Error | K        | K Error |
|----------|-----------|-------|---------------------|----------|--------|----------|------------|---------|---------|----------|----------|----------|----------|---------|
| 300      | 1936      | cm 2  | context 1           | 53.37    | 70.21  | 9.94     | 62.71      | 14.58   | 2025.99 | 29.14    | 6041.71  | 136.76   | 12517.33 | 137.01  |
| 300      | 1937      | cm 2  | context 1           | 59.61    | 57.11  | 10.13    | 72.55      | 14.84   | 2206.15 | 30.28    | 9322.16  | 164.81   | 10953.3  | 129.44  |
| 300      | 1937      | cm 4  | context 1           | 57.08    | 60.77  | 9.75     | 60.68      | 14.07   | 2095    | 28.71    | 7663.3   | 151.72   | 15434.37 | 151.17  |
| 300      | 1937      | cm 6  | context 1           | 55.87    | 70.6   | 10.46    | 71.96      | 15.72   | 2331.38 | 32       | 10650.82 | 178.54   | 11498.67 | 133.87  |
| 300      | 1937      | cm 8  | context 1           | 66.66    | 82.27  | 12.56    | 74.86      | 17.81   | 1338.26 | 32.09    | 20370.46 | 265.24   | 10608.01 | 140.87  |
| 300      | 1937-1-10 | cm 10 | core 1937 context 1 | 64.07    | 60.09  | 9.71     | 65.91      | 13.75   | 2153.28 | 28.44    | 14532.97 | 192.54   | 11303.25 | 125.95  |
| 300      | 1937-2-12 | cm 12 | core 1937 context 2 | 67.95    | 83.49  | 10.72    | 70.23      | 15.71   | 2793.83 | 33.74    | 11038.3  | 181.01   | 12949.82 | 142.79  |
| 300      | 1937-2-14 | cm 14 | core 1937 context 2 | 70.21    | 59.49  | 10.48    | 81.37      | 14.35   | 1684.05 | 27.42    | 11004.04 | 173.69   | 9094.66  | 116.65  |
| 300      | 1937-2-16 | cm 16 | core 1937 context 2 | 63.58    | 68.44  | 10.47    | 76.55      | 15.13   | 2244.66 | 30.72    | 13269.51 | 193.08   | 10760.74 | 128.08  |
| 300      | 1937-2-18 | cm 18 | core 1937 context 2 | 63.81    | 81.71  | 12       | 89.79      | 16.62   | 1912.23 | 31.82    | 13770.99 | 208.84   | 10244.86 | 133.28  |
| 300      | 1937-2-20 | cm 20 | core 1937 context 2 | 58.4     | 91.57  | 10.87    | 73.93      | 14.68   | 1836.58 | 28.61    | 10979.95 | 177.58   | 10599.27 | 128.28  |
| 300      | 1937-2-22 | cm 22 | core 1937 context 3 | 68.44    | 54.66  | 10.04    | 67.07      | 13.26   | 1755.22 | 26.39    | 13779.93 | 191.35   | 9197.78  | 116.04  |
| 300      | 1937-2-26 | cm 26 | core 1937 context 4 | 53.78    | 54.54  | 9.07     | 64.29      | 13.06   | 1862.48 | 26.37    | 11754.6  | 171.42   | 10936.17 | 121.59  |
| 300.83   | 1936-2-22 | cm 22 | core 1936 context 2 | 56.68    | 49.91  | 10.51    | 94.82      | 15.77   | 2818.06 | 33.81    | 12583.48 | 194.4    | 14917.13 | 154.11  |
| 301.55   | 1936-2-16 | cm 16 | core 1936 context 2 | 55.29    | 52.97  | 9.67     | 75.83      | 14.72   | 2404.01 | 30.69    | 10647.78 | 173.95   | 15808.65 | 153.32  |
| 300.37   | 1936-2-18 | cm 18 | core 1936 context 2 | 63.86    | 63.34  | 11.55    | 98.59      | 18.93   | 3898.1  | 42.34    | 16204    | 229.06   | 13845.11 | 155.33  |
| 300.6    | 1936-2-20 | cm 20 | core 1936 context 2 | 59.28    | 54.71  | 10.91    | 84.4       | 17.04   | 3270.9  | 37.32    | 11991.66 | 192.58   | 15352.42 | 158.48  |
| 301.86   | 1936-2-24 | cm 24 | core 1936 context 2 | 55.12    | 131.32 | 12.81    | 121.9<br>9 | 17.8    | 2455.11 | 35.31    | 7703.67  | 175.59   | 17144.2  | 180.28  |

### Appendix 3

| Duratio<br>n | SAMPLE                | Depth             | NOTE                | Mn<br>Error | Cr     | Cr<br>Error | V          | V<br>Error | Ti      | Ti<br>Error | Ca       | Ca Error | K        | K Error |
|--------------|-----------------------|-------------------|---------------------|-------------|--------|-------------|------------|------------|---------|-------------|----------|----------|----------|---------|
| 300.09       | 1936-2-26             | cm 26             | core 1936 context 2 | 59.39       | 52.48  | 10.86       | 89.67      | 16.04      | 2648.5  | 33.73       | 10914.93 | 186.68   | 15646.52 | 161.35  |
| 301.18       | 1936-1-2              | cm 2              | core 1936 context 1 | 56.41       | 103.92 | 12.4        | 118.4<br>8 | 20.31      | 3869.99 | 43.77       | 9773.36  | 191.59   | 17509.88 | 179.63  |
| 300.44       | 1936-2-14             | cm 14             | core 1936 context 2 | 54.01       | 78.03  | 10.51       | 73.52      | 15.76      | 2715.84 | 33.43       | 12087.99 | 189.74   | 15930.1  | 158.1   |
| 300.27       | 1936-1-12             | . cm 12           | core 1936 context 1 | 53.93       | 75.21  | 10.59       | 81.8       | 16.73      | 3226.26 | 36.67       | 13020.53 | 199.17   | 15790.5  | 159.26  |
| 300.12       | 1936-1-10             | . cm 10           | core 1936 context 1 | 52.44       | 100.34 | 11.5        | 99.06      | 18.59      | 3813.96 | 41.02       | 9460.01  | 177.53   | 15416.19 | 160.95  |
| 301.3        | 1936-1-8              | . cm 8            | core 1936 context 1 | 51.1        | 71.58  | 10.02       | 79.33      | 15.96      | 3008.31 | 34.47       | 7681.4   | 154.02   | 15586.73 | 154.32  |
| 301.35       | 1936-1-6              | . cm 6            | core 1936 context 1 | 51.09       | 74.03  | 10.74       | 79.27      | 16.57      | 3111.96 | 35.76       | 9096.44  | 168.37   | 16152.14 | 159.73  |
| 301.57       | 1936-1-4              | . cm 4            | core 1936 context 1 | 53.44       | 85.55  | 12          | 106.7<br>8 | 18.94      | 3529.41 | 40.53       | 9766.49  | 183.82   | 15433.04 | 163.89  |
| 301.55       | 1937-5-28             | . cm 28           | core 1937 context 5 | 50.28       | 59.1   | 10.65       | 74.34      | 15.86      | 2425.44 | 32.34       | 9702.79  | 173.45   | 15213.42 | 154.5   |
| 300.36       | 1937-2-12             | . cm 12           | core 1937 context 2 | 57.51       | 75.5   | 11.47       | 91.89      | 17.03      | 2475.72 | 34.36       | 14611.77 | 214.31   | 13634.67 | 151.62  |
| 300.05       | 1937-2-16             | . cm16            | core 1937 context 2 | 63.63       | 86.17  | 13.7        | 106.4<br>6 | 20.48      | 2824.99 | 40.66       | 17155.88 | 250.93   | 13647.72 | 162.79  |
| 301.89       | 1937-1-4              | . cm 4            | core 1937 context 1 | 53.03       | 72.15  | 11.86       | 99.93      | 19         | 3579.83 | 40.89       | 12924.67 | 208.01   | 13666.84 | 153.56  |
| 300.19       | 1937-1-8              | . cm 8            | core 1937 context 1 | 58.07       | 100.87 | 13.39       | 109.7<br>5 | 20.68      | 3206.04 | 42          | 13641.38 | 222.51   | 13713.21 | 161.41  |
| 300.61       | 1937-2-20             | . cm 20           | core 1937 context 2 | 110.39      | 94.3   | 13.94       | 113.6<br>7 | 19.6       | 2358.08 | 37.77       | 16485.29 | 247.88   | 13389.41 | 162.43  |
| 301.74       | 1937-3-22             | . cm 22<br>(24.5) | core 1937 context 3 | 91.7        | 82.02  | 13.35       | 104.7      | 17.46      | 1936.03 | 33.18       | 16940.94 | 244.05   | 12323.55 | 152.12  |
| 301.92       | 1937-3-22<br>reshaken | . cm 22<br>(24.5) | core 1937 context 3 | 96.15       | 95.78  | 13.77       | 102.7<br>1 | 17.94      | 2019.12 | 34.38       | 17076.68 | 250.78   | 11286.35 | 149.55  |
| 301.71       | 1937-4-26             | . cm 26           | core 1937 context 4 | 54.87       | 86.56  | 12.47       | 84.21      | 18.08      | 2406.02 | 35.88       | 14745.18 | 225.79   | 13086.05 | 154.38  |
| 300          | 1938-1-2              | . cm 2            | core 1938 context 1 | 57.99       | 51.42  | 9.96        | 52.63      | 14.03      | 1749.77 | 27.5        | 10144.08 | 166.95   | 10143.85 | 122.28  |
| 300          | 1938-1-4              | . cm 2            | core 1938 context 1 | 53.31       | 71.26  | 9.1         | 48.59      | 12.41      | 1753.77 | 25.14       | 9645.52  | 159.71   | 17081.82 | 153.8   |
| 300          | 1938-1-6              | . cm 6            | core 1938 context 1 | 56.82       | 61.78  | 10.71       | 72.22      | 15.47      | 2304.27 | 31.64       | 12194.03 | 189.68   | 10728.18 | 129.73  |
| 301.66       | 1938-1-10             | . cm 10           | core 193 context 1  | 53.09       | 85.99  | 10.57       | 93.76      | 16.71      | 2918.04 | 35.49       | 14153.44 | 206.73   | 16190.48 | 161.32  |
| 300.07       | 1938-1-8              | . cm 8            | core 1938 context 1 | 54.5        | 99.47  | 13.34       | 115.4<br>3 | 20.76      | 3137.92 | 42.22       | 15461.08 | 239.52   | 13579.44 | 163.71  |
| 301.91       | 1938-1-6              | . cm 6            | core 1938 context 1 | 57.55       | 105.99 | 14.11       | 103.6<br>4 | 21.37      | 3007.62 | 42.65       | 20295.46 | 271.9    | 12627.02 | 158.82  |

### Appendix 3

| Duratio<br>n | SAMPLE    | Depth                   | NOTE                | Mn<br>Error | Cr     | Cr<br>Error | V          | V<br>Error | Ti      | Ti<br>Error | Ca       | Ca Error | K        | K Error |
|--------------|-----------|-------------------------|---------------------|-------------|--------|-------------|------------|------------|---------|-------------|----------|----------|----------|---------|
| 300.45       | 1938-2-28 | . cm 28                 | core 1938 context 2 | 59.59       | 58.88  | 10.57       | 95.18      | 15.81      | 2211.09 | 31.65       | 12421.92 | 194.7    | 14578.42 | 153.56  |
| 300.38       | 1938-2-18 | . cm 18                 | core 1938 context 2 | 53.58       | 59.38  | 10.04       | 82.03      | 16.17      | 3282.25 | 35.93       | 12334.56 | 187.22   | 13891.56 | 145.01  |
| 301.9        | 1938-2-24 | . cm 24                 | core 1938 context 2 | 53.12       | 44.43  | 9.57        | 59.98      | 13.25      | 1941.7  | 26.9        | 12609.11 | 180.71   | 14853.68 | 143.88  |
| 301.55       | 1938-2-16 | . cm 16                 | core 1938 context 2 | 51.85       | 57.72  | 10.28       | 75.46      | 15.29      | 2463.99 | 31.6        | 10757.16 | 176.09   | 16127.3  | 155.88  |
| 300.01       | 1938-2-12 | . cm 12                 | core 1938 context 2 | 49.45       | 50.11  | 9.09        | 69.1       | 13.27      | 2116.45 | 27.51       | 10250.71 | 163.91   | 15459.85 | 146.26  |
| 301.92       | 1938-2-14 | . cm 14                 | core 1938 context 2 | 49.52       | 66.5   | 9.06        | 73.96      | 13.4       | 1946.09 | 27.07       | 9047.66  | 158.4    | 17048.62 | 155.42  |
| 300          | 1943-1-2  | . cm 2                  | core 1943 context 1 | 49.72       | 60.77  | 9.9         | 73.33      | 14.06      | 1973    | 27.93       | 8636.24  | 152.95   | 10004.12 | 119.13  |
| 300          | 1943-1-4  | . cm 4                  | core 1943 context 1 | 54.98       | 85.14  | 12.09       | 102.6<br>4 | 18.58      | 3301.54 | 39.31       | 10212.52 | 182.88   | 10049.04 | 132.42  |
| 300          | 1943-1-6  | . cm 6                  | core 1943 context 1 | 53.47       | 78.58  | 10.6        | 64.56      | 16.4       | 2914.25 | 34.89       | 9144.65  | 166.51   | 12478.72 | 138.76  |
| 300          | 1942-1-2  | . cm 2                  | core 1942 context 1 | 51.27       | 64.94  | 9.55        | 81.5       | 14.91      | 2416.26 | 30.81       | 13965.05 | 189.17   | 9709.15  | 116.74  |
| 300          | 1942-1-4  | . cm 4                  | core 1942 context 1 | 51.14       | 64.14  | 10.87       | 80.52      | 16.18      | 2265.79 | 32.39       | 13527.05 | 199.84   | 9883.06  | 126.01  |
| 300          | 1942-1-6  | . cm 6                  | core 1942 context 1 | 50.91       | 59.01  | 10.97       | 78.05      | 15.39      | 1766.01 | 29.25       | 9520.78  | 167.77   | 9189.48  | 120.51  |
| 300          | 1942-2-8  | . cm 8<br>gravelly lens | core 1942 context 2 | 56.54       | 24.2   | 11.08       | 56.38      | 16.19      | 1709.02 | 30.28       | 7501.67  | 157.39   | 17551.01 | 168.26  |
| 300          | 1942-2-10 | . cm 10<br>humic lens   | core 1942 context 2 | 55.78       | 71.15  | 11.8        | 82.49      | 16.83      | 1653.6  | 30.87       | 7035.63  | 152.72   | 10660.47 | 133.17  |
| 301.39       | 1939-3-24 | . cm 24                 | core 1939 context 3 | 63.26       | 76.02  | 11.65       | 84.34      | 17.5       | 2036.95 | 33.49       | 9119.94  | 176.03   | 13583.1  | 153.07  |
| 300.49       | 1939-3-28 | . cm 28                 | core 1939 context 3 | 56.11       | 117.84 | 13.46       | 113.8<br>8 | 21.72      | 3393.89 | 43.92       | 9462.31  | 188.38   | 12827.86 | 156.2   |
| 302.04       | 1939-3-20 | . cm 20                 | core 1939 context 3 | 59.29       | 90.59  | 11.16       | 91.12      | 16.9       | 2186.19 | 33.05       | 9400.51  | 177.17   | 15902.48 | 163.36  |
| 300.74       | 1939-3-18 | . cm 18                 | core 1939 context 3 | 56.95       | 72.43  | 11.56       | 64.06      | 18.43      | 3307.93 | 39.35       | 10892.45 | 188.71   | 13694.15 | 152.23  |
| 300.19       | 1939-3-14 | . cm 14                 | core 1939 context 3 | 52.9        | 69.01  | 10.61       | 92.55      | 16.77      | 2786.29 | 34.79       | 10398.78 | 178.36   | 15950.47 | 158.66  |
| 300.28       | 1939-3-16 | . cm 16                 | core 1939 context 3 | 50.99       | 54.62  | 10.65       | 81.9       | 15.87      | 2481.99 | 32.38       | 8971.55  | 165.4    | 16219.3  | 158.24  |
| 302.01       | 1942-3-16 | . cm 16                 | core 1942 context 3 | 62.4        | 70.81  | 12.87       | 123.9<br>5 | 21.73      | 5306.67 | 51.12       | 15439.27 | 234.84   | 17569.75 | 181.76  |
| 302.04       | 1942-3-14 | . cm 14                 | core 1942 context 3 | 66.63       | 103.29 | 13.38       | 130.7      | 22.55      | 5368.2  | 52.51       | 14860.53 | 234.67   | 17764.11 | 185.56  |
| 300.72       | 1942-3-24 | . cm 24                 | core 1942 context 3 | 57.86       | 86.16  | 12.64       | 127.9<br>1 | 19.92      | 3900.26 | 43.57       | 13143.42 | 220.17   | 20122.71 | 194.52  |
| 302.18       | 1942-3-18 | . cm 18                 | core 1942 context 3 | 57.25       | 74.95  | 11.26       | 94.01      | 17.89      | 3657.91 | 39.74       | 12579.6  | 201.62   | 18012.54 | 174.13  |



