| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 750 | 2136.08 | 129.07 | 26.01 | 14.01 | 1460543.72106 | 449867.27185 |
| 751 | 2160.88 | 117.05 | 23.01 | 10.00 | 1460543.69944 | 449867.27303 |
| 752 | 2166.21 | 102.06 | 22.01 | 18.01 | 1460543.87125 | 449867.01819 |
| 753 | 2177.34 | 123.02 | 17.00 | 11.00 | 1460544.84010 | 449865.64472 |
| 754 | 2102.86 | 105.04 | 16.01 | 14.01 | 1460545.94446 | 449864.04873 |
| 755 | 2101.86 | 130.05 | 27.01 | 14.01 | 1460547.07177 | 449862.26359 |
| 756 | 2074.74 | 109.04 | 19.01 | 11.00 | 1460548.19059 | 449860.42582 |
| 757 | 2102.75 | 110.04 | 16.01 | 13.00 | 1460549.33516 | 449858.68051 |
| 758 | 2023.42 | 114.02 | 16.00 | 17.00 | 1460550.55086 | 449856.76329 |
| 759 | 2023.03 | 136.07 | 20.01 | 15.01 | 1460551.76283 | 449855.00323 |
| 762 | 1986.61 | 101.03 | 24.01 | 8.00 | 1460554.08874 | 449851.14115 |
| 765 | 1960.41 | 115.02 | 19.00 | 7.00 | 1460556.58053 | 449847.15788 |
| 766 | 1951.90 | 89.04 | 19.01 | 16.01 | 1460557.30992 | 449845.91178 |
| 767 | 1917.78 | 113.05 | 17.01 | 16.01 | 1460557.30992 | 449845.91178 |
| 768 | 1905.78 | 100.04 | 22.01 | 8.00 | 1460559.10485 | 449843.15697 |
| 769 | 1823.47 | 113.03 | 16.00 | 19.00 | 1460559.76030 | 449841.77857 |
| 770 | 1960.60 | 104.03 | 18.01 | 16.00 | 1460560.34659 | 449840.68400 |
| 771 | 1826.75 | 103.04 | 13.01 | 6.00 | 1460560.82570 | 449840.09153 |
| 772 | 1839.75 | 92.04 | 17.01 | 9.00 | 1460561.48279 | 449838.64452 |
| 773 | 1956.90 | 118.05 | 16.01 | 15.01 | 1460562.29909 | 449837.46747 |
| 774 | 1877.58 | 76.02 | 18.01 | 12.00 | 1460562.69082 | 449836.64815 |
| 775 | 1866.48 | 105.03 | 15.00 | 15.00 | 1460562.96026 | 449836.09180 |
| 776 | 1878.67 | 115.04 | 9.00 | 5.00 | 1460563.40537 | 449835.07756 |
| 777 | 1869.76 | 113.05 | 20.01 | 12.00 | 1460564.22800 | 449833.80319 |
| 778 | 1887.77 | 102.04 | 19.01 | 16.01 | 1460564.86222 | 449832.45927 |
| 779 | 1920.69 | 103.04 | 19.01 | 16.01 | 1460565.46001 | 449831.45591 |
| 780 | 1935.40 | 89.02 | 17.00 | 18.00 | 1460566.09065 | 449830.41281 |
| 781 | 1988.71 | 103.04 | 12.00 | 21.01 | 1460566.74438 | 449829.41835 |
| 782 | 1933.60 | 87.03 | 17.01 | 10.00 | 1460567.53700 | 449828.02398 |
| 783 | 1966.71 | 117.04 | 10.00 | 13.00 | 1460567.53700 | 449828.02398 |
| 784 | 1986.71 | 116.04 | 12.00 | 11.00 | 1460569.36712 | 449825.34012 |
| 785 | 1966.71 | 105.04 | 22.01 | 11.00 | 1460570.15769 | 449823.84523 |
| 787 | 1917.78 | 95.04 | 14.01 | 11.00 | 1460571.89731 | 449820.86470 |
| 788 | 1854.76 | 95.04 | 11.00 | 16.01 | 1460572.81132 | 449819.37886 |
| 789 | 1925.40 | 93.02 | 8.00 | 20.00 | 1460573.71392 | 449817.89661 |
| 790 | 1900.30 | 111.02 | 17.00 | 17.00 | 1460574.53467 | 449816.42780 |
| 791 | 1940.31 | 114.02 | 14.00 | 11.00 | 1460575.37376 | 449814.87408 |
| 792 | 2017.62 | 113.03 | 18.01 | 5.00 | 1460576.36245 | 449813.33962 |
| 793 | 2006.22 | 92.06 | 22.01 | 12.01 | 1460577.28584 | 449811.88654 |
| 794 | 2060.15 | 105.06 | 16.01 | 15.01 | 1460578.18977 | 449810.23913 |
| 796 | 2090.65 | 106.03 | 27.01 | 14.00 | 1460580.21772 | 449807.10590 |
| 797 | 1944.70 | 113.04 | 13.00 | 14.01 | 1460581.18087 | 449805.19974 |
| 798 | 2030.73 | 111.04 | 23.01 | 12.00 | 1460581.18087 | 449805.19974 |
| 800 | 2006.82 | 118.05 | 32.01 | 12.00 | 1460584.10422 | 449799.94585 |
| 801 | 2028.53 | 107.03 | 18.00 | 9.00 | 1460585.03751 | 449798.35177 |
| 802 | 2030.93 | 92.04 | 16.01 | 18.01 | 1460585.88813 | 449796.68235 |
| 803 | 2034.93 | 112.05 | 12.01 | 12.01 | 1460586.62730 | 449795.28567 |
| 804 | 2043.73 | 110.04 | 22.01 | 13.00 | 1460587.57590 | 449793.46885 |
| 805 | 2000.72 | 101.04 | 20.01 | 13.00 | 1460588.53733 | 449791.65649 |
| 806 | 1945.80 | 102.04 | 20.01 | 15.01 | 1460589.56406 | 449790.17263 |
| 808 | 2058.43 | 101.02 | 22.00 | 12.00 | 1460590.62251 | 449786.97522 |
| 809 | 2045.53 | 114.03 | 15.00 | 16.00 | 1460590.66607 | 449786.62181 |
| 810 | 2014.82 | 105.04 | 17.01 | 11.00 | 1460590.54324 | 449787.42661 |
| 811 | 2048.94 | 108.05 | 18.01 | 14.01 | 1460590.41905 | 449789.39793 |
| 812 | 2016.52 | 112.03 | 14.00 | 10.00 | 1460590.41905 | 449789.39793 |
| 814 | 2008.02 | 129.07 | 17.01 | 15.01 | 1460589.16249 | 449796.26843 |
| 815 | 1976.81 | 110.04 | 23.01 | 14.01 | 1460588.84722 | 449798.15082 |
| 816 | 2128.87 | 93.04 | 18.01 | 20.01 | 1460588.63075 | 449800.15564 |
| 817 | 2124.55 | 135.04 | 26.01 | 9.00 | 1460588.46993 | 449800.54539 |
| 818 | 2011.52 | 105.03 | 15.00 | 10.00 | 1460588.67002 | 449799.67919 |
| 820 | 2055.64 | 98.03 | 18.01 | 10.00 | 1460589.60403 | 449795.97507 |
| 821 | 2005.62 | 106.03 | 21.01 | 10.00 | 1460589.92486 | 449794.01110 |
| 823 | 2050.74 | 117.04 | 28.01 | 11.00 | 1460589.71956 | 449790.99115 |
| 824 | 1983.61 | 94.03 | 14.00 | 14.00 | 1460589.54765 | 449790.02455 |
| 827 | 2041.73 | 107.04 | 21.01 | 7.00 | 1460587.61655 | 449785.48842 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 828 | 2225.46 | 111.02 | 22.00 | 8.00 | 1460586.70803 | 449784.01853 |
| 829 | 2223.35 | 113.07 | 19.01 | 4.00 | 1460586.70803 | 449784.01853 |
| 831 | 2117.55 | 118.03 | 17.00 | 14.00 | 1460582.71025 | 449781.62303 |
| 832 | 2114.34 | 115.02 | 20.00 | 11.00 | 1460583.18519 | 449781.83966 |
| 833 | 2233.25 | 119.07 | 24.01 | 16.01 | 1460584.78191 | 449782.69383 |
| 834 | 2144.66 | 133.04 | 27.01 | 13.00 | 1460586.38895 | 449783.59152 |
| 835 | 2138.44 | 114.02 | 18.00 | 14.00 | 1460587.96784 | 449784.75315 |
| 836 | 2089.17 | 107.06 | 20.01 | 20.01 | 1460589.29550 | 449785.93549 |
| 837 | 2134.98 | 122.06 | 22.01 | 11.01 | 1460590.98172 | 449786.81687 |
| 838 | 2099.96 | 124.06 | 17.01 | 8.00 | 1460592.36791 | 449787.77288 |
| 839 | 2081.06 | 109.06 | 22.01 | 7.00 | 1460593.93484 | 449788.88811 |
| 840 | 2095.86 | 106.04 | 21.01 | 16.01 | 1460595.31927 | 449790.01902 |
| 841 | 2156.31 | 109.07 | 26.02 | 11.01 | 1460596.48962 | 449790.94659 |
| 842 | 2187.79 | 124.04 | 21.01 | 15.01 | 1460596.59622 | 449791.01466 |
| 843 | 2052.32 | 100.02 | 24.00 | 14.00 | 1460596.52035 | 449790.91877 |
| 844 | 2175.67 | 101.03 | 17.01 | 16.00 | 1460596.52035 | 449790.91877 |
| 845 | 2076.43 | 121.03 | 17.00 | 11.00 | 1460595.79747 | 449790.34575 |
| 846 | 2114.55 | 114.03 | 20.01 | 7.00 | 1460594.78302 | 449789.34479 |
| 847 | 2137.98 | 114.05 | 17.01 | 10.00 | 1460593.29402 | 449788.07999 |
| 848 | 2083.06 | 121.06 | 15.01 | 16.01 | 1460591.95381 | 449786.78630 |
| 849 | 1980.91 | 110.05 | 16.01 | 15.01 | 1460590.24594 | 449785.92577 |
| 850 | 2127.08 | 130.07 | 13.01 | 15.01 | 1460588.58800 | 449785.10518 |
| 851 | 2110.97 | 117.05 | 21.01 | 16.01 | 1460587.25771 | 449784.10562 |
| 852 | 2152.20 | 113.06 | 25.01 | 13.01 | 1460586.19420 | 449783.62417 |
| 855 | 2273.82 | 113.04 | 22.01 | 19.01 | 1460581.69046 | 449781.28397 |
| 856 | 2208.57 | 99.03 | 17.00 | 20.01 | 1460580.12137 | 449780.43507 |
| 857 | 2277.59 | 111.03 | 21.01 | 18.00 | 1460578.62638 | 449779.52019 |
| 858 | 2312.60 | 134.03 | 24.01 | 14.00 | 1460578.62638 | 449779.52019 |
| 859 | 2374.21 | 112.06 | 28.01 | 17.01 | 1460575.57869 | 449777.76361 |
| 861 | 2287.82 | 124.04 | 22.01 | 23.01 | 1460573.20276 | 449776.26442 |
| 862 | 2319.60 | 109.03 | 25.01 | 17.00 | 1460571.75865 | 449775.28902 |
| 863 | 2161.99 | 139.06 | 14.01 | 19.01 | 1460570.21352 | 449774.44796 |
| 864 | 2192.79 | 116.04 | 26.01 | 13.00 | 1460568.66151 | 449773.66705 |
| 865 | 2307.83 | 128.05 | 27.01 | 7.00 | 1460567.14886 | 449772.82922 |
| 866 | 2193.77 | 123.10 | 22.02 | 17.01 | 1460565.66853 | 449771.93941 |
| 867 | 2240.47 | 113.02 | 22.00 | 10.00 | 1460564.40557 | 449771.19054 |
| 868 | 2263.06 | 120.11 | 23.02 | 17.02 | 1460563.11285 | 449770.39984 |
| 869 | 2250.69 | 104.03 | 25.01 | 15.00 | 1460561.69514 | 449769.70414 |
| 870 | 2329.30 | 147.08 | 19.01 | 11.01 | 1460560.43950 | 449768.92867 |
| 871 | 2254.81 | 116.04 | 22.01 | 17.01 | 1460559.15511 | 449768.19480 |
| 872 | 2283.05 | 123.06 | 26.01 | 10.00 | 1460557.77971 | 449767.40093 |
| 873 | 2180.22 | 115.06 | 20.01 | 15.01 | 1460556.42373 | 449766.65643 |
| 874 | 2227.91 | 126.05 | 23.01 | 12.00 | 1460555.10054 | 449765.74030 |
| 875 | 2217.24 | 116.06 | 23.01 | 10.01 | 1460553.76609 | 449764.87419 |
| 876 | 2146.31 | 124.08 | 28.02 | 14.01 | 1460552.44413 | 449763.96852 |
| 877 | 2070.95 | 118.05 | 14.01 | 17.01 | 1460551.14971 | 449763.11978 |
| 878 | 2124.40 | 133.09 | 21.01 | 15.01 | 1460549.88523 | 449762.21825 |
| 879 | 2032.44 | 122.09 | 18.01 | 9.01 | 1460548.65021 | 449761.28285 |
| 881 | 2080.64 | 111.03 | 15.00 | 9.00 | 1460545.93804 | 449759.36935 |
| 882 | 2099.44 | 128.03 | 23.00 | 15.00 | 1460545.93804 | 449759.36935 |
| 883 | 1998.42 | 100.02 | 18.00 | 9.00 | 1460543.00458 | 449757.55828 |
| 884 | 1996.62 | 108.03 | 22.01 | 14.00 | 1460541.39905 | 449756.85391 |
| 886 | 2059.22 | 105.01 | 20.00 | 14.00 | 1460538.06142 | 449756.18408 |
| 887 | 2073.06 | 111.06 | 21.01 | 11.01 | 1460536.42849 | 449756.13902 |
| 888 | 2048.04 | 100.05 | 22.01 | 12.01 | 1460535.28946 | 449756.13353 |
| 889 | 2090.54 | 113.03 | 15.00 | 10.00 | 1460535.25682 | 449756.15693 |
| 890 | 2044.35 | 101.07 | 24.02 | 12.01 | 1460535.57935 | 449756.13146 |
| 891 | 2063.15 | 112.06 | 18.01 | 13.01 | 1460537.26315 | 449755.82948 |
| 892 | 1974.41 | 103.02 | 21.00 | 11.00 | 1460538.97157 | 449755.38577 |
| 893 | 2021.13 | 103.06 | 18.01 | 11.01 | 1460540.73114 | 449754.83186 |
| 894 | 2033.53 | 107.03 | 17.00 | 15.00 | 1460542.30982 | 449753.87148 |
| 896 | 2006.62 | 107.03 | 30.01 | 18.01 | 1460544.23496 | 449753.25641 |
| 897 | 1985.91 | 88.04 | 16.01 | 8.00 | 1460544.26306 | 449753.25627 |
| 899 | 2066.43 | 107.02 | 19.00 | 11.00 | 1460543.30004 | 449753.48909 |
| 900 | 1973.71 | 102.04 | 13.00 | 14.01 | 1460541.44463 | 449754.12714 |

# Pile 33, Pad 31

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 901 | 2013.62 | 114.04 | 19.01 | 16.00 | 1460539.78647 | 449754.95969 |
| 902 | 2072.74 | 120.04 | 5.00 | 15.01 | 1460538.13912 | 449755.92886 |
| 903 | 2095.44 | 113.02 | 19.00 | 11.00 | 1460536.69562 | 449756.92554 |
| 904 | 2146.55 | 115.03 | 18.00 | 12.00 | 1460535.44218 | 449758.15829 |
| 905 | 2064.53 | 95.02 | 21.01 | 15.00 | 1460534.37294 | 449759.27825 |
| 906 | 2042.43 | 117.02 | 23.00 | 15.00 | 1460533.50907 | 449760.70280 |
| 907 | 2141.87 | 140.06 | 19.01 | 18.01 | 1460532.47063 | 449762.13168 |
| 908 | 2209.23 | 107.06 | 22.01 | 17.01 | 1460531.52439 | 449763.67138 |
| 909 | 2251.81 | 132.05 | 16.01 | 13.00 | 1460530.53522 | 449765.35980 |
| 910 | 2277.93 | 118.05 | 25.01 | 24.01 | 1460529.82147 | 449767.14625 |
| 911 | 2209.23 | 131.07 | 19.01 | 11.01 | 1460528.86472 | 449768.77268 |
| 912 | 2197.12 | 115.06 | 22.01 | 13.01 | 1460528.10791 | 449770.46509 |
| 913 | 2127.29 | 116.07 | 24.01 | 12.01 | 1460527.27044 | 449772.01435 |
| 914 | 2155.99 | 132.06 | 17.01 | 14.01 | 1460526.56685 | 449773.47336 |
| 916 | 1922.69 | 116.04 | 16.01 | 12.00 | 1460525.11390 | 449776.32598 |
| 917 | 1881.68 | 97.03 | 18.01 | 11.00 | 1460524.44750 | 449777.67643 |
| 918 | 1908.78 | 116.05 | 18.01 | 19.01 | 1460523.73028 | 449778.98138 |
| 919 | 1929.69 | 98.04 | 16.01 | 7.00 | 1460523.01117 | 449780.40377 |
| 920 | 2042.73 | 95.03 | 9.00 | 20.01 | 1460522.32017 | 449781.77662 |
| 921 | 1947.50 | 110.03 | 9.00 | 11.00 | 1460521.64437 | 449783.19515 |
| 922 | 2000.72 | 114.04 | 15.01 | 16.01 | 1460520.89085 | 449784.60940 |
| 923 | 1988.41 | 97.02 | 16.00 | 15.00 | 1460520.18013 | 449786.08043 |
| 924 | 2055.05 | 126.06 | 9.00 | 11.01 | 1460519.36689 | 449787.40393 |
| 926 | 1881.68 | 102.04 | 15.01 | 13.00 | 1460517.78254 | 449790.38499 |
| 928 | 1950.99 | 111.06 | 24.01 | 19.01 | 1460516.38272 | 449793.21452 |
| 929 | 1950.31 | 106.02 | 18.00 | 13.00 | 1460515.64095 | 449794.64618 |
| 930 | 2043.83 | 99.04 | 19.01 | 9.00 | 1460514.87829 | 449796.12759 |
| 931 | 2049.84 | 115.05 | 15.01 | 15.01 | 1460514.21871 | 449797.49372 |
| 933 | 1941.40 | 94.02 | 21.00 | 17.00 | 1460512.95541 | 449800.31677 |
| 934 | 1905.87 | 114.05 | 23.01 | 8.00 | 1460512.27926 | 449801.74003 |
| 935 | 1930.79 | 97.04 | 15.01 | 12.00 | 1460511.62377 | 449803.20290 |
| 937 | 1898.06 | 97.05 | 22.01 | 16.01 | 1460510.28058 | 449806.00013 |
| 938 | 1918.59 | 99.03 | 17.01 | 7.00 | 1460509.60397 | 449807.37601 |
| 939 | 1886.05 | 97.05 | 17.01 | 11.01 | 1460509.10582 | 449808.42176 |
| 940 | 1887.58 | 121.04 | 14.00 | 12.00 | 1460508.83618 | 449808.99764 |
| 941 | 1878.58 | 99.03 | 19.01 | 10.00 | 1460508.52748 | 449809.67230 |
| 942 | 1873.48 | 98.03 | 24.01 | 11.00 | 1460508.52748 | 449809.67230 |
| 943 | 1873.48 | 101.03 | 12.00 | 8.00 | 1460508.22145 | 449810.41332 |
| 944 | 1912.40 | 108.02 | 23.00 | 12.00 | 1460507.88248 | 449811.02994 |
| 945 | 2066.84 | 112.05 | 29.01 | 10.00 | 1460507.02394 | 449812.33602 |
| 946 | 2069.53 | 108.03 | 21.01 | 17.00 | 1460506.36920 | 449813.68993 |
| 947 | 2131.98 | 130.06 | 18.01 | 8.00 | 1460505.50958 | 449815.13234 |
| 948 | 2083.54 | 110.03 | 21.01 | 12.00 | 1460505.50958 | 449815.13234 |
| 949 | 2148.99 | 115.05 | 26.01 | 13.01 | 1460503.79735 | 449817.96535 |
| 950 | 2121.55 | 126.03 | 24.01 | 13.00 | 1460503.79735 | 449817.96535 |
| 951 | 2076.95 | 109.05 | 15.01 | 12.01 | 1460502.35031 | 449820.38608 |
| 952 | 2148.66 | 114.04 | 27.01 | 16.00 | 1460501.56375 | 449821.41715 |
| 953 | 2055.33 | 139.02 | 22.00 | 15.00 | 1460501.47510 | 449821.50884 |
| 954 | 2017.62 | 112.03 | 15.00 | 13.00 | 1460501.32982 | 449821.73975 |
| 958 | 1995.62 | 118.04 | 23.01 | 16.00 | 1460499.12344 | 449829.13281 |
| 959 | 1900.68 | 97.03 | 14.01 | 13.00 | 1460499.26427 | 449831.06918 |
| 960 | 2045.04 | 122.06 | 18.01 | 19.01 | 1460499.47581 | 449832.25948 |
| 961 | 2031.42 | 107.02 | 15.00 | 8.00 | 1460499.47581 | 449832.25948 |
| 963 | 2061.33 | 109.02 | 27.00 | 10.00 | 1460498.51545 | 449828.92942 |
| 964 | 2013.62 | 94.03 | 18.01 | 10.00 | 1460498.22610 | 449827.02459 |
| 965 | 1986.51 | 116.03 | 18.00 | 12.00 | 1460497.70637 | 449825.15376 |
| 966 | 1879.96 | 109.06 | 15.01 | 12.01 | 1460497.23688 | 449823.58765 |
| 967 | 1940.21 | 111.01 | 12.00 | 18.00 | 1460496.78567 | 449822.30385 |
| 968 | 1852.57 | 107.03 | 10.00 | 12.00 | 1460496.37732 | 449821.62129 |
| 969 | 1961.21 | 93.01 | 27.00 | 13.00 | 1460496.39236 | 449821.63780 |
| 970 | 1893.68 | 124.04 | 22.01 | 12.00 | 1460496.39236 | 449821.63780 |
| 971 | 1878.67 | 102.04 | 13.00 | 14.01 | 1460496.91423 | 449821.28733 |
| 972 | 1906.16 | 110.07 | 21.01 | 13.01 | 1460497.09799 | 449821.65989 |
| 973 | 1905.88 | 100.05 | 17.01 | 9.00 | 1460497.20676 | 449821.90632 |
| 974 | 1846.75 | 108.04 | 24.01 | 13.01 | 1460497.18683 | 449821.89241 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 976 | 1850.39 | 101.02 | 17.00 | 16.00 | 1460496.56201 | 449820.06173 |
| 977 | 1885.30 | 106.02 | 11.00 | 15.00 | 1460496.20606 | 449818.66815 |
| 978 | 1892.77 | 98.04 | 24.01 | 4.00 | 1460496.13580 | 449818.24613 |
| 979 | 1882.68 | 102.04 | 14.01 | 12.00 | 1460496.33775 | 449819.32702 |
| 980 | 1849.85 | 93.04 | 17.01 | 8.00 | 1460496.65667 | 449821.37663 |
| 981 | 1991.01 | 87.04 | 21.01 | 13.01 | 1460497.17734 | 449822.92095 |
| 983 | 1900.97 | 111.06 | 22.01 | 13.01 | 1460498.13988 | 449826.03528 |
| 984 | 1946.89 | 106.05 | 20.01 | 12.01 | 1460498.92404 | 449827.74677 |
| 986 | 1950.80 | 98.04 | 24.01 | 8.00 | 1460500.92348 | 449830.87165 |
| 987 | 1935.99 | 91.05 | 14.01 | 12.01 | 1460502.25268 | 449832.26004 |
| 988 | 2010.32 | 105.07 | 15.01 | 8.01 | 1460503.72431 | 449833.49662 |
| 989 | 1944.70 | 102.04 | 15.01 | 17.01 | 1460505.32895 | 449834.65713 |
| 990 | 1911.07 | 81.05 | 18.01 | 11.01 | 1460507.05771 | 449835.65624 |
| 991 | 1977.61 | 112.03 | 14.00 | 8.00 | 1460508.64198 | 449836.69978 |
| 992 | 1852.29 | 113.02 | 20.00 | 12.00 | 1460510.16656 | 449837.67480 |
| 993 | 1925.50 | 111.03 | 16.00 | 8.00 | 1460511.70776 | 449838.50785 |
| 994 | 1890.49 | 117.03 | 22.01 | 8.00 | 1460513.02460 | 449839.30590 |
| 995 | 1899.49 | 96.02 | 15.00 | 11.00 | 1460514.27091 | 449840.01773 |
| 996 | 1940.79 | 114.05 | 20.01 | 8.00 | 1460515.41535 | 449840.69278 |
| 997 | 1860.67 | 92.03 | 12.00 | 14.01 | 1460516.57883 | 449841.42451 |
| 998 | 1973.51 | 102.03 | 18.00 | 10.00 | 1460517.79868 | 449842.14507 |
| 999 | 1912.30 | 108.02 | 15.00 | 15.00 | 1460519.09161 | 449842.94827 |
| 1000 | 1946.70 | 91.03 | 21.01 | 15.01 | 1460519.09161 | 449842.94827 |
| 1001 | 1970.51 | 105.03 | 18.00 | 16.00 | 1460522.07094 | 449844.55687 |
| 1003 | 2015.62 | 114.04 | 28.01 | 8.00 | 1460524.95226 | 449846.22771 |
| 1004 | 2062.22 | 120.01 | 19.00 | 13.00 | 1460526.35776 | 449847.17319 |
| 1005 | 2262.70 | 129.04 | 25.01 | 15.00 | 1460527.64708 | 449848.11247 |
| 1006 | 2139.87 | 123.05 | 23.01 | 14.01 | 1460529.03822 | 449849.08664 |
| 1007 | 2160.67 | 108.03 | 29.01 | 11.00 | 1460530.36070 | 449849.98046 |
| 1008 | 2138.66 | 117.04 | 21.01 | 15.00 | 1460531.85579 | 449850.86394 |
| 1009 | 2225.13 | 125.06 | 21.01 | 8.00 | 1460531.85579 | 449850.86394 |
| 1010 | 2153.10 | 118.06 | 28.01 | 12.01 | 1460534.51471 | 449852.67024 |
| 1011 | 2120.66 | 122.04 | 20.01 | 22.01 | 1460535.77545 | 449853.51026 |
| 1012 | 2168.00 | 110.05 | 18.01 | 16.01 | 1460537.02811 | 449854.23463 |
| 1013 | 2260.81 | 129.05 | 19.01 | 13.00 | 1460538.27453 | 449854.95951 |
| 1014 | 2278.82 | 103.04 | 18.01 | 12.00 | 1460539.70648 | 449855.68453 |
| 1017 | 2202.46 | 137.03 | 20.00 | 16.00 | 1460544.21354 | 449857.71183 |
| 1018 | 2078.43 | 124.03 | 20.00 | 12.00 | 1460546.06395 | 449858.33477 |
| 1019 | 2173.67 | 125.04 | 17.01 | 17.01 | 1460546.06395 | 449858.33477 |
| 1020 | 2098.75 | 100.04 | 15.01 | 11.00 | 1460548.86752 | 449858.74587 |
| 1021 | 2104.07 | 120.06 | 15.01 | 14.01 | 1460548.22109 | 449858.57193 |
| 1022 | 2107.18 | 111.06 | 20.01 | 9.01 | 1460546.65700 | 449858.59667 |
| 1026 | 2297.60 | 119.03 | 17.00 | 13.00 | 1460539.54227 | 449858.43687 |
| 1027 | 2152.67 | 125.04 | 18.01 | 14.00 | 1460538.08076 | 449858.52891 |
| 1028 | 2264.81 | 130.05 | 26.01 | 13.00 | 1460538.08076 | 449858.52891 |
| 1029 | 2230.91 | 135.06 | 15.01 | 15.01 | 1460537.32834 | 449858.65169 |
| 1030 | 2189.68 | 116.04 | 31.01 | 4.00 | 1460538.20947 | 449858.52946 |
| 1031 | 2221.47 | 127.08 | 21.01 | 18.01 | 1460540.10750 | 449858.30217 |
| 1032 | 2197.90 | 104.04 | 18.01 | 17.01 | 1460541.52607 | 449858.01679 |
| 1033 | 2143.20 | 138.08 | 20.01 | 8.00 | 1460543.03358 | 449857.59635 |
| 1034 | 2179.67 | 123.04 | 22.01 | 21.01 | 1460544.39778 | 449856.87760 |
| 1035 | 2080.54 | 113.03 | 19.00 | 17.00 | 1460545.68160 | 449856.13237 |
| 1036 | 2121.08 | 111.06 | 19.01 | 11.01 | 1460546.49119 | 449855.39272 |
| 1037 | 2182.44 | 128.08 | 21.01 | 16.01 | 1460546.59209 | 449855.30220 |
| 1038 | 2214.46 | 121.03 | 25.01 | 13.00 | 1460546.59066 | 449855.29279 |
| 1039 | 2138.77 | 114.04 | 17.01 | 11.00 | 1460546.58541 | 449855.29667 |
| 1040 | 2185.44 | 127.08 | 18.01 | 6.00 | 1460545.89866 | 449855.86698 |
| 1043 | 2221.69 | 127.04 | 19.01 | 17.01 | 1460541.55505 | 449858.87841 |
| 1044 | 2145.88 | 119.05 | 18.01 | 23.01 | 1460540.76437 | 449859.65233 |
| 1045 | 2212.02 | 127.06 | 21.01 | 13.01 | 1460540.57557 | 449859.75939 |
| 1046 | 2205.23 | 109.06 | 21.01 | 13.01 | 1460540.73105 | 449859.67927 |
| 1047 | 2269.93 | 128.05 | 18.01 | 11.00 | 1460540.73105 | 449859.67927 |
| 1048 | 2173.78 | 101.04 | 25.01 | 11.00 | 1460543.76759 | 449857.53633 |
| 1049 | 2191.79 | 115.04 | 15.01 | 11.00 | 1460545.27691 | 449856.42652 |
| 1050 | 2184.46 | 89.02 | 22.00 | 10.00 | 1460546.41072 | 449855.12540 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1051 | 2069.33 | 127.02 | 18.00 | 11.00 | 1460547.56844 | 449853.88772 |
| 1052 | 2068.85 | 103.04 | 20.01 | 8.00 | 1460548.80346 | 449852.55120 |
| 1053 | 2036.32 | 122.02 | 16.00 | 12.00 | 1460549.59387 | 449851.39186 |
| 1054 | 2092.54 | 111.03 | 14.00 | 9.00 | 1460550.42014 | 449850.03968 |
| 1055 | 1987.01 | 106.05 | 16.01 | 10.01 | 1460550.85779 | 449849.43156 |
| 1056 | 2007.32 | 121.02 | 18.00 | 18.00 | 1460551.20079 | 449848.99749 |
| 1057 | 1905.49 | 96.02 | 14.00 | 14.00 | 1460552.12077 | 449847.76778 |
| 1058 | 2046.94 | 109.05 | 16.01 | 8.00 | 1460552.76476 | 449846.89751 |
| 1059 | 2045.94 | 131.06 | 19.01 | 15.01 | 1460552.57003 | 449847.14765 |
| 1060 | 1963.51 | 116.03 | 13.00 | 14.00 | 1460551.69127 | 449848.13320 |
| 1061 | 2111.97 | 106.05 | 17.01 | 12.01 | 1460550.84366 | 449849.41945 |
| 1062 | 2053.35 | 99.07 | 28.02 | 17.01 | 1460549.87419 | 449850.56240 |
| 1063 | 2131.19 | 106.06 | 24.01 | 20.01 | 1460549.00439 | 449851.95279 |
| 1065 | 2119.87 | 103.04 | 17.01 | 14.01 | 1460547.42335 | 449854.41545 |
| 1066 | 2155.56 | 142.04 | 21.01 | 10.00 | 1460546.77442 | 449855.55596 |
| 1067 | 2026.93 | 104.05 | 21.01 | 10.00 | 1460546.04137 | 449856.92494 |
| 1068 | 2160.53 | 154.11 | 30.02 | 10.01 | 1460546.04137 | 449856.92494 |
| 1069 | 2229.80 | 134.05 | 19.01 | 18.01 | 1460544.63842 | 449859.45056 |
| 1070 | 2209.79 | 114.04 | 20.01 | 15.01 | 1460544.63842 | 449859.45056 |
| 1072 | 2111.39 | 125.08 | 14.01 | 14.01 | 1460542.64999 | 449863.26278 |
| 1075 | 2174.00 | 119.05 | 20.01 | 16.01 | 1460541.89709 | 449864.56890 |
| 1076 | 2279.16 | 135.07 | 23.01 | 11.01 | 1460541.69201 | 449865.10507 |
| 1077 | 2301.94 | 150.06 | 22.01 | 15.01 | 1460541.52152 | 449865.36711 |
| 1078 | 2135.66 | 116.04 | 23.01 | 17.01 | 1460541.72626 | 449865.10029 |
| 1079 | 2126.55 | 101.03 | 18.00 | 10.00 | 1460542.51520 | 449863.54426 |
| 1080 | 2269.59 | 119.03 | 15.00 | 11.00 | 1460542.51520 | 449863.54426 |
| 1082 | 2162.99 | 140.06 | 19.01 | 9.00 | 1460544.99832 | 449858.83108 |
| 1083 | 2117.65 | 118.04 | 23.01 | 22.01 | 1460545.77650 | 449857.60937 |
| 1084 | 2157.99 | 108.05 | 14.01 | 10.00 | 1460546.45015 | 449856.41197 |
| 1085 | 2133.77 | 128.05 | 18.01 | 9.00 | 1460547.07563 | 449855.17020 |
| 1086 | 2123.87 | 127.05 | 19.01 | 8.00 | 1460547.72159 | 449854.14221 |
| 1087 | 2146.20 | 112.06 | 28.02 | 13.01 | 1460548.63152 | 449852.92478 |
| 1088 | 2116.87 | 133.05 | 15.01 | 6.00 | 1460549.25429 | 449851.69610 |
| 1089 | 2089.96 | 120.05 | 23.01 | 13.01 | 1460550.05542 | 449850.26258 |
| 1090 | 2047.04 | 107.05 | 19.01 | 11.01 | 1460550.05542 | 449850.26258 |
| 1091 | 2045.43 | 128.03 | 17.00 | 10.00 | 1460551.80277 | 449847.73412 |
| 1092 | 1970.71 | 79.03 | 23.01 | 6.00 | 1460552.44702 | 449846.61907 |
| 1093 | 2016.03 | 112.06 | 16.01 | 16.01 | 1460552.97222 | 449845.47693 |
| 1094 | 1966.51 | 104.03 | 29.01 | 9.00 | 1460553.69564 | 449844.30286 |
| 1095 | 1970.71 | 131.05 | 11.00 | 13.00 | 1460554.38392 | 449842.97458 |
| 1096 | 1971.61 | 102.03 | 24.01 | 11.00 | 1460555.22738 | 449841.63121 |
| 1097 | 1916.88 | 111.05 | 18.01 | 7.00 | 1460555.78985 | 449840.59900 |
| 1098 | 1943.40 | 92.02 | 19.00 | 6.00 | 1460555.94262 | 449840.32334 |
| 1099 | 1856.57 | 115.04 | 13.00 | 11.00 | 1460556.46323 | 449839.35067 |
| 1100 | 1868.39 | 113.02 | 23.00 | 10.00 | 1460557.03662 | 449838.68284 |
| 1101 | 1820.56 | 85.03 | 16.00 | 13.00 | 1460557.36154 | 449837.47661 |
| 1102 | 1829.66 | 101.04 | 15.01 | 16.01 | 1460558.42188 | 449835.96314 |
| 1103 | 1863.13 | 103.06 | 20.01 | 15.01 | 1460559.21104 | 449834.69155 |
| 1104 | 1883.58 | 105.03 | 23.01 | 8.00 | 1460559.70135 | 449833.72766 |
| 1105 | 1856.48 | 104.03 | 24.01 | 9.00 | 1460560.33637 | 449832.51593 |
| 1106 | 1877.58 | 109.03 | 27.01 | 8.00 | 1460561.23542 | 449831.12581 |
| 1107 | 2021.13 | 97.05 | 20.01 | 10.01 | 1460561.86424 | 449829.72198 |
| 1108 | 1906.88 | 88.04 | 18.01 | 10.00 | 1460562.56851 | 449828.36198 |
| 1109 | 1870.95 | 102.05 | 12.01 | 15.01 | 1460563.45250 | 449827.01430 |
| 1110 | 2007.32 | 98.02 | 20.00 | 7.00 | 1460564.30056 | 449825.71054 |
| 1111 | 1945.09 | 114.06 | 16.01 | 13.01 | 1460565.11528 | 449824.42578 |
| 1113 | 1978.01 | 117.06 | 14.01 | 7.00 | 1460566.64057 | 449822.00809 |
| 1114 | 2073.43 | 111.02 | 24.01 | 15.00 | 1460567.53722 | 449820.59051 |
| 1115 | 2089.85 | 111.05 | 27.01 | 14.01 | 1460568.32839 | 449819.60078 |
| 1116 | 1949.41 | 107.02 | 11.00 | 12.00 | 1460569.14715 | 449818.19906 |
| 1117 | 1977.61 | 124.04 | 11.00 | 10.00 | 1460570.01675 | 449816.88080 |
| 1118 | 1933.69 | 100.04 | 18.01 | 12.00 | 1460570.01675 | 449816.88080 |
| 1119 | 1993.52 | 111.03 | 25.01 | 10.00 | 1460571.42023 | 449814.05707 |
| 1120 | 2033.63 | 111.03 | 11.00 | 17.01 | 1460572.28361 | 449813.10280 |
| 1121 | 1967.90 | 100.05 | 14.01 | 16.01 | 1460573.10324 | 449811.70496 |

# Pile 33, Pad 31

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1122 | 1927.98 | 108.06 | 19.01 | 16.01 | 1460573.99081 | 449810.41859 |
| 1123 | 1967.61 | 89.03 | 25.01 | 13.00 | 1460574.73971 | 449808.90414 |
| 1125 | 2046.73 | 105.04 | 23.01 | 14.01 | 1460576.54862 | 449806.19044 |
| 1126 | 1990.91 | 108.05 | 20.01 | 18.01 | 1460577.34262 | 449804.87046 |
| 1127 | 2022.73 | 113.04 | 24.01 | 12.00 | 1460578.15413 | 449803.25383 |
| 1128 | 1999.72 | 111.04 | 16.01 | 12.00 | 1460578.86198 | 449801.70729 |
| 1129 | 1962.61 | 115.04 | 23.01 | 11.00 | 1460579.72806 | 449800.27197 |
| 1130 | 2039.14 | 125.07 | 20.01 | 5.00 | 1460580.43149 | 449798.89377 |
| 1131 | 2005.62 | 101.03 | 20.01 | 18.01 | 1460581.29145 | 449797.43611 |
| 1132 | 2030.73 | 93.03 | 20.01 | 14.01 | 1460582.09155 | 449796.03879 |
| 1133 | 1904.59 | 105.03 | 25.01 | 16.00 | 1460582.99712 | 449794.40037 |
| 1134 | 1946.31 | 111.02 | 20.00 | 9.00 | 1460583.47995 | 449793.35302 |
| 1135 | 1995.02 | 100.05 | 23.01 | 12.01 | 1460584.11050 | 449792.23646 |
| 1136 | 1975.91 | 102.05 | 30.01 | 13.01 | 1460584.99273 | 449790.76485 |
| 1137 | 1940.18 | 103.06 | 14.01 | 13.01 | 1460585.70515 | 449789.32002 |
| 1138 | 2006.42 | 119.02 | 20.00 | 13.00 | 1460586.06814 | 449788.16156 |
| 1139 | 1996.81 | 115.05 | 18.01 | 15.01 | 1460586.00876 | 449788.52672 |
| 1140 | 1984.71 | 100.04 | 25.01 | 13.00 | 1460586.09876 | 449788.00584 |
| 1141 | 2012.23 | 89.05 | 19.01 | 15.01 | 1460587.01949 | 449786.35547 |
| 1142 | 2057.53 | 117.03 | 22.01 | 8.00 | 1460587.60505 | 449785.62945 |
| 1143 | 1974.71 | 90.03 | 25.01 | 14.01 | 1460587.64438 | 449785.30584 |
| 1144 | 1967.61 | 115.04 | 17.01 | 9.00 | 1460587.62067 | 449785.21794 |
| 1145 | 2060.64 | 98.03 | 15.00 | 17.01 | 1460587.59164 | 449785.12508 |
| 1146 | 2001.02 | 108.06 | 19.01 | 9.00 | 1460587.39120 | 449786.13014 |
| 1148 | 1984.01 | 101.05 | 19.01 | 12.01 | 1460586.75194 | 449788.54931 |
| 1150 | 1975.71 | 111.04 | 14.01 | 8.00 | 1460587.20392 | 449789.97849 |
| 1152 | 1950.41 | 95.02 | 13.00 | 12.00 | 1460588.27574 | 449793.57170 |
| 1153 | 1955.41 | 94.02 | 23.00 | 17.00 | 1460589.02608 | 449795.37323 |
| 1154 | 2020.52 | 93.02 | 16.00 | 8.00 | 1460589.90244 | 449796.96938 |
| 1156 | 2100.33 | 111.02 | 20.00 | 12.00 | 1460590.93927 | 449799.03382 |
| 1157 | 2054.84 | 110.04 | 27.01 | 22.01 | 1460590.91130 | 449798.98849 |
| 1158 | 1978.41 | 100.02 | 27.01 | 16.00 | 1460590.31226 | 449798.09343 |
| 1159 | 2019.83 | 106.04 | 22.01 | 16.01 | 1460590.31226 | 449798.09343 |
| 1160 | 2037.73 | 122.04 | 17.01 | 12.00 | 1460589.31137 | 449795.22511 |
| 1161 | 2010.32 | 103.02 | 22.00 | 14.00 | 1460589.06202 | 449793.62590 |
| 1162 | 1984.61 | 107.03 | 18.01 | 5.00 | 1460588.34557 | 449792.19404 |
| 1163 | 1961.31 | 113.02 | 21.00 | 10.00 | 1460587.66326 | 449790.89678 |
| 1164 | 1946.89 | 107.05 | 13.01 | 14.01 | 1460587.10442 | 449789.94602 |
| 1165 | 2091.54 | 121.03 | 25.01 | 12.00 | 1460586.99054 | 449789.84195 |
| 1166 | 2023.42 | 93.02 | 20.00 | 9.00 | 1460586.57546 | 449789.46267 |
| 1167 | 2034.94 | 129.06 | 19.01 | 13.01 | 1460585.68874 | 449788.21422 |
| 1168 | 2051.74 | 93.03 | 19.01 | 13.00 | 1460584.56982 | 449787.04696 |
| 1170 | 2172.21 | 115.06 | 10.01 | 16.01 | 1460582.43214 | 449785.18675 |
| 1171 | 2094.65 | 128.04 | 24.01 | 9.00 | 1460581.46000 | 449784.59060 |
| 1172 | 2153.34 | 104.02 | 24.00 | 9.00 | 1460580.66627 | 449784.13542 |
| 1173 | 2146.88 | 127.05 | 22.01 | 14.01 | 1460579.27262 | 449783.30567 |
| 1174 | 2150.56 | 105.03 | 13.00 | 19.00 | 1460578.09582 | 449782.56450 |
| 1175 | 2184.89 | 111.05 | 21.01 | 11.00 | 1460577.57869 | 449782.21325 |
| 1176 | 2156.67 | 106.03 | 31.01 | 13.00 | 1460577.60052 | 449782.19211 |
| 1177 | 2148.20 | 135.08 | 17.01 | 17.01 | 1460577.08807 | 449781.91041 |
| 1178 | 2187.00 | 115.05 | 25.01 | 18.01 | 1460575.97484 | 449781.22696 |
| 1179 | 2224.91 | 124.05 | 32.01 | 12.00 | 1460575.03124 | 449780.70045 |
| 1180 | 2266.15 | 140.07 | 20.01 | 9.00 | 1460574.12126 | 449780.16069 |
| 1181 | 2249.59 | 109.08 | 23.02 | 13.01 | 1460573.40338 | 449779.64282 |
| 1182 | 2229.47 | 129.03 | 18.00 | 10.00 | 1460572.43288 | 449779.10635 |
| 1183 | 2231.36 | 114.07 | 19.01 | 10.01 | 1460571.11809 | 449778.28257 |
| 1184 | 2101.76 | 127.05 | 17.01 | 17.01 | 1460569.87542 | 449777.65528 |
| 1186 | 2211.24 | 116.01 | 31.00 | 17.00 | 1460567.88433 | 449776.56276 |
| 1187 | 2178.78 | 125.04 | 19.01 | 9.00 | 1460566.82067 | 449775.97585 |
| 1188 | 2259.92 | 106.04 | 27.01 | 14.01 | 1460565.63639 | 449775.28407 |
| 1189 | 2147.09 | 113.06 | 25.01 | 11.01 | 1460564.19369 | 449774.53584 |
| 1190 | 2128.98 | 110.05 | 27.01 | 9.00 | 1460563.00534 | 449773.89808 |
| 1192 | 2284.93 | 131.05 | 24.01 | 19.01 | 1460560.48748 | 449772.45103 |
| 1193 | 2228.69 | 123.04 | 21.01 | 15.00 | 1460559.12280 | 449771.73322 |
| 1194 | 2242.69 | 127.04 | 21.01 | 15.00 | 1460557.89362 | 449770.95800 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1195 | 2261.81 | 131.05 | 23.01 | 11.00 | 1460556.71297 | 449770.35262 |
| 1196 | 2254.81 | 144.05 | 18.01 | 21.01 | 1460555.83911 | 449769.73052 |
| 1199 | 2059.84 | 109.04 | 22.01 | 11.00 | 1460552.94204 | 449767.98154 |
| 1200 | 2140.55 | 118.03 | 23.01 | 14.00 | 1460552.94204 | 449767.98154 |
| 1201 | 2178.67 | 114.04 | 22.01 | 23.01 | 1460551.23358 | 449767.07612 |
| 1202 | 2157.77 | 103.04 | 25.01 | 13.00 | 1460550.95762 | 449766.71761 |
| 1203 | 2153.77 | 110.04 | 11.00 | 20.01 | 1460549.81034 | 449765.73084 |
| 1204 | 2089.33 | 115.02 | 24.00 | 10.00 | 1460548.39628 | 449764.78397 |
| 1205 | 2022.13 | 96.05 | 17.01 | 8.00 | 1460547.17503 | 449763.85646 |
| 1206 | 1965.51 | 109.03 | 13.00 | 18.00 | 1460545.93424 | 449763.07158 |
| 1207 | 2082.54 | 112.03 | 11.00 | 13.00 | 1460544.72672 | 449762.48327 |
| 1208 | 2008.22 | 87.01 | 19.00 | 15.00 | 1460543.55109 | 449761.78218 |
| 1209 | 2081.75 | 120.04 | 28.01 | 10.00 | 1460542.42900 | 449761.31881 |
| 1210 | 2041.84 | 111.05 | 19.01 | 16.01 | 1460542.42900 | 449761.31881 |
| 1212 | 2025.54 | 114.09 | 20.02 | 15.01 | 1460538.71137 | 449759.66944 |
| 1213 | 1993.92 | 99.05 | 23.01 | 22.01 | 1460537.27791 | 449759.30753 |
| 1214 | 2100.65 | 115.04 | 17.01 | 14.00 | 1460536.22358 | 449759.42455 |
| 1215 | 1968.10 | 124.07 | 17.01 | 15.01 | 1460536.60469 | 449759.39741 |
| 1216 | 1955.51 | 95.02 | 19.00 | 14.00 | 1460537.15135 | 449759.33254 |
| 1218 | 2039.73 | 122.04 | 17.01 | 19.01 | 1460540.88562 | 449758.63274 |
| 1219 | 2075.64 | 118.04 | 22.01 | 8.00 | 1460542.65425 | 449757.96992 |
| 1220 | 2050.04 | 113.06 | 21.01 | 12.01 | 1460544.27186 | 449757.33798 |
| 1221 | 2075.33 | 117.02 | 28.00 | 13.00 | 1460544.34820 | 449757.46732 |
| 1222 | 2054.94 | 112.05 | 12.01 | 9.00 | 1460544.26780 | 449757.54597 |
| 1223 | 2094.54 | 128.03 | 18.00 | 16.00 | 1460543.58312 | 449757.93016 |
| 1224 | 2076.64 | 113.03 | 28.01 | 13.00 | 1460542.08125 | 449758.49905 |
| 1225 | 2056.95 | 111.05 | 23.01 | 17.01 | 1460540.60340 | 449759.05450 |
| 1226 | 1972.71 | 107.04 | 17.01 | 13.00 | 1460539.31970 | 449759.78514 |
| 1228 | 1964.61 | 112.03 | 22.01 | 16.00 | 1460536.74477 | 449761.62770 |
| 1229 | 2019.62 | 107.03 | 19.01 | 8.00 | 1460535.69048 | 449762.69757 |
| 1230 | 1987.12 | 123.01 | 14.00 | 11.00 | 1460534.81157 | 449763.86945 |
| 1231 | 2056.53 | 119.03 | 15.00 | 9.00 | 1460534.48460 | 449764.32357 |
| 1232 | 2180.56 | 127.03 | 20.01 | 13.00 | 1460534.46481 | 449765.00477 |
| 1234 | 2218.58 | 124.03 | 22.01 | 16.00 | 1460532.56223 | 449768.07022 |
| 1235 | 2110.28 | 107.07 | 22.01 | 12.01 | 1460531.78757 | 449769.67611 |
| 1237 | 2080.85 | 103.04 | 19.01 | 15.01 | 1460530.21900 | 449772.73214 |
| 1238 | 2188.11 | 111.06 | 26.01 | 9.00 | 1460529.42452 | 449774.39233 |
| 1239 | 2136.55 | 109.03 | 16.00 | 14.00 | 1460528.70737 | 449775.92989 |
| 1240 | 1889.68 | 111.04 | 17.01 | 10.00 | 1460528.01736 | 449777.38357 |
| 1241 | 1969.51 | 110.03 | 24.01 | 17.00 | 1460527.41366 | 449778.61111 |
| 1242 | 1917.30 | 108.02 | 20.00 | 7.00 | 1460526.81883 | 449779.86255 |
| 1243 | 1949.89 | 100.05 | 24.01 | 18.01 | 1460526.30498 | 449780.95746 |
| 1244 | 1931.50 | 95.02 | 19.00 | 12.00 | 1460525.84591 | 449782.00083 |
| 1245 | 1949.99 | 102.05 | 14.01 | 11.01 | 1460525.24635 | 449783.38767 |
| 1246 | 1957.51 | 107.03 | 25.01 | 16.00 | 1460524.50832 | 449784.89571 |