### Appendix 3

| Duration | SAMPLE    | Depth   | NOTE                | Mn Error | Cr         | Cr Error | V      | V Error | Ti      | Ti Error | Ca       | Ca Error | K        | K Error |
|----------|-----------|---------|---------------------|----------|------------|----------|--------|---------|---------|----------|----------|----------|----------|---------|
| 300.6    | 1942-3-28 | . cm 28 | core 1942 context 3 | 56.34    | 85.42      | 12.79    | 122.09 | 19.77   | 3464.55 | 41.9     | 11410.62 | 212.47   | 21140.07 | 202.68  |
| 300.13   | 1942-2-12 | . cm 12 | core 1942 context 2 | 57.56    | 108.6      | 15.35    | 140.42 | 22.77   | 2823.74 | 43.12    | 9667.33  | 197.08   | 13558.87 | 166.16  |
| 300.01   | 1942-3-20 | . cm 20 | core 1942 context 3 | 56.59    | 88.42      | 11.89    | 114.08 | 18.68   | 3552.4  | 40.66    | 13420.34 | 217.42   | 20695.71 | 193.55  |
| 301.77   | 1939-2-4  | . cm 4  | core 1939 context 2 | 54.91    | 84.01      | 12.02    | 105.99 | 18.74   | 3206.44 | 39.15    | 9771.41  | 185.02   | 15913.05 | 167.37  |
| 301.97   | 1939-2-8  | . cm 8  | core 1939 context 2 | 55.43    | 100.7<br>3 | 11.67    | 93.34  | 19.3    | 3714.9  | 41.71    | 13417.64 | 207.96   | 15684.59 | 163.38  |
| 301.37   | 1939-2-10 | . cm 10 | core 1939 context 2 | 62.88    | 72.15      | 12.15    | 101.55 | 18.96   | 3254.56 | 39.64    | 13246.03 | 208.85   | 16731.16 | 170.37  |
| 300.61   | 1939-2-6  | . cm 6  | core 1939 context 2 | 59.05    | 104.9<br>7 | 13.2     | 103.28 | 20.48   | 2924.96 | 40.78    | 11194.28 | 204      | 14511.6  | 166.16  |
| 300.71   | 1939-1-2  | . cm 2  | core 1939 context 1 | 58.34    | 109.4      | 14.42    | 125.71 | 21.39   | 2504.76 | 40.72    | 11153.4  | 212.26   | 10748.57 | 151.34  |
| 301.83   | 1943-2-8  | . cm 8  | core 1943 context 2 | 53.09    | 96.99      | 12.11    | 120.35 | 19.45   | 3853.56 | 42.16    | 8981.32  | 178.92   | 15422.66 | 164.61  |
| 302.02   | 1943-2-10 | . cm 10 | core 1943 context 2 | 55.5     | 102.1<br>5 | 11.78    | 129.63 | 19.76   | 4324.01 | 44.29    | 10124.49 | 187.19   | 15316.21 | 163.54  |
| 300.18   | 1943-3-14 | . cm 14 | core 1943 context 3 | 58.45    | 90.34      | 12.94    | 121.08 | 21.9    | 5093.2  | 50.51    | 12267.87 | 216.88   | 17417.68 | 183.9   |
| 300.52   | 1943-3-16 | . cm 16 | core 1943 context 3 | 54.51    | 88.95      | 11.42    | 102.86 | 18.15   | 3606.39 | 39.8     | 13063.03 | 206.86   | 18230.91 | 175.82  |
| 300.63   | 1943-3-18 | . cm 18 | core 1943 context 3 | 54.22    | 93.98      | 11.75    | 118.1  | 18.63   | 3616.07 | 40.64    | 11808.78 | 203.52   | 18495.07 | 181.7   |
| 300.99   | 1943-3-20 | . cm 20 | core 1943 context 3 | 55.91    | 68.14      | 11.69    | 101.87 | 18.14   | 3638.41 | 39.94    | 10723.78 | 192.65   | 19102.87 | 181.74  |
| 300.07   | 1943-3-28 | . cm 28 | core 1943 context 3 | 55.79    | 76.8       | 11.06    | 99.86  | 16.9    | 2988.93 | 36       | 10934.61 | 191.31   | 19563.71 | 182.11  |
| 302.02   | 1943-3-24 | . cm 24 | core 1943 context 3 | 54.95    | 74.1       | 11.35    | 111.88 | 17.65   | 3246.23 | 37.67    | 10919.55 | 190.97   | 20215.86 | 184.4   |
| 300.83   | 1943-2-12 | . cm 12 | core 1943 context 2 | 61.06    | 114.0<br>1 | 13.03    | 134.81 | 22.75   | 5237.88 | 52.02    | 13509.19 | 223.42   | 17262.71 | 181.62  |
| 301.36   | 1940-2-26 | . cm 26 | core 1940 context 2 | 54.85    | 104.1<br>7 | 11.75    | 109.23 | 18.51   | 3263.98 | 39.09    | 10372.31 | 191.2    | 18555.02 | 180.21  |
| 300.5    | 1940-1-22 | . cm 22 | core 1940 context 1 | 52.86    | 91.17      | 12.47    | 95.62  | 18.5    | 2617.22 | 36.88    | 10524.71 | 195.55   | 16957.56 | 175.25  |
| 301.7    | 1940-1-14 | . cm 14 | core 1940 context 1 | 53.16    | 136.7<br>1 | 14.68    | 133    | 22.03   | 2328.6  | 41.07    | 9683.59  | 207.36   | 14565.6  | 178.43  |
| 300.42   | 1940-2-24 | . cm 24 | core 1940 context 2 | 52.33    | 93.6       | 12.04    | 120.76 | 17.93   | 2851.66 | 36.58    | 9932.92  | 187.32   | 19040.69 | 181.98  |
| 301.76   | 1940-2-28 | . cm 28 | core 1940 context 2 | 52.72    | 57.35      | 10.21    | 77.97  | 14.7    | 2166.72 | 29.72    | 10805.24 | 177.78   | 18180.54 | 166.24  |
| 300.99   | 1940-1-18 | . cm 18 | core 1940 context 1 | 58.22    | 123.4      | 13.82    | 143.31 | 20.96   | 2675.29 | 40.76    | 10219.23 | 208.36   | 15965.6  | 181.84  |
| 301.88   | 1940-1-20 | . cm 20 | core 1940 context 1 | 53.97    | 91.62      | 13.36    | 112.95 | 20.51   | 3017.9  | 41.14    | 9516.28  | 195.68   | 16836.49 | 181.44  |
| 300.4    | 1940-1-16 | . cm 16 | core 1940 context 1 | 53.97    | 101.9      | 14.27    | 129.98 | 20.65   | 2198.44 | 38.58    | 10599.83 | 210.24   | 14047.25 | 171.71  |

### Appendix 3

|              |           |         |                     |             | 3          |             |        |            |         |             |          |          |          |         |
|--------------|-----------|---------|---------------------|-------------|------------|-------------|--------|------------|---------|-------------|----------|----------|----------|---------|
| Duratio<br>n | SAMPLE    | Depth   | NOTE                | Mn<br>Error | Cr         | Cr<br>Error | V      | V<br>Error | Ti      | Ti<br>Error | Ca       | Ca Error | K        | K Error |
| 302.1        | 1940-1-4  | . cm 4  | core 1940 context 1 | 55.53       | 98.02      | 13.27       | 125.07 | 20.52      | 2744.82 | 40.18       | 9827.32  | 197.71   | 15976.25 | 176.96  |
| 300.95       | 1940-1-8  | . cm 8  | core 1940 context 1 | 54          | 86.42      | 12.44       | 107.43 | 19.35      | 2749.53 | 38.52       | 9760.23  | 190.37   | 16288.4  | 173.51  |
| 300.84       | 1940-1-12 | . cm 12 | core 1940 context 1 | 52.61       | 113.0<br>6 | 14.48       | 127.71 | 21.55      | 2402.13 | 40.64       | 10332.78 | 209.69   | 14164.49 | 174.51  |
| 302.05       | 1940-1-10 | . cm 10 | core 1940 context 1 | 56.45       | 100.2<br>9 | 14.6        | 123.02 | 21.49      | 2627    | 41.3        | 8992.97  | 198.44   | 14689.02 | 177.15  |
| 302.09       | 1940-1A-2 | . cm 2  | core 1940 context 1 | 57.5        | 113.9<br>1 | 13.76       | 132.91 | 21.71      | 2917.01 | 42.49       | 10742.85 | 208.1    | 13930.21 | 168.31  |
| 301.79       | 1940-1-6  | . cm 6  | core 1940 context 1 | 52.11       | 102.3<br>4 | 12.55       | 115.99 | 19.33      | 2580.92 | 37.91       | 9600.28  | 190.84   | 15601.77 | 171     |
| 300.87       | 1934-1-2  | . cm 2  | core 1934 context 1 | 53.73       | 99.43      | 12.96       | 131.1  | 20.68      | 3755.27 | 44.02       | 11948.32 | 216.39   | 20349.72 | 198.78  |
| 301          | 1934-1-4  | . cm 4  | core 1934 context 1 | 55.9        | 112.7<br>7 | 13.67       | 127.41 | 21.3       | 3714.3  | 45.02       | 11402.69 | 220.57   | 20463.88 | 204.51  |
| 301.98       | 1934-3-28 | . cm 28 | core 1934 context 3 | 66.2        | 88.78      | 11.95       | 94.26  | 18.69      | 3840.05 | 41.76       | 13429.5  | 213.96   | 15193.86 | 163.91  |
| 300.84       | 1934-3-18 | . cm 18 | core 1934 context 3 | 54.64       | 95.76      | 11.71       | 106.14 | 18.6       | 3262.31 | 39.44       | 10497.82 | 195.69   | 17278.42 | 175.99  |
| 300.63       | 1934-3-16 | . cm 16 | core 1934 context 3 | 52.45       | 82.31      | 11.2        | 85.63  | 17.65      | 3276.83 | 37.78       | 9734.43  | 180.3    | 17833.27 | 171.13  |
| 301.45       | 1934-3-24 | . cm 24 | core 1934 context 3 | 59.66       | 78.1       | 10.82       | 80.42  | 16.94      | 3595.75 | 38.16       | 12069.75 | 192.59   | 16044.48 | 159.76  |
| 301.37       | 1934-2-6  | . cm 6  | core 1934 context 2 | 50.2        | 92.54      | 11.44       | 94.55  | 17.98      | 3347    | 38.21       | 8672.3   | 168.36   | 15753.76 | 159.51  |
| 302.09       | 1934-2-8  | . cm 8  | core 1934 context 2 | 49.16       | 100.6<br>6 | 11.67       | 108.29 | 18.38      | 3530.26 | 39.06       | 7796.25  | 156.35   | 12530.79 | 140.37  |
| 300.96       | 1934-2-10 | . cm 10 | core 1934 context 2 | 48.37       | 88.26      | 11.8        | 103.77 | 18.06      | 3079.61 | 37.04       | 6416.51  | 144.67   | 12177.59 | 139.05  |
| 301.59       | 1934-3-12 | . cm 12 | core 1934 context 3 | 51.16       | 104.7<br>7 | 11.4        | 109.3  | 18.29      | 3520.98 | 39.72       | 9506.46  | 182.11   | 16341.34 | 167.58  |
| 301.43       | 1934-3-20 | . cm 20 | core 1934 context 3 | 55.5        | 132.3      | 12.6        | 131.7  | 20.27      | 3953.94 | 43.98       | 10450.27 | 198.84   | 16745.25 | 176.35  |
| 301.39       | 1934-3-14 | . cm 14 | core 1934 context 3 | 55.22       | 79.08      | 11.57       | 87.62  | 19.52      | 4370.99 | 44.51       | 10601.28 | 192.16   | 17131.36 | 172.47  |