| 1247 | 1987.31 | 111.02 | 13.00 | 18.00 | 1460523.83202 | 449786.16414 |
| 1248 | 1995.92 | 114.05 | 11.01 | 14.01 | 1460523.15313 | 449787.42355 |
| 1249 | 2036.22 | 111.01 | 24.00 | 10.00 | 1460522.48783 | 449788.79291 |
| 1250 | 1993.92 | 107.05 | 17.01 | 11.01 | 1460521.89330 | 449789.93247 |
| 1251 | 2009.52 | 107.03 | 18.00 | 10.00 | 1460521.21236 | 449791.30485 |
| 1253 | 1937.40 | 112.02 | 16.00 | 16.00 | 1460519.92877 | 449793.91102 |
| 1254 | 1964.10 | 105.06 | 16.01 | 15.01 | 1460519.43434 | 449795.28779 |
| 1255 | 1946.09 | 88.05 | 22.01 | 12.01 | 1460519.43434 | 449795.28779 |
| 1256 | 2057.05 | 92.05 | 22.01 | 14.01 | 1460518.44421 | 449797.41068 |
| 1257 | 1971.61 | 116.04 | 27.01 | 8.00 | 1460517.85796 | 449798.33455 |
| 1258 | 1915.30 | 95.01 | 16.00 | 10.00 | 1460517.85796 | 449798.33455 |
| 1259 | 1949.41 | 96.02 | 12.00 | 11.00 | 1460517.06056 | 449800.18731 |
| 1260 | 1987.91 | 128.06 | 19.01 | 12.01 | 1460516.42972 | 449801.52545 |
| 1261 | 1841.94 | 100.05 | 12.01 | 14.01 | 1460515.89461 | 449802.83109 |
| 1262 | 1908.30 | 108.02 | 16.00 | 14.00 | 1460515.33101 | 449803.88855 |
| 1263 | 1929.79 | 110.05 | 18.01 | 8.00 | 1460514.87722 | 449804.64905 |
| 1264 | 1900.40 | 109.02 | 15.00 | 10.00 | 1460514.45551 | 449805.70767 |
| 1265 | 1900.78 | 94.04 | 18.01 | 10.00 | 1460513.81327 | 449806.85277 |
| 1268 | 1872.67 | 94.03 | 17.01 | 11.00 | 1460511.80937 | 449810.72550 |
| 1269 | 1949.50 | 98.03 | 12.00 | 16.00 | 1460511.14641 | 449811.96942 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1270 | 1883.58 | 111.03 | 14.00 | 10.00 | 1460510.63083 | 449812.89423 |
| 1272 | 2096.86 | 108.04 | 17.01 | 12.00 | 1460509.75161 | 449814.65197 |
| 1273 | 2065.84 | 122.05 | 26.01 | 18.01 | 1460509.75161 | 449814.65197 |
| 1274 | 2133.34 | 116.02 | 24.00 | 17.00 | 1460508.88155 | 449816.41062 |
| 1276 | 2275.16 | 131.07 | 22.01 | 11.01 | 1460508.46024 | 449817.44782 |
| 1278 | 2350.08 | 119.05 | 24.01 | 10.00 | 1460508.01272 | 449818.06967 |
| 1279 | 2246.69 | 115.04 | 22.01 | 20.01 | 1460507.42997 | 449819.05512 |
| 1280 | 2187.11 | 121.06 | 30.02 | 12.01 | 1460506.54456 | 449820.47056 |
| 1281 | 2153.45 | 126.03 | 15.00 | 12.00 | 1460506.54456 | 449820.47056 |
| 1282 | 2085.27 | 130.08 | 15.01 | 15.01 | 1460505.34680 | 449822.98601 |
| 1284 | 1979.11 | 83.05 | 22.01 | 7.00 | 1460503.68035 | 449825.35410 |
| 1285 | 1940.60 | 102.03 | 17.01 | 9.00 | 1460502.89627 | 449826.82871 |
| 1286 | 1971.90 | 116.05 | 16.01 | 13.01 | 1460502.27933 | 449828.25688 |
| 1287 | 1871.33 | 83.06 | 15.01 | 12.01 | 1460501.88618 | 449829.43121 |
| 1288 | 1960.19 | 97.06 | 13.01 | 17.01 | 1460501.91582 | 449829.16406 |
| 1289 | 1856.76 | 93.04 | 24.01 | 9.00 | 1460501.90048 | 449829.24967 |
| 1290 | 1841.12 | 112.07 | 17.01 | 13.01 | 1460501.81273 | 449829.77225 |
| 1292 | 1930.69 | 95.03 | 19.01 | 13.00 | 1460501.59762 | 449831.38449 |
| 1293 | 1857.20 | 94.01 | 22.00 | 19.00 | 1460501.57697 | 449831.38477 |
| 1294 | 1962.90 | 99.05 | 16.01 | 10.00 | 1460501.55864 | 449831.35596 |
| 1295 | 1863.14 | 106.06 | 19.01 | 9.01 | 1460501.56173 | 449831.14654 |
| 1296 | 1935.79 | 113.05 | 23.01 | 6.00 | 1460501.59623 | 449830.64107 |
| 1297 | 1866.76 | 96.04 | 16.01 | 8.00 | 1460501.58345 | 449830.03805 |
| 1298 | 1931.31 | 103.02 | 17.00 | 7.00 | 1460501.56280 | 449827.85816 |
| 1299 | 2018.72 | 104.04 | 19.01 | 11.00 | 1460501.30601 | 449825.68959 |
| 1300 | 1964.61 | 119.04 | 11.00 | 12.00 | 1460500.81408 | 449823.69508 |
| 1301 | 1969.81 | 92.04 | 17.01 | 11.00 | 1460500.29939 | 449821.74467 |
| 1302 | 1977.61 | 94.03 | 10.00 | 8.00 | 1460500.23602 | 449820.39078 |
| 1305 | 1892.58 | 94.03 | 14.00 | 9.00 | 1460499.72259 | 449819.06752 |
| 1306 | 1919.69 | 108.04 | 27.01 | 12.00 | 1460499.72431 | 449819.08762 |
| 1307 | 1948.60 | 97.03 | 14.00 | 8.00 | 1460499.73114 | 449819.11760 |
| 1308 | 1958.61 | 111.03 | 21.01 | 10.00 | 1460499.73282 | 449819.13886 |
| 1309 | 1984.71 | 99.04 | 20.01 | 18.01 | 1460499.73282 | 449819.13886 |
| 1310 | 1957.41 | 101.02 | 13.00 | 11.00 | 1460499.75304 | 449819.21148 |
| 1311 | 1978.01 | 116.06 | 18.01 | 10.01 | 1460499.76177 | 449819.20311 |
| 1312 | 1952.70 | 91.03 | 17.01 | 16.01 | 1460499.76243 | 449819.25204 |
| 1313 | 1918.50 | 89.02 | 22.01 | 9.00 | 1460499.75512 | 449819.25214 |
| 1315 | 1987.01 | 103.05 | 21.01 | 7.00 | 1460499.76052 | 449819.26367 |
| 1316 | 2042.63 | 144.04 | 14.00 | 14.00 | 1460499.75662 | 449819.29540 |
| 1317 | 1960.00 | 88.04 | 19.01 | 11.01 | 1460499.75518 | 449819.33018 |
| 1318 | 1897.06 | 93.05 | 15.01 | 11.01 | 1460499.75216 | 449819.34532 |
| 1320 | 1912.40 | 106.02 | 10.00 | 16.00 | 1460499.77299 | 449819.38244 |
| 1321 | 1999.62 | 103.03 | 22.01 | 11.00 | 1460499.78009 | 449819.40691 |
| 1322 | 1841.38 | 100.02 | 18.00 | 10.00 | 1460499.77894 | 449819.41222 |
| 1323 | 1885.68 | 87.03 | 18.01 | 16.01 | 1460499.77894 | 449819.41222 |
| 1324 | 1926.60 | 118.04 | 26.01 | 16.00 | 1460499.81542 | 449819.61122 |
| 1325 | 2008.32 | 122.02 | 17.00 | 14.00 | 1460500.16913 | 449820.48455 |
| 1326 | 1960.51 | 99.03 | 17.00 | 12.00 | 1460500.30252 | 449822.01690 |
| 1329 | 1946.70 | 104.04 | 18.01 | 15.01 | 1460502.06686 | 449826.13270 |
| 1330 | 1941.50 | 105.03 | 19.00 | 10.00 | 1460502.82979 | 449827.10868 |
| 1332 | 1969.21 | 120.01 | 15.00 | 11.00 | 1460504.63477 | 449829.45656 |
| 1333 | 1988.71 | 120.04 | 14.01 | 13.00 | 1460504.63477 | 449829.45656 |
| 1336 | 1950.60 | 85.03 | 17.01 | 8.00 | 1460508.62238 | 449832.60400 |
| 1337 | 1968.71 | 96.03 | 20.01 | 10.00 | 1460509.29448 | 449833.28984 |
| 1338 | 1939.50 | 114.03 | 11.00 | 13.00 | 1460510.35741 | 449834.02376 |
| 1339 | 1950.60 | 122.04 | 13.00 | 8.00 | 1460511.63931 | 449834.86933 |
| 1340 | 1841.12 | 88.05 | 13.01 | 10.01 | 1460512.65294 | 449835.64364 |
| 1341 | 1897.21 | 108.01 | 14.00 | 8.00 | 1460513.52151 | 449836.42037 |
| 1342 | 1893.59 | 104.03 | 15.00 | 7.00 | 1460516.66824 | 449838.08253 |
| 1343 | 1899.68 | 96.03 | 16.01 | 19.01 | 1460516.13175 | 449838.05967 |
| 1344 | 1917.69 | 113.04 | 18.01 | 7.00 | 1460517.55919 | 449839.05971 |
| 1345 | 1940.70 | 119.04 | 18.01 | 7.00 | 1460518.95847 | 449839.99504 |
| 1346 | 1907.59 | 96.03 | 20.01 | 9.00 | 1460520.38774 | 449840.92726 |
| 1347 | 1890.49 | 104.03 | 21.01 | 15.00 | 1460521.86343 | 449841.78903 |
| 1348 | 1946.60 | 107.03 | 24.01 | 6.00 | 1460523.49456 | 449842.71898 |

## Pile 33, Pad 31

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1349 | 2098.96 | 119.05 | 24.01 | 12.01 | 1460525.08261 | 449843.69247 |
| 1350 | 2047.63 | 91.03 | 18.01 | 16.00 | 1460525.08261 | 449843.69247 |
| 1351 | 2132.77 | 110.04 | 23.01 | 13.00 | 1460528.18240 | 449845.45302 |
| 1352 | 2109.76 | 117.04 | 23.01 | 17.01 | 1460528.18240 | 449845.45302 |
| 1355 | 2298.17 | 126.06 | 25.01 | 14.01 | 1460535.99407 | 449849.75487 |
| 1356 | 2146.99 | 121.06 | 22.01 | 9.00 | 1460537.55431 | 449850.67374 |
| 1357 | 2173.11 | 110.06 | 26.01 | 17.01 | 1460539.18580 | 449851.64010 |
| 1358 | 2214.80 | 114.04 | 19.01 | 17.01 | 1460539.18580 | 449851.64010 |
| 1360 | 2326.18 | 129.07 | 28.01 | 21.01 | 1460543.62231 | 449854.00439 |
| 1361 | 2205.35 | 117.02 | 20.00 | 13.00 | 1460545.21930 | 449854.59667 |
| 1362 | 2036.04 | 104.05 | 16.01 | 10.01 | 1460546.61793 | 449855.24225 |
| 1363 | 2102.75 | 115.04 | 18.01 | 18.01 | 1460546.74851 | 449855.19849 |
| 1364 | 2153.99 | 118.05 | 23.01 | 15.01 | 1460548.37967 | 449855.38749 |
| 1365 | 2062.05 | 118.06 | 22.01 | 10.01 | 1460549.83293 | 449855.31178 |
| 1 | 2213.13 | 112.06 | 23.01 | 16.01 | 1460536.53333 | 449850.33103 |
| 2 | 2296.06 | 140.06 | 24.01 | 12.01 | 1460536.54152 | 449850.32245 |
| 3 | 2214.02 | 120.06 | 20.01 | 15.01 | 1460536.51244 | 449850.34861 |
| 4 | 2208.68 | 119.04 | 17.01 | 15.00 | 1460536.51707 | 449850.34651 |
| 5 | 2370.85 | 126.05 | 29.01 | 16.01 | 1460536.50687 | 449850.36489 |
| 6 | 2238.25 | 112.06 | 14.01 | 19.01 | 1460536.51451 | 449850.33829 |
| 7 | 2256.26 | 132.07 | 17.01 | 24.01 | 1460536.51210 | 449850.35179 |
| 8 | 2283.94 | 115.05 | 24.01 | 18.01 | 1460536.52305 | 449850.34704 |
| 9 | 2199.68 | 86.03 | 29.01 | 17.01 | 1460536.50963 | 449850.34219 |
| 10 | 2204.57 | 119.03 | 26.01 | 9.00 | 1460536.53084 | 449850.32432 |
| 11 | 2173.33 | 124.08 | 30.02 | 8.00 | 1460536.54060 | 449850.31898 |
| 12 | 2240.25 | 130.07 | 30.02 | 10.01 | 1460536.54967 | 449850.32219 |
| 15 | 2235.69 | 111.03 | 21.01 | 12.00 | 1460536.58151 | 449850.33690 |
| 16 | 2314.83 | 109.04 | 20.01 | 16.01 | 1460536.57146 | 449850.33011 |
| 17 | 2257.36 | 110.02 | 19.00 | 17.00 | 1460536.58367 | 449850.32458 |
| 18 | 2222.58 | 106.03 | 25.01 | 17.00 | 1460536.58155 | 449850.29919 |
| 20 | 2207.90 | 140.06 | 17.01 | 12.00 | 1460536.58505 | 449850.29051 |
| 21 | 2187.57 | 122.03 | 20.01 | 21.01 | 1460536.58991 | 449850.28475 |
| 23 | 2211.91 | 120.05 | 16.01 | 13.01 | 1460539.19690 | 449851.87309 |
| 24 | 2196.46 | 133.03 | 31.01 | 15.00 | 1460540.63542 | 449852.70879 |
| 25 | 2289.60 | 128.03 | 17.00 | 16.00 | 1460541.93014 | 449853.44280 |
| 26 | 2216.24 | 107.06 | 24.01 | 9.01 | 1460543.46309 | 449854.02197 |
| 27 | 2160.34 | 109.02 | 23.00 | 18.00 | 1460545.01729 | 449854.64262 |
| 28 | 2121.76 | 117.04 | 20.01 | 11.00 | 1460546.58020 | 449855.11150 |
| 29 | 2094.44 | 140.03 | 18.00 | 7.00 | 1460547.75148 | 449855.39508 |
| 31 | 2108.65 | 108.03 | 11.00 | 12.00 | 1460547.93415 | 449855.41397 |
| 32 | 2112.87 | 131.05 | 16.01 | 11.00 | 1460547.93459 | 449855.41059 |
| 33 | 2148.20 | 97.05 | 16.01 | 10.01 | 1460547.94007 | 449855.40171 |
| 35 | 2104.07 | 109.06 | 13.01 | 12.01 | 1460547.79936 | 449855.35966 |
| 37 | 2243.48 | 111.07 | 24.02 | 17.01 | 1460545.49098 | 449854.84421 |
| 38 | 2203.46 | 123.03 | 15.00 | 10.00 | 1460543.61056 | 449854.57004 |
| 40 | 2218.02 | 134.06 | 19.01 | 17.01 | 1460539.88341 | 449854.47934 |
| 41 | 2182.46 | 121.03 | 27.01 | 10.00 | 1460537.87425 | 449854.59789 |
| 43 | 2110.44 | 114.02 | 18.00 | 19.00 | 1460534.42276 | 449854.72773 |
| 44 | 2056.95 | 115.05 | 16.01 | 10.00 | 1460534.28318 | 449854.75181 |
| 45 | 2219.46 | 122.03 | 17.00 | 19.00 | 1460535.93480 | 449854.64964 |
| 46 | 2241.03 | 126.06 | 20.01 | 12.01 | 1460535.93480 | 449854.64964 |
| 47 | 2243.69 | 122.04 | 23.01 | 16.00 | 1460539.76837 | 449854.30992 |
| 48 | 2234.92 | 113.05 | 26.01 | 15.01 | 1460541.30579 | 449853.91756 |
| 49 | 2231.47 | 121.08 | 19.01 | 10.01 | 1460543.11116 | 449853.18801 |
| 50 | 2371.21 | 155.08 | 21.01 | 5.00 | 1460544.74547 | 449852.34366 |
| 51 | 2194.90 | 128.05 | 21.01 | 7.00 | 1460546.15016 | 449851.36416 |
| 52 | 2177.67 | 120.04 | 11.00 | 20.01 | 1460547.35183 | 449850.00439 |
| 53 | 2087.54 | 104.03 | 30.01 | 13.00 | 1460548.45327 | 449848.29326 |
| 54 | 2032.53 | 115.03 | 8.00 | 12.00 | 1460549.41250 | 449846.61769 |
| 55 | 2047.04 | 120.06 | 14.01 | 4.00 | 1460550.45150 | 449844.94972 |
| 56 | 2025.63 | 109.03 | 17.01 | 14.00 | 1460550.74627 | 449844.08456 |
| 57 | 2018.23 | 123.07 | 20.01 | 8.00 | 1460550.34376 | 449845.04416 |
| 59 | 2148.09 | 126.06 | 15.01 | 10.01 | 1460548.12568 | 449848.37245 |
| 60 | 2159.21 | 140.08 | 19.01 | 21.01 | 1460547.07991 | 449850.16937 |
| 61 | 2270.93 | 129.05 | 24.01 | 10.00 | 1460545.91058 | 449851.98863 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 62 | 2157.67 | 119.04 | 24.01 | 14.00 | 1460545.05020 | 449853.54999 |
| 63 | 2292.51 | 103.07 | 25.02 | 18.01 | 1460544.20220 | 449854.88796 |
| 65 | 2154.99 | 132.06 | 16.01 | 17.01 | 1460543.18904 | 449856.47083 |
| 66 | 2134.45 | 119.02 | 24.01 | 8.00 | 1460543.19359 | 449856.42706 |
| 67 | 2266.27 | 129.07 | 18.01 | 18.01 | 1460543.19359 | 449856.42706 |
| 68 | 2273.82 | 139.05 | 27.01 | 8.00 | 1460543.91797 | 449855.25865 |
| 69 | 2226.80 | 124.04 | 25.01 | 13.00 | 1460545.09580 | 449853.32818 |
| 70 | 2135.19 | 118.07 | 19.01 | 13.01 | 1460545.09580 | 449853.32818 |
| 71 | 2138.66 | 121.04 | 20.01 | 15.00 | 1460547.15330 | 449849.86620 |
| 72 | 2087.65 | 105.03 | 32.01 | 5.00 | 1460548.23213 | 449847.91145 |
| 73 | 2015.93 | 124.06 | 26.01 | 14.01 | 1460549.32916 | 449846.19440 |
| 74 | 2029.24 | 116.07 | 17.01 | 16.01 | 1460550.37863 | 449844.42665 |
| 75 | 1982.91 | 105.05 | 26.01 | 16.01 | 1460550.37863 | 449844.42665 |
| 76 | 2001.62 | 117.04 | 12.00 | 12.00 | 1460552.35596 | 449840.46576 |
| 77 | 1881.05 | 98.05 | 13.01 | 13.01 | 1460553.57659 | 449838.65228 |
| 78 | 1886.68 | 106.04 | 16.01 | 11.00 | 1460554.64813 | 449836.54560 |
| 79 | 1904.59 | 117.04 | 26.01 | 8.00 | 1460555.92780 | 449834.70204 |
| 80 | 1896.30 | 124.02 | 16.00 | 16.00 | 1460556.96201 | 449832.68694 |
| 81 | 1963.71 | 100.04 | 20.01 | 8.00 | 1460557.98903 | 449831.16543 |
| 82 | 1925.60 | 101.03 | 18.01 | 11.00 | 1460558.72112 | 449829.86205 |
| 83 | 1903.78 | 113.05 | 29.01 | 12.00 | 1460559.37097 | 449828.64644 |
| 86 | 2090.75 | 93.03 | 19.01 | 20.01 | 1460561.07807 | 449825.74643 |
| 87 | 1940.80 | 135.06 | 16.01 | 16.01 | 1460561.75604 | 449824.82853 |
| 88 | 1983.91 | 104.05 | 20.01 | 16.01 | 1460562.66729 | 449823.35327 |
| 90 | 1965.30 | 96.06 | 11.01 | 7.00 | 1460564.19653 | 449821.09529 |
| 91 | 2007.72 | 108.04 | 22.01 | 11.00 | 1460565.02958 | 449819.56672 |
| 92 | 2000.42 | 91.06 | 17.01 | 13.01 | 1460565.88329 | 449818.22709 |
| 93 | 1992.92 | 123.06 | 14.01 | 11.01 | 1460566.75928 | 449816.79028 |
| 94 | 2032.04 | 90.05 | 26.01 | 7.00 | 1460567.67812 | 449815.35623 |
| 95 | 2098.28 | 122.07 | 26.02 | 16.01 | 1460568.64062 | 449813.83238 |
| 96 | 2008.92 | 101.05 | 16.01 | 19.01 | 1460569.28592 | 449812.46234 |
| 97 | 1993.12 | 100.06 | 20.01 | 21.01 | 1460570.19601 | 449810.99889 |
| 98 | 1967.61 | 96.03 | 15.00 | 7.00 | 1460571.11183 | 449809.55640 |
| 99 | 2068.12 | 97.01 | 22.00 | 14.00 | 1460572.05967 | 449808.04186 |
| 100 | 1983.91 | 122.06 | 21.01 | 13.01 | 1460572.99100 | 449806.51689 |
| 101 | 2026.73 | 125.05 | 20.01 | 13.00 | 1460573.92227 | 449804.96466 |
| 102 | 2097.07 | 96.05 | 14.01 | 12.01 | 1460574.72052 | 449803.33737 |
| 103 | 2096.86 | 113.05 | 22.01 | 9.00 | 1460575.59209 | 449801.79159 |
| 104 | 2153.78 | 116.04 | 20.01 | 19.01 | 1460576.47575 | 449800.26868 |
| 105 | 2122.87 | 129.05 | 22.01 | 11.00 | 1460577.34861 | 449798.67902 |
| 106 | 2208.57 | 113.08 | 16.01 | 10.01 | 1460578.13511 | 449797.16999 |
| 107 | 2108.97 | 106.05 | 24.01 | 12.01 | 1460579.01137 | 449795.79812 |
| 108 | 2042.53 | 108.03 | 20.01 | 9.00 | 1460579.82529 | 449794.34324 |
| 109 | 2135.98 | 124.06 | 20.01 | 14.01 | 1460580.59534 | 449792.79833 |
| 110 | 2105.76 | 120.04 | 22.01 | 18.01 | 1460581.23855 | 449791.36187 |
| 111 | 2138.45 | 139.03 | 15.00 | 10.00 | 1460582.13616 | 449789.76567 |
| 112 | 2039.73 | 99.04 | 18.01 | 15.01 | 1460583.00869 | 449788.20382 |
| 114 | 2174.67 | 114.04 | 24.01 | 18.01 | 1460584.16390 | 449785.05677 |
| 115 | 2203.79 | 133.05 | 28.01 | 21.01 | 1460584.73693 | 449783.53468 |
| 116 | 2227.80 | 132.05 | 22.01 | 19.01 | 1460584.78129 | 449783.50468 |
| 117 | 2103.44 | 120.03 | 22.00 | 13.00 | 1460584.72981 | 449783.69681 |
| 118 | 2058.84 | 101.04 | 15.01 | 13.01 | 1460584.43400 | 449785.49663 |
| 119 | 2085.54 | 126.03 | 19.00 | 10.00 | 1460584.28453 | 449787.66617 |
| 120 | 2031.73 | 101.04 | 20.01 | 15.01 | 1460584.49789 | 449789.59190 |
| 121 | 1983.61 | 102.03 | 18.01 | 10.00 | 1460584.49789 | 449789.59190 |
| 122 | 2061.95 | 111.05 | 20.01 | 15.01 | 1460584.79769 | 449793.59842 |
| 123 | 2069.64 | 124.04 | 15.00 | 16.00 | 1460585.47574 | 449795.44063 |
| 124 | 2025.52 | 96.02 | 19.00 | 12.00 | 1460586.35666 | 449796.86120 |
| 125 | 2040.94 | 113.05 | 9.00 | 8.00 | 1460586.35666 | 449796.86120 |
| 126 | 1974.41 | 105.02 | 26.01 | 14.00 | 1460586.72582 | 449797.52275 |
| 127 | 2113.44 | 107.02 | 19.00 | 10.00 | 1460585.78215 | 449795.96862 |
| 128 | 2050.63 | 108.03 | 19.01 | 13.00 | 1460585.78215 | 449795.96862 |
| 129 | 2031.83 | 110.05 | 14.01 | 13.01 | 1460584.34587 | 449793.33484 |
| 130 | 2011.93 | 116.05 | 14.01 | 9.00 | 1460583.57746 | 449791.99925 |
| 131 | 1929.89 | 114.05 | 13.01 | 10.00 | 1460582.67448 | 449790.76161 |

# Pile 33, Pad 31

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 133 | 2057.84 | 101.04 | 17.01 | 16.01 | 1460580.46923 | 449788.39440 |
| 135 | 2130.34 | 121.02 | 23.00 | 15.00 | 1460578.22602 | 449786.71219 |
| 136 | 2153.77 | 117.04 | 16.01 | 12.00 | 1460577.70435 | 449786.29708 |
| 137 | 2083.12 | 112.01 | 26.00 | 9.00 | 1460576.85352 | 449785.72290 |
| 138 | 2082.96 | 128.06 | 19.01 | 11.01 | 1460576.04489 | 449785.10224 |
| 139 | 2158.45 | 126.03 | 16.00 | 14.00 | 1460576.04489 | 449785.10224 |
| 140 | 2139.98 | 123.06 | 29.01 | 15.01 | 1460575.10926 | 449784.44492 |
| 141 | 2196.79 | 131.05 | 18.01 | 7.00 | 1460574.11918 | 449783.90660 |
| 142 | 2217.69 | 105.03 | 20.01 | 13.00 | 1460574.11918 | 449783.90660 |
| 143 | 2297.48 | 126.03 | 18.00 | 18.00 | 1460572.38588 | 449782.94893 |
| 144 | 2264.59 | 129.03 | 21.01 | 14.00 | 1460571.82792 | 449782.65043 |
| 145 | 2220.58 | 128.03 | 20.01 | 12.00 | 1460570.99069 | 449782.13815 |
| 146 | 2263.81 | 125.04 | 21.01 | 18.01 | 1460571.00358 | 449782.16139 |
| 147 | 2182.24 | 128.01 | 21.00 | 16.00 | 1460571.00358 | 449782.16139 |
| 148 | 2289.82 | 125.05 | 30.01 | 15.01 | 1460570.34985 | 449781.75720 |
| 149 | 2232.47 | 130.03 | 20.00 | 19.00 | 1460570.33865 | 449781.72270 |
| 151 | 2273.59 | 123.03 | 19.00 | 16.00 | 1460569.45657 | 449781.22247 |
| 152 | 2120.76 | 113.04 | 16.01 | 13.00 | 1460569.04823 | 449780.96896 |
| 153 | 2207.02 | 133.06 | 25.01 | 16.01 | 1460569.08276 | 449780.98731 |
| 154 | 2294.83 | 118.04 | 30.01 | 17.01 | 1460569.09386 | 449780.98577 |
| 155 | 2171.21 | 120.07 | 27.02 | 10.01 | 1460569.09386 | 449780.98577 |
| 156 | 2136.34 | 131.02 | 16.00 | 14.00 | 1460569.07820 | 449780.95843 |
| 157 | 2222.35 | 126.08 | 19.01 | 15.01 | 1460568.42627 | 449780.54386 |
| 158 | 2251.92 | 110.05 | 18.01 | 13.01 | 1460568.42627 | 449780.54386 |
| 159 | 2284.28 | 127.07 | 20.01 | 14.01 | 1460568.05510 | 449780.34452 |
| 160 | 2219.46 | 133.03 | 23.00 | 10.00 | 1460568.06268 | 449780.35065 |
| 162 | 2210.69 | 109.03 | 21.01 | 11.00 | 1460566.06259 | 449778.94241 |
| 163 | 2161.21 | 118.07 | 20.01 | 13.01 | 1460564.93972 | 449778.27216 |
| 164 | 2095.86 | 112.05 | 26.01 | 10.00 | 1460564.07054 | 449777.72159 |
| 165 | 2176.78 | 109.04 | 20.01 | 13.00 | 1460563.01824 | 449777.14787 |
| 166 | 2256.92 | 132.05 | 24.01 | 15.01 | 1460563.01824 | 449777.14787 |
| 167 | 2237.69 | 127.04 | 22.01 | 18.01 | 1460561.38303 | 449776.13907 |
| 168 | 2188.57 | 107.03 | 19.00 | 14.00 | 1460561.15218 | 449775.92577 |
| 169 | 2274.05 | 138.06 | 21.01 | 13.01 | 1460559.86980 | 449775.27196 |
| 171 | 2265.93 | 120.05 | 28.01 | 12.00 | 1460557.20018 | 449773.54093 |
| 172 | 2179.68 | 125.04 | 23.01 | 13.00 | 1460555.96558 | 449772.77917 |
| 173 | 2165.89 | 136.06 | 22.01 | 12.00 | 1460555.96558 | 449772.77917 |
| 174 | 2209.80 | 124.04 | 15.01 | 15.01 | 1460553.55967 | 449771.22235 |
| 175 | 2173.57 | 139.04 | 24.01 | 10.00 | 1460552.44087 | 449770.55756 |
| 176 | 2166.10 | 108.06 | 13.01 | 18.01 | 1460551.32508 | 449769.75819 |
| 177 | 2149.88 | 112.05 | 14.01 | 15.01 | 1460550.22543 | 449768.88888 |
| 178 | 2155.88 | 102.04 | 21.01 | 10.00 | 1460549.03990 | 449767.99047 |
| 179 | 2123.19 | 133.07 | 17.01 | 11.01 | 1460547.91299 | 449767.41614 |
| 180 | 2150.99 | 116.05 | 20.01 | 16.01 | 1460546.92757 | 449766.83961 |
| 181 | 2100.54 | 116.03 | 16.00 | 9.00 | 1460545.73418 | 449766.13160 |
| 182 | 1968.61 | 108.03 | 22.01 | 12.00 | 1460544.14649 | 449765.42682 |
| 183 | 2014.32 | 93.01 | 22.00 | 11.00 | 1460542.61740 | 449764.55231 |
| 184 | 2035.93 | 110.05 | 11.01 | 19.01 | 1460541.15805 | 449763.70966 |
| 185 | 1971.91 | 105.05 | 26.01 | 9.00 | 1460539.74768 | 449763.27846 |
| 186 | 1979.41 | 114.02 | 15.00 | 12.00 | 1460538.17500 | 449762.69303 |
| 187 | 2029.22 | 110.01 | 19.00 | 15.00 | 1460536.65166 | 449762.50599 |
| 188 | 2107.76 | 111.04 | 16.01 | 12.00 | 1460535.03031 | 449762.46612 |
| 189 | 2075.37 | 117.08 | 18.01 | 12.01 | 1460533.30744 | 449762.58831 |
| 190 | 2059.84 | 113.05 | 15.01 | 8.00 | 1460532.63333 | 449762.73310 |
| 191 | 2040.84 | 102.04 | 21.01 | 12.00 | 1460533.27229 | 449762.59837 |
| 192 | 1973.01 | 106.05 | 26.01 | 10.01 | 1460533.47437 | 449762.56534 |
| 193 | 2002.92 | 115.05 | 17.01 | 14.01 | 1460535.45577 | 449762.15385 |
| 194 | 1944.80 | 112.05 | 19.01 | 18.01 | 1460537.25448 | 449761.52521 |
| 195 | 2006.92 | 90.04 | 24.01 | 15.01 | 1460539.10254 | 449760.91628 |
| 196 | 2057.84 | 116.05 | 16.01 | 9.00 | 1460540.91489 | 449760.00744 |
| 198 | 2103.07 | 118.06 | 12.01 | 9.00 | 1460544.57405 | 449757.83376 |
| 199 | 2094.75 | 114.04 | 19.01 | 17.01 | 1460545.23468 | 449757.16619 |
| 200 | 1984.81 | 102.04 | 18.01 | 14.01 | 1460545.78251 | 449756.64374 |
| 201 | 2023.83 | 105.04 | 24.01 | 15.01 | 1460545.69516 | 449756.76121 |
| 203 | 2082.64 | 121.04 | 19.01 | 20.01 | 1460543.38607 | 449758.55077 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 204 | 2132.30 | 113.07 | 24.01 | 8.00 | 1460542.04908 | 449759.66065 |
| 205 | 1959.41 | 96.02 | 14.00 | 14.00 | 1460540.74821 | 449760.96839 |
| 206 | 2110.55 | 123.03 | 22.01 | 19.00 | 1460539.52952 | 449762.26718 |
| 207 | 2036.73 | 102.04 | 18.01 | 13.00 | 1460538.48661 | 449763.61895 |
| 208 | 2003.62 | 109.03 | 23.01 | 15.00 | 1460537.54874 | 449764.91732 |
| 209 | 2042.94 | 113.05 | 11.01 | 15.01 | 1460537.04763 | 449765.95960 |
| 210 | 2148.77 | 130.05 | 14.01 | 15.01 | 1460536.26597 | 449767.50537 |
| 211 | 2108.97 | 123.06 | 21.01 | 15.01 | 1460535.48207 | 449769.25341 |
| 212 | 1995.62 | 112.03 | 27.01 | 12.00 | 1460534.58420 | 449771.10658 |
| 213 | 2048.74 | 115.04 | 20.01 | 20.01 | 1460533.82151 | 449772.98255 |
| 214 | 2228.80 | 126.05 | 22.01 | 12.00 | 1460532.89016 | 449774.93906 |
| 215 | 2179.68 | 117.04 | 23.01 | 13.00 | 1460532.04563 | 449776.95833 |
| 216 | 2047.84 | 124.05 | 19.01 | 11.00 | 1460531.08871 | 449778.76062 |
| 217 | 1948.41 | 113.02 | 9.00 | 13.00 | 1460530.38198 | 449780.63962 |
| 218 | 1815.93 | 100.05 | 12.01 | 9.00 | 1460529.57815 | 449782.36681 |
| 219 | 1918.31 | 113.02 | 17.00 | 21.00 | 1460528.79288 | 449784.11889 |
| 222 | 2128.98 | 107.05 | 19.01 | 17.01 | 1460526.45005 | 449788.91503 |
| 223 | 2098.86 | 108.04 | 12.00 | 12.00 | 1460525.78685 | 449790.21474 |
| 224 | 2027.03 | 99.05 | 19.01 | 12.01 | 1460525.16231 | 449791.65903 |
| 225 | 1868.48 | 75.02 | 10.00 | 10.00 | 1460524.49688 | 449793.04789 |
| 226 | 2075.37 | 116.08 | 22.01 | 10.01 | 1460523.80231 | 449794.67513 |
| 227 | 2010.72 | 108.04 | 19.01 | 15.01 | 1460522.88524 | 449795.99850 |
| 228 | 1995.12 | 114.06 | 12.01 | 14.01 | 1460522.20485 | 449797.32612 |
| 229 | 1928.60 | 101.03 | 18.01 | 8.00 | 1460521.47170 | 449798.90149 |
| 230 | 1877.86 | 104.05 | 16.01 | 8.00 | 1460520.72549 | 449800.34608 |
| 231 | 1965.61 | 117.04 | 17.01 | 14.00 | 1460520.08669 | 449801.64517 |
| 233 | 1954.70 | 103.04 | 20.01 | 8.00 | 1460518.65302 | 449804.58747 |
| 234 | 1858.95 | 104.05 | 16.01 | 14.01 | 1460517.90626 | 449806.04948 |
| 235 | 1921.07 | 102.06 | 13.01 | 16.01 | 1460517.17809 | 449807.34981 |
| 237 | 1879.67 | 104.04 | 17.01 | 8.00 | 1460515.79723 | 449810.07580 |
| 238 | 1850.57 | 89.03 | 12.00 | 13.00 | 1460515.24278 | 449811.19385 |
| 239 | 1825.93 | 95.05 | 15.01 | 8.00 | 1460514.67928 | 449812.35680 |
| 240 | 1929.98 | 116.06 | 23.01 | 8.00 | 1460513.99987 | 449813.69947 |
| 241 | 1881.58 | 120.04 | 13.00 | 15.00 | 1460513.62654 | 449814.23306 |
| 242 | 1782.28 | 83.01 | 22.00 | 14.00 | 1460513.62631 | 449814.24598 |
| 243 | 1882.39 | 89.02 | 19.00 | 12.00 | 1460513.62631 | 449814.24598 |
| 244 | 1979.11 | 118.07 | 18.01 | 9.01 | 1460512.75742 | 449816.03295 |
| 245 | 1904.49 | 93.02 | 20.01 | 9.00 | 1460512.21325 | 449817.05061 |
| 246 | 1918.79 | 118.05 | 17.01 | 11.00 | 1460511.60120 | 449818.21255 |
| 247 | 2013.52 | 107.03 | 25.01 | 21.01 | 1460510.81667 | 449819.53774 |
| 248 | 2194.23 | 114.06 | 15.01 | 17.01 | 1460510.13413 | 449820.99866 |
| 249 | 2060.15 | 106.06 | 27.02 | 17.01 | 1460509.41976 | 449822.32207 |
| 250 | 1977.71 | 90.03 | 15.01 | 13.00 | 1460508.85603 | 449823.55685 |
| 251 | 2069.64 | 111.03 | 17.01 | 8.00 | 1460508.23155 | 449825.07303 |
| 252 | 2065.95 | 105.05 | 16.01 | 8.00 | 1460507.74329 | 449826.53877 |
| 253 | 2093.86 | 117.05 | 10.00 | 13.01 | 1460507.74329 | 449826.53877 |
| 254 | 1994.52 | 105.03 | 20.01 | 13.00 | 1460507.61684 | 449829.66528 |
| 255 | 2029.03 | 122.06 | 15.01 | 18.01 | 1460507.82826 | 449831.01810 |
| 256 | 1952.60 | 83.03 | 19.01 | 18.01 | 1460507.82826 | 449831.01810 |
| 257 | 1937.70 | 97.03 | 14.01 | 11.00 | 1460508.53692 | 449833.74176 |
| 258 | 1929.98 | 107.05 | 14.01 | 13.01 | 1460508.53076 | 449833.78749 |
| 259 | 1917.69 | 102.04 | 11.00 | 6.00 | 1460508.36437 | 449833.22975 |
| 260 | 1895.78 | 105.04 | 14.01 | 9.00 | 1460508.35338 | 449833.12850 |
| 261 | 1990.91 | 110.05 | 13.01 | 8.00 | 1460508.15285 | 449832.57263 |
| 262 | 1981.61 | 93.03 | 14.00 | 15.00 | 1460507.22420 | 449830.77543 |
| 263 | 1991.72 | 117.04 | 18.01 | 11.00 | 1460506.25080 | 449828.99287 |
| 264 | 2077.06 | 110.06 | 18.01 | 23.01 | 1460505.48562 | 449827.86090 |
| 266 | 2037.53 | 127.03 | 17.00 | 13.00 | 1460504.68595 | 449826.95532 |
| 267 | 2019.83 | 93.04 | 23.01 | 14.01 | 1460504.07651 | 449826.32426 |
| 268 | 2114.18 | 89.05 | 23.01 | 9.01 | 1460503.41961 | 449825.31086 |
| 269 | 2013.03 | 127.06 | 23.01 | 9.00 | 1460503.40926 | 449825.30705 |
| 270 | 1990.82 | 103.04 | 18.01 | 11.00 | 1460503.42716 | 449825.37467 |
| 271 | 2059.95 | 113.05 | 19.01 | 12.01 | 1460504.35147 | 449826.58631 |
| 272 | 2094.96 | 128.06 | 24.01 | 5.00 | 1460505.65495 | 449828.18716 |
| 273 | 2081.44 | 117.02 | 20.00 | 15.00 | 1460506.61876 | 449829.08889 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 275 | 1980.81 | 136.06 | 17.01 | 13.01 | 1460508.02059 | 449830.37267 |
| 276 | 1916.88 | 96.04 | 20.01 | 17.01 | 1460509.40386 | 449831.41955 |
| 277 | 2008.92 | 111.05 | 21.01 | 8.00 | 1460510.81716 | 449832.35963 |
| 278 | 2119.66 | 113.04 | 16.00 | 23.01 | 1460512.10798 | 449833.37318 |
| 279 | 1959.70 | 102.04 | 21.01 | 14.01 | 1460512.89326 | 449833.88201 |
| 280 | 2009.82 | 96.04 | 12.00 | 10.00 | 1460512.97719 | 449833.94036 |
| 282 | 1883.86 | 117.05 | 18.01 | 6.00 | 1460513.89602 | 449834.56730 |
| 283 | 1911.40 | 97.02 | 21.00 | 9.00 | 1460514.48604 | 449834.91577 |
| 284 | 1935.99 | 101.05 | 14.01 | 15.01 | 1460515.03592 | 449835.36822 |
| 285 | 1948.99 | 93.05 | 16.01 | 16.01 | 1460515.20493 | 449835.46711 |
| 286 | 1983.42 | 108.02 | 11.00 | 16.00 | 1460515.66584 | 449835.71023 |
| 287 | 1954.51 | 115.03 | 15.00 | 14.00 | 1460516.91003 | 449836.49356 |
| 288 | 1949.90 | 100.05 | 15.01 | 8.00 | 1460518.15590 | 449837.26263 |
| 289 | 1993.42 | 114.02 | 14.00 | 14.00 | 1460518.29101 | 449837.38291 |
| 290 | 1978.61 | 117.04 | 20.01 | 12.00 | 1460518.19303 | 449837.29773 |
| 291 | 1956.41 | 114.02 | 24.01 | 12.00 | 1460518.87747 | 449837.77162 |
| 292 | 1955.09 | 106.06 | 22.01 | 15.01 | 1460520.01161 | 449838.48038 |
| 293 | 1845.85 | 83.04 | 23.01 | 12.01 | 1460520.98022 | 449839.16766 |
| 295 | 1984.51 | 111.03 | 19.00 | 9.00 | 1460521.23439 | 449839.47170 |
| 297 | 1933.18 | 122.07 | 18.01 | 12.01 | 1460522.50573 | 449840.33243 |
| 298 | 1894.78 | 98.04 | 16.01 | 10.00 | 1460523.33371 | 449840.88221 |
| 300 | 2028.32 | 111.02 | 20.00 | 13.00 | 1460525.82835 | 449842.55449 |
| 301 | 1928.50 | 102.03 | 15.00 | 14.00 | 1460526.99711 | 449843.29021 |
| 302 | 2137.77 | 113.04 | 21.01 | 16.01 | 1460528.09506 | 449843.97500 |
| 303 | 2092.75 | 132.05 | 14.01 | 13.00 | 1460529.00573 | 449844.48311 |
| 304 | 2086.65 | 117.04 | 24.01 | 13.00 | 1460529.88052 | 449844.93932 |
| 305 | 2147.77 | 125.05 | 27.01 | 19.01 | 1460531.02744 | 449845.56535 |
| 306 | 2170.67 | 115.04 | 16.00 | 12.00 | 1460532.25506 | 449846.28729 |
| 307 | 2134.34 | 120.02 | 30.00 | 8.00 | 1460533.51250 | 449846.86605 |
| 309 | 2118.55 | 110.03 | 16.00 | 13.00 | 1460534.32723 | 449847.26666 |
| 310 | 2176.56 | 106.03 | 18.00 | 14.00 | 1460534.86916 | 449847.54047 |
| 311 | 2187.66 | 112.09 | 18.01 | 18.01 | 1460536.11178 | 449848.16538 |
| 312 | 2194.12 | 123.06 | 19.01 | 8.00 | 1460537.25667 | 449848.86729 |
| 313 | 2183.67 | 115.04 | 19.01 | 15.00 | 1460538.57161 | 449849.57870 |
| 314 | 2245.36 | 137.02 | 19.00 | 18.00 | 1460539.97609 | 449850.35419 |
| 315 | 2226.02 | 114.05 | 20.01 | 12.01 | 1460541.41878 | 449851.18957 |
| 316 | 2269.04 | 127.06 | 29.01 | 10.00 | 1460542.95587 | 449851.95192 |
| **317** | **2264.81** | **158.06** | **21.01** | **13.00** | **1460544.50935** | **449852.69826** |
| 318 | 2223.02 | 124.06 | 16.01 | 13.01 | 1460546.18937 | 449853.39333 |
| 319 | 2142.09 | 106.05 | 23.01 | 7.00 | 1460547.49188 | 449853.88574 |
| 320 | 2219.46 | 130.03 | 26.01 | 12.00 | 1460547.24525 | 449853.72694 |
| 322 | 2250.16 | 123.12 | 14.01 | 19.02 | 1460544.46518 | 449852.87311 |
| 323 | 2191.01 | 111.05 | 18.01 | 10.00 | 1460542.98227 | 449852.75041 |
| 324 | 2132.66 | 131.04 | 14.00 | 13.00 | 1460541.42952 | 449852.71955 |
| 325 | 2251.92 | 132.05 | 22.01 | 17.01 | 1460539.95030 | 449852.91992 |
| 326 | 2241.03 | 130.06 | 28.01 | 13.01 | 1460538.34987 | 449853.32474 |
| 327 | 2163.35 | 103.02 | 16.00 | 14.00 | 1460536.86526 | 449853.80567 |
| 328 | 2167.67 | 112.03 | 12.00 | 10.00 | 1460535.40793 | 449854.55327 |
| 333 | 2091.54 | 96.02 | 26.01 | 13.00 | 1460536.41175 | 449854.12887 |
| 334 | 2131.09 | 123.06 | 23.01 | 17.01 | 1460538.23339 | 449853.05667 |
| 335 | 2260.72 | 123.09 | 21.02 | 14.01 | 1460539.92962 | 449851.90031 |
| 336 | 2264.36 | 106.02 | 24.00 | 21.00 | 1460541.38113 | 449850.80773 |
| 338 | 2166.56 | 119.03 | 28.01 | 15.00 | 1460543.91333 | 449848.12527 |
| 339 | 2119.98 | 102.05 | 15.01 | 7.00 | 1460545.01592 | 449846.83932 |
| 340 | 2061.22 | 114.01 | 19.00 | 12.00 | 1460545.62601 | 449845.66396 |
| 341 | 2118.97 | 118.05 | 17.01 | 17.01 | 1460545.70558 | 449845.62051 |
| 344 | 2191.46 | 124.03 | 14.00 | 16.00 | 1460545.77127 | 449845.48810 |
| 345 | 2061.95 | 134.06 | 19.01 | 18.01 | 1460545.77127 | 449845.48810 |
| 346 | 2154.88 | 116.05 | 12.00 | 11.00 | 1460545.80451 | 449845.46493 |
| 347 | 2059.84 | 110.05 | 19.01 | 12.00 | 1460546.22773 | 449845.05683 |
| 348 | 1993.62 | 98.03 | 19.01 | 18.01 | 1460547.04069 | 449843.37095 |
| 349 | 1998.62 | 102.03 | 17.01 | 9.00 | 1460548.02864 | 449842.10957 |
| 350 | 1979.41 | 98.02 | 13.00 | 11.00 | 1460548.62094 | 449840.72581 |
| 351 | 2020.93 | 115.05 | 17.01 | 11.01 | 1460549.30897 | 449839.56274 |
| 352 | 1916.69 | 98.04 | 14.01 | 7.00 | 1460550.23269 | 449838.25216 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 353 | 1924.50 | 114.03 | 14.00 | 15.00 | 1460551.02507 | 449836.69352 |
| 355 | 1916.59 | 107.03 | 17.01 | 10.00 | 1460552.72613 | 449834.20650 |
| 356 | 1958.61 | 110.03 | 24.01 | 15.00 | 1460553.17838 | 449833.29019 |
| 357 | 1912.78 | 99.04 | 19.01 | 18.01 | 1460553.17838 | 449833.29019 |
| 360 | 1917.79 | 112.05 | 23.01 | 10.00 | 1460556.69068 | 449827.81961 |
| 361 | 1904.68 | 93.03 | 13.00 | 14.01 | 1460557.40034 | 449826.24658 |
| 362 | 1964.00 | 98.05 | 20.01 | 8.00 | 1460558.15880 | 449825.13772 |
| 363 | 1995.42 | 118.02 | 18.00 | 10.00 | 1460559.01273 | 449823.71568 |
| 364 | 1984.91 | 111.05 | 14.01 | 10.00 | 1460559.81494 | 449822.54290 |
| 365 | 1902.78 | 107.04 | 14.01 | 9.00 | 1460560.40195 | 449821.16391 |
| 366 | 1966.41 | 103.02 | 24.01 | 12.00 | 1460560.93472 | 449820.21623 |
| 367 | 1994.42 | 115.02 | 10.00 | 7.00 | 1460560.80529 | 449820.31298 |
| 370 | 2000.32 | 107.02 | 22.00 | 13.00 | 1460563.34881 | 449816.41810 |
| 371 | 2000.72 | 100.04 | 20.01 | 11.00 | 1460563.93464 | 449815.16763 |
| 372 | 2003.02 | 93.05 | 26.01 | 9.00 | 1460564.63157 | 449814.14833 |
| 374 | 2070.05 | 127.06 | 15.01 | 9.00 | 1460565.98503 | 449811.82827 |
| 375 | 2097.76 | 108.04 | 19.01 | 5.00 | 1460566.15106 | 449811.58163 |
| 376 | 1968.51 | 100.03 | 25.01 | 14.00 | 1460566.15106 | 449811.58163 |
| 377 | 2005.92 | 103.05 | 19.01 | 11.01 | 1460567.68141 | 449809.10620 |
| 378 | 1956.00 | 106.05 | 14.01 | 17.01 | 1460568.05856 | 449808.62342 |
| 379 | 1941.99 | 104.05 | 20.01 | 14.01 | 1460568.66045 | 449807.39520 |
| 380 | 1864.58 | 99.03 | 11.00 | 10.00 | 1460569.27332 | 449806.40114 |
| 382 | 2066.16 | 110.06 | 22.01 | 14.01 | 1460570.15126 | 449804.83168 |
| 383 | 2132.55 | 112.03 | 18.00 | 16.00 | 1460571.17198 | 449803.05230 |
| 384 | 2194.01 | 102.05 | 21.01 | 13.01 | 1460572.18855 | 449801.38075 |
| 385 | 2183.46 | 122.03 | 18.00 | 15.00 | 1460573.11509 | 449799.93985 |
| 386 | 2293.05 | 136.06 | 25.01 | 10.00 | 1460574.07322 | 449798.29136 |
| 387 | 2327.49 | 115.02 | 27.01 | 12.00 | 1460574.93852 | 449796.65402 |