### Appendix 3

| Duration | SAMPLE    | Depth | NOTE                | Al       | Al Error | P        | P Error | Si       | Si Error | Cl     | Cl Error | S       | S Error | Mg      | Mg Error |
|----------|-----------|-------|---------------------|----------|----------|----------|---------|----------|----------|--------|----------|---------|---------|---------|----------|
| 300      | 1936      | cm 2  | context 1           | 15042.93 | 333.55   | 5599.98  | 87.14   | 128094.9 | 674.81   | 116.71 | 14.34    | 1299.71 | 37.27   | 1750.87 | 939.78   |
| 300      | 1937      | cm 2  | context 1           | 9871.55  | 290.09   | 5454.25  | 86      | 102862.3 | 607.9    | 133.17 | 15.38    | 719.53  | 35.23   | 0       | 1323.41  |
| 300      | 1937      | cm 4  | context 1           | 16415.12 | 361.6    | 7072.13  | 99.69   | 150931.5 | 755.23   | 124.53 | 15       | 850.53  | 35.59   | 0       | 1460.37  |
| 300      | 1937      | cm 6  | context 1           | 16848.14 | 365.8    | 9168.98  | 108.38  | 148798.1 | 744.18   | 111.41 | 14.93    | 1043.96 | 37.05   | 1718.23 | 1001.19  |
| 300      | 1937      | cm 8  | context 1           | 15765.07 | 405.2    | 22297.27 | 172.24  | 123069.6 | 674.65   | 113.69 | 15.7     | 1106.4  | 41.61   | 0       | 1619.01  |
| 300      | 1937-1-10 | cm 10 | core 1937 context 1 | 10167.27 | 291.74   | 6709.44  | 91.74   | 109039.6 | 616.46   | 146.13 | 15.1     | 879.54  | 35.81   | 0       | 1371.21  |
| 300      | 1937-2-12 | cm 12 | core 1937 context 2 | 13184.96 | 331.41   | 9273.3   | 108.56  | 129450.7 | 696.93   | 113.61 | 15.35    | 1078.4  | 38.26   | 0       | 1387.97  |
| 300      | 1937-2-14 | cm 14 | core 1937 context 2 | 11862.57 | 307.25   | 9016.33  | 102.36  | 116540.9 | 634.29   | 124.02 | 14.08    | 1220.54 | 36.78   | 0       | 1326.05  |
| 300      | 1937-2-16 | cm 16 | core 1937 context 2 | 12477.7  | 323.87   | 8998.56  | 104.95  | 133470.3 | 683.36   | 136.87 | 14.35    | 1205.15 | 37.07   | 0       | 1442.4   |
| 300      | 1937-2-18 | cm 18 | core 1937 context 2 | 14583.37 | 366.59   | 12868.16 | 129.04  | 145406.1 | 749.17   | 151.25 | 15.27    | 1563.89 | 41.95   | 0       | 1503.06  |
| 300      | 1937-2-20 | cm 20 | core 1937 context 2 | 13284.83 | 344.49   | 11098.36 | 120.47  | 167741.4 | 797.58   | 82.07  | 14.53    | 1369.7  | 39.28   | 0       | 1924.94  |
| 300      | 1937-2-22 | cm 22 | core 1937 context 3 | 8669.89  | 295.29   | 7541.65  | 103.33  | 159038.2 | 769.59   | 132.35 | 15.35    | 1202.75 | 38.87   | 0       | 1418.29  |
| 300      | 1937-2-26 | cm 26 | core 1937 context 4 | 13505.78 | 324.07   | 9105.1   | 105.68  | 151962.5 | 741.61   | 106.72 | 13.61    | 1366.99 | 37.18   | 1505.01 | 913.6    |
| 300.83   | 1936-2-22 | cm 22 | core 1936 context 2 | 27835.84 | 481.21   | 12476.49 | 129.79  | 182730   | 842.24   | 44.69  | 14.93    | 839.17  | 36.71   | 3020.16 | 1108.18  |
| 301.55   | 1936-2-16 | cm 16 | core 1936 context 2 | 25926.95 | 457.29   | 12686.79 | 129.87  | 181482.6 | 837.84   | 0      | 34.62    | 1315.11 | 40.36   | 1701.76 | 1069.27  |
| 300.37   | 1936-2-18 | cm 18 | core 1936 context 2 | 28775.88 | 518.89   | 13393.49 | 138.54  | 174422.2 | 833.19   | 82.06  | 16.16    | 1214.77 | 41.97   | 2621.68 | 1204.47  |
| 300.6    | 1936-2-20 | cm 20 | core 1936 context 2 | 27381.08 | 485.44   | 13033.42 | 135.06  | 186446.4 | 869.18   | 23.28  | 15.4     | 987.19  | 39.03   | 1765.66 | 1110.07  |
| 301.86   | 1936-2-24 | cm 24 | core 1936 context 2 | 35840.23 | 557.26   | 14055.9  | 136.16  | 159687.3 | 779.81   | 82.81  | 15.85    | 1043.32 | 39.45   | 4856.09 | 1214.07  |
| 300.09   | 1936-2-26 | cm 26 | core 1936 context 2 | 30100.86 | 501.77   | 13847.61 | 135.94  | 170080.3 | 819.48   | 78.64  | 15.48    | 888.48  | 37.84   | 1810.45 | 1102.58  |

### Appendix 3

| Duration | SAMPLE             | Depth          | NOTE                | Al       | Al Error | P        | P Error | Si       | Si Error | Cl     | Cl Error | S       | S Error | Mg      | Mg Error |
|----------|--------------------|----------------|---------------------|----------|----------|----------|---------|----------|----------|--------|----------|---------|---------|---------|----------|
| 301.18   | 1936-1-2           | cm 2           | core 1936 context 1 | 27005.61 | 491.79   | 9721.67  | 120.61  | 180426   | 842.81   | 91.44  | 15.97    | 1755.49 | 44.7    | 2565.33 | 1167.51  |
| 300.44   | 1936-2-14          | cm 14          | core 1936 context 2 | 26909.91 | 484.15   | 11608.12 | 125.38  | 178488.8 | 829.61   | 46.07  | 15.37    | 1341.14 | 40.82   | 0       | 2665.17  |
| 300.27   | 1936-1-12          | . cm 12        | core 1936 context 1 | 25333.95 | 461.83   | 8269.42  | 113.03  | 184709.4 | 853.3    | 122.9  | 15.85    | 1432.31 | 41.76   | 0       | 1622.28  |
| 300.12   | 1936-1-10          | . cm 10        | core 1936 context 1 | 27055.85 | 478.07   | 9323.45  | 116.71  | 175597.6 | 826.75   | 106.75 | 15.67    | 2042.86 | 45.89   | 2193.77 | 1107.08  |
| 301.3    | 1936-1-8           | . cm 8         | core 1936 context 1 | 25016.41 | 444.88   | 8472.82  | 113.11  | 204020.5 | 895.64   | 0      | 22.63    | 1669.84 | 42.26   | 0       | 1560.14  |
| 301.35   | 1936-1-6           | . cm 6         | core 1936 context 1 | 25756.03 | 468.06   | 7864.21  | 110.01  | 184150.9 | 852.91   | 101.48 | 15.58    | 1958.19 | 44.88   | 0       | 2442.22  |
| 301.57   | 1936-1-4           | . cm 4         | core 1936 context 1 | 24373.05 | 459.09   | 8954.53  | 116.1   | 177685.5 | 835.3    | 126.68 | 15.98    | 2048.42 | 46.4    | 1920.69 | 1107.15  |
| 301.55   | 1937-5-28          | . cm 28        | core 1937 context 5 | 26404.68 | 477.1    | 13207.33 | 136.47  | 197962.6 | 878.4    | 32.35  | 15.63    | 1843.4  | 45.28   | 2666.61 | 1130.4   |
| 300.36   | 1937-2-12          | . cm 12        | core 1937 context 2 | 20342.37 | 429.6    | 12439.01 | 133.12  | 200186   | 875.35   | 91.73  | 15.7     | 1574.23 | 43.2    | 0       | 1600.4   |
| 300.05   | 1937-2-16          | . cm16         | core 1937 context 2 | 23354.98 | 500.15   | 15532.76 | 153.93  | 202656.4 | 897.37   | 128.32 | 17.14    | 1967.88 | 49.15   | 3610.26 | 1311.53  |
| 301.89   | 1937-1-4           | . cm 4         | core 1937 context 1 | 23792.08 | 457.28   | 10464.49 | 124.98  | 208398   | 898.47   | 58.78  | 15.58    | 1309.97 | 40.99   | 0       | 1669.73  |
| 300.19   | 1937-1-8           | . cm 8         | core 1937 context 1 | 24691.08 | 490.94   | 13453.72 | 142.03  | 198831.5 | 885.14   | 73.87  | 16.39    | 1738.8  | 46.33   | 0       | 1734.83  |
| 300.61   | 1937-2-20          | . cm 20        | core 1937 context 2 | 21138.52 | 476.84   | 14990.36 | 151.25  | 202355.2 | 907.22   | 122.34 | 16.95    | 1814.94 | 47.86   | 0       | 1777.23  |
| 301.74   | 1937-3-22          | . cm 22 (24.5) | core 1937 context 3 | 18513.27 | 476.59   | 13285.9  | 156.17  | 286972.4 | 1077.34  | 117.13 | 18.08    | 1624.25 | 48      | 0       | 1916.19  |
| 301.92   | 1937-3-22 reshaken | . cm 22 (24.5) | core 1937 context 3 | 16976.56 | 479.04   | 13038.37 | 157.48  | 300764   | 1098     | 123.15 | 18.26    | 1790.64 | 49.41   | 0       | 3265.1   |
| 301.71   | 1937-4-26          | . cm 26        | core 1937 context 4 | 21681.81 | 451.64   | 15347.14 | 146.46  | 190006.3 | 851.01   | 138.04 | 16.17    | 3106.98 | 54.24   | 0       | 1661.29  |
| 300      | 1938-1-2           | . cm 2         | core 1938 context 1 | 10943.07 | 305.72   | 7848     | 99.14   | 108034.4 | 623.29   | 188.26 | 15.92    | 1035.76 | 38.33   | 0       | 1426.53  |
| 300      | 1938-1-4           | . cm 2         | core 1938 context 1 | 16762.06 | 359.87   | 4279.11  | 86.93   | 161050.8 | 793.75   | 119.47 | 15.21    | 723.12  | 34.39   | 1735.16 | 991.91   |
| 300      | 1938-1-6           | . cm 6         | core 1938 context 1 | 13444.87 | 328.66   | 6487.09  | 91.77   | 118211.9 | 652.73   | 134.79 | 14.41    | 1127.66 | 36.5    | 0       | 2202.56  |

### Appendix 3

| Duration | SAMPLE    | Depth                      | NOTE                | Al       | Al Error | P        | P Error | Si       | Si Error | Cl     | Cl Error | S       | S Error | Mg      | Mg Error |
|----------|-----------|----------------------------|---------------------|----------|----------|----------|---------|----------|----------|--------|----------|---------|---------|---------|----------|
| 301.66   | 1938-1-10 | . cm 10                    | core 193 context 1  | 25762.85 | 469.1    | 7869.71  | 111.87  | 183713.1 | 857.86   | 69.39  | 15.65    | 1650    | 43.54   | 0       | 1639.13  |
| 300.07   | 1938-1-8  | . cm 8                     | core 1938 context 1 | 23020.98 | 472.37   | 11735.29 | 130.24  | 167805.9 | 808.01   | 104.81 | 16.09    | 1970.36 | 47.03   | 3646.73 | 1228.28  |
| 301.91   | 1938-1-6  | . cm 6                     | core 1938 context 1 | 21761.53 | 471.67   | 14290.89 | 141.86  | 164291   | 787.58   | 129.53 | 16.48    | 1895.87 | 47.39   | 2211.63 | 1241.45  |
| 300.45   | 1938-2-28 | . cm 28                    | core 1938 context 2 | 26847.55 | 478.51   | 18089.75 | 154.68  | 170084.8 | 810.91   | 43.74  | 15.24    | 1038.68 | 39.46   | 0       | 1642.49  |
| 300.38   | 1938-2-18 | . cm 18                    | core 1938 context 2 | 26245.49 | 462.12   | 14105.15 | 136.61  | 189567   | 857.08   | 33.26  | 14.67    | 1035.62 | 37.96   | 0       | 1830.53  |
| 301.9    | 1938-2-24 | . cm 24                    | core 1938 context 2 | 26683.81 | 486.54   | 15130.25 | 143.22  | 189823   | 860.77   | 49.82  | 15.54    | 944.87  | 38.8    | 0       | 2499.51  |
| 301.55   | 1938-2-16 | . cm 16                    | core 1938 context 2 | 29113.56 | 505.07   | 16265.26 | 150.07  | 184267.2 | 855.38   | 62.25  | 16       | 1369.21 | 42.88   | 2647.9  | 1150.97  |
| 300.01   | 1938-2-12 | . cm 12                    | core 1938 context 2 | 26830.07 | 473.14   | 9150.95  | 121.07  | 218748.9 | 948.57   | 0      | 22.05    | 961.32  | 38.45   | 1683.07 | 1075.26  |
| 301.92   | 1938-2-14 | . cm 14                    | core 1938 context 2 | 28140.09 | 463.66   | 13326.23 | 130.78  | 191315.8 | 857.83   | 0      | 20.93    | 1154.27 | 38.28   | 3058.58 | 1062.94  |
| 300      | 1943-1-2  | . cm 2                     | core 1943 context 1 | 11550.77 | 294.96   | 5513.03  | 83.75   | 114960.3 | 621.12   | 233.29 | 14.84    | 1325.49 | 37.41   | 0       | 2045.37  |
| 300      | 1943-1-4  | . cm 4                     | core 1943 context 1 | 13737.85 | 377.4    | 7067.21  | 106.15  | 126899.1 | 712.9    | 265.37 | 18.9     | 1563.27 | 47.46   | 0       | 2548.9   |
| 300      | 1943-1-6  | . cm 6                     | core 1943 context 1 | 21034.44 | 403.11   | 6422.38  | 97.73   | 160273.7 | 781.39   | 176.31 | 14.82    | 1241.94 | 37.91   | 0       | 1460.23  |
| 300      | 1942-1-2  | . cm 2                     | core 1942 context 1 | 14143.66 | 329.43   | 7293.19  | 96      | 126485.7 | 665.58   | 279.36 | 15.28    | 1132.67 | 37.03   | 0       | 1350.64  |
| 300      | 1942-1-4  | . cm 4                     | core 1942 context 1 | 10858.25 | 299.32   | 6988.15  | 92.49   | 107206.9 | 605.44   | 244.58 | 14.92    | 1189.24 | 36.96   | 0       | 1332.77  |
| 300      | 1942-1-6  | . cm 6                     | core 1942 context 1 | 10486.82 | 281.88   | 6958.73  | 88.26   | 92092.84 | 541.94   | 242.56 | 14.12    | 2271.41 | 42.67   | 0       | 1235.26  |
| 300      | 1942-2-8  | . cm 8<br>gravelly<br>lens | core 1942 context 2 | 19972.45 | 399.39   | 6453.4   | 95.21   | 127643.8 | 689.7    | 145.55 | 16.21    | 1066.51 | 39.13   | 0       | 1996.9   |
| 300      | 1942-2-10 | . cm 10<br>humic<br>lens   | core 1942 context 2 | 18418.18 | 368.4    | 6654.47  | 89.86   | 115916.5 | 625.26   | 283.65 | 14.63    | 1280.92 | 36.4    | 0       | 2137.97  |
| 301.39   | 1939-3-24 | . cm 24                    | core 1939 context 3 | 31624.59 | 527.09   | 28184.85 | 197.28  | 130452.8 | 698.19   | 122.98 | 16.02    | 1940.68 | 47.56   | 0       | 1846.56  |

### Appendix 3

| Duration | SAMPLE    | Depth   | NOTE                | Al       | Al Error | P        | P Error | Si       | Si Error | Cl     | Cl Error | S       | S Error | Mg      | Mg Error |
|----------|-----------|---------|---------------------|----------|----------|----------|---------|----------|----------|--------|----------|---------|---------|---------|----------|
| 300.49   | 1939-3-28 | . cm 28 | core 1939 context 3 | 33928.07 | 555.37   | 29879.88 | 203.01  | 117761.7 | 654.13   | 195.72 | 16.57    | 2060.06 | 48.67   | 0       | 1785.27  |
| 302.04   | 1939-3-20 | . cm 20 | core 1939 context 3 | 33008.84 | 530.56   | 24639.28 | 182.36  | 150211.9 | 755.25   | 85.56  | 15.89    | 1684.54 | 45.2    | 0       | 1688.15  |
| 300.74   | 1939-3-18 | . cm 18 | core 1939 context 3 | 33127.17 | 539.67   | 24318.95 | 181.83  | 145292.6 | 742.97   | 103.41 | 15.98    | 1882.62 | 46.87   | 2067.6  | 1154.47  |
| 300.19   | 1939-3-14 | . cm 14 | core 1939 context 3 | 28383.19 | 486.2    | 16250.19 | 145.13  | 153421.4 | 762.93   | 73.73  | 15.47    | 1854.89 | 45.05   | 3393.57 | 1125.46  |
| 300.28   | 1939-3-16 | . cm 16 | core 1939 context 3 | 29843.23 | 516.63   | 19531.46 | 159.64  | 157003.2 | 770.87   | 81.43  | 15.57    | 1733.14 | 44.62   | 0       | 2666.56  |
| 302.01   | 1942-3-16 | . cm 16 | core 1942 context 3 | 27784.6  | 536.88   | 8789.19  | 1302.4  | 194428.9 | 938.08   | 49.81  | 17.66    | 1049.35 | 118.46  | 0       | 1921.86  |
| 302.04   | 1942-3-14 | . cm 14 | core 1942 context 3 | 31703.88 | 570.62   | 9495.16  | 1453.8  | 185881.4 | 924.68   | 170.43 | 17.78    | 1657.67 | 133.24  | 2364.22 | 1285.45  |
| 300.72   | 1942-3-24 | . cm 24 | core 1942 context 3 | 33744.09 | 568.23   | 4804.13  | 106.6   | 221253.9 | 959.16   | 32.07  | 16.67    | 252.18  | 34.2    | 1862.7  | 1239.12  |
| 302.18   | 1942-3-18 | . cm 18 | core 1942 context 3 | 30299.86 | 516.07   | 2867.63  | 94.91   | 226486.6 | 957.54   | 0      | 22.04    | 225.65  | 31.77   | 2997.7  | 1168.29  |
| 300.6    | 1942-3-28 | . cm 28 | core 1942 context 3 | 35040.55 | 580.67   | 4614.38  | 104.83  | 214415.7 | 930.94   | 40.44  | 16.84    | 262.73  | 34.39   | 4301.5  | 1301.34  |
| 300.13   | 1942-2-12 | . cm 12 | core 1942 context 2 | 25683.36 | 473.07   | 13334.7  | 131.29  | 145057.3 | 726.75   | 264.59 | 16.47    | 2239.55 | 47.62   | 0       | 1674.36  |
| 300.01   | 1942-3-20 | . cm 20 | core 1942 context 3 | 33163.61 | 574      | 3579.02  | 106.39  | 245130.8 | 1019.64  | 0      | 24.35    | 210.02  | 34.59   | 3468.44 | 1302.78  |
| 301.77   | 1939-2-4  | . cm 4  | core 1939 context 2 | 26800.42 | 496.44   | 8359.97  | 115.19  | 186546.3 | 857.03   | 58.62  | 15.77    | 1762.12 | 44.61   | 0       | 2666.94  |
| 301.97   | 1939-2-8  | . cm 8  | core 1939 context 2 | 27663.03 | 503.15   | 12996.87 | 136.26  | 170043.6 | 815.64   | 113.44 | 16.4     | 2091.51 | 48.26   | 2531.81 | 1180.78  |
| 301.37   | 1939-2-10 | . cm 10 | core 1939 context 2 | 29113.06 | 498.92   | 11891.51 | 127.74  | 170752.3 | 811.27   | 65.57  | 15.63    | 1880.65 | 45.16   | 0       | 1693.19  |
| 300.61   | 1939-2-6  | . cm 6  | core 1939 context 2 | 26204.48 | 491.8    | 12585.66 | 132.33  | 156856   | 780.81   | 98.68  | 16.05    | 2055.35 | 47.5    | 0       | 1740.78  |
| 300.71   | 1939-1-2  | . cm 2  | core 1939 context 1 | 19528.28 | 428.42   | 13085.23 | 131.02  | 144807.6 | 737.86   | 212.97 | 16.07    | 2674.06 | 50.52   | 0       | 1575.77  |
| 301.83   | 1943-2-8  | . cm 8  | core 1943 context 2 | 25854.68 | 474.19   | 7809.84  | 111.2   | 182509.4 | 837.32   | 119.92 | 15.93    | 1612.73 | 43.15   | 2484.7  | 1132.27  |
| 302.02   | 1943-2-10 | . cm 10 | core 1943 context 2 | 26165    | 466.49   | 8129.81  | 109.16  | 171702.1 | 803.41   | 95.2   | 15.31    | 1357.33 | 40.29   | 2866.08 | 1110.26  |

### Appendix 3

| Duration | SAMPLE    | Depth   | NOTE                | Al       | Al Error | P        | P Error | Si       | Si Error | Cl     | Cl Error | S       | S Error | Mg      | Mg Error |
|----------|-----------|---------|---------------------|----------|----------|----------|---------|----------|----------|--------|----------|---------|---------|---------|----------|
| 300.18   | 1943-3-14 | . cm 14 | core 1943 context 3 | 31305.2  | 542.15   | 7917.17  | 115.4   | 194537.8 | 871.54   | 77.33  | 16.25    | 788.01  | 38.01   | 2961.86 | 1236.72  |
| 300.52   | 1943-3-16 | . cm 16 | core 1943 context 3 | 29968.72 | 520.38   | 4253.98  | 101.65  | 218853.8 | 936.99   | 0      | 37.95    | 499.33  | 35.2    | 2191.9  | 1179.52  |
| 300.63   | 1943-3-18 | . cm 18 | core 1943 context 3 | 31266.8  | 528.66   | 4238.78  | 101     | 222031.1 | 944.67   | 0      | 22.6     | 401.66  | 33.86   | 3530.17 | 1201.38  |
| 300.99   | 1943-3-20 | . cm 20 | core 1943 context 3 | 29673.71 | 514.43   | 3772.27  | 98.56   | 214868   | 934.74   | 0      | 38.76    | 299.83  | 33.27   | 1786.13 | 1156.32  |
| 300.07   | 1943-3-28 | . cm 28 | core 1943 context 3 | 32279.96 | 542.38   | 3603.55  | 100.47  | 228083.5 | 974.24   | 0      | 25.83    | 190.29  | 32.24   | 3656.68 | 1211.6   |
| 302.02   | 1943-3-24 | . cm 24 | core 1943 context 3 | 32356.8  | 540.48   | 3349.97  | 99.82   | 232420.9 | 981.36   | 0      | 30.02    | 323.94  | 33.72   | 1823.67 | 1178.68  |
| 300.83   | 1943-2-12 | . cm 12 | core 1943 context 2 | 31081.16 | 550.95   | 15673.82 | 1545.85 | 178472.3 | 889.66   | 132.33 | 16.59    | 1720.77 | 141.64  | 3955.42 | 1259.46  |
| 301.36   | 1940-2-26 | . cm 26 | core 1940 context 2 | 30583.32 | 513.31   | 7519.63  | 111.4   | 194824   | 878.37   | 36.38  | 15.59    | 995.14  | 38.5    | 0       | 1689.43  |
| 300.5    | 1940-1-22 | . cm 22 | core 1940 context 1 | 29836.36 | 513.38   | 10272.82 | 122.41  | 174058   | 819.46   | 54.98  | 15.82    | 874.33  | 38.34   | 2746.35 | 1166.28  |
| 301.7    | 1940-1-14 | . cm 14 | core 1940 context 1 | 26148.51 | 485.18   | 15044.33 | 137.92  | 142235.9 | 718.02   | 107.38 | 15.33    | 1299.6  | 40.66   | 0       | 1728.93  |
| 300.42   | 1940-2-24 | . cm 24 | core 1940 context 2 | 31978.35 | 531.26   | 7916.93  | 114.78  | 198160.4 | 885.66   | 0      | 23.63    | 651.51  | 36.34   | 2749.83 | 1171.51  |
| 301.76   | 1940-2-28 | . cm 28 | core 1940 context 2 | 27305.22 | 470.85   | 6378.59  | 105.7   | 202295   | 898.02   | 0      | 21.72    | 620.46  | 35.12   | 0       | 1522.98  |
| 300.99   | 1940-1-18 | . cm 18 | core 1940 context 1 | 29518.48 | 523.31   | 12717.14 | 132.99  | 158154.5 | 790.15   | 100.87 | 15.99    | 1197.5  | 41.09   | 0       | 1719.31  |
| 301.88   | 1940-1-20 | . cm 20 | core 1940 context 1 | 29461.04 | 510.18   | 11498.95 | 125.99  | 162476.6 | 782.47   | 79.11  | 15.64    | 1094.59 | 39.63   | 1872.44 | 1149.08  |
| 300.4    | 1940-1-16 | . cm 16 | core 1940 context 1 | 27889.6  | 513.92   | 17067.31 | 150.45  | 145941.3 | 750.63   | 122.24 | 15.93    | 1428.61 | 42.94   | 3603.4  | 1233.46  |
| 302.1    | 1940-1-4  | . cm 4  | core 1940 context 1 | 28514.45 | 512.01   | 10970.45 | 126.25  | 175107.4 | 825.2    | 41.04  | 15.84    | 844.88  | 38.34   | 2791.61 | 1200.5   |
| 300.95   | 1940-1-8  | . cm 8  | core 1940 context 1 | 26977.79 | 488.34   | 11757.19 | 125     | 161559.3 | 780.15   | 113.04 | 15.46    | 1202    | 39.71   | 0       | 2589.04  |
| 300.84   | 1940-1-12 | . cm 12 | core 1940 context 1 | 27313.19 | 511.8    | 18310.85 | 155.14  | 144989.7 | 732.77   | 117.5  | 15.88    | 1547.56 | 43.92   | 0       | 2297.95  |
| 302.05   | 1940-1-10 | . cm 10 | core 1940 context 1 | 27667.23 | 503.33   | 13751.24 | 134.85  | 153927.5 | 758.47   | 105.02 | 15.52    | 1198.7  | 40.3    | 0       | 1745     |