| 388 | 2273.16 | 115.06 | 21.01 | 12.01 | 1460575.78441 | 449795.01035 |
| 389 | 2193.12 | 117.06 | 23.01 | 14.01 | 1460576.80075 | 449793.63438 |
| 390 | 2184.89 | 105.04 | 16.01 | 13.01 | 1460577.54305 | 449791.81070 |
| 391 | 2199.90 | 108.04 | 22.01 | 16.01 | 1460578.32720 | 449790.25943 |
| 392 | 2191.35 | 118.02 | 25.00 | 14.00 | 1460579.22287 | 449788.65391 |
| 393 | 2228.91 | 149.06 | 24.01 | 9.00 | 1460580.23556 | 449787.09469 |
| 394 | 2231.69 | 127.04 | 23.01 | 20.01 | 1460580.67569 | 449785.54780 |
| 395 | 2174.78 | 105.04 | 18.01 | 18.01 | 1460581.34392 | 449783.84421 |
| 397 | 2145.56 | 113.03 | 20.01 | 13.00 | 1460581.79860 | 449781.85051 |
| 398 | 2235.36 | 116.07 | 21.01 | 11.01 | 1460581.74677 | 449781.97050 |
| 399 | 2210.46 | 129.03 | 22.00 | 13.00 | 1460581.53574 | 449784.12683 |
| 400 | 2161.67 | 99.03 | 13.00 | 12.00 | 1460581.38996 | 449786.22665 |
| 401 | 2119.29 | 120.07 | 14.01 | 9.01 | 1460581.68134 | 449788.30670 |
| 402 | 2089.54 | 108.03 | 15.00 | 23.01 | 1460581.78209 | 449790.35540 |
| 403 | 2041.63 | 110.03 | 14.00 | 14.00 | 1460582.15299 | 449792.40544 |
| 404 | 2068.64 | 116.04 | 19.01 | 12.00 | 1460582.74536 | 449794.35223 |
| 405 | 2004.42 | 106.02 | 23.00 | 6.00 | 1460583.22882 | 449795.95952 |
| 406 | 2063.53 | 98.03 | 30.01 | 16.00 | 1460583.21665 | 449795.93058 |
| 407 | 2016.63 | 106.03 | 16.00 | 11.00 | 1460583.21665 | 449795.93058 |
| 408 | 2080.96 | 132.06 | 21.01 | 9.00 | 1460583.06253 | 449795.17844 |
| 409 | 2045.04 | 109.06 | 22.01 | 11.01 | 1460582.49380 | 449793.57097 |
| 410 | 2076.85 | 118.05 | 18.01 | 11.00 | 1460581.89077 | 449792.13643 |
| 411 | 2107.18 | 109.06 | 24.01 | 20.01 | 1460581.10663 | 449790.82956 |
| 413 | 2188.24 | 104.01 | 18.00 | 9.00 | 1460579.48517 | 449788.64366 |
| 415 | 2138.09 | 121.06 | 18.01 | 16.01 | 1460577.13961 | 449786.70427 |
| 416 | 2200.01 | 112.05 | 26.01 | 16.01 | 1460575.96958 | 449785.76924 |
| 417 | 2218.46 | 111.07 | 14.01 | 15.01 | 1460574.85274 | 449784.90046 |
| 418 | 2217.46 | 106.02 | 30.01 | 13.00 | 1460573.69405 | 449784.14560 |
| 419 | 2243.14 | 130.07 | 16.01 | 16.01 | 1460572.46224 | 449783.42431 |
| 420 | 2227.69 | 115.04 | 17.01 | 10.00 | 1460571.20322 | 449782.66293 |
| 421 | 2281.94 | 118.05 | 16.01 | 9.00 | 1460569.87877 | 449781.78643 |
| 422 | 2231.03 | 108.05 | 14.01 | 18.01 | 1460568.38670 | 449780.88483 |
| 423 | 2257.26 | 112.06 | 23.01 | 12.01 | 1460566.81458 | 449779.87367 |
| 425 | 2304.83 | 134.05 | 25.01 | 12.00 | 1460563.65571 | 449777.77348 |
| 426 | 2200.90 | 128.05 | 22.01 | 14.01 | 1460561.85458 | 449776.65687 |
| 430 | 2200.57 | 125.03 | 14.00 | 17.00 | 1460555.54208 | 449772.79325 |
| 431 | 2262.04 | 125.06 | 20.01 | 12.01 | 1460553.97031 | 449771.79568 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 432 | 2208.68 | 114.04 | 21.01 | 15.00 | 1460552.58039 | 449770.94904 |
| 434 | 2257.92 | 105.04 | 28.01 | 11.00 | 1460549.57069 | 449768.96665 |
| 437 | 2104.86 | 117.05 | 18.01 | 11.00 | 1460544.78086 | 449766.13203 |
| 438 | 1956.70 | 125.04 | 20.01 | 9.00 | 1460543.04556 | 449765.29048 |
| 440 | 2007.82 | 107.04 | 17.01 | 6.00 | 1460539.72760 | 449763.68211 |
| 441 | 1960.20 | 103.06 | 21.01 | 12.01 | 1460537.89600 | 449763.23714 |
| 442 | 1976.81 | 117.05 | 15.01 | 11.00 | 1460535.92842 | 449763.01036 |
| 443 | 2021.83 | 126.05 | 13.01 | 9.00 | 1460533.94566 | 449762.94797 |
| 444 | 2142.20 | 97.05 | 19.01 | 13.01 | 1460532.08862 | 449763.36713 |
| 445 | 2093.96 | 125.06 | 20.01 | 14.01 | 1460530.45643 | 449763.77563 |
| 446 | 2080.75 | 130.05 | 14.01 | 11.00 | 1460530.35402 | 449763.84016 |
| 447 | 2068.16 | 118.07 | 21.01 | 19.01 | 1460531.11345 | 449763.66966 |
| 448 | 2035.53 | 118.03 | 13.00 | 13.00 | 1460533.02895 | 449762.91077 |
| 449 | 1987.71 | 120.04 | 14.01 | 14.01 | 1460535.02574 | 449762.24284 |
| 451 | 2041.94 | 119.05 | 16.01 | 9.00 | 1460538.76880 | 449761.19009 |
| 452 | 2027.83 | 109.04 | 18.01 | 14.01 | 1460540.71892 | 449760.56998 |
| 453 | 2134.66 | 140.04 | 19.01 | 13.00 | 1460542.60975 | 449759.79801 |
| 454 | 2073.74 | 105.04 | 20.01 | 18.01 | 1460544.18284 | 449758.98648 |
| 455 | 2121.66 | 120.04 | 17.01 | 16.00 | 1460545.68775 | 449757.75665 |
| 456 | 2024.83 | 110.05 | 16.01 | 17.01 | 1460546.54827 | 449756.89189 |
| 457 | 2107.44 | 103.02 | 26.01 | 13.00 | 1460547.17840 | 449756.29453 |
| 458 | 2104.86 | 121.05 | 15.01 | 11.00 | 1460547.02161 | 449756.41608 |
| 459 | 2081.48 | 103.07 | 19.01 | 18.01 | 1460546.01669 | 449757.30793 |
| 460 | 2084.65 | 109.03 | 17.01 | 8.00 | 1460544.59680 | 449758.92099 |
| 461 | 2090.54 | 143.04 | 16.00 | 11.00 | 1460543.23113 | 449760.54603 |
| 462 | 2105.65 | 129.04 | 24.01 | 13.00 | 1460541.92226 | 449762.23387 |
| 463 | 2042.04 | 109.06 | 10.01 | 10.01 | 1460540.98336 | 449764.25168 |
| 464 | 2063.85 | 100.04 | 25.01 | 22.01 | 1460540.05357 | 449766.29005 |
| 465 | 2112.55 | 120.03 | 20.01 | 11.00 | 1460539.04379 | 449768.26719 |
| 466 | 2075.95 | 119.05 | 19.01 | 16.01 | 1460538.09923 | 449770.29730 |
| 467 | 2102.76 | 108.04 | 23.01 | 12.00 | 1460537.15563 | 449772.39119 |
| 468 | 2174.00 | 112.05 | 27.01 | 11.01 | 1460536.34749 | 449774.27282 |
| 469 | 2303.52 | 112.07 | 22.01 | 11.01 | 1460535.74380 | 449775.72231 |
| 470 | 2138.98 | 119.05 | 18.01 | 19.01 | 1460534.75224 | 449777.53061 |
| 471 | 2130.55 | 113.03 | 18.00 | 15.00 | 1460534.03308 | 449779.20251 |
| 472 | 2029.73 | 110.04 | 19.01 | 13.00 | 1460533.57420 | 449780.99458 |
| 473 | 1953.51 | 102.03 | 20.01 | 12.00 | 1460532.46893 | 449782.66234 |
| 477 | 2032.83 | 130.05 | 18.01 | 23.01 | 1460529.24620 | 449789.36800 |
| 478 | 2187.33 | 135.08 | 24.01 | 13.01 | 1460528.60421 | 449790.85129 |
| 480 | 2023.63 | 105.03 | 9.00 | 10.00 | 1460527.26657 | 449793.67610 |
| 481 | 2027.22 | 106.01 | 19.00 | 14.00 | 1460527.26657 | 449793.67610 |
| 482 | 1969.21 | 108.01 | 16.00 | 9.00 | 1460525.99765 | 449796.47264 |
| 483 | 1933.70 | 102.04 | 21.01 | 11.00 | 1460525.47766 | 449797.12548 |
| 484 | 1912.59 | 85.03 | 15.00 | 13.00 | 1460525.40071 | 449797.27065 |
| 485 | 1857.76 | 92.04 | 13.01 | 14.01 | 1460524.65552 | 449798.85924 |
| 487 | 1915.17 | 77.05 | 12.01 | 17.01 | 1460522.95565 | 449801.87875 |
| 489 | 1969.61 | 98.03 | 11.00 | 10.00 | 1460521.74570 | 449804.55452 |
| 490 | 2027.53 | 91.02 | 20.01 | 15.00 | 1460521.02850 | 449806.12765 |
| 491 | 1947.60 | 131.04 | 19.01 | 12.00 | 1460520.30986 | 449807.53401 |
| 492 | 1967.61 | 112.03 | 20.01 | 13.00 | 1460519.54514 | 449808.88110 |
| 493 | 1938.70 | 114.04 | 25.01 | 14.01 | 1460518.80194 | 449810.26875 |
| 494 | 1990.42 | 97.02 | 16.00 | 15.00 | 1460518.04257 | 449811.94249 |
| 495 | 1876.77 | 107.04 | 20.01 | 19.01 | 1460518.04257 | 449811.94249 |
| 496 | 1989.92 | 105.05 | 16.01 | 10.00 | 1460516.32063 | 449815.37271 |
| 497 | 1952.09 | 97.05 | 10.01 | 9.01 | 1460515.46092 | 449816.81687 |
| 498 | 1981.32 | 108.02 | 16.00 | 13.00 | 1460514.77481 | 449818.27752 |
| 499 | 2008.23 | 104.06 | 17.01 | 14.01 | 1460513.97652 | 449819.72129 |
| 500 | 2072.54 | 133.03 | 17.00 | 15.00 | 1460513.10306 | 449821.22863 |
| 501 | 2065.05 | 96.05 | 16.01 | 14.01 | 1460512.41774 | 449822.73665 |
| 503 | 2041.73 | 110.04 | 20.01 | 9.00 | 1460510.69574 | 449825.68058 |
| 504 | 2035.43 | 105.02 | 25.01 | 8.00 | 1460509.85355 | 449827.00985 |
| 505 | 1964.41 | 122.03 | 12.00 | 12.00 | 1460509.17476 | 449828.35925 |
| 506 | 2027.53 | 109.03 | 16.00 | 13.00 | 1460508.16381 | 449829.97723 |
| 507 | 2071.33 | 112.02 | 13.00 | 11.00 | 1460507.61643 | 449831.53044 |
| 508 | 1877.05 | 115.06 | 21.01 | 12.01 | 1460507.13674 | 449833.44917 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 510 | 1901.49 | 94.02 | 18.00 | 13.00 | 1460507.07374 | 449835.65135 |
| 511 | 1880.24 | 102.07 | 19.01 | 9.01 | 1460507.07374 | 449835.65135 |
| 512 | 2024.13 | 103.06 | 17.01 | 23.01 | 1460506.80777 | 449832.49835 |
| 513 | 1966.90 | 95.04 | 23.01 | 13.01 | 1460506.36153 | 449830.45454 |
| 514 | 2075.54 | 112.03 | 20.01 | 16.00 | 1460505.76121 | 449828.36757 |
| 515 | 2023.32 | 113.02 | 12.00 | 11.00 | 1460505.10354 | 449826.43029 |
| 516 | 2112.29 | 102.06 | 22.01 | 11.01 | 1460504.33055 | 449824.68951 |
| 517 | 2182.78 | 127.05 | 20.01 | 16.01 | 1460503.49344 | 449823.07243 |
| 518 | 2168.56 | 129.03 | 21.01 | 13.00 | 1460502.61779 | 449821.43064 |
| 520 | 2054.05 | 103.05 | 19.01 | 9.00 | 1460502.06133 | 449820.59450 |
| 521 | 2214.69 | 123.04 | 17.01 | 16.00 | 1460503.02749 | 449822.04717 |
| 522 | 2041.94 | 112.05 | 5.00 | 8.00 | 1460503.91223 | 449823.83429 |
| 523 | 2040.94 | 125.06 | 19.01 | 16.01 | 1460504.86135 | 449825.71715 |
| 524 | 2109.18 | 104.06 | 17.01 | 26.01 | 1460506.05124 | 449827.22574 |
| 525 | 2006.02 | 106.05 | 17.01 | 11.01 | 1460507.20981 | 449828.62049 |
| 526 | 1953.90 | 91.04 | 11.01 | 14.01 | 1460508.53033 | 449829.90722 |
| 527 | 1895.97 | 118.06 | 11.01 | 6.00 | 1460509.85885 | 449830.93435 |
| 528 | 1990.01 | 116.06 | 20.01 | 12.01 | 1460511.02926 | 449831.74122 |
| 529 | 2018.93 | 116.05 | 29.01 | 7.00 | 1460512.00539 | 449832.35989 |
| 530 | 1996.82 | 106.04 | 17.01 | 12.00 | 1460513.50665 | 449833.14510 |
| 531 | 1974.71 | 101.04 | 23.01 | 18.01 | 1460515.05271 | 449834.22109 |
| 532 | 1934.08 | 100.06 | 17.01 | 13.01 | 1460516.68513 | 449835.18020 |
| 533 | 1986.72 | 104.04 | 26.01 | 14.01 | 1460518.21096 | 449836.02585 |
| 534 | 2034.34 | 84.06 | 18.01 | 11.01 | 1460519.62507 | 449836.77987 |
| 535 | 2008.82 | 107.04 | 16.01 | 9.00 | 1460521.02400 | 449837.51358 |
| 537 | 1943.41 | 103.02 | 17.00 | 7.00 | 1460523.77420 | 449838.92782 |
| 538 | 1912.40 | 89.02 | 15.00 | 11.00 | 1460524.92164 | 449839.56505 |
| 539 | 1961.61 | 118.04 | 10.00 | 13.00 | 1460526.00263 | 449840.15653 |
| 540 | 2019.03 | 105.05 | 15.01 | 9.00 | 1460526.78543 | 449840.44718 |
| 541 | 2027.44 | 117.08 | 23.02 | 9.01 | 1460526.78543 | 449840.44718 |
| 542 | 1977.01 | 115.06 | 21.01 | 10.01 | 1460529.32532 | 449841.85637 |
| 543 | 2061.95 | 124.06 | 19.01 | 14.01 | 1460530.64335 | 449842.49414 |
| 544 | 2129.51 | 120.09 | 23.02 | 23.02 | 1460531.95580 | 449843.19722 |
| 545 | 2086.33 | 109.02 | 26.00 | 17.00 | 1460533.27026 | 449843.89207 |
| 546 | 2170.56 | 126.03 | 21.01 | 13.00 | 1460534.62863 | 449844.58384 |
| 547 | 2142.09 | 107.05 | 19.01 | 15.01 | 1460536.05285 | 449845.30060 |
| 548 | 2136.34 | 110.02 | 18.00 | 11.00 | 1460537.49314 | 449845.95656 |
| 549 | 2132.66 | 110.03 | 17.01 | 10.00 | 1460538.89491 | 449846.73381 |
| 550 | 2207.79 | 127.05 | 22.01 | 20.01 | 1460540.22583 | 449847.48818 |
| 551 | 2158.99 | 120.06 | 23.01 | 13.01 | 1460541.51826 | 449848.10378 |
| 552 | 2176.00 | 107.05 | 34.02 | 13.01 | 1460542.73270 | 449848.73897 |
| 553 | 2221.91 | 112.05 | 22.01 | 14.01 | 1460543.94414 | 449849.29755 |
| 554 | 2166.56 | 116.03 | 23.01 | 15.00 | 1460545.35557 | 449849.69452 |
| 555 | 2084.75 | 118.04 | 27.01 | 10.00 | 1460545.35557 | 449849.69452 |
| 556 | 2161.34 | 108.02 | 17.00 | 14.00 | 1460548.40060 | 449850.03138 |
| 557 | 2126.19 | 109.06 | 20.01 | 7.00 | 1460548.40060 | 449850.03138 |
| 558 | 2160.67 | 112.03 | 22.01 | 14.00 | 1460548.52120 | 449850.08693 |
| 559 | 2218.13 | 99.05 | 20.01 | 13.01 | 1460547.23398 | 449850.05772 |
| 560 | 2203.79 | 98.04 | 13.00 | 12.00 | 1460545.31448 | 449850.26576 |
| 562 | 2190.79 | 113.04 | 14.01 | 17.01 | 1460541.72407 | 449850.48840 |
| 563 | 2206.57 | 110.03 | 31.01 | 8.00 | 1460539.79163 | 449850.86729 |
| 565 | 2177.22 | 112.06 | 27.02 | 16.01 | 1460536.13188 | 449851.76254 |
| 566 | 2122.76 | 103.04 | 13.00 | 18.01 | 1460534.35363 | 449852.30599 |
| 567 | 2183.68 | 112.03 | 17.01 | 14.00 | 1460532.74038 | 449853.08245 |
| 568 | 2200.01 | 132.06 | 19.01 | 16.01 | 1460532.30287 | 449853.28415 |
| 570 | 2102.76 | 106.04 | 13.00 | 9.00 | 1460532.63618 | 449853.17937 |
| 571 | 2133.98 | 112.05 | 12.01 | 14.01 | 1460534.20228 | 449852.53140 |
| 572 | 2274.36 | 128.02 | 22.00 | 17.00 | 1460535.84914 | 449851.64172 |
| 573 | 2226.91 | 137.06 | 17.01 | 8.00 | 1460537.43790 | 449850.68656 |
| 574 | 2210.90 | 116.05 | 12.00 | 11.00 | 1460538.91258 | 449849.58471 |
| 575 | 2143.77 | 119.04 | 24.01 | 18.01 | 1460540.22790 | 449848.51515 |
| 576 | 2146.66 | 116.04 | 20.01 | 18.01 | 1460541.31206 | 449847.06730 |
| 577 | 2127.77 | 113.04 | 17.01 | 11.00 | 1460542.37269 | 449845.60179 |
| 578 | 2124.08 | 102.05 | 20.01 | 13.01 | 1460543.48698 | 449844.08861 |
| 580 | 2005.62 | 109.03 | 16.00 | 9.00 | 1460544.96778 | 449841.44395 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 581 | 1991.32 | 123.02 | 14.00 | 17.00 | 1460545.76606 | 449839.89961 |
| 582 | 1813.38 | 105.02 | 15.00 | 18.00 | 1460546.75605 | 449838.42202 |
| 583 | 1916.79 | 101.04 | 15.01 | 10.00 | 1460547.43745 | 449836.91778 |
| 584 | 1863.86 | 102.05 | 22.01 | 13.01 | 1460548.26531 | 449835.41345 |
| 585 | 1916.69 | 122.04 | 16.01 | 8.00 | 1460549.15647 | 449833.80274 |
| 586 | 1927.69 | 110.04 | 12.00 | 22.01 | 1460549.91675 | 449832.59310 |
| 587 | 1834.75 | 98.04 | 17.01 | 10.00 | 1460550.72615 | 449831.13684 |
| 589 | 2041.14 | 118.07 | 19.01 | 10.01 | 1460552.46513 | 449828.23289 |
| 590 | 2024.73 | 107.04 | 24.01 | 13.00 | 1460553.27322 | 449826.95959 |
| 591 | 1909.07 | 85.05 | 25.01 | 12.01 | 1460554.16014 | 449825.75348 |
| 592 | 1857.29 | 104.02 | 17.00 | 12.00 | 1460555.00639 | 449824.09589 |
| 594 | 1959.80 | 101.04 | 13.01 | 17.01 | 1460556.44019 | 449821.70811 |
| 595 | 1923.60 | 130.04 | 23.01 | 9.00 | 1460556.95139 | 449820.89455 |
| 596 | 1961.51 | 106.03 | 16.00 | 18.00 | 1460556.96139 | 449820.86488 |
| 597 | 1876.67 | 94.03 | 21.01 | 15.01 | 1460557.84022 | 449819.57953 |
| 600 | 1964.90 | 97.04 | 18.01 | 17.01 | 1460559.25229 | 449816.85279 |
| 601 | 1923.31 | 130.02 | 16.00 | 10.00 | 1460559.55164 | 449816.28969 |
| 602 | 1985.22 | 114.01 | 20.00 | 13.00 | 1460560.35945 | 449814.87119 |
| 604 | 2003.72 | 102.04 | 25.01 | 17.01 | 1460561.59367 | 449812.84165 |
| 605 | 1936.60 | 114.04 | 16.00 | 11.00 | 1460562.28166 | 449811.67294 |
| 606 | 2055.05 | 114.06 | 22.01 | 19.01 | 1460563.09683 | 449810.25594 |
| 607 | 1983.31 | 97.06 | 17.01 | 15.01 | 1460563.88108 | 449808.90585 |
| 610 | 2017.63 | 102.03 | 25.01 | 12.00 | 1460566.55946 | 449804.62320 |
| 611 | 2069.33 | 111.02 | 24.00 | 13.00 | 1460567.50535 | 449803.09725 |
| 613 | 2163.78 | 113.04 | 18.01 | 18.01 | 1460569.36888 | 449800.02152 |
| 614 | 2175.22 | 129.07 | 22.01 | 15.01 | 1460570.20916 | 449798.53241 |
| 615 | 2272.70 | 117.04 | 24.01 | 23.01 | 1460570.94677 | 449797.28111 |
| 616 | 2280.59 | 103.03 | 32.01 | 14.00 | 1460571.96607 | 449795.71574 |
| 617 | 2276.70 | 111.03 | 17.01 | 19.01 | 1460571.96607 | 449795.71574 |
| 618 | 2299.52 | 103.07 | 17.01 | 18.01 | 1460573.10953 | 449793.40833 |
| 619 | 2240.58 | 136.04 | 33.01 | 10.00 | 1460573.15394 | 449793.31845 |
| 620 | 2223.36 | 119.07 | 22.01 | 19.01 | 1460573.19568 | 449793.25571 |
| 621 | 2177.57 | 106.03 | 19.00 | 7.00 | 1460573.51824 | 449792.56260 |
| 623 | 2161.45 | 140.03 | 32.01 | 14.00 | 1460573.48912 | 449792.65808 |
| 624 | 2165.32 | 108.07 | 17.01 | 20.01 | 1460573.73745 | 449792.10849 |
| 625 | 2092.75 | 115.04 | 12.00 | 15.01 | 1460574.65031 | 449790.73902 |
| 627 | 2199.35 | 117.02 | 16.00 | 19.00 | 1460575.58734 | 449788.88355 |
| 628 | 2143.88 | 127.05 | 17.01 | 10.00 | 1460576.34935 | 449787.19074 |
| 629 | 2139.77 | 126.05 | 23.01 | 14.01 | 1460577.17624 | 449785.53062 |
| 630 | 2173.89 | 109.04 | 20.01 | 11.00 | 1460577.47842 | 449783.88327 |
| 631 | 2167.56 | 117.03 | 20.01 | 14.00 | 1460577.65211 | 449783.37349 |
| 632 | 2168.89 | 114.05 | 23.01 | 15.01 | 1460577.46072 | 449784.07190 |
| 634 | 2205.34 | 133.08 | 21.01 | 11.01 | 1460576.87569 | 449788.22600 |
| 635 | 2079.16 | 102.06 | 22.01 | 12.01 | 1460576.99861 | 449790.20374 |
| 636 | 2207.01 | 117.05 | 11.01 | 22.01 | 1460577.33309 | 449792.08832 |
| 638 | 2071.85 | 129.05 | 13.01 | 6.00 | 1460578.11574 | 449796.15495 |
| 639 | 2061.95 | 115.05 | 30.01 | 10.00 | 1460578.67548 | 449798.14143 |
| 640 | 2058.84 | 102.04 | 22.01 | 11.00 | 1460579.11718 | 449799.72439 |
| 642 | 2040.14 | 108.06 | 19.01 | 15.01 | 1460579.64772 | 449801.53221 |
| 643 | 2033.73 | 103.04 | 26.01 | 13.00 | 1460579.52280 | 449801.14098 |
| 644 | 2161.45 | 113.02 | 17.00 | 9.00 | 1460579.03203 | 449799.27633 |
| 645 | 2152.10 | 101.05 | 20.01 | 11.01 | 1460578.54829 | 449797.36156 |