### Appendix 3

| Duration | SAMPLE    | Depth   | NOTE                | Al       | Al Error | P        | P Error | Si       | Si Error | Cl     | Cl Error | S       | S Error | Mg      | Mg Error |
|----------|-----------|---------|---------------------|----------|----------|----------|---------|----------|----------|--------|----------|---------|---------|---------|----------|
| 302.09   | 1940-1A-2 | . cm 2  | core 1940 context 1 | 25027.56 | 481.69   | 11972.79 | 125.69  | 155247.8 | 767.36   | 79.5   | 15.19    | 1033.06 | 38.5    | 0       | 2586.85  |
| 301.79   | 1940-1-6  | . cm 6  | core 1940 context 1 | 26907.11 | 503.16   | 11642.7  | 128.12  | 171279.8 | 813.22   | 64.16  | 15.66    | 999.63  | 39.16   | 0       | 2666.16  |
| 300.87   | 1934-1-2  | . cm 2  | core 1934 context 1 | 33828.57 | 567.74   | 4239.85  | 104.89  | 223502.4 | 951.3    | 63.35  | 16.96    | 468.73  | 36.21   | 0       | 1847.28  |
| 301      | 1934-1-4  | . cm 4  | core 1934 context 1 | 33256.85 | 571.74   | 4452.15  | 105.98  | 217101.9 | 940.61   | 67.2   | 17.23    | 630.16  | 38.22   | 0       | 1892.9   |
| 301.98   | 1934-3-28 | . cm 28 | core 1934 context 3 | 33019.09 | 553.88   | 8013.17  | 116.68  | 194646.3 | 883.36   | 196.82 | 17.01    | 984.84  | 39.98   | 3176.72 | 1227.37  |
| 300.84   | 1934-3-18 | . cm 18 | core 1934 context 3 | 30526.02 | 506.39   | 10708.68 | 121.77  | 168221.1 | 802.31   | 193.71 | 16.02    | 1439.31 | 41.65   | 0       | 1647.29  |
| 300.63   | 1934-3-16 | . cm 16 | core 1934 context 3 | 31583.32 | 515.78   | 9283.29  | 118.75  | 193109.5 | 864.58   | 125.93 | 16.16    | 1394.55 | 41.83   | 0       | 1675.73  |
| 301.45   | 1934-3-24 | . cm 24 | core 1934 context 3 | 29973.96 | 513.75   | 7153.45  | 109.11  | 200295.1 | 890.01   | 124.06 | 15.88    | 854.72  | 37.15   | 0       | 2534.72  |
| 301.37   | 1934-2-6  | . cm 6  | core 1934 context 2 | 27691.25 | 477.36   | 9578.79  | 118.28  | 181331.6 | 832.85   | 274.3  | 16.8     | 2229.47 | 47.43   | 0       | 1616.99  |
| 302.09   | 1934-2-8  | . cm 8  | core 1934 context 2 | 31956.85 | 506.28   | 14135.5  | 136.04  | 165237.9 | 788.99   | 485.05 | 17.73    | 3509.29 | 55.41   | 0       | 1610.7   |
| 300.96   | 1934-2-10 | . cm 10 | core 1934 context 2 | 36346.58 | 535.24   | 17474.44 | 148.69  | 139255.3 | 711.78   | 578.49 | 18.27    | 4144.2  | 59.55   | 0       | 1514.09  |
| 301.59   | 1934-3-12 | . cm 12 | core 1934 context 3 | 31975.47 | 519.43   | 8935.81  | 115.22  | 172970.9 | 821.76   | 194.57 | 16.35    | 1572.28 | 42.97   | 3183.85 | 1141.81  |
| 301.43   | 1934-3-20 | . cm 20 | core 1934 context 3 | 34780.51 | 562.09   | 9775.28  | 120.75  | 167664.7 | 807.69   | 229.54 | 16.97    | 1518.73 | 43.69   | 3548.6  | 1222.89  |
| 301.39   | 1934-3-14 | . cm 14 | core 1934 context 3 | 32807.27 | 527.52   | 10681.74 | 123.83  | 177698.1 | 829.12   | 181.69 | 16.39    | 1609.17 | 43.52   | 0       | 1681.23  |



### Appendix 3

#### Core 1891 and 1892 uncalibrated

All filter times are 50-100-50-100, <LOD replaced with 0.

| Duration | SAMPLE | MISC     | NOTE           | Ba      | Ba Error | Sb | Sb Error | Sn     | Sn Error | Cd | Cd Error | Pd | Pd Error | Ag    | Ag Error |
|----------|--------|----------|----------------|---------|----------|----|----------|--------|----------|----|----------|----|----------|-------|----------|
| 300      | 1891   | depth 2  | context 1891-1 | 770.15  | 29.94    | 0  | 10.39    | 12.67  | 6.98     | 0  | 4.8      | 0  | 2.03     | 0     | 3.04     |
| 300      | 1891   | depth 4  | context 1891-1 | 815.51  | 32.49    | 0  | 10.55    | 18.19  | 7.71     | 0  | 5.42     | 0  | 3.79     | 0     | 4.17     |
| 300      | 1891   | depth 8  | context 1891-2 | 394.44  | 29.02    | 0  | 11.53    | 11.2   | 7.21     | 0  | 5.12     | 0  | 2.15     | 0     | 3.39     |
| 300      | 1891   | depth 10 | context 1891-2 | 458.31  | 25.56    | 0  | 10.69    | 10.26  | 6.29     | 0  | 4.34     | 0  | 3.62     | 7.22  | 2.07     |
| 298.59   | 1891   | depth 12 | context 1891-2 | 536.98  | 27.13    | 0  | 8.95     | 28.21  | 6.89     | 0  | 5.42     | 0  | 2.96     | 23.29 | 2.48     |
| 300      | 1892   | depth 2  | context 1892-1 | 591.56  | 27.45    | 0  | 8.91     | 12.31  | 6.6      | 0  | 4.53     | 0  | 1.9      | 0     | 3.1      |
| 300      | 1892   | depth 4  | context 1892-1 | 493.76  | 27.69    | 0  | 9.22     | 17.31  | 6.86     | 0  | 4.77     | 0  | 2.02     | 0     | 3.47     |
| 300      | 1892   | depth 6  | context 1892-1 | 600.29  | 26.8     | 0  | 8.72     | 10.82  | 6.43     | 0  | 4.45     | 0  | 1.82     | 3.7   | 2.04     |
| 300      | 1892   | depth 8  | context 1892-1 | 543.71  | 27.7     | 0  | 9.08     | 605.75 | 12.55    | 0  | 5.81     | 0  | 1.94     | 5.05  | 2.15     |
| 300      | 1892   | depth 10 | context 1892-1 | 558.58  | 28.91    | 0  | 9.61     | 18.42  | 7.14     | 0  | 4.91     | 0  | 2.06     | 8.07  | 2.32     |
| 300      | 1892   | depth 12 | context 1892-1 | 434.79  | 24.46    | 0  | 8.33     | 17.26  | 6.13     | 0  | 4.09     | 0  | 3.13     | 5.42  | 1.95     |
| 300      | 1892   | depth 14 | context 1892-1 | 616.91  | 31.15    | 0  | 12.93    | 13.32  | 7.56     | 0  | 5.26     | 0  | 3.09     | 6.69  | 2.44     |
| 300      | 1892   | depth 14 | context 1892-1 | 580.71  | 30.19    | 0  | 10.03    | 16.63  | 7.39     | 0  | 5.11     | 0  | 2.19     | 4.57  | 2.34     |
| 300      | 1892   | depth 16 | context 1892-1 | 411.2   | 27.56    | 0  | 9.31     | 13.77  | 6.86     | 0  | 4.77     | 0  | 1.97     | 4.47  | 2.18     |
| 300      | 1892   | depth 18 | context 1892-1 | 506.52  | 30.73    | 0  | 10.4     | 16.44  | 7.61     | 0  | 5.29     | 0  | 2.33     | 3.76  | 2.38     |
| 300      | 1892   | depth 22 | context 1892-2 | 419.59  | 26.22    | 0  | 8.86     | 0      | 9.16     | 0  | 4.41     | 0  | 1.83     | 0     | 2.03     |
| 300      | 1892   | depth 24 | context 1892-2 | 1104.94 | 35.81    | 0  | 11.17    | 0      | 11.58    | 0  | 5.73     | 0  | 2.53     | 0     | 2.69     |
| 300      | 1892   | depth 26 | context 1892-2 | 608.09  | 28.92    | 0  | 9.54     | 0      | 9.31     | 0  | 4.78     | 0  | 2.1      | 0     | 2.17     |
| 300.31   | 1891   | depth 26 | core 1892-1-26 | 486.55  | 27.65    | 0  | 9.31     | 0      | 10.86    | 0  | 4.75     | 0  | 1.98     | 0     | 2.16     |
| 300.73   | 1891   | depth 2  | core 1891-1-2  | 526.72  | 28.19    | 0  | 9.38     | 20.66  | 7.02     | 0  | 4.81     | 0  | 2.05     | 7.54  | 2.27     |
| 300.21   | 1891   | depth 14 | core 1891-2-14 | 565.55  | 27.85    | 0  | 9.13     | 30.99  | 7.08     | 0  | 8.24     | 0  | 3.02     | 24.31 | 2.59     |

### Appendix 3

| Duration | SAMPLE | MISC     | NOTE           | Bal      | Bal Error | Mo   | Mo Error | Nb    | Nb Error | Zr     | Zr Error | Sr     | Sr Error | Rb    | Rb Error |
|----------|--------|----------|----------------|----------|-----------|------|----------|-------|----------|--------|----------|--------|----------|-------|----------|
| 300      | 1891   | depth 2  | context 1891-1 | 766618.1 | 892.96    | 0    | 1.76     | 30.24 | 1.45     | 170.02 | 3.3      | 228.99 | 3.22     | 40.74 | 1.45     |
| 300      | 1891   | depth 4  | context 1891-1 | 728912.9 | 1006.52   | 0    | 1.5      | 21.18 | 1.32     | 152.55 | 3.22     | 333.3  | 3.88     | 51.19 | 1.56     |
| 300      | 1891   | depth 8  | context 1891-2 | 844231.8 | 651.04    | 0    | 2.25     | 24.57 | 1.47     | 190.76 | 3.49     | 134.79 | 2.53     | 41.42 | 1.51     |
| 300      | 1891   | depth 10 | context 1891-2 | 836130.7 | 640.31    | 4.89 | 1.36     | 15.36 | 1.27     | 86.02  | 2.37     | 96.08  | 2.02     | 27.92 | 1.22     |
| 298.59   | 1891   | depth 12 | context 1891-2 | 776146.6 | 855.72    | 0    | 2.17     | 21.33 | 1.31     | 186.95 | 3.24     | 155.82 | 2.54     | 52.98 | 1.57     |
| 300      | 1892   | depth 2  | context 1892-1 | 805397.6 | 764.77    | 2.22 | 1.38     | 12.35 | 1.24     | 139.63 | 2.92     | 124.22 | 2.33     | 39.48 | 1.43     |
| 300      | 1892   | depth 4  | context 1892-1 | 792785.6 | 818.89    | 2.59 | 1.45     | 43.03 | 1.61     | 224.71 | 3.62     | 147.93 | 2.56     | 47.1  | 1.54     |
| 300      | 1892   | depth 6  | context 1892-1 | 811709.9 | 751.42    | 0    | 2.21     | 27.46 | 1.42     | 169.2  | 3.14     | 117.09 | 2.26     | 39.81 | 1.42     |
| 300      | 1892   | depth 8  | context 1892-1 | 801757.5 | 783.52    | 0    | 2.34     | 30.99 | 1.44     | 158.17 | 3.05     | 141.89 | 2.46     | 38.72 | 1.4      |
| 300      | 1892   | depth 10 | context 1892-1 | 786192.3 | 844.8     | 0    | 2.16     | 26.65 | 1.43     | 209.68 | 3.53     | 155.07 | 2.63     | 32.06 | 1.32     |
| 300      | 1892   | depth 12 | context 1892-1 | 817753.8 | 719.51    | 0    | 2.09     | 16.7  | 1.28     | 190    | 3.28     | 125.76 | 2.31     | 42.89 | 1.45     |
| 300      | 1892   | depth 14 | context 1892-1 | 758197.5 | 926.02    | 2.57 | 1.43     | 16.03 | 1.31     | 168.57 | 3.24     | 159.61 | 2.68     | 42.26 | 1.49     |
| 300      | 1892   | depth 14 | context 1892-1 | 750129.3 | 950.69    | 3.16 | 1.4      | 20.02 | 1.33     | 162.46 | 3.14     | 167.08 | 2.69     | 48.34 | 1.54     |
| 300      | 1892   | depth 16 | context 1892-1 | 821767.1 | 692.92    | 4.07 | 1.42     | 17.94 | 1.31     | 171.41 | 3.17     | 120.3  | 2.28     | 41.68 | 1.47     |
| 300      | 1892   | depth 18 | context 1892-1 | 787811.7 | 840.5     | 2.61 | 1.46     | 30.84 | 1.51     | 181.58 | 3.34     | 120.76 | 2.35     | 45.51 | 1.57     |
| 300      | 1892   | depth 22 | context 1892-2 | 782269.2 | 877.78    | 2.97 | 1.51     | 40.47 | 1.55     | 350.35 | 4.5      | 250.23 | 3.32     | 63.5  | 1.72     |
| 300      | 1892   | depth 24 | context 1892-2 | 757492.7 | 963.17    | 5.16 | 1.6      | 51.48 | 1.72     | 373    | 4.83     | 293.9  | 3.75     | 78.32 | 1.97     |
| 300      | 1892   | depth 26 | context 1892-2 | 754389.3 | 965.2     | 2.67 | 1.48     | 36.84 | 1.53     | 285.53 | 4.04     | 171.4  | 2.74     | 79.53 | 1.94     |
| 300.31   | 1891   | depth 26 | core 1892-1-26 | 732508.6 | 1032.51   | 0    | 2.09     | 23.05 | 1.36     | 183.93 | 3.26     | 148.78 | 2.52     | 70.03 | 1.8      |
| 300.73   | 1891   | depth 2  | core 1891-1-2  | 692099.9 | 1111.98   | 2.75 | 1.43     | 23.58 | 1.38     | 205.91 | 3.48     | 171.97 | 2.74     | 46.79 | 1.53     |
| 300.21   | 1891   | depth 14 | core 1891-2-14 | 701539.9 | 1055.56   | 5.14 | 1.4      | 23.28 | 1.33     | 182.44 | 3.29     | 238.58 | 3.17     | 51.93 | 1.57     |

### Appendix 3

| Duration | SAMPLE | MISC     | NOTE           | Bi    | Bi Error | As    | As Error | Se | Se Error | Au | Au Error | Pb      | Pb Error | W | W Error |
|----------|--------|----------|----------------|-------|----------|-------|----------|----|----------|----|----------|---------|----------|---|---------|
| 300      | 1891   | depth 2  | context 1891-1 | 11.38 | 4.26     | 20.96 | 11.43    | 0  | 2.11     | 0  | 6.75     | 595.56  | 13.25    | 0 | 45.06   |
| 300      | 1891   | depth 4  | context 1891-1 | 9.93  | 3.86     | 0     | 17.72    | 0  | 2.14     | 0  | 6.45     | 409.49  | 10.83    | 0 | 44.08   |
| 300      | 1891   | depth 8  | context 1891-2 | 0     | 5.45     | 0     | 12.13    | 0  | 1.98     | 0  | 6.49     | 252.16  | 9.31     | 0 | 48.29   |
| 300      | 1891   | depth 10 | context 1891-2 | 7.12  | 3.61     | 0     | 12.3     | 0  | 1.61     | 0  | 6.04     | 350.46  | 10.21    | 0 | 42.39   |
| 298.59   | 1891   | depth 12 | context 1891-2 | 13.28 | 4.16     | 0     | 15.12    | 0  | 1.53     | 0  | 6.19     | 557.19  | 12.47    | 0 | 42.13   |
| 300      | 1892   | depth 2  | context 1892-1 | 10.92 | 4.21     | 0     | 18.13    | 0  | 2.39     | 0  | 6.98     | 580.11  | 13.11    | 0 | 46.67   |
| 300      | 1892   | depth 4  | context 1892-1 | 11.32 | 3.9      | 0     | 13.1     | 0  | 1.66     | 0  | 8.16     | 375.39  | 10.69    | 0 | 45.08   |
| 300      | 1892   | depth 6  | context 1892-1 | 7.65  | 3.8      | 0     | 16.73    | 0  | 1.54     | 0  | 6.48     | 414.72  | 11.12    | 0 | 44.25   |
| 300      | 1892   | depth 8  | context 1892-1 | 14.03 | 4.32     | 0     | 16.41    | 0  | 1.61     | 0  | 6.78     | 654.54  | 13.69    | 0 | 44.9    |
| 300      | 1892   | depth 10 | context 1892-1 | 8.99  | 4.32     | 0     | 17.29    | 0  | 1.79     | 0  | 7.11     | 670.88  | 14.15    | 0 | 48.69   |
| 300      | 1892   | depth 12 | context 1892-1 | 12.39 | 4.14     | 0     | 15.37    | 0  | 1.52     | 0  | 6.28     | 554.17  | 12.64    | 0 | 41.8    |
| 300      | 1892   | depth 14 | context 1892-1 | 7.51  | 4.42     | 0     | 20.96    | 0  | 2.48     | 0  | 7.19     | 660.91  | 14.14    | 0 | 46.73   |
| 300      | 1892   | depth 14 | context 1892-1 | 14.22 | 4.19     | 0     | 19.42    | 0  | 1.89     | 0  | 6.74     | 522.14  | 12.36    | 0 | 44.36   |
| 300      | 1892   | depth 16 | context 1892-1 | 8.84  | 5.08     | 0     | 22.97    | 0  | 1.87     | 0  | 7.71     | 1138.84 | 18.28    | 0 | 45.57   |
| 300      | 1892   | depth 18 | context 1892-1 | 9.8   | 5.49     | 51.43 | 16.9     | 0  | 2.09     | 0  | 8.05     | 1265.74 | 19.89    | 0 | 47.26   |
| 300      | 1892   | depth 22 | context 1892-2 | 9.62  | 3.18     | 0     | 6.26     | 0  | 1.54     | 0  | 5.96     | 47.53   | 4.78     | 0 | 41.49   |
| 300      | 1892   | depth 24 | context 1892-2 | 18.43 | 3.64     | 11.3  | 3.85     | 0  | 1.77     | 0  | 6.26     | 22.37   | 4.33     | 0 | 43.5    |
| 300      | 1892   | depth 26 | context 1892-2 | 15.17 | 3.44     | 8.25  | 3.75     | 0  | 1.51     | 0  | 5.79     | 26.54   | 4.28     | 0 | 40.48   |
| 300.31   | 1891   | depth 26 | core 1892-1-26 | 7.28  | 3.1      | 10.53 | 3.87     | 0  | 1.5      | 0  | 5.73     | 31.88   | 4.32     | 0 | 41.22   |
| 300.73   | 1891   | depth 2  | core 1891-1-2  | 19.13 | 4.56     | 0     | 17.2     | 0  | 2.89     | 0  | 6.98     | 663.02  | 13.92    | 0 | 46.99   |
| 300.21   | 1891   | depth 14 | core 1891-2-14 | 22.44 | 5.02     | 0     | 20.18    | 0  | 1.82     | 0  | 7.19     | 1013.97 | 16.69    | 0 | 46.08   |

### Appendix 3

| Duration | SAMPLE | MISC     | NOTE           | Zn     | Zn Error | Cu      | Cu Error | Ni    | Ni Error | Co | Co Error | Fe       | Fe Error | Mn       | Mn Error |
|----------|--------|----------|----------------|--------|----------|---------|----------|-------|----------|----|----------|----------|----------|----------|----------|
| 300      | 1891   | depth 2  | context 1891-1 | 244.65 | 11.21    | 1009.97 | 25.2     | 0     | 41.44    | 0  | 91.84    | 40787.56 | 260.34   | 1481.83  | 69.65    |
| 300      | 1891   | depth 4  | context 1891-1 | 219.04 | 10.43    | 498.23  | 18.7     | 0     | 25.55    | 0  | 77.79    | 27603.09 | 209.42   | 2126.54  | 79.56    |
| 300      | 1891   | depth 8  | context 1891-2 | 279.31 | 12.38    | 929.87  | 25.77    | 0     | 27.36    | 0  | 98.13    | 44210.87 | 284.71   | 8622.87  | 144.79   |
| 300      | 1891   | depth 10 | context 1891-2 | 279.96 | 11.63    | 1162.9  | 26.39    | 0     | 23.85    | 0  | 91.92    | 44297.74 | 267.08   | 25499.65 | 226.95   |
| 298.59   | 1891   | depth 12 | context 1891-2 | 196.95 | 10       | 690.36  | 20.85    | 0     | 24       | 0  | 81.05    | 31949.76 | 223.02   | 1968.13  | 75.86    |
| 300      | 1892   | depth 2  | context 1892-1 | 327.89 | 12.51    | 775.7   | 22.53    | 0     | 24.63    | 0  | 88.87    | 36773.43 | 246.08   | 6940.12  | 127.5    |
| 300      | 1892   | depth 4  | context 1892-1 | 240.17 | 11.03    | 507.62  | 19.22    | 0     | 25.79    | 0  | 89.79    | 35821.86 | 244.97   | 2132.75  | 80.4     |
| 300      | 1892   | depth 6  | context 1892-1 | 251.25 | 11.18    | 553.2   | 19.63    | 0     | 24.88    | 0  | 86.2     | 33576.6  | 234.98   | 3903.63  | 100.86   |
| 300      | 1892   | depth 8  | context 1892-1 | 228.47 | 10.69    | 453.65  | 18.07    | 0     | 24.92    | 0  | 77.3     | 26253.45 | 204.73   | 1481.05  | 71.24    |
| 300      | 1892   | depth 10 | context 1892-1 | 330.13 | 12.72    | 726.23  | 22.28    | 0     | 26.19    | 0  | 83.47    | 29661.13 | 222.57   | 3063.72  | 93.16    |
| 300      | 1892   | depth 12 | context 1892-1 | 218.83 | 10.54    | 894.52  | 23.57    | 0     | 23.8     | 0  | 83.53    | 33670.36 | 231.57   | 4254.34  | 102.77   |
| 300      | 1892   | depth 14 | context 1892-1 | 199.58 | 10.52    | 728.3   | 22.26    | 0     | 41.94    | 0  | 102.47   | 50834.22 | 303.73   | 3577.38  | 95.7     |
| 300      | 1892   | depth 14 | context 1892-1 | 173.25 | 9.74     | 542.9   | 19.6     | 0     | 25.8     | 0  | 83.81    | 32226.21 | 230.91   | 2322.9   | 82.47    |
| 300      | 1892   | depth 16 | context 1892-1 | 168.93 | 9.61     | 578.95  | 19.89    | 0     | 24.79    | 0  | 95.05    | 48429.23 | 282.53   | 5060.18  | 107.39   |
| 300      | 1892   | depth 18 | context 1892-1 | 162.28 | 9.84     | 582.45  | 20.54    | 0     | 25.69    | 0  | 96.69    | 45991.53 | 284.79   | 10186.88 | 152.17   |
| 300      | 1892   | depth 22 | context 1892-2 | 61.93  | 7.05     | 27.9    | 10.87    | 0     | 26.13    | 0  | 70.41    | 20106.43 | 179.99   | 403.9    | 53.84    |
| 300      | 1892   | depth 24 | context 1892-2 | 66.89  | 7.39     | 0       | 26.12    | 0     | 27.03    | 0  | 91.69    | 38727.25 | 261.47   | 757.26   | 60.7     |
| 300      | 1892   | depth 26 | context 1892-2 | 59.46  | 6.96     | 17.45   | 10.42    | 27.54 | 17.82    | 0  | 82.97    | 31388.24 | 228.84   | 552.96   | 56.57    |
| 300.31   | 1891   | depth 26 | core 1892-1-26 | 89.29  | 7.74     | 38.38   | 10.78    | 0     | 25.64    | 0  | 74.29    | 23610.61 | 196.62   | 661.74   | 58.86    |
| 300.73   | 1891   | depth 2  | core 1891-1-2  | 283.4  | 11.82    | 779.98  | 22.6     | 0     | 25.46    | 0  | 88.39    | 35877.63 | 245.08   | 2448.9   | 83.62    |
| 300.21   | 1891   | depth 14 | core 1891-2-14 | 260.54 | 11.13    | 965.16  | 23.85    | 0     | 23.65    | 0  | 82.75    | 34137.89 | 231.53   | 4084.14  | 98.74    |

### Appendix 3

| Duration | SAMPLE | MISC     | NOTE           | Cr    | Cr Error | V      | V Error | Ti      | Ti Error | Ca       | Ca Error | K        | K Error |
|----------|--------|----------|----------------|-------|----------|--------|---------|---------|----------|----------|----------|----------|---------|
| 300      | 1891   | depth 2  | context 1891-1 | 73.82 | 11.8     | 72.49  | 17.31   | 2299.99 | 34.6     | 18627.96 | 243.08   | 8917.95  | 125.64  |
| 300      | 1891   | depth 4  | context 1891-1 | 110.2 | 12.18    | 84.84  | 18.81   | 3441.07 | 40.47    | 22488.17 | 264.24   | 11241.66 | 139.13  |
| 300      | 1891   | depth 8  | context 1891-2 | 64.95 | 13.03    | 83.36  | 17.85   | 1743.93 | 33.26    | 16618.6  | 236.72   | 6487.1   | 115.11  |
| 300      | 1891   | depth 10 | context 1891-2 | 58.04 | 17.18    | 93.45  | 21.83   | 1319.77 | 37.13    | 12896.58 | 225.25   | 5289.36  | 112.54  |
| 298.59   | 1891   | depth 12 | context 1891-2 | 73.26 | 12.68    | 83.73  | 18.08   | 1924.77 | 34.21    | 18127.77 | 246.01   | 11070.87 | 141.67  |
| 300      | 1892   | depth 2  | context 1892-1 | 83.81 | 12.4     | 84.1   | 16.56   | 1660.21 | 31.11    | 16604.26 | 234.7    | 9523.53  | 132.29  |
| 300      | 1892   | depth 4  | context 1892-1 | 63.57 | 11.28    | 79.88  | 16.95   | 2592.85 | 34.76    | 15753.39 | 218.05   | 9726.61  | 127     |
| 300      | 1892   | depth 6  | context 1892-1 | 71.07 | 12.16    | 90.73  | 17.95   | 2311.02 | 35.24    | 16539.13 | 229.3    | 7720.7   | 117.66  |
| 300      | 1892   | depth 8  | context 1892-1 | 52.42 | 10.85    | 73.69  | 16.06   | 2399.2  | 32.9     | 19523.46 | 236.83   | 9274.18  | 121.62  |
| 300      | 1892   | depth 10 | context 1892-1 | 46.6  | 11.84    | 61.17  | 16.76   | 2209.67 | 33.52    | 22154.37 | 259.07   | 8061.21  | 117.68  |
| 300      | 1892   | depth 12 | context 1892-1 | 62.35 | 11.44    | 70.15  | 15.91   | 1493.11 | 29.5     | 17306.7  | 227.13   | 7883.18  | 114.83  |
| 300      | 1892   | depth 14 | context 1892-1 | 96.42 | 13.03    | 85.45  | 18.56   | 1903.27 | 35.25    | 30863.39 | 322.14   | 11176.99 | 145.04  |
| 300      | 1892   | depth 14 | context 1892-1 | 59.31 | 11.93    | 80.71  | 17.04   | 2019.4  | 33.51    | 35172.32 | 328.92   | 10884.55 | 136.52  |
| 300      | 1892   | depth 16 | context 1892-1 | 55.34 | 13.34    | 71.66  | 18.57   | 1488.21 | 33.2     | 12400.02 | 206.32   | 7952.92  | 124.43  |
| 300      | 1892   | depth 18 | context 1892-1 | 93.48 | 16.32    | 110.62 | 21.82   | 1512.39 | 37.81    | 11356.47 | 215.73   | 7768.71  | 134.11  |
| 300      | 1892   | depth 22 | context 1892-2 | 45.09 | 8.49     | 42.46  | 11.94   | 1804.59 | 24.56    | 6369.98  | 129.08   | 13818.65 | 134.56  |
| 300      | 1892   | depth 24 | context 1892-2 | 68.56 | 12.05    | 102.25 | 18.12   | 2208.61 | 35.01    | 11292.2  | 201.27   | 16165.31 | 172.43  |
| 300      | 1892   | depth 26 | context 1892-2 | 74.67 | 11.45    | 45.83  | 14.73   | 1615.68 | 28.08    | 3652.03  | 125.17   | 16106.46 | 164.7   |
| 300.31   | 1891   | depth 26 | core 1892-1-26 | 73.32 | 10.9     | 82.76  | 17.12   | 3253.12 | 37.25    | 12718.67 | 196.36   | 14995.33 | 155.78  |
| 300.73   | 1891   | depth 2  | core 1891-1-2  | 83.42 | 13.84    | 100.38 | 20.11   | 2634.73 | 39.84    | 23952.82 | 292.84   | 12449.72 | 157.61  |
| 300.21   | 1891   | depth 14 | core 1891-2-14 | 87.62 | 13.87    | 91.19  | 20.54   | 2521.16 | 40.24    | 37108.81 | 356.75   | 15149.15 | 169.73  |