| 646 | 2203.57 | 142.04 | 19.00 | 13.00 | 1460577.86325 | 449795.42872 |
| 647 | 2177.67 | 124.04 | 18.01 | 14.00 | 1460577.23509 | 449793.48314 |
| 648 | 2111.29 | 99.06 | 19.01 | 15.01 | 1460576.32238 | 449791.84355 |
| 649 | 2160.21 | 103.06 | 26.01 | 11.01 | 1460575.03061 | 449790.40395 |
| 651 | 2127.08 | 111.06 | 20.01 | 16.01 | 1460572.40633 | 449787.63880 |
| 652 | 2175.67 | 108.03 | 21.01 | 12.00 | 1460571.01642 | 449786.45031 |
| 653 | 2138.77 | 122.04 | 22.01 | 18.01 | 1460569.53587 | 449785.34678 |
| 654 | 2195.34 | 126.08 | 17.01 | 13.01 | 1460567.98979 | 449784.36315 |
| 655 | 2220.46 | 129.03 | 21.00 | 18.00 | 1460566.53308 | 449783.36211 |
| 656 | 2323.07 | 127.06 | 18.01 | 12.01 | 1460564.98839 | 449782.37629 |
| 657 | 2216.35 | 114.07 | 23.01 | 15.01 | 1460563.46484 | 449781.49234 |
| 659 | 2272.16 | 129.07 | 24.01 | 12.01 | 1460560.67195 | 449779.68928 |
| 660 | 2251.26 | 130.07 | 16.01 | 16.01 | 1460559.29120 | 449778.69182 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 661 | 2179.33 | 113.07 | 19.01 | 14.01 | 1460557.96003 | 449777.82140 |
| 662 | 2261.59 | 114.03 | 16.00 | 11.00 | 1460556.63016 | 449776.84342 |
| 663 | 2175.22 | 108.06 | 19.01 | 15.01 | 1460555.18151 | 449775.99089 |
| 664 | 2241.26 | 119.07 | 13.01 | 12.01 | 1460553.86823 | 449775.14944 |
| 665 | 2321.83 | 123.04 | 23.01 | 12.00 | 1460552.55007 | 449774.29944 |
| 668 | 2221.24 | 127.07 | 20.01 | 10.01 | 1460548.29916 | 449771.69869 |
| 669 | 2268.59 | 120.03 | 22.01 | 13.00 | 1460546.99263 | 449770.74894 |
| 670 | 2174.67 | 124.04 | 26.01 | 13.00 | 1460545.61586 | 449770.08570 |
| 671 | 2219.80 | 106.04 | 29.01 | 11.00 | 1460544.14764 | 449769.28740 |
| 672 | 2174.56 | 126.03 | 27.01 | 9.00 | 1460542.65828 | 449768.39257 |
| 673 | 2107.55 | 118.03 | 20.01 | 8.00 | 1460541.20493 | 449767.49639 |
| 674 | 2072.64 | 106.03 | 17.01 | 11.00 | 1460539.88776 | 449766.50085 |
| 675 | 2047.04 | 103.05 | 21.01 | 16.01 | 1460538.17194 | 449765.82946 |
| 676 | 2011.33 | 111.07 | 21.01 | 11.01 | 1460536.65392 | 449765.27553 |
| 677 | 2014.32 | 103.02 | 24.00 | 8.00 | 1460536.30951 | 449765.21077 |
| 679 | 2001.82 | 106.04 | 14.01 | 21.01 | 1460538.21505 | 449765.69204 |
| 680 | 2017.72 | 111.04 | 16.01 | 10.00 | 1460540.26565 | 449765.76241 |
| 681 | 2107.65 | 122.04 | 20.01 | 9.00 | 1460542.31059 | 449766.03718 |
| 682 | 2180.00 | 102.05 | 19.01 | 10.00 | 1460544.21244 | 449765.91806 |
| 684 | 1985.21 | 128.08 | 20.01 | 9.01 | 1460547.91985 | 449764.92836 |
| 685 | 2116.66 | 115.04 | 15.00 | 11.00 | 1460549.64115 | 449764.11508 |
| 686 | 2130.66 | 118.04 | 17.01 | 16.00 | 1460551.04471 | 449763.21836 |
| 687 | 2189.90 | 118.05 | 20.01 | 7.00 | 1460552.31556 | 449762.24674 |
| 689 | 2192.35 | 100.02 | 19.00 | 10.00 | 1460553.06011 | 449761.75903 |
| 690 | 2256.47 | 133.03 | 29.01 | 12.00 | 1460551.91798 | 449762.54403 |
| 691 | 2138.66 | 123.04 | 12.00 | 13.00 | 1460550.22102 | 449763.88645 |
| 692 | 2192.68 | 124.04 | 20.01 | 17.01 | 1460548.61620 | 449765.11644 |
| 694 | 2151.77 | 123.04 | 19.01 | 17.01 | 1460545.62616 | 449767.66175 |
| **695** | **2234.58** | **155.04** | **25.01** | **14.00** | **1460544.22318** | **449769.10002** |
| 696 | 2253.92 | 125.05 | 18.01 | 12.00 | 1460542.98232 | 449770.66247 |
| 697 | 2182.78 | 127.05 | 24.01 | 15.01 | 1460542.00390 | 449772.05197 |
| 698 | 2179.89 | 103.04 | 20.01 | 15.01 | 1460541.11768 | 449773.43920 |
| 699 | 2173.78 | 125.04 | 25.01 | 20.01 | 1460540.20750 | 449774.93130 |
| 700 | 2326.84 | 118.04 | 29.01 | 14.01 | 1460539.45649 | 449776.44098 |
| 701 | 2298.71 | 105.03 | 22.01 | 22.01 | 1460538.63837 | 449777.95931 |
| 702 | 2206.23 | 115.06 | 23.01 | 9.01 | 1460537.89907 | 449779.58750 |
| 703 | 2109.87 | 114.05 | 19.01 | 14.01 | 1460537.16014 | 449780.99866 |
| 704 | 2157.32 | 92.06 | 21.01 | 19.01 | 1460536.43754 | 449782.74080 |
| 705 | 2022.83 | 125.05 | 25.01 | 8.00 | 1460535.66194 | 449784.32425 |
| 706 | 2021.83 | 106.04 | 14.01 | 14.01 | 1460535.66194 | 449784.32425 |
| 708 | 2107.07 | 135.07 | 17.01 | 12.01 | 1460533.43855 | 449788.63957 |
| 709 | 2123.76 | 102.04 | 18.01 | 17.01 | 1460532.89150 | 449790.09302 |
| 710 | 2091.59 | 116.09 | 19.01 | 13.01 | 1460532.29030 | 449791.30476 |
| 711 | 2132.87 | 114.05 | 15.01 | 15.01 | 1460531.72153 | 449792.39364 |
| 712 | 2045.43 | 115.02 | 9.00 | 12.00 | 1460531.34233 | 449793.27807 |
| 713 | 2045.43 | 117.02 | 21.00 | 13.00 | 1460530.91515 | 449794.13432 |
| 714 | 2120.40 | 121.08 | 18.01 | 11.01 | 1460530.06026 | 449795.71544 |
| 716 | 1936.40 | 113.02 | 16.00 | 19.00 | 1460528.86442 | 449797.76490 |
| 717 | 1943.18 | 119.07 | 20.01 | 14.01 | 1460528.73209 | 449798.97332 |
| 719 | 1936.89 | 101.05 | 18.01 | 6.00 | 1460527.48302 | 449801.10621 |
| 720 | 1959.70 | 107.04 | 21.01 | 10.00 | 1460526.63794 | 449802.72798 |
| 721 | 1979.41 | 99.02 | 22.00 | 15.00 | 1460525.93207 | 449804.22416 |
| 722 | 1996.42 | 97.02 | 17.00 | 5.00 | 1460525.35211 | 449805.75300 |
| 723 | 2026.83 | 109.04 | 16.01 | 16.01 | 1460524.59232 | 449807.07697 |
| 724 | 2067.95 | 131.06 | 12.01 | 12.01 | 1460523.80465 | 449808.48883 |
| 725 | 1930.89 | 106.05 | 24.01 | 14.01 | 1460523.10514 | 449809.93962 |
| 726 | 1907.69 | 105.04 | 16.01 | 14.01 | 1460522.47260 | 449811.38428 |
| 727 | 1901.59 | 93.03 | 17.01 | 13.00 | 1460521.71367 | 449812.82465 |
| 729 | 1924.40 | 83.02 | 13.00 | 16.00 | 1460520.15380 | 449815.66495 |
| 731 | 2030.83 | 92.04 | 22.01 | 12.00 | 1460518.72829 | 449818.67414 |
| 732 | 2148.88 | 114.05 | 22.01 | 13.01 | 1460517.93629 | 449820.05231 |
| 733 | 2078.37 | 123.08 | 19.01 | 17.01 | 1460517.21558 | 449821.46502 |
| 738 | 1993.82 | 109.04 | 19.01 | 9.00 | 1460513.47175 | 449828.45227 |
| 739 | 1953.60 | 113.03 | 26.01 | 14.00 | 1460512.74874 | 449829.79088 |
| 740 | 2021.83 | 107.04 | 12.00 | 18.01 | 1460512.44525 | 449830.46263 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 741 | 2153.34 | 120.02 | 19.00 | 12.00 | 1460512.66909 | 449830.01731 |
| 742 | 2041.84 | 109.04 | 21.01 | 14.01 | 1460513.00502 | 449829.23707 |
| 743 | 2036.83 | 108.04 | 18.01 | 11.00 | 1460513.57252 | 449827.55498 |
| 745 | 2067.74 | 121.04 | 20.01 | 6.00 | 1460514.04253 | 449824.17103 |
| 746 | 2066.74 | 93.03 | 19.01 | 12.00 | 1460514.11147 | 449822.69193 |
| 747 | 2057.53 | 114.03 | 24.01 | 10.00 | 1460514.11803 | 449821.11337 |
| 748 | 1893.87 | 96.04 | 14.01 | 7.00 | 1460513.90133 | 449819.56206 |
| 749 | 1851.67 | 89.03 | 17.01 | 14.01 | 1460513.54196 | 449818.09570 |
| 750 | 1918.50 | 112.03 | 13.00 | 6.00 | 1460513.54196 | 449818.09570 |
| 751 | 1896.68 | 104.04 | 14.01 | 10.00 | 1460513.12566 | 449814.44300 |
| 752 | 1821.75 | 95.04 | 17.01 | 5.00 | 1460512.90572 | 449813.00562 |
| 754 | 1809.65 | 108.04 | 19.01 | 14.01 | 1460512.93100 | 449813.20945 |
| 756 | 1866.86 | 87.04 | 16.01 | 14.01 | 1460513.10505 | 449816.44428 |
| 757 | 2002.62 | 123.04 | 16.00 | 11.00 | 1460513.10725 | 449818.45676 |
| 758 | 2026.42 | 122.03 | 21.00 | 4.00 | 1460513.20061 | 449820.42702 |
| 759 | 2128.98 | 113.05 | 20.01 | 17.01 | 1460513.54294 | 449822.16942 |
| 762 | 2079.64 | 109.03 | 21.01 | 8.00 | 1460515.65732 | 449826.46317 |
| 763 | 2030.53 | 111.03 | 28.01 | 12.00 | 1460516.74579 | 449827.58288 |
| 764 | 2131.51 | 117.08 | 19.01 | 13.01 | 1460517.73320 | 449828.51449 |
| 765 | 1969.31 | 107.02 | 22.00 | 13.00 | 1460517.73320 | 449828.51449 |
| 766 | 1902.97 | 106.05 | 16.01 | 16.01 | 1460520.09579 | 449830.14266 |
| 767 | 1912.40 | 114.02 | 21.00 | 9.00 | 1460520.09579 | 449830.14266 |
| 768 | 1904.68 | 109.04 | 15.01 | 13.00 | 1460522.78158 | 449831.61027 |
| 769 | 1891.40 | 98.02 | 26.01 | 10.00 | 1460523.77511 | 449832.15298 |
| 770 | 1891.06 | 101.06 | 15.01 | 17.01 | 1460523.73573 | 449832.12782 |
| 772 | 1903.49 | 114.03 | 17.00 | 9.00 | 1460523.67765 | 449832.09433 |
| 773 | 1959.31 | 108.02 | 12.00 | 14.00 | 1460522.47590 | 449831.49240 |
| 774 | 1994.02 | 102.05 | 24.01 | 14.01 | 1460520.52828 | 449830.48831 |
| 775 | 2057.53 | 120.03 | 18.00 | 15.00 | 1460518.66874 | 449829.67700 |
| 776 | 2074.33 | 111.02 | 27.00 | 11.00 | 1460516.89323 | 449828.73209 |
| 777 | 2034.63 | 114.04 | 19.01 | 11.00 | 1460514.89384 | 449828.01505 |
| 778 | 2036.14 | 90.05 | 29.02 | 8.00 | 1460512.98039 | 449827.26551 |
| 780 | 1971.30 | 116.08 | 20.01 | 7.00 | 1460509.25396 | 449825.56830 |
| 781 | 2051.25 | 102.06 | 14.01 | 9.01 | 1460507.33051 | 449824.91093 |
| 783 | 2170.54 | 120.09 | 15.01 | 16.01 | 1460503.93559 | 449822.77771 |
| 784 | 2135.45 | 105.02 | 15.00 | 19.00 | 1460502.40791 | 449821.56479 |
| 786 | 2023.23 | 132.08 | 16.01 | 11.01 | 1460501.12171 | 449820.71589 |
| 787 | 2131.09 | 122.06 | 13.01 | 15.01 | 1460502.26846 | 449821.39347 |
| 788 | 2081.96 | 102.05 | 24.01 | 15.01 | 1460504.01275 | 449823.02816 |
| 789 | 2048.74 | 112.04 | 18.01 | 14.01 | 1460505.95178 | 449824.53882 |
| 790 | 2040.24 | 105.06 | 15.01 | 14.01 | 1460507.87027 | 449826.02655 |
| 792 | 1993.42 | 105.02 | 11.00 | 11.00 | 1460511.78598 | 449828.72157 |
| 793 | 2008.62 | 101.03 | 16.00 | 12.00 | 1460513.68718 | 449829.89661 |
| 794 | 2009.62 | 106.03 | 20.01 | 9.00 | 1460515.32442 | 449830.79715 |
| 795 | 1918.40 | 107.02 | 30.01 | 14.00 | 1460517.00701 | 449831.59737 |
| 796 | 2011.72 | 121.04 | 15.01 | 15.01 | 1460518.60448 | 449832.50848 |
| 797 | 1985.01 | 111.06 | 20.01 | 14.01 | 1460520.28472 | 449833.42209 |
| 798 | 2016.52 | 99.03 | 16.00 | 13.00 | 1460521.96088 | 449834.27048 |
| 800 | 1894.49 | 90.02 | 20.01 | 12.00 | 1460525.30075 | 449836.10711 |
| 801 | 2002.42 | 108.02 | 19.00 | 10.00 | 1460526.88192 | 449837.00112 |
| 802 | 1951.80 | 107.04 | 16.01 | 12.00 | 1460528.57224 | 449837.81402 |
| 803 | 1990.72 | 121.04 | 17.01 | 13.00 | 1460530.20464 | 449838.64526 |
| 804 | 1951.51 | 107.03 | 9.00 | 19.00 | 1460531.89457 | 449839.50976 |
| 805 | 2063.95 | 107.05 | 23.01 | 8.00 | 1460533.54758 | 449840.32452 |
| 806 | 2110.23 | 120.01 | 18.00 | 12.00 | 1460535.14017 | 449841.17964 |
| 807 | 2114.65 | 110.03 | 28.01 | 13.00 | 1460536.74595 | 449841.92670 |
| 808 | 2167.11 | 126.06 | 21.01 | 13.01 | 1460538.34588 | 449842.67510 |
| 809 | 2171.22 | 116.06 | 29.02 | 7.00 | 1460539.93437 | 449843.28271 |
| 811 | 2126.77 | 111.04 | 25.01 | 11.00 | 1460543.20665 | 449844.35216 |
| 812 | 2025.53 | 99.03 | 25.01 | 13.00 | 1460545.05042 | 449844.81091 |
| 813 | 1987.51 | 119.03 | 13.00 | 15.00 | 1460546.89024 | 449844.81438 |
| 814 | 1989.82 | 108.04 | 20.01 | 7.00 | 1460548.69043 | 449844.81832 |
| 815 | 2002.42 | 127.03 | 18.00 | 14.00 | 1460550.22339 | 449844.65391 |
| 816 | 2006.02 | 114.06 | 18.01 | 14.01 | 1460550.78196 | 449844.37450 |
| 817 | 1994.82 | 106.04 | 16.01 | 6.00 | 1460550.36190 | 449844.49487 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 819 | 2068.85 | 134.05 | 26.01 | 12.00 | 1460546.67384 | 449845.56126 |
| 820 | 2085.86 | 114.05 | 23.01 | 14.01 | 1460544.60853 | 449845.89491 |
| 821 | 2245.70 | 112.03 | 18.01 | 16.00 | 1460542.71409 | 449846.53022 |
| 822 | 2177.00 | 123.06 | 26.01 | 16.01 | 1460540.87612 | 449847.24196 |
| 823 | 2148.10 | 114.06 | 19.01 | 14.01 | 1460538.99362 | 449847.84701 |
| 824 | 2149.56 | 105.03 | 23.01 | 9.00 | 1460537.20665 | 449848.71192 |
| 825 | 2189.57 | 105.03 | 13.00 | 16.00 | 1460535.59764 | 449849.70843 |
| 826 | 2173.89 | 119.05 | 15.01 | 14.01 | 1460533.96751 | 449850.68071 |
| 827 | 2106.07 | 103.05 | 17.01 | 16.01 | 1460532.76651 | 449851.79310 |
| 828 | 2054.74 | 130.05 | 13.00 | 8.00 | 1460532.11055 | 449852.48323 |
| 829 | 2163.32 | 118.07 | 20.01 | 12.01 | 1460531.97747 | 449852.60247 |
| 832 | 2191.01 | 106.05 | 21.01 | 12.01 | 1460536.19071 | 449848.41636 |
| 833 | 2169.89 | 113.05 | 21.01 | 18.01 | 1460537.47430 | 449847.17555 |
| 834 | 2170.45 | 121.03 | 22.00 | 8.00 | 1460538.61396 | 449845.79848 |
| 835 | 2062.64 | 116.04 | 23.01 | 14.00 | 1460539.74996 | 449844.29070 |
| 836 | 0.00 | 0.00 | 0.00 | 0.00 | 1460540.83551 | 449842.88922 |
| 837 | 2061.95 | 109.05 | 30.01 | 12.01 | 1460541.74096 | 449841.25447 |
| 838 | 1942.70 | 104.04 | 24.01 | 15.01 | 1460542.56972 | 449839.81852 |
| 839 | 1914.79 | 100.04 | 22.01 | 10.00 | 1460543.73031 | 449838.16292 |
| 840 | 1880.68 | 85.03 | 14.01 | 9.00 | 1460544.33333 | 449836.64030 |
| 841 | 1881.77 | 100.04 | 15.01 | 13.01 | 1460545.26845 | 449834.95871 |
| 842 | 1894.06 | 119.07 | 14.01 | 7.00 | 1460546.11620 | 449833.57339 |
| 844 | 2004.12 | 109.06 | 16.01 | 13.01 | 1460547.88213 | 449830.58689 |
| 845 | 1880.39 | 96.02 | 17.00 | 12.00 | 1460548.94614 | 449829.05477 |
| 846 | 1945.89 | 112.05 | 13.01 | 13.01 | 1460549.74589 | 449827.38448 |
| 847 | 1939.09 | 97.05 | 20.01 | 13.01 | 1460550.62177 | 449825.95539 |
| 848 | 1885.49 | 97.03 | 17.00 | 18.00 | 1460551.38073 | 449824.60172 |
| 849 | 1856.67 | 103.04 | 15.01 | 12.00 | 1460552.32690 | 449822.98626 |
| 850 | 1872.58 | 108.03 | 15.00 | 10.00 | 1460553.02229 | 449821.68453 |
| 851 | 1911.69 | 89.03 | 20.01 | 12.00 | 1460553.78851 | 449820.39211 |
| 852 | 1850.39 | 81.02 | 19.00 | 15.00 | 1460554.40295 | 449819.01172 |
| 853 | 1954.31 | 93.01 | 21.00 | 9.00 | 1460555.47672 | 449817.81301 |
| 854 | 2067.95 | 114.05 | 19.01 | 12.01 | 1460556.08132 | 449816.20800 |
| 855 | 1984.42 | 121.03 | 17.00 | 16.00 | 1460557.03916 | 449814.92113 |
| 856 | 1923.27 | 121.08 | 16.01 | 17.01 | 1460557.93098 | 449813.61827 |
| 857 | 1963.61 | 100.03 | 15.00 | 13.00 | 1460558.54355 | 449812.39728 |
| 858 | 1972.20 | 101.06 | 21.01 | 9.01 | 1460558.87539 | 449811.89645 |
| 859 | 2022.03 | 122.06 | 17.01 | 11.01 | 1460559.14278 | 449811.30770 |
| 860 | 1961.31 | 95.02 | 16.00 | 13.00 | 1460560.11211 | 449809.66028 |
| 861 | 1918.31 | 109.02 | 17.00 | 13.00 | 1460561.16438 | 449808.10192 |
| 863 | 1904.68 | 90.03 | 18.01 | 8.00 | 1460562.67602 | 449805.01437 |
| 864 | 1992.72 | 107.04 | 23.01 | 8.00 | 1460563.53773 | 449803.99107 |
| 865 | 2031.83 | 113.05 | 18.01 | 15.01 | 1460564.17865 | 449802.73862 |
| 868 | 2059.43 | 101.02 | 17.00 | 11.00 | 1460566.42351 | 449798.93142 |
| 869 | 2136.98 | 122.06 | 20.01 | 7.00 | 1460567.06746 | 449797.75850 |
| 870 | 2156.21 | 125.07 | 19.01 | 14.01 | 1460567.66390 | 449796.44245 |
| 871 | 2259.15 | 116.06 | 22.01 | 11.01 | 1460568.38890 | 449795.30527 |
| 872 | 2241.69 | 117.04 | 29.01 | 14.00 | 1460569.15713 | 449794.20603 |
| 873 | 2179.00 | 133.06 | 19.01 | 9.00 | 1460569.93195 | 449792.85900 |
| 874 | 2088.06 | 93.05 | 14.01 | 12.01 | 1460570.47446 | 449791.57221 |
| 875 | 2180.57 | 132.03 | 26.01 | 10.00 | 1460571.06037 | 449790.53753 |
| 876 | 2233.69 | 128.04 | 19.01 | 19.01 | 1460571.82454 | 449789.20036 |
| 877 | 2189.57 | 117.03 | 19.00 | 7.00 | 1460572.50943 | 449787.64728 |
| 878 | 2196.68 | 110.03 | 20.01 | 14.00 | 1460572.67815 | 449785.89066 |
| 881 | 2245.92 | 113.05 | 28.01 | 13.01 | 1460572.79867 | 449781.47460 |
| 882 | 2250.37 | 135.08 | 20.01 | 8.00 | 1460572.81655 | 449781.42885 |
| 883 | 2243.03 | 106.05 | 15.01 | 16.01 | 1460572.81544 | 449781.41040 |
| 884 | 2196.90 | 122.05 | 16.01 | 17.01 | 1460572.79994 | 449781.39933 |
| 885 | 2211.57 | 111.03 | 20.01 | 13.00 | 1460572.80250 | 449781.39853 |
| 886 | 2309.48 | 117.02 | 16.00 | 15.00 | 1460572.80648 | 449781.38820 |
| 887 | 2292.05 | 117.05 | 14.01 | 13.01 | 1460572.80647 | 449781.37266 |
| 1 | 2118.65 | 114.04 | 16.00 | 13.00 | 1460583.67170 | 449783.90362 |
| 2 | 2001.12 | 94.05 | 18.01 | 12.01 | 1460583.67170 | 449783.90362 |
| 3 | 2099.65 | 105.03 | 20.01 | 6.00 | 1460583.69414 | 449783.89587 |
| 4 | 2000.02 | 96.05 | 27.01 | 11.01 | 1460583.70775 | 449783.88876 |

## Pile 33, Pad 31

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 5 | 2156.99 | 119.05 | 18.01 | 12.01 | 1460583.70653 | 449783.85552 |
| 7 | 2082.33 | 107.02 | 14.00 | 12.00 | 1460583.70505 | 449783.84314 |
| 10 | 2007.52 | 76.02 | 14.00 | 17.00 | 1460583.70642 | 449783.85229 |
| 11 | 2129.66 | 107.03 | 23.01 | 12.00 | 1460583.70479 | 449783.84267 |
| 12 | 2077.64 | 117.04 | 18.01 | 5.00 | 1460583.71181 | 449783.83888 |
| 13 | 2054.63 | 102.03 | 27.01 | 8.00 | 1460583.70576 | 449783.84020 |
| 14 | 2059.53 | 119.03 | 15.00 | 9.00 | 1460583.70488 | 449783.84646 |
| 15 | 2076.85 | 105.04 | 22.01 | 9.00 | 1460583.70488 | 449783.84646 |
| 16 | 2052.74 | 106.04 | 19.01 | 9.00 | 1460583.70590 | 449783.85349 |
| 17 | 2083.64 | 105.03 | 17.01 | 10.00 | 1460583.71074 | 449783.84470 |
| 18 | 2008.72 | 106.04 | 21.01 | 13.00 | 1460583.70385 | 449783.84327 |
| 19 | 2061.43 | 120.03 | 18.00 | 15.00 | 1460583.69232 | 449783.83317 |
| 20 | 2087.75 | 113.04 | 10.00 | 14.01 | 1460583.70733 | 449783.85327 |
| 21 | 2087.44 | 116.02 | 15.00 | 11.00 | 1460583.70519 | 449783.84318 |
| 24 | 2005.42 | 80.02 | 15.00 | 8.00 | 1460583.69656 | 449783.86156 |
| 25 | 2049.84 | 120.05 | 18.01 | 12.00 | 1460583.05761 | 449783.38578 |
| 26 | 2055.94 | 97.04 | 20.01 | 17.01 | 1460582.05290 | 449782.78534 |
| 27 | 2147.09 | 93.05 | 14.01 | 7.00 | 1460582.01154 | 449782.73844 |
| 28 | 2115.34 | 116.02 | 24.00 | 18.00 | 1460582.06056 | 449782.78421 |
| 29 | 2131.08 | 109.06 | 24.01 | 19.01 | 1460582.06056 | 449782.78421 |
| 30 | 2013.82 | 110.05 | 12.00 | 9.00 | 1460581.10064 | 449782.19299 |
| 32 | 2080.54 | 83.02 | 20.01 | 10.00 | 1460579.53425 | 449781.40484 |
| 33 | 2023.63 | 105.03 | 13.00 | 13.00 | 1460578.61895 | 449780.91827 |
| 34 | 2086.85 | 90.04 | 13.01 | 17.01 | 1460577.42445 | 449780.28163 |
| 35 | 2166.56 | 104.03 | 19.00 | 10.00 | 1460577.42445 | 449780.28163 |
| 36 | 1989.91 | 107.05 | 17.01 | 14.01 | 1460575.39378 | 449779.05676 |
| 37 | 1963.41 | 103.02 | 15.00 | 9.00 | 1460574.96941 | 449778.82318 |
| 38 | 2085.33 | 120.02 | 28.00 | 17.00 | 1460573.95027 | 449778.25148 |
| 39 | 2121.44 | 135.03 | 25.01 | 9.00 | 1460573.09690 | 449777.79615 |
| 40 | 2082.85 | 119.05 | 10.00 | 17.01 | 1460573.09690 | 449777.79615 |
| 41 | 2169.67 | 107.03 | 26.01 | 9.00 | 1460570.98690 | 449776.73898 |
| 42 | 2075.43 | 113.02 | 16.00 | 17.00 | 1460570.18282 | 449776.29019 |
| 43 | 2227.80 | 138.05 | 13.00 | 14.01 | 1460570.18282 | 449776.29019 |
| 44 | 2137.88 | 115.05 | 15.01 | 11.00 | 1460568.89117 | 449775.61785 |
| 45 | 2115.76 | 112.04 | 21.01 | 16.01 | 1460568.12006 | 449775.20219 |
| 46 | 2162.78 | 120.04 | 20.01 | 13.00 | 1460566.91884 | 449774.62993 |
| 47 | 2140.98 | 120.06 | 15.01 | 13.01 | 1460565.53484 | 449773.68504 |
| 48 | 2251.37 | 132.08 | 21.01 | 19.01 | 1460564.16289 | 449772.82269 |
| 49 | 2163.89 | 101.04 | 19.01 | 20.01 | 1460564.16289 | 449772.82269 |
| 50 | 2150.20 | 108.06 | 11.01 | 8.00 | 1460561.40944 | 449771.14425 |
| 51 | 2119.44 | 103.02 | 17.00 | 15.00 | 1460561.40944 | 449771.14425 |
| 52 | 2146.55 | 106.03 | 16.00 | 7.00 | 1460558.66715 | 449769.37277 |
| 53 | 2171.67 | 112.03 | 18.01 | 8.00 | 1460557.32882 | 449768.56613 |
| 54 | 2196.79 | 114.04 | 22.01 | 10.00 | 1460556.08862 | 449767.65287 |
| 55 | 2138.66 | 119.04 | 20.01 | 12.00 | 1460554.81209 | 449766.80233 |
| 56 | 2070.54 | 102.03 | 18.00 | 12.00 | 1460553.57745 | 449766.05333 |
| 57 | 2204.01 | 119.05 | 18.01 | 18.01 | 1460552.34815 | 449765.19999 |
| 58 | 2122.87 | 115.05 | 22.01 | 11.00 | 1460551.02488 | 449764.37116 |
| 59 | 2078.12 | 107.01 | 25.00 | 7.00 | 1460551.02488 | 449764.37116 |
| 60 | 2163.24 | 95.01 | 22.00 | 20.00 | 1460547.94757 | 449763.27064 |
| 61 | 2110.55 | 97.03 | 21.01 | 10.00 | 1460546.91166 | 449763.09455 |
| 62 | 2127.98 | 101.05 | 23.01 | 14.01 | 1460547.18998 | 449763.13765 |
| 63 | 2195.01 | 119.05 | 19.01 | 11.01 | 1460547.34956 | 449763.16041 |
| 64 | 2131.77 | 117.04 | 22.01 | 13.00 | 1460549.19571 | 449763.20937 |
| 65 | 2155.21 | 115.06 | 16.01 | 14.01 | 1460549.19571 | 449763.20937 |
| 66 | 2145.63 | 105.08 | 20.02 | 18.01 | 1460553.59093 | 449762.78600 |
| 69 | 2177.56 | 98.03 | 29.01 | 17.00 | 1460559.19208 | 449761.67002 |
| 70 | 2195.01 | 117.05 | 15.01 | 12.01 | 1460559.45172 | 449761.58219 |
| 71 | 2120.87 | 106.04 | 20.01 | 14.01 | 1460558.97348 | 449761.72495 |
| 73 | 2079.27 | 107.07 | 15.01 | 13.01 | 1460555.63692 | 449762.05842 |
| 74 | 2180.89 | 123.05 | 21.01 | 19.01 | 1460554.10751 | 449763.01413 |
| 75 | 2240.81 | 118.04 | 25.01 | 12.00 | 1460552.49185 | 449764.13972 |
| 77 | 2087.54 | 104.03 | 14.00 | 15.00 | 1460550.10718 | 449766.61250 |
| 78 | 2112.87 | 99.04 | 15.01 | 9.00 | 1460549.07603 | 449768.05080 |
| 79 | 2152.56 | 87.02 | 20.01 | 13.00 | 1460548.05708 | 449769.59267 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 80 | 2150.56 | 124.03 | 16.00 | 8.00 | 1460548.05708 | 449769.59267 |
| 81 | 2226.91 | 112.05 | 24.01 | 15.01 | 1460546.36065 | 449773.01183 |
| 82 | 2222.69 | 107.03 | 18.01 | 14.00 | 1460545.59699 | 449774.78813 |
| 83 | 2080.75 | 100.04 | 16.01 | 9.00 | 1460544.62951 | 449776.39813 |
| 84 | 2061.84 | 109.04 | 17.01 | 10.00 | 1460544.62951 | 449776.39813 |
| 85 | 1995.52 | 96.02 | 16.00 | 13.00 | 1460543.09769 | 449780.14386 |
| 87 | 2092.07 | 102.05 | 16.01 | 18.01 | 1460541.42341 | 449783.77980 |
| 88 | 1991.11 | 90.05 | 18.01 | 7.00 | 1460540.56692 | 449785.58787 |
| 89 | 1934.69 | 81.03 | 15.01 | 11.00 | 1460539.98257 | 449787.32150 |
| 90 | 2013.82 | 111.05 | 21.01 | 12.00 | 1460539.00434 | 449789.19235 |
| 91 | 2031.73 | 106.04 | 19.01 | 8.00 | 1460538.38512 | 449790.89769 |
| 92 | 1909.97 | 81.04 | 15.01 | 9.00 | 1460537.53536 | 449792.68742 |
| 93 | 1962.19 | 112.07 | 16.01 | 16.01 | 1460536.56242 | 449794.50583 |
| 95 | 1923.59 | 108.03 | 20.01 | 4.00 | 1460535.02583 | 449797.90363 |
| 97 | 1932.89 | 108.05 | 13.01 | 13.01 | 1460533.35495 | 449801.27895 |
| 99 | 1891.78 | 89.04 | 17.01 | 8.00 | 1460531.68266 | 449804.61600 |
| 100 | 1801.65 | 100.04 | 14.01 | 7.00 | 1460530.67971 | 449806.35812 |
| 102 | 1875.77 | 97.04 | 15.01 | 9.00 | 1460528.84896 | 449809.94392 |
| 103 | 1796.74 | 91.04 | 16.01 | 8.00 | 1460528.84896 | 449809.94392 |
| 104 | 1970.00 | 111.06 | 12.01 | 12.01 | 1460526.80258 | 449813.53235 |
| 105 | 2031.73 | 121.04 | 13.00 | 13.00 | 1460525.77441 | 449815.35738 |
| 106 | 2145.88 | 114.05 | 17.01 | 10.00 | 1460524.69778 | 449817.10006 |
| 107 | 1930.69 | 95.03 | 19.01 | 12.00 | 1460523.85817 | 449818.94406 |
| 108 | 1913.50 | 104.03 | 22.01 | 16.00 | 1460522.91293 | 449820.76554 |
| 109 | 1919.88 | 108.05 | 21.01 | 11.01 | 1460522.91293 | 449820.76554 |
| 110 | 1983.91 | 99.05 | 13.01 | 8.00 | 1460521.61525 | 449824.44137 |
| 111 | 1943.60 | 103.03 | 14.00 | 12.00 | 1460521.61525 | 449824.44137 |
| 112 | 1949.60 | 91.03 | 15.00 | 3.00 | 1460521.43291 | 449825.92816 |
| 113 | 1920.30 | 106.02 | 13.00 | 11.00 | 1460521.44210 | 449825.62842 |
| 114 | 1888.06 | 93.05 | 15.01 | 13.01 | 1460521.44422 | 449825.61084 |
| 115 | 1997.22 | 121.01 | 17.00 | 10.00 | 1460521.37500 | 449823.88167 |
| 116 | 2005.42 | 104.02 | 12.00 | 9.00 | 1460521.36533 | 449822.60691 |
| 117 | 1996.72 | 93.03 | 16.01 | 4.00 | 1460521.29097 | 449821.13420 |
| 118 | 1907.59 | 87.03 | 18.01 | 12.00 | 1460521.12926 | 449819.71730 |
| 119 | 1999.92 | 114.05 | 17.01 | 9.00 | 1460521.12926 | 449819.71730 |
| 121 | 1970.81 | 104.04 | 23.01 | 7.00 | 1460520.64170 | 449815.15371 |
| 122 | 1877.20 | 93.01 | 16.00 | 9.00 | 1460520.37209 | 449813.60358 |
| 123 | 1924.40 | 97.02 | 20.00 | 12.00 | 1460520.37209 | 449813.60358 |
| 124 | 1769.37 | 99.02 | 13.00 | 9.00 | 1460519.89623 | 449810.39910 |
| 125 | 1823.47 | 94.02 | 18.00 | 7.00 | 1460519.71245 | 449809.12499 |
| 126 | 1722.62 | 102.04 | 16.01 | 5.00 | 1460519.71245 | 449809.12499 |
| 127 | 1786.82 | 102.05 | 23.01 | 12.01 | 1460519.74378 | 449809.13415 |
| 128 | 1864.67 | 92.03 | 13.00 | 13.00 | 1460520.00920 | 449810.76442 |
| 129 | 1902.40 | 83.02 | 23.00 | 13.00 | 1460520.20552 | 449812.57899 |
| 130 | 1976.61 | 107.03 | 24.01 | 7.00 | 1460520.45778 | 449814.46411 |
| 131 | 2020.62 | 91.03 | 19.01 | 17.01 | 1460520.80796 | 449816.47814 |
| 132 | 1928.50 | 97.03 | 19.00 | 11.00 | 1460521.30754 | 449818.43160 |
| 133 | 2032.83 | 113.05 | 15.01 | 12.00 | 1460522.12182 | 449820.16268 |
| 134 | 1914.50 | 96.02 | 22.01 | 15.00 | 1460523.32505 | 449821.82522 |
| 135 | 1900.78 | 106.04 | 23.01 | 12.00 | 1460524.70586 | 449823.26376 |
| 137 | 1742.45 | 87.02 | 13.00 | 10.00 | 1460528.07292 | 449825.60009 |
| 139 | 1853.66 | 111.04 | 10.00 | 9.00 | 1460531.61847 | 449827.60640 |
| 140 | 1835.94 | 99.05 | 18.01 | 14.01 | 1460533.41711 | 449828.58740 |
| 141 | 1888.58 | 96.03 | 20.01 | 12.00 | 1460535.18021 | 449829.59074 |
| 142 | 1832.29 | 101.02 | 5.00 | 8.00 | 1460536.99649 | 449830.56312 |
| 143 | 1895.87 | 94.04 | 17.01 | 16.01 | 1460538.79613 | 449831.53110 |
| 145 | 1965.61 | 122.04 | 20.01 | 15.00 | 1460542.25994 | 449833.44613 |
| 147 | 1873.24 | 98.06 | 22.01 | 26.02 | 1460546.00529 | 449834.56922 |
| 148 | 1957.61 | 95.03 | 20.01 | 13.00 | 1460548.02161 | 449834.61267 |
| 149 | 1911.30 | 106.02 | 16.00 | 7.00 | 1460549.72784 | 449834.40164 |
| 150 | 1929.60 | 102.03 | 9.00 | 11.00 | 1460550.98070 | 449834.14221 |
| 151 | 1886.58 | 101.03 | 16.00 | 10.00 | 1460551.03563 | 449834.10850 |
| 152 | 1954.80 | 103.04 | 21.01 | 9.00 | 1460550.18729 | 449834.38215 |
| 153 | 1996.82 | 93.04 | 12.00 | 12.00 | 1460548.34971 | 449835.10263 |
| 154 | 1935.99 | 114.06 | 15.01 | 12.01 | 1460546.28291 | 449836.11712 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 155 | 1979.01 | 113.06 | 16.01 | 15.01 | 1460546.28291 | 449836.11712 |
| 156 | 1938.79 | 99.04 | 15.01 | 12.00 | 1460542.41324 | 449838.02208 |
| 157 | 2091.54 | 95.02 | 17.00 | 20.01 | 1460540.69576 | 449839.06495 |
| 158 | 2136.98 | 108.05 | 20.01 | 15.01 | 1460539.68898 | 449839.76739 |
| 159 | 2086.27 | 112.07 | 26.02 | 11.01 | 1460539.68898 | 449839.76739 |
| 160 | 2139.66 | 107.03 | 17.01 | 11.00 | 1460539.98553 | 449839.62340 |
| 161 | 2065.43 | 116.02 | 20.00 | 11.00 | 1460539.98553 | 449839.62340 |
| 162 | 2059.53 | 132.03 | 21.01 | 12.00 | 1460543.05846 | 449837.59961 |
| 163 | 1941.80 | 83.03 | 23.01 | 7.00 | 1460544.69274 | 449836.32248 |
| 164 | 1910.40 | 100.02 | 17.00 | 8.00 | 1460546.06613 | 449834.56341 |
| 165 | 2010.62 | 108.03 | 12.00 | 9.00 | 1460546.06613 | 449834.56341 |
| 166 | 1934.50 | 104.03 | 27.01 | 6.00 | 1460548.54093 | 449830.72371 |
| 167 | 1940.31 | 95.02 | 11.00 | 7.00 | 1460549.67572 | 449828.71142 |
| 168 | 1904.97 | 85.04 | 19.01 | 12.01 | 1460550.70458 | 449826.42791 |
| 169 | 1881.49 | 117.03 | 16.00 | 12.00 | 1460551.95904 | 449824.67991 |
| 170 | 1903.68 | 87.03 | 14.01 | 15.01 | 1460553.13398 | 449822.89058 |
| 171 | 1861.67 | 106.04 | 16.01 | 11.00 | 1460554.18186 | 449821.14614 |
| 172 | 1782.46 | 71.02 | 13.00 | 9.00 | 1460555.23901 | 449819.47258 |
| 173 | 1887.49 | 97.03 | 14.00 | 13.00 | 1460556.17852 | 449817.72712 |
| 174 | 1926.50 | 114.03 | 13.00 | 13.00 | 1460557.37900 | 449815.89171 |
| 175 | 1876.86 | 105.05 | 17.01 | 5.00 | 1460558.27781 | 449814.08476 |
| 176 | 1786.55 | 87.03 | 17.01 | 14.00 | 1460559.20761 | 449812.58896 |
| 177 | 1793.55 | 93.03 | 15.00 | 14.00 | 1460560.35560 | 449810.88705 |
| 178 | 1887.49 | 83.02 | 19.00 | 12.00 | 1460561.06364 | 449809.14645 |
| 179 | 1887.77 | 83.03 | 19.01 | 13.01 | 1460561.06364 | 449809.14645 |
| 180 | 1825.84 | 94.04 | 22.01 | 7.00 | 1460563.18045 | 449806.03225 |
| 181 | 1821.38 | 82.02 | 13.00 | 9.00 | 1460564.17691 | 449804.14899 |
| 183 | 1892.68 | 105.04 | 16.01 | 13.00 | 1460566.33824 | 449800.60270 |
| 184 | 1889.87 | 96.04 | 17.01 | 7.00 | 1460567.50191 | 449798.80594 |
| 185 | 1876.86 | 92.04 | 17.01 | 7.00 | 1460568.48942 | 449796.80600 |
| 186 | 1933.31 | 103.02 | 23.00 | 17.00 | 1460569.43504 | 449795.03180 |
| 187 | 1908.49 | 88.02 | 17.00 | 8.00 | 1460570.32290 | 449793.18659 |
| 188 | 1913.50 | 106.03 | 13.00 | 7.00 | 1460571.29921 | 449791.36829 |
| 189 | 2108.07 | 116.06 | 22.01 | 14.01 | 1460572.12110 | 449789.61344 |
| 190 | 2101.49 | 97.07 | 20.01 | 13.01 | 1460572.89786 | 449787.70747 |
| 191 | 2060.84 | 105.04 | 22.01 | 11.00 | 1460573.66068 | 449785.59330 |
| 192 | 2071.43 | 121.03 | 20.00 | 8.00 | 1460574.23404 | 449783.62870 |
| 193 | 2117.19 | 107.06 | 17.01 | 12.01 | 1460574.55264 | 449782.05182 |
| 194 | 2199.90 | 123.05 | 14.01 | 13.01 | 1460574.53169 | 449781.99887 |
| 195 | 2087.44 | 114.02 | 17.00 | 14.00 | 1460574.53468 | 449783.09517 |
| 196 | 2138.77 | 92.03 | 22.01 | 10.00 | 1460574.30165 | 449785.49095 |
| 197 | 2068.85 | 117.05 | 23.01 | 8.00 | 1460574.43972 | 449787.93940 |
| 198 | 2135.77 | 112.04 | 23.01 | 15.01 | 1460574.75591 | 449790.42367 |
| 199 | 2113.44 | 122.03 | 13.00 | 14.00 | 1460575.15873 | 449792.91503 |
| 201 | 2005.52 | 111.03 | 19.00 | 11.00 | 1460575.82997 | 449797.16933 |
| 202 | 2077.06 | 107.05 | 18.01 | 18.01 | 1460575.80445 | 449796.65720 |
| 203 | 1978.71 | 96.03 | 20.01 | 14.01 | 1460575.80445 | 449796.65720 |
| 205 | 2051.64 | 104.03 | 19.01 | 12.00 | 1460575.45887 | 449791.73934 |
| 211 | 2107.76 | 117.04 | 16.01 | 8.00 | 1460572.25397 | 449781.52947 |
| 212 | 2078.64 | 114.04 | 22.01 | 11.00 | 1460570.80548 | 449780.32070 |
| 213 | 2232.69 | 116.04 | 15.00 | 12.00 | 1460570.80548 | 449780.32070 |
| 214 | 2111.65 | 105.03 | 21.01 | 20.01 | 1460568.13141 | 449778.10515 |
| 215 | 2212.69 | 104.03 | 15.00 | 22.01 | 1460568.13141 | 449778.10515 |
| 216 | 2204.45 | 102.07 | 16.01 | 10.01 | 1460565.75523 | 449776.23145 |
| 217 | 2167.89 | 123.05 | 14.01 | 12.00 | 1460564.54785 | 449775.31468 |
| 218 | 2170.78 | 117.04 | 15.01 | 11.00 | 1460563.33974 | 449774.42799 |
| 219 | 2258.93 | 120.05 | 24.01 | 11.00 | 1460562.14622 | 449773.71816 |
| 220 | 2151.20 | 112.06 | 18.01 | 9.01 | 1460561.22709 | 449773.01927 |
| 221 | 2168.78 | 123.04 | 26.01 | 6.00 | 1460560.33171 | 449772.46115 |
| 222 | 2198.12 | 104.05 | 21.01 | 14.01 | 1460559.33950 | 449771.74529 |
| 223 | 2217.24 | 109.06 | 27.02 | 15.01 | 1460558.49423 | 449771.14782 |
| 224 | 2192.68 | 115.04 | 20.01 | 17.01 | 1460557.50428 | 449770.50390 |
| 225 | 2175.78 | 120.04 | 19.01 | 19.01 | 1460556.13771 | 449769.72220 |
| 226 | 2189.79 | 109.04 | 28.01 | 23.01 | 1460554.39509 | 449768.87859 |
| 227 | 2203.68 | 122.04 | 17.01 | 9.00 | 1460554.39509 | 449768.87859 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 228 | 2195.90 | 101.04 | 14.01 | 6.00 | 1460553.50982 | 449768.59910 |
| 229 | 2255.04 | 124.06 | 15.01 | 14.01 | 1460555.74235 | 449769.00758 |
| 230 | 2223.80 | 104.04 | 20.01 | 11.00 | 1460558.17934 | 449769.39588 |
| 231 | 2117.18 | 100.06 | 22.01 | 10.01 | 1460560.29250 | 449769.73865 |
| 232 | 2220.91 | 107.04 | 26.01 | 12.00 | 1460562.14167 | 449769.88835 |
| 233 | 2147.66 | 120.04 | 23.01 | 16.00 | 1460561.65390 | 449769.85960 |
| 234 | 2136.88 | 107.04 | 20.01 | 8.00 | 1460560.91446 | 449769.75992 |
| 235 | 2186.78 | 124.04 | 8.00 | 14.01 | 1460559.88163 | 449769.45341 |
| 236 | 2157.67 | 112.03 | 4.00 | 18.01 | 1460557.78113 | 449769.37049 |
| 237 | 2172.56 | 110.03 | 22.01 | 14.00 | 1460555.78350 | 449769.74132 |
| 238 | 2137.55 | 104.03 | 17.00 | 13.00 | 1460553.89118 | 449770.59822 |
| 239 | 2079.33 | 107.02 | 24.00 | 14.00 | 1460553.89118 | 449770.59822 |
| 240 | 2157.10 | 93.05 | 12.01 | 12.01 | 1460551.00546 | 449772.87674 |
| 241 | 2183.79 | 114.04 | 23.01 | 11.00 | 1460551.00546 | 449772.87674 |
| 242 | 2153.67 | 105.03 | 17.01 | 8.00 | 1460549.16970 | 449776.38693 |
| 243 | 2207.79 | 91.03 | 15.01 | 15.01 | 1460548.50086 | 449777.94293 |
| 244 | 2173.89 | 108.04 | 16.01 | 12.00 | 1460547.73384 | 449779.49060 |
| 245 | 2141.77 | 99.04 | 21.01 | 5.00 | 1460547.73384 | 449779.49060 |
| 246 | 2053.15 | 99.06 | 17.01 | 16.01 | 1460546.15863 | 449782.17710 |
| 247 | 2120.44 | 125.03 | 15.00 | 20.00 | 1460545.74264 | 449783.78565 |
| 248 | 1981.71 | 106.04 | 19.01 | 13.00 | 1460545.12694 | 449785.30626 |
| 249 | 2081.85 | 128.05 | 16.01 | 11.00 | 1460544.25588 | 449786.77823 |
| 250 | 1935.99 | 90.05 | 20.01 | 14.01 | 1460543.80120 | 449788.09353 |
| 251 | 2002.82 | 121.05 | 14.01 | 9.00 | 1460543.80120 | 449788.09353 |
| 252 | 1939.70 | 103.04 | 10.00 | 12.00 | 1460542.43743 | 449791.15162 |
| 253 | 1908.69 | 91.03 | 14.01 | 14.01 | 1460541.63691 | 449792.56253 |
| 254 | 1958.51 | 109.03 | 13.00 | 8.00 | 1460541.18452 | 449794.20965 |
| 255 | 1970.61 | 98.03 | 15.00 | 16.00 | 1460540.37280 | 449795.66828 |
| 256 | 1921.98 | 101.05 | 20.01 | 13.01 | 1460539.51869 | 449796.87934 |
| 257 | 1824.20 | 92.01 | 15.00 | 15.00 | 1460539.51869 | 449796.87934 |
| 258 | 1826.57 | 101.03 | 12.00 | 8.00 | 1460538.47668 | 449799.31650 |
| 259 | 1895.78 | 109.04 | 13.01 | 3.00 | 1460538.47668 | 449799.31650 |
| 261 | 1922.69 | 102.04 | 12.00 | 10.00 | 1460536.49075 | 449802.90896 |
| 262 | 1976.91 | 105.05 | 16.01 | 15.01 | 1460536.49075 | 449802.90896 |
| 264 | 1869.58 | 108.03 | 15.00 | 14.00 | 1460535.31808 | 449805.17909 |
| 265 | 1832.66 | 104.04 | 14.01 | 11.00 | 1460534.48362 | 449806.77633 |
| 266 | 1877.77 | 105.04 | 12.00 | 7.00 | 1460533.68769 | 449808.21703 |