### Appendix 3

| Duration | SAMPLE | MISC     | NOTE           | Al       | Al Error | P        | P Error | Si       | Si Error | Cl     | Cl Error | S       | S Error | Mg     | Mg Error |
|----------|--------|----------|----------------|----------|----------|----------|---------|----------|----------|--------|----------|---------|---------|--------|----------|
| 300      | 1891   | depth 2  | context 1891-1 | 13574.8  | 358.81   | 12241.13 | 122.1   | 129989.5 | 683.11   | 230.94 | 15.06    | 1948.64 | 43.9    | 0      | 1490.65  |
| 300      | 1891   | depth 4  | context 1891-1 | 18835.74 | 447.32   | 14467.48 | 145.08  | 164404.2 | 798.55   | 295.2  | 18.24    | 2037.72 | 50.16   | 0      | 1855.37  |
| 300      | 1891   | depth 8  | context 1891-2 | 6552.88  | 291.05   | 11892.48 | 118.57  | 55216.36 | 431.89   | 277.56 | 18       | 1720.83 | 46.97   | 0      | 1685.77  |
| 300      | 1891   | depth 10 | context 1891-2 | 9539.7   | 300.51   | 9239.59  | 98.15   | 49041.2  | 384.42   | 204.62 | 13.71    | 1952.33 | 41.72   | 1930.8 | 998.86   |
| 298.59   | 1891   | depth 12 | context 1891-2 | 16492.04 | 395.01   | 12584.69 | 127.02  | 124934.9 | 677.33   | 251.46 | 15.45    | 1926.59 | 44.94   | 0      | 1904.11  |
| 300      | 1892   | depth 2  | context 1892-1 | 9944.27  | 306.64   | 8954.08  | 102.04  | 99733.47 | 579.27   | 459.82 | 16.2     | 1222.15 | 38.06   | 0      | 1409.31  |
| 300      | 1892   | depth 4  | context 1892-1 | 11746.33 | 323.68   | 7775.08  | 99.12   | 117570.3 | 645.27   | 457.37 | 16.28    | 1383.56 | 39.44   | 0      | 1359.35  |
| 300      | 1892   | depth 6  | context 1892-1 | 10715.63 | 311.43   | 9532.26  | 105.28  | 99741.29 | 584.09   | 365.3  | 15.45    | 1527.54 | 39.87   | 0      | 1388.35  |
| 300      | 1892   | depth 8  | context 1892-1 | 10700.58 | 316.03   | 9696.4   | 108.97  | 114381.8 | 636.91   | 255.94 | 15.43    | 1270.17 | 39.1    | 0      | 1441.64  |
| 300      | 1892   | depth 10 | context 1892-1 | 10837.34 | 336.02   | 10728.09 | 118.03  | 122677.1 | 675.89   | 314.69 | 16.82    | 1246.14 | 41.31   | 0      | 1744.18  |
| 300      | 1892   | depth 12 | context 1892-1 | 10591.71 | 298.91   | 8350.61  | 96.51   | 94479    | 555.55   | 322.08 | 14.49    | 1247.77 | 36.21   | 0      | 1298.66  |
| 300      | 1892   | depth 14 | context 1892-1 | 15748.18 | 421.02   | 14651.13 | 137.26  | 108196.1 | 620.14   | 378.26 | 17.54    | 1669.46 | 45.73   | 0      | 2353.3   |
| 300      | 1892   | depth 14 | context 1892-1 | 16103.72 | 447.36   | 18775.33 | 164.7   | 127756.1 | 709.08   | 464.58 | 19.58    | 1750.06 | 50.4    | 0      | 2337.59  |
| 300      | 1892   | depth 16 | context 1892-1 | 10211.38 | 321.77   | 10840.76 | 111.64  | 76425.68 | 500.1    | 385.48 | 16.93    | 2214.1  | 47.13   | 0      | 1517.55  |
| 300      | 1892   | depth 18 | context 1892-1 | 16922.41 | 416.53   | 12326.97 | 126.31  | 100619.8 | 605.97   | 307.65 | 16.99    | 2011.78 | 47.57   | 0      | 2502.3   |
| 300      | 1892   | depth 22 | context 1892-2 | 19592.85 | 365.67   | 5199.08  | 86.79   | 148301.2 | 741.76   | 79.88  | 14.82    | 687.38  | 34.06   | 0      | 1326.41  |
| 300      | 1892   | depth 24 | context 1892-2 | 22608.34 | 479.15   | 21315.66 | 170.79  | 125701.2 | 690.86   | 199.25 | 17.9     | 1335.69 | 45.76   | 0      | 2172.79  |
| 300      | 1892   | depth 26 | context 1892-2 | 20275.05 | 407.61   | 25764.4  | 180.05  | 143390.8 | 714.82   | 83.07  | 14.6     | 1322.97 | 40.13   | 0      | 1471.07  |
| 300.31   | 1891   | depth 26 | core 1892-1-26 | 24905.64 | 470.92   | 10205.36 | 121.45  | 174101.9 | 829.72   | 110.44 | 15.8     | 1680.82 | 43.88   | 0      | 2417.69  |
| 300.73   | 1891   | depth 2  | core 1891-1-2  | 20725.87 | 482.32   | 14781.12 | 150.94  | 189565.4 | 864.73   | 202.07 | 17.75    | 2326.64 | 52.52   | 0      | 1860.41  |
| 300.21   | 1891   | depth 14 | core 1891-2-14 | 21689.06 | 515.62   | 19406.95 | 170.3   | 158808.7 | 776.77   | 211.62 | 18.23    | 1777.1  | 50.62   | 0      | 2020.92  |

### Appendix 3

#### Smithy data, uncalibrated

| Duration | SAMPLE       | Sample<br>(site<br>number) | Ba     | Ba Error | Sb | Sb Error | Sn      | Sn Error | Cd    | Cd Error | Pd   | Pd Error | Ag    | Ag Error | Bal      | Bal Error |
|----------|--------------|----------------------------|--------|----------|----|----------|---------|----------|-------|----------|------|----------|-------|----------|----------|-----------|
| 300.84   | kaupang      |                            | 297.46 | 30.63    | 0  | 13.6     | 460.42  | 13.8     | 10.47 | 4.57     | 4.41 | 2.38     | 21.11 | 2.94     | 695091.1 | 859.9     |
| 300.95   | K12          | 2800                       | 506.72 | 32.12    | 0  | 10.82    | 411.48  | 12.72    | 0     | 7.71     | 0    | 2.63     | 12.2  | 2.69     | 712917.4 | 843.56    |
| 300.83   | K8           | 2796                       | 497.74 | 31.9     | 0  | 10.75    | 445.4   | 13.05    | 0     | 6.72     | 4.62 | 2.39     | 25.8  | 3        | 722432.3 | 817.18    |
| 300.37   | K15          | 2803                       | 614.7  | 31.44    | 0  | 10.43    | 90.97   | 8.7      | 0     | 7.08     | 0    | 2.33     | 12.81 | 2.62     | 775567.9 | 667.13    |
| 300.42   | K9 sandstone | 2797                       | 547.76 | 30.49    | 0  | 10.26    | 0       | 14.72    | 0     | 5.3      | 0    | 2.29     | 0     | 2.48     | 700650.5 | 859.9     |
| 300.21   | K6           | 2794                       | 661.9  | 33.42    | 0  | 14.68    | 238.96  | 11.02    | 8.8   | 4.62     | 0    | 3.99     | 19.9  | 2.91     | 713547.6 | 860.02    |
| 300.76   | K7           | 2795                       | 584.53 | 38.61    | 0  | 12.89    | 1009.63 | 20.89    | 0     | 7.98     | 0    | 4.11     | 16.9  | 3.26     | 696099.5 | 1000.56   |
| 300.14   | K18          | 2806                       | 487.62 | 36.07    | 0  | 12.17    | 335.34  | 13.24    | 0     | 6.45     | 0    | 3.42     | 16.68 | 3.11     | 719483.1 | 899       |
| 300.01   | K10          | 2798                       | 434.88 | 30.84    | 0  | 13.11    | 91.18   | 8.79     | 0     | 6.65     | 0    | 3.47     | 7.09  | 2.51     | 727183   | 791.79    |
| 300.54   | K17          | 2805                       | 471.92 | 30.97    | 0  | 14.17    | 252.48  | 10.72    | 0     | 8.62     | 0    | 4.38     | 7.04  | 2.5      | 698813.3 | 866.69    |
| 300.71   | K11          | 2799                       | 481.91 | 32.91    | 0  | 14.41    | 263.17  | 11.4     | 0     | 5.87     | 0    | 2.51     | 10.63 | 2.73     | 704825.8 | 880.76    |
| 300.28   | K14          | 2802                       | 617.11 | 35.8     | 0  | 11.98    | 288.51  | 12.37    | 0     | 6.24     | 0    | 4.94     | 29.08 | 3.34     | 701160.1 | 905.95    |
| 300.29   | K16          | 2804                       | 651.34 | 33.35    | 0  | 11.02    | 167.9   | 10.07    | 0     | 5.75     | 0    | 2.64     | 11.01 | 2.7      | 728916.3 | 818.77    |
| 301.87   | P3163 S3112  | 3163                       | 534.45 | 29.49    | 0  | 9.68     | 279.65  | 10.33    | 0     | 6.23     | 0    | 3.01     | 8.71  | 2.36     | 754744.4 | 973.54    |
| 301.93   | P3161 S3097  | 3161                       | 498.41 | 28.07    | 0  | 9.39     | 77.96   | 7.74     | 0     | 4.83     | 0    | 2.25     | 7.23  | 2.26     | 712425.4 | 1066.72   |
| 300.95   | P3159 S3097  | 3159                       | 482.39 | 28.42    | 0  | 9.52     | 603.13  | 12.87    | 0     | 8.34     | 0    | 2.28     | 17.8  | 2.5      | 716230.2 | 1062.08   |
| 301.71   | P3160 S3097  | 3160                       | 635.89 | 29.58    | 0  | 9.65     | 206.8   | 9.38     | 0     | 5.04     | 0    | 2.14     | 13.06 | 2.45     | 690536.3 | 1152.04   |

### Appendix 3

| Duration | SAMPLE       | Sample<br>(site<br>number) | Mo   | Mo Error | Nb    | Nb Error | Zr     | Zr Error | Sr     | Sr Error | Rb    | Rb Error | Bi    | Bi Error | As     | As Error |
|----------|--------------|----------------------------|------|----------|-------|----------|--------|----------|--------|----------|-------|----------|-------|----------|--------|----------|
| 300.84   | kaupang      |                            | 3.19 | 1.13     | 24.28 | 1.09     | 200.08 | 2.78     | 221.49 | 2.47     | 55.9  | 1.36     | 36.01 | 6.29     | 32.83  | 20.21    |
| 300.95   | K12          | 2800                       | 3.95 | 1.19     | 29.86 | 1.17     | 263.37 | 3.18     | 212.67 | 2.47     | 49.22 | 1.3      | 28.38 | 5.52     | 0      | 25.25    |
| 300.83   | K8           | 2796                       | 6.37 | 1.22     | 22.49 | 1.1      | 281.02 | 3.25     | 183.52 | 2.28     | 51.69 | 1.31     | 23.77 | 5.1      | 0      | 23.6     |
| 300.37   | K15          | 2803                       | 2.7  | 1.09     | 14.82 | 1        | 168.65 | 2.54     | 234.99 | 2.51     | 49.98 | 1.23     | 14.07 | 3.71     | 25.76  | 10.52    |
| 300.42   | K9 sandstone | 2797                       | 0    | 1.5      | 22.01 | 1.04     | 215.64 | 2.83     | 287.67 | 2.8      | 73.88 | 1.44     | 7.55  | 2.45     | 6.8    | 2.86     |
| 300.21   | K6           | 2794                       | 0    | 1.81     | 17.73 | 1.08     | 180.82 | 2.8      | 205.55 | 2.5      | 57.84 | 1.45     | 30.95 | 6.73     | 0      | 44.87    |
| 300.76   | K7           | 2795                       | 3.86 | 1.38     | 27.66 | 1.33     | 242.06 | 3.64     | 225.77 | 2.96     | 52.57 | 1.69     | 76.22 | 11.2     | 0      | 54.88    |
| 300.14   | K18          | 2806                       | 2.71 | 1.27     | 19.43 | 1.2      | 163.13 | 2.97     | 205.01 | 2.71     | 48.71 | 1.56     | 51.86 | 9.88     | 0      | 48.75    |
| 300.01   | K10          | 2798                       | 2.4  | 1.11     | 23.09 | 1.07     | 181.04 | 2.62     | 195.62 | 2.3      | 51.55 | 1.28     | 21.7  | 4.92     | 0      | 32.82    |
| 300.54   | K17          | 2805                       | 1.95 | 1.14     | 26.72 | 1.11     | 256.29 | 3.02     | 173.35 | 2.16     | 61.95 | 1.37     | 20.09 | 4.19     | 22.7   | 12.07    |
| 300.71   | K11          | 2799                       | 3.96 | 1.22     | 31.41 | 1.21     | 244.81 | 3.15     | 198.08 | 2.44     | 59.79 | 1.45     | 34.13 | 6.29     | 60.41  | 20.12    |
| 300.28   | K14          | 2802                       | 4.96 | 1.27     | 20.27 | 1.13     | 267.61 | 3.38     | 204.05 | 2.54     | 60.32 | 1.51     | 34.89 | 7.11     | 0      | 40.09    |
| 300.29   | K16          | 2804                       | 1.78 | 1.15     | 28.89 | 1.17     | 185.22 | 2.76     | 209.79 | 2.48     | 54.94 | 1.35     | 15.59 | 4.73     | 60.32  | 14.64    |
| 301.87   | P3163 S3112  | 3163                       | 2.68 | 1.52     | 20.4  | 1.44     | 168.56 | 3.5      | 170.83 | 2.94     | 52.8  | 1.83     | 32.14 | 9.38     | 140.18 | 31.26    |
| 301.93   | P3161 S3097  | 3161                       | 2.59 | 1.43     | 44.15 | 1.6      | 214.07 | 3.5      | 151.28 | 2.55     | 70.89 | 1.83     | 15.56 | 4.34     | 0      | 16.16    |
| 300.95   | P3159 S3097  | 3159                       | 0    | 2        | 19.82 | 1.32     | 204.22 | 3.43     | 156.11 | 2.59     | 77.04 | 1.9      | 11.88 | 4.36     | 28.41  | 11.31    |
| 301.71   | P3160 S3097  | 3160                       | 3.66 | 1.49     | 31.76 | 1.49     | 248.55 | 3.83     | 155.92 | 2.64     | 65.23 | 1.8      | 12.9  | 4.47     | 21.11  | 11.59    |



### Appendix 3

| Duration | SAMPLE       | Sample<br>(site<br>number) | Se | Se Error | Au | Au Error | Pb      | Pb Error | W     | W Error | Zn     | Zn Error | Cu       | Cu Error | Ni | Ni Error |
|----------|--------------|----------------------------|----|----------|----|----------|---------|----------|-------|---------|--------|----------|----------|----------|----|----------|
| 300.84   | kaupang      |                            | 0  | 1.86     | 0  | 7.96     | 3351.18 | 26.12    | 0     | 44.32   | 398.35 | 11.67    | 7134.76  | 52.52    | 0  | 18.56    |
| 300.95   | K12          | 2800                       | 0  | 1.6      | 0  | 7.14     | 2314.66 | 21.49    | 0     | 40.51   | 341.27 | 11.22    | 6151.93  | 49.48    | 0  | 19.3     |
| 300.83   | K8           | 2796                       | 0  | 1.6      | 0  | 6.9      | 1890.32 | 19.23    | 0     | 41.76   | 464.74 | 12.2     | 4533.21  | 41.89    | 0  | 19.33    |
| 300.37   | K15          | 2803                       | 0  | 1.5      | 0  | 5.42     | 859.13  | 12.25    | 0     | 37.83   | 452.22 | 11.94    | 5941.42  | 47.26    | 0  | 18.43    |
| 300.42   | K9 sandstone | 2797                       | 0  | 1.5      | 0  | 4.17     | 28.12   | 3.28     | 0     | 31.5    | 81.48  | 5.9      | 148.3    | 10.24    | 0  | 19.44    |
| 300.21   | K6           | 2794                       | 0  | 1.93     | 0  | 8.57     | 3555.43 | 28.45    | 0     | 43.32   | 311.7  | 11.49    | 7743.63  | 57.91    | 0  | 19.84    |
| 300.76   | K7           | 2795                       | 0  | 3.26     | 0  | 13.58    | 8912.4  | 57.65    | 85.43 | 41.24   | 758.77 | 17.41    | 11603.66 | 80.35    | 0  | 21.87    |
| 300.14   | K18          | 2806                       | 0  | 2.86     | 0  | 12.29    | 7393.29 | 48.94    | 0     | 74.79   | 563.45 | 15       | 9649.35  | 69.84    | 0  | 21.1     |
| 300.01   | K10          | 2798                       | 0  | 1.52     | 0  | 6.4      | 1860.91 | 18.6     | 0     | 38.14   | 311.63 | 10.27    | 4060.95  | 38.59    | 0  | 19.09    |
| 300.54   | K17          | 2805                       | 0  | 1.5      | 0  | 5.84     | 1130.96 | 14.28    | 0     | 36.58   | 246.14 | 8.86     | 1297.43  | 22.01    | 0  | 19.32    |
| 300.71   | K11          | 2799                       | 0  | 1.86     | 0  | 8.13     | 2966.1  | 25.45    | 0     | 58.61   | 419.25 | 12.19    | 5479.64  | 47.44    | 0  | 19.93    |
| 300.28   | K14          | 2802                       | 0  | 2.12     | 0  | 9.09     | 3836.32 | 30.39    | 0     | 49.52   | 386.1  | 12.3     | 6716.88  | 54.32    | 0  | 20.61    |
| 300.29   | K16          | 2804                       | 0  | 2.72     | 0  | 6.58     | 1536.15 | 17.41    | 0     | 39.53   | 291.54 | 10.57    | 4654.96  | 43.17    | 0  | 19.96    |
| 301.87   | P3163 S3112  | 3163                       | 0  | 3.86     | 0  | 12.13    | 4298.63 | 41.31    | 0     | 96.51   | 326.01 | 14.72    | 6470.77  | 67.15    | 0  | 25.23    |
| 301.93   | P3161 S3097  | 3161                       | 0  | 1.69     | 0  | 6.59     | 525.67  | 12.39    | 0     | 43.23   | 178.62 | 11.02    | 3884.44  | 48.43    | 0  | 24.51    |
| 300.95   | P3159 S3097  | 3159                       | 0  | 2.95     | 0  | 6.59     | 572.96  | 12.88    | 0     | 42.84   | 119.73 | 9.99     | 3767.72  | 47.54    | 0  | 24.62    |
| 301.71   | P3160 S3097  | 3160                       | 0  | 2.54     | 0  | 7.24     | 589.16  | 13.33    | 0     | 46.3    | 177.67 | 11.39    | 4235.73  | 51.6     | 0  | 25.64    |

### Appendix 3

| Duration | SAMPLE       | Sample<br>(site<br>number) | Co | Co Error | Fe       | Fe Error | Mn      | Mn Error | Cr    | Cr Error | V      | V Error | Ti      | Ti Error | Ca       | Ca Error |
|----------|--------------|----------------------------|----|----------|----------|----------|---------|----------|-------|----------|--------|---------|---------|----------|----------|----------|
| 300.84   | kaupang      |                            | 0  | 67.34    | 37695.57 | 191.95   | 2196.42 | 59.75    | 78.28 | 15.77    | 120.28 | 24.12   | 2541.98 | 45.02    | 33405.73 | 357.56   |
| 300.95   | K12          | 2800                       | 0  | 66.36    | 33854    | 185.21   | 1943.21 | 59.76    | 65.58 | 14.42    | 89.35  | 22.1    | 3080.21 | 43.64    | 25114.68 | 302.71   |
| 300.83   | K8           | 2796                       | 0  | 70.2     | 38121.8  | 199.56   | 4083.62 | 79.38    | 81.9  | 14.97    | 123.56 | 23.17   | 2494.74 | 43.26    | 27100.62 | 319.22   |
| 300.37   | K15          | 2803                       | 0  | 61.24    | 29641.99 | 167.71   | 3830.39 | 75.93    | 61.29 | 14.27    | 87.12  | 21.48   | 2047.88 | 39.5     | 30096.38 | 318.58   |
| 300.42   | K9 sandstone | 2797                       | 0  | 54.93    | 21220.22 | 144.46   | 946.95  | 49.89    | 53.68 | 10.66    | 87.22  | 17.2    | 3625.11 | 37.18    | 13735.16 | 199.68   |
| 300.21   | K6           | 2794                       | 0  | 66.89    | 33089.96 | 186.92   | 1551.74 | 56.29    | 73.32 | 13.49    | 92.99  | 20.73   | 2239.03 | 39.12    | 27161.33 | 307.9    |
| 300.76   | K7           | 2795                       | 0  | 78.11    | 40929.75 | 228.27   | 3579.12 | 79.91    | 70.83 | 15.57    | 105.31 | 22.86   | 2171.19 | 42.36    | 27232.77 | 335.75   |
| 300.14   | K18          | 2806                       | 0  | 76.46    | 40999.25 | 222.66   | 4429.55 | 85.8     | 74.68 | 15.76    | 112.69 | 22.92   | 2236.84 | 42.5     | 24726.74 | 320.54   |
| 300.01   | K10          | 2798                       | 0  | 63.36    | 31170.9  | 174.65   | 3076.83 | 70.38    | 75.22 | 13.47    | 96.83  | 20.71   | 2711.2  | 40.28    | 22818.57 | 281.65   |
| 300.54   | K17          | 2805                       | 0  | 66.41    | 33703.43 | 183.84   | 1186.31 | 51.33    | 74.8  | 13.83    | 88.19  | 20.92   | 2711.46 | 40.66    | 20594.99 | 272.81   |
| 300.71   | K11          | 2799                       | 0  | 69.59    | 35465.4  | 195.49   | 1428.37 | 55.16    | 77.55 | 13.9     | 97.06  | 21.19   | 2585.96 | 40.89    | 28340.78 | 316.79   |
| 300.28   | K14          | 2802                       | 0  | 68.76    | 33347.63 | 192.16   | 4110.59 | 82.82    | 61.4  | 14.6     | 94.49  | 21.26   | 2232.08 | 40.01    | 30440.01 | 332.52   |
| 300.29   | K16          | 2804                       | 0  | 70.1     | 36782.87 | 198.28   | 2348.58 | 65.32    | 88.03 | 14.32    | 112.56 | 23.42   | 3071.65 | 45.35    | 23821.87 | 297.93   |
| 301.87   | P3163 S3112  | 3163                       | 0  | 95.66    | 43747.81 | 281.54   | 2722.8  | 87.12    | 97.85 | 15.12    | 109.58 | 23.24   | 2083.16 | 42.53    | 18204.84 | 277.15   |
| 301.93   | P3161 S3097  | 3161                       | 0  | 77.81    | 28162.63 | 211.94   | 2062.51 | 78.59    | 91.5  | 12.43    | 81.52  | 19.79   | 3004.25 | 40.37    | 16657.37 | 240.66   |
| 300.95   | P3159 S3097  | 3159                       | 0  | 72.69    | 24112.45 | 194.98   | 1341.37 | 68.6     | 46.25 | 11.09    | 68.11  | 16.69   | 2462.15 | 33.99    | 16410.71 | 225.48   |
| 301.71   | P3160 S3097  | 3160                       | 0  | 84.75    | 32845.71 | 233.77   | 1357.15 | 69.29    | 77.66 | 12.77    | 115.23 | 21.26   | 3987.17 | 45.62    | 15983.92 | 240.18   |

### Appendix 3

| Duration | SAMPLE       | Sample<br>(site<br>number) | K        | K Error | Al       | Al Error | P        | P Error | Si       | Si Error | Cl     | Cl Error | S       | S Error | Mg      | Mg Error |
|----------|--------------|----------------------------|----------|---------|----------|----------|----------|---------|----------|----------|--------|----------|---------|---------|---------|----------|
| 300.84   | kaupang      |                            | 14322.54 | 176.73  | 23574.31 | 610.03   | 16134.56 | 171.54  | 158913.8 | 783.97   | 449.43 | 22.92    | 3223.95 | 68.56   | 0       | 2660.12  |
| 300.95   | K12          | 2800                       | 13747.86 | 166.59  | 21781.53 | 531.18   | 11096.51 | 139.53  | 161141.6 | 761.14   | 284.3  | 19.77    | 2391.44 | 56.8    | 0       | 2167.65  |
| 300.83   | K8           | 2796                       | 12962.49 | 165.05  | 18502.03 | 520.39   | 13582.09 | 152.84  | 148950.7 | 747.88   | 445.92 | 21.23    | 2665.84 | 60.72   | 0       | 2745.22  |
| 300.37   | K15          | 2803                       | 13248.97 | 159.91  | 12438.8  | 439.48   | 9431.17  | 129.71  | 113099.4 | 662.56   | 434.31 | 21.18    | 1532.18 | 52.02   | 0       | 3028.57  |
| 300.42   | K9 sandstone | 2797                       | 16923.96 | 158.42  | 25855.52 | 525.6    | 5435.07  | 114.7   | 209530   | 845.39   | 56.35  | 17.67    | 461.1   | 38.34   | 0       | 2500.7   |
| 300.21   | K6           | 2794                       | 13586    | 162.31  | 21320.59 | 537.74   | 10437.56 | 138.97  | 160191.2 | 772.74   | 377.8  | 20.57    | 3297.73 | 64.03   | 0       | 2432.37  |
| 300.76   | K7           | 2795                       | 13384.63 | 174.65  | 21689.82 | 576.69   | 12137.94 | 149.35  | 149149   | 779.86   | 400.57 | 21.57    | 5817.11 | 81.75   | 3623.94 | 1668.55  |
| 300.14   | K18          | 2806                       | 11944.52 | 166.91  | 19146.28 | 525.47   | 11195.81 | 141.22  | 141555.5 | 745.92   | 399.96 | 21.18    | 4758.56 | 74.07   | 0       | 2218.26  |
| 300.01   | K10          | 2798                       | 13656.51 | 161.51  | 20097.4  | 500.18   | 9832.31  | 130.75  | 159131.6 | 744.9    | 322.36 | 19.39    | 2581.93 | 56.64   | 0       | 2883.98  |
| 300.54   | K17          | 2805                       | 15036.22 | 170.43  | 23401.32 | 555.3    | 12427.46 | 150.66  | 185727.8 | 826.59   | 295.29 | 20.41    | 1970.43 | 54.98   | 0       | 2561.13  |
| 300.71   | K11          | 2799                       | 14075.94 | 166.45  | 21203    | 551.59   | 13355.42 | 154.94  | 162731.3 | 785.99   | 342.03 | 21.01    | 3321.38 | 65.94   | 0       | 2287.34  |
| 300.28   | K14          | 2802                       | 13868.29 | 168.12  | 21701.52 | 576.86   | 13525.63 | 156.15  | 162840.3 | 790.47   | 391.17 | 21.39    | 3760.72 | 68.99   | 0       | 3844.83  |
| 300.29   | K16          | 2804                       | 13218.54 | 164.76  | 21309.77 | 538.27   | 12585.17 | 146.1   | 147351.6 | 741.24   | 288.42 | 19.85    | 2235.17 | 56.35   | 0       | 3054.16  |
| 301.87   | P3163 S3112  | 3163                       | 12186    | 166.56  | 18770.11 | 428.97   | 7545.76  | 104.57  | 122468.3 | 674.4    | 370.77 | 17.19    | 4442.84 | 61.68   | 0       | 1730.25  |
| 301.93   | P3161 S3097  | 3161                       | 16790.96 | 175.41  | 25023.28 | 495.44   | 8419.39  | 117.65  | 180151.1 | 839.81   | 227.02 | 17.25    | 1216.82 | 42.08   | 0       | 2266.2   |
| 300.95   | P3159 S3097  | 3159                       | 16030.44 | 162.54  | 22893.12 | 459.48   | 10531.35 | 124.2   | 179676.5 | 831.12   | 182.48 | 16.55    | 1604.86 | 43.93   | 2348.72 | 1173.23  |
| 301.71   | P3160 S3097  | 3160                       | 17305.37 | 180.56  | 28058.97 | 530.71   | 7020.68  | 113.76  | 191500.8 | 873.23   | 137.86 | 17.14    | 1068.25 | 41.33   | 3607.49 | 1302.15  |