| 267 | 1810.38 | 81.02 | 17.00 | 4.00 | 1460532.96181 | 449809.55277 |
| 268 | 1817.93 | 96.05 | 15.01 | 6.00 | 1460532.25754 | 449810.85464 |
| 269 | 1831.93 | 110.06 | 22.01 | 12.01 | 1460531.54046 | 449812.07922 |
| 270 | 1898.40 | 96.02 | 12.00 | 12.00 | 1460530.98737 | 449813.23854 |
| 271 | 1909.88 | 108.05 | 18.01 | 11.01 | 1460530.24213 | 449814.44482 |
| 272 | 1980.41 | 109.02 | 15.00 | 17.00 | 1460530.24213 | 449814.44482 |
| 273 | 1977.71 | 100.04 | 16.01 | 9.00 | 1460528.82873 | 449817.24481 |
| 274 | 1970.81 | 96.04 | 21.01 | 14.01 | 1460528.13102 | 449818.56047 |
| 275 | 2081.75 | 120.04 | 18.01 | 11.00 | 1460527.47681 | 449820.03919 |
| 277 | 1795.47 | 89.02 | 20.01 | 15.00 | 1460526.15563 | 449823.57684 |
| 278 | 1859.58 | 106.03 | 20.01 | 15.00 | 1460525.95687 | 449825.48075 |
| 279 | 1925.40 | 100.02 | 16.00 | 7.00 | 1460525.86279 | 449827.12221 |
| 280 | 1916.69 | 110.04 | 15.01 | 11.00 | 1460525.89050 | 449826.87517 |
| 281 | 1868.58 | 93.03 | 13.00 | 6.00 | 1460525.68735 | 449825.24677 |
| 282 | 1914.59 | 89.03 | 31.01 | 12.00 | 1460525.32103 | 449823.15747 |
| 283 | 2037.04 | 120.06 | 11.01 | 14.01 | 1460525.32103 | 449823.15747 |
| 284 | 2053.43 | 128.03 | 18.00 | 9.00 | 1460524.33969 | 449818.99317 |
| 285 | 1999.72 | 98.04 | 15.01 | 10.00 | 1460523.90693 | 449816.79555 |
| 287 | 1924.59 | 99.03 | 13.00 | 10.00 | 1460523.04967 | 449813.95584 |
| 288 | 2045.94 | 110.05 | 16.01 | 11.01 | 1460523.00330 | 449813.75313 |
| 289 | 2058.95 | 111.05 | 17.01 | 14.01 | 1460523.48662 | 449815.66966 |
| 290 | 2030.03 | 100.05 | 21.01 | 18.01 | 1460524.07674 | 449817.77554 |
| 291 | 1995.82 | 112.05 | 29.01 | 9.00 | 1460524.72561 | 449819.84645 |
| 292 | 1990.51 | 126.03 | 13.00 | 11.00 | 1460525.81590 | 449821.83861 |
| 293 | 1914.69 | 77.03 | 13.00 | 8.00 | 1460527.33001 | 449823.56547 |
| 294 | 1853.30 | 87.01 | 14.00 | 9.00 | 1460529.09579 | 449825.06671 |
| 295 | 1823.56 | 83.03 | 10.00 | 14.00 | 1460530.96990 | 449826.41925 |
| 296 | 1907.30 | 89.01 | 15.00 | 18.00 | 1460532.98996 | 449827.62175 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 297 | 1876.20 | 90.01 | 18.00 | 7.00 | 1460535.15531 | 449828.73265 |
| 298 | 1757.28 | 83.01 | 20.00 | 9.00 | 1460537.30303 | 449829.84674 |
| 299 | 1817.75 | 99.04 | 17.01 | 8.00 | 1460539.42956 | 449830.91777 |
| 300 | 1926.79 | 111.05 | 15.01 | 13.01 | 1460541.55216 | 449831.95761 |
| 301 | 1950.60 | 94.03 | 15.00 | 10.00 | 1460543.69643 | 449833.01916 |
| 302 | 1978.51 | 97.03 | 17.00 | 9.00 | 1460545.88259 | 449833.94488 |
| 303 | 1992.31 | 103.07 | 25.02 | 12.01 | 1460548.01906 | 449835.06534 |
| 304 | 1957.41 | 105.02 | 16.00 | 7.00 | 1460550.05931 | 449836.10507 |
| 305 | 1934.41 | 89.02 | 19.00 | 10.00 | 1460551.00588 | 449836.44183 |
| 306 | 1914.30 | 115.02 | 16.00 | 14.00 | 1460550.88061 | 449836.40298 |
| 307 | 1897.78 | 99.04 | 15.01 | 12.00 | 1460550.05091 | 449836.08921 |
| 308 | 1958.90 | 101.05 | 13.01 | 15.01 | 1460550.05091 | 449836.08921 |
| 309 | 1978.81 | 98.04 | 20.01 | 15.01 | 1460546.00754 | 449834.88417 |
| 310 | 1932.70 | 104.04 | 13.00 | 13.00 | 1460543.85724 | 449834.62206 |
| 311 | 1981.51 | 96.02 | 20.01 | 10.00 | 1460541.68551 | 449834.42950 |
| 312 | 1883.96 | 113.06 | 16.01 | 13.01 | 1460539.56812 | 449834.54308 |
| 313 | 1994.02 | 92.05 | 17.01 | 9.00 | 1460537.33908 | 449834.89072 |
| 314 | 2073.26 | 104.06 | 18.01 | 11.01 | 1460536.29569 | 449835.12990 |
| 315 | 1978.81 | 108.04 | 19.01 | 11.00 | 1460536.22532 | 449835.13558 |
| 316 | 1933.70 | 108.04 | 22.01 | 12.00 | 1460536.50178 | 449835.15562 |
| 317 | 1872.20 | 96.01 | 17.00 | 12.00 | 1460537.23853 | 449835.08820 |
| 318 | 1907.30 | 82.01 | 12.00 | 18.00 | 1460539.08756 | 449834.70808 |
| 319 | 1894.78 | 97.04 | 18.01 | 13.01 | 1460541.11626 | 449833.99567 |
| 320 | 1913.40 | 106.02 | 20.00 | 12.00 | 1460542.84215 | 449833.08954 |
| 321 | 1874.49 | 99.03 | 13.00 | 6.00 | 1460544.51825 | 449831.91834 |
| 322 | 1906.40 | 107.02 | 25.01 | 10.00 | 1460544.99705 | 449831.13717 |
| 323 | 1870.39 | 109.02 | 13.00 | 16.00 | 1460544.99705 | 449831.13717 |
| 324 | 1934.50 | 103.03 | 10.00 | 9.00 | 1460546.13131 | 449829.66232 |
| 325 | 1864.86 | 90.04 | 11.01 | 9.00 | 1460547.24419 | 449828.38579 |
| 326 | 1881.68 | 87.03 | 17.01 | 9.00 | 1460547.93450 | 449826.88718 |
| 327 | 1885.58 | 94.03 | 20.01 | 9.00 | 1460549.12148 | 449825.43287 |
| 328 | 1824.66 | 73.03 | 18.01 | 7.00 | 1460549.92559 | 449824.27200 |
| 329 | 1968.71 | 115.04 | 17.01 | 8.00 | 1460550.74471 | 449822.75618 |
| 330 | 1945.50 | 110.03 | 10.00 | 15.00 | 1460551.68834 | 449821.21467 |
| 331 | 1982.12 | 116.01 | 20.00 | 13.00 | 1460552.75093 | 449819.67957 |
| 332 | 1930.79 | 103.04 | 7.00 | 17.01 | 1460553.58104 | 449818.23535 |
| 333 | 1898.49 | 105.03 | 14.00 | 9.00 | 1460553.58104 | 449818.23535 |
| 335 | 1980.31 | 89.01 | 14.00 | 16.00 | 1460556.13779 | 449813.90740 |
| 336 | 1938.31 | 93.01 | 21.00 | 11.00 | 1460556.88006 | 449812.47168 |
| 337 | 1874.77 | 87.04 | 11.00 | 12.00 | 1460557.73420 | 449811.45138 |
| 338 | 1898.97 | 105.05 | 15.01 | 16.01 | 1460558.57214 | 449809.75663 |
| 339 | 1902.59 | 77.02 | 17.01 | 6.00 | 1460559.68595 | 449808.02460 |
| 340 | 1860.48 | 80.02 | 19.00 | 12.00 | 1460560.28881 | 449806.62393 |
| 341 | 1854.57 | 109.03 | 18.01 | 9.00 | 1460561.30746 | 449805.25303 |
| 344 | 1883.58 | 103.03 | 18.01 | 18.01 | 1460563.80159 | 449800.83181 |
| 345 | 1848.57 | 82.03 | 17.01 | 12.00 | 1460564.65488 | 449799.38079 |
| 346 | 1924.50 | 104.03 | 12.00 | 5.00 | 1460565.59030 | 449797.59393 |
| 347 | 1959.51 | 93.02 | 21.01 | 11.00 | 1460565.59030 | 449797.59393 |
| 348 | 1829.84 | 87.04 | 10.00 | 12.01 | 1460567.08135 | 449794.78579 |
| 349 | 1978.51 | 90.02 | 24.01 | 6.00 | 1460567.97440 | 449793.53296 |
| 350 | 1989.61 | 102.08 | 18.01 | 19.02 | 1460568.59953 | 449792.12839 |
| 351 | 2105.55 | 109.03 | 14.00 | 16.00 | 1460569.36629 | 449790.64715 |
| 352 | 2048.43 | 109.02 | 17.00 | 14.00 | 1460570.08510 | 449789.60060 |
| 353 | 2153.56 | 117.03 | 18.00 | 12.00 | 1460570.08510 | 449789.60060 |
| 355 | 2199.90 | 120.05 | 21.01 | 16.01 | 1460571.82692 | 449784.88831 |
| 356 | 2224.13 | 110.06 | 14.01 | 9.00 | 1460572.14544 | 449783.14539 |
| 357 | 2082.54 | 102.03 | 25.01 | 17.00 | 1460572.14544 | 449783.14539 |
| 358 | 2059.43 | 104.02 | 13.00 | 10.00 | 1460571.91151 | 449780.41916 |
| 359 | 2121.76 | 103.04 | 17.01 | 8.00 | 1460571.77110 | 449780.03336 |
| 361 | 2083.17 | 114.06 | 12.01 | 12.01 | 1460572.23984 | 449781.49431 |
| 362 | 2152.56 | 112.03 | 15.00 | 12.00 | 1460572.66180 | 449783.08413 |
| 363 | 2114.65 | 118.04 | 14.00 | 12.00 | 1460572.66180 | 449783.08413 |
| 364 | 2226.24 | 113.01 | 16.00 | 7.00 | 1460573.40929 | 449786.43944 |
| 365 | 2146.23 | 101.01 | 17.00 | 13.00 | 1460574.06723 | 449788.34723 |
| 366 | 2118.23 | 98.01 | 14.00 | 16.00 | 1460574.68990 | 449790.00546 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 367 | 2060.64 | 102.03 | 9.00 | 12.00 | 1460575.38048 | 449791.51279 |
| 368 | 2012.82 | 116.05 | 10.00 | 12.00 | 1460575.85468 | 449792.76033 |
| 369 | 2067.43 | 125.03 | 11.00 | 15.00 | 1460576.45002 | 449793.86899 |
| 370 | 2100.86 | 101.04 | 21.01 | 18.01 | 1460576.45002 | 449793.86899 |
| 371 | 2076.75 | 117.04 | 12.00 | 20.01 | 1460576.31369 | 449793.62295 |
| 372 | 2046.63 | 103.03 | 15.00 | 11.00 | 1460575.49564 | 449791.73088 |
| 373 | 2093.17 | 110.06 | 12.01 | 9.01 | 1460574.62459 | 449789.62949 |
| 375 | 2143.88 | 122.05 | 14.01 | 13.01 | 1460572.63320 | 449785.34201 |
| 377 | 2110.76 | 93.03 | 23.01 | 7.00 | 1460569.83730 | 449781.81418 |
| 378 | 2190.24 | 99.01 | 18.00 | 20.00 | 1460569.83730 | 449781.81418 |
| 379 | 2065.33 | 119.02 | 12.00 | 16.00 | 1460566.53256 | 449779.11227 |
| 380 | 2106.86 | 105.04 | 15.01 | 16.01 | 1460564.79732 | 449777.92156 |
| 381 | 2199.57 | 113.03 | 11.00 | 14.00 | 1460563.10168 | 449776.74326 |
| 382 | 2173.00 | 112.05 | 15.01 | 14.01 | 1460561.35615 | 449775.41926 |
| 383 | 2026.63 | 107.03 | 11.00 | 10.00 | 1460559.68684 | 449774.35731 |
| 384 | 2122.40 | 120.08 | 13.01 | 9.01 | 1460557.86220 | 449773.31611 |
| 385 | 2112.76 | 111.04 | 15.01 | 15.01 | 1460555.93282 | 449772.54936 |
| 386 | 2102.65 | 105.03 | 11.00 | 14.00 | 1460553.88754 | 449771.62131 |
| 387 | 2143.56 | 105.03 | 16.00 | 6.00 | 1460551.67511 | 449771.17580 |
| 388 | 2141.77 | 117.04 | 15.01 | 17.01 | 1460549.54051 | 449771.09444 |
| 389 | 2150.20 | 113.06 | 23.01 | 11.01 | 1460548.58814 | 449771.08693 |
| 390 | 2134.87 | 106.04 | 15.01 | 16.01 | 1460548.31731 | 449771.13291 |
| 391 | 2036.94 | 103.05 | 16.01 | 12.01 | 1460549.80850 | 449770.92570 |
| 392 | 2151.56 | 111.03 | 20.01 | 9.00 | 1460551.93164 | 449770.33428 |
| 393 | 2065.95 | 97.04 | 24.01 | 13.01 | 1460551.93164 | 449770.33428 |
| 395 | 2155.78 | 106.04 | 28.01 | 18.01 | 1460558.24993 | 449767.13646 |
| 396 | 2108.97 | 107.05 | 16.01 | 14.01 | 1460559.79176 | 449765.78156 |
| 397 | 2166.45 | 107.02 | 14.00 | 14.00 | 1460561.07863 | 449764.68048 |
| 398 | 2270.36 | 118.02 | 22.00 | 14.00 | 1460561.41406 | 449764.40770 |
| 399 | 2082.85 | 99.04 | 17.01 | 13.01 | 1460560.53036 | 449764.96711 |
| 400 | 2171.67 | 113.04 | 13.00 | 13.00 | 1460558.85825 | 449766.51753 |
| 401 | 2277.70 | 127.04 | 16.00 | 13.00 | 1460558.85825 | 449766.51753 |
| 404 | 2089.75 | 92.03 | 22.01 | 18.01 | 1460553.54667 | 449774.81829 |
| 405 | 2243.03 | 109.05 | 20.01 | 14.01 | 1460553.54667 | 449774.81829 |
| 406 | 2239.03 | 121.06 | 17.01 | 16.01 | 1460551.45198 | 449779.33040 |
| 407 | 2173.89 | 100.04 | 17.01 | 14.01 | 1460550.27478 | 449781.66492 |
| 409 | 2166.67 | 117.04 | 13.00 | 5.00 | 1460548.46245 | 449785.84407 |
| 410 | 2001.72 | 95.03 | 15.01 | 11.00 | 1460547.55019 | 449787.88642 |
| 411 | 1949.99 | 104.05 | 16.01 | 15.01 | 1460546.75549 | 449790.08345 |
| 412 | 1911.30 | 125.02 | 15.00 | 11.00 | 1460546.75549 | 449790.08345 |
| 413 | 1899.78 | 83.03 | 14.01 | 13.01 | 1460544.67054 | 449794.13663 |
| 414 | 1825.66 | 92.03 | 11.00 | 9.00 | 1460543.61719 | 449796.27627 |
| 415 | 1937.21 | 103.01 | 23.00 | 9.00 | 1460542.68834 | 449798.43081 |
| 416 | 1846.94 | 96.05 | 21.01 | 8.00 | 1460541.78063 | 449800.44492 |
| 417 | 1928.31 | 102.02 | 18.00 | 11.00 | 1460540.70929 | 449802.39249 |
| 418 | 1898.97 | 85.04 | 12.01 | 13.01 | 1460539.80355 | 449804.35209 |
| 419 | 1916.40 | 94.02 | 16.00 | 11.00 | 1460538.69589 | 449806.34157 |
| 420 | 1840.48 | 75.02 | 15.00 | 10.00 | 1460537.69453 | 449808.35075 |
| 421 | 1937.50 | 101.03 | 17.00 | 6.00 | 1460536.52997 | 449810.20890 |
| 422 | 1931.79 | 82.03 | 19.01 | 13.01 | 1460535.42730 | 449812.03375 |
| 423 | 1825.84 | 98.05 | 15.01 | 7.00 | 1460534.46149 | 449813.89957 |
| 424 | 1888.68 | 87.03 | 19.01 | 13.00 | 1460533.29391 | 449815.72493 |
| 425 | 1871.77 | 85.03 | 12.00 | 13.01 | 1460532.14692 | 449817.45009 |
| 426 | 2006.62 | 95.03 | 18.01 | 16.00 | 1460531.29497 | 449819.38588 |
| 427 | 1979.61 | 99.03 | 20.01 | 11.00 | 1460530.13789 | 449821.23040 |
| 428 | 1836.57 | 107.03 | 10.00 | 7.00 | 1460529.37594 | 449823.28070 |
| 429 | 1840.85 | 103.05 | 12.01 | 14.01 | 1460528.88823 | 449825.49756 |
| 430 | 1786.55 | 90.03 | 19.01 | 14.00 | 1460528.93483 | 449827.59971 |
| 431 | 1918.40 | 116.02 | 13.00 | 5.00 | 1460528.98430 | 449828.69796 |
| 432 | 1822.38 | 90.02 | 17.00 | 9.00 | 1460528.92394 | 449828.27985 |
| 433 | 1829.66 | 97.03 | 12.00 | 13.00 | 1460528.92394 | 449828.27985 |
| 434 | 1821.20 | 86.01 | 19.00 | 9.00 | 1460528.32004 | 449825.62618 |
| 435 | 1988.52 | 86.02 | 16.00 | 15.00 | 1460527.53726 | 449823.48619 |
| 436 | 1985.01 | 105.05 | 19.01 | 9.00 | 1460526.48953 | 449821.39288 |
| 437 | 2049.74 | 106.04 | 16.01 | 13.00 | 1460525.30051 | 449819.60904 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 438 | 2031.83 | 114.05 | 13.01 | 6.00 | 1460523.94169 | 449817.59159 |
| 439 | 2029.93 | 87.04 | 17.01 | 14.01 | 1460523.94169 | 449817.59159 |
| 441 | 2057.74 | 107.04 | 17.01 | 14.01 | 1460521.96534 | 449815.73298 |
| 442 | 2051.84 | 100.04 | 21.01 | 13.01 | 1460522.83290 | 449816.55663 |
| 443 | 2087.75 | 91.03 | 27.01 | 11.00 | 1460524.35700 | 449818.08318 |
| 445 | 1952.80 | 82.03 | 14.01 | 16.01 | 1460527.94509 | 449821.02599 |
| 446 | 1835.66 | 98.04 | 19.01 | 4.00 | 1460529.69908 | 449822.34022 |
| 447 | 1771.55 | 78.02 | 12.00 | 10.00 | 1460531.50502 | 449823.59865 |
| 448 | 1861.58 | 100.03 | 19.01 | 8.00 | 1460531.50502 | 449823.59865 |
| 449 | 1868.86 | 96.04 | 20.01 | 10.00 | 1460535.04719 | 449826.12618 |
| 450 | 1829.38 | 103.02 | 10.00 | 7.00 | 1460536.63913 | 449827.25452 |
| 451 | 1798.92 | 104.05 | 17.01 | 13.01 | 1460538.34172 | 449828.19723 |
| 453 | 1789.64 | 91.03 | 13.00 | 14.01 | 1460541.33788 | 449830.21212 |
| 454 | 1791.55 | 104.03 | 13.00 | 11.00 | 1460541.33788 | 449830.21212 |
| 455 | 1961.00 | 92.05 | 17.01 | 13.01 | 1460542.76839 | 449831.05382 |
| 456 | 1820.56 | 85.03 | 13.00 | 10.00 | 1460542.55586 | 449830.97472 |
| 457 | 1880.20 | 76.01 | 14.00 | 15.00 | 1460541.58824 | 449830.49951 |
| 458 | 1781.55 | 81.03 | 16.00 | 10.00 | 1460539.89911 | 449829.37132 |
| 459 | 1766.37 | 92.02 | 11.00 | 11.00 | 1460539.89911 | 449829.37132 |
| 460 | 1797.47 | 96.02 | 22.01 | 10.00 | 1460536.75377 | 449827.75245 |
| 461 | 1813.11 | 116.07 | 10.01 | 8.00 | 1460535.22653 | 449827.00647 |
| 462 | 1804.92 | 71.04 | 19.01 | 8.00 | 1460533.72872 | 449826.18947 |
| 463 | 1825.38 | 104.02 | 10.00 | 3.00 | 1460533.72872 | 449826.18947 |
| 464 | 1874.49 | 93.02 | 13.00 | 13.00 | 1460530.81723 | 449824.52761 |
| 465 | 1934.21 | 91.01 | 16.00 | 14.00 | 1460529.45016 | 449823.65895 |
| 466 | 1951.70 | 119.04 | 16.01 | 14.01 | 1460529.45016 | 449823.65895 |
| 467 | 2011.82 | 114.05 | 16.01 | 13.01 | 1460526.44962 | 449821.97292 |
| 468 | 1956.80 | 92.04 | 19.01 | 10.00 | 1460525.09823 | 449821.28153 |
| 469 | 2012.62 | 92.03 | 22.01 | 10.00 | 1460523.92716 | 449820.47153 |
| 470 | 2017.93 | 111.05 | 13.01 | 18.01 | 1460522.71302 | 449819.78330 |
| 471 | 1948.70 | 100.04 | 21.01 | 8.00 | 1460522.71302 | 449819.78330 |
| 472 | 1935.79 | 101.04 | 22.01 | 12.00 | 1460520.40441 | 449818.71117 |
| 473 | 2008.52 | 94.02 | 16.00 | 17.00 | 1460520.03264 | 449818.55163 |
| 474 | 1957.61 | 103.03 | 17.01 | 16.00 | 1460520.20946 | 449818.65219 |
| 475 | 1945.99 | 111.06 | 15.01 | 13.01 | 1460521.44664 | 449819.26815 |
| 476 | 1961.51 | 112.03 | 18.00 | 11.00 | 1460522.58937 | 449819.77521 |
| 477 | 1947.31 | 104.02 | 22.00 | 9.00 | 1460523.81804 | 449820.40717 |
| 479 | 1976.22 | 96.01 | 11.00 | 9.00 | 1460526.46295 | 449821.94028 |
| 480 | 1921.69 | 104.04 | 10.00 | 15.01 | 1460528.05496 | 449822.73308 |
| 481 | 1833.48 | 102.03 | 20.01 | 14.00 | 1460529.46917 | 449823.45129 |
| 482 | 1782.64 | 107.04 | 18.01 | 7.00 | 1460531.01400 | 449824.30489 |
| 483 | 1825.38 | 95.02 | 16.00 | 12.00 | 1460531.01400 | 449824.30489 |
| 484 | 1859.30 | 95.02 | 19.00 | 7.00 | 1460533.92591 | 449825.95495 |
| 485 | 1804.56 | 104.03 | 13.00 | 11.00 | 1460535.53931 | 449826.81965 |
| 486 | 1829.75 | 104.04 | 8.00 | 9.00 | 1460537.14724 | 449827.74235 |
| 487 | 1832.38 | 87.02 | 21.00 | 9.00 | 1460538.91281 | 449828.43733 |
| 488 | 1894.49 | 90.02 | 23.01 | 15.00 | 1460540.80686 | 449829.12736 |
| 489 | 1885.58 | 100.03 | 20.01 | 7.00 | 1460542.48468 | 449829.62105 |
| 490 | 1867.48 | 105.03 | 21.01 | 12.00 | 1460544.16532 | 449830.07761 |
| 491 | 1971.01 | 103.05 | 23.01 | 8.00 | 1460545.86686 | 449830.51325 |
| 492 | 1938.50 | 97.03 | 25.01 | 16.00 | 1460547.46465 | 449830.69101 |
| 493 | 1859.20 | 98.01 | 15.00 | 9.00 | 1460549.02766 | 449830.73513 |
| 495 | 1834.93 | 100.05 | 13.01 | 12.01 | 1460548.83905 | 449830.71715 |
| 496 | 2021.03 | 108.06 | 11.01 | 7.00 | 1460547.89838 | 449830.85599 |
| 497 | 1966.90 | 106.05 | 16.01 | 6.00 | 1460545.91326 | 449831.31060 |
| 498 | 1893.87 | 93.04 | 20.01 | 11.01 | 1460544.35676 | 449832.03612 |
| 499 | 1831.12 | 104.06 | 12.01 | 15.01 | 1460542.68005 | 449832.86323 |
| 500 | 1904.59 | 107.03 | 16.00 | 11.00 | 1460541.04516 | 449833.90626 |
| 501 | 2021.32 | 102.02 | 16.00 | 18.00 | 1460539.71316 | 449835.01904 |
| 502 | 2036.53 | 126.03 | 16.00 | 15.00 | 1460539.71316 | 449835.01904 |
| 504 | 1973.81 | 110.05 | 24.01 | 8.00 | 1460537.45929 | 449837.49813 |
| 505 | 1959.41 | 90.02 | 14.00 | 9.00 | 1460537.57617 | 449837.38936 |
| 506 | 1943.60 | 119.04 | 15.00 | 14.00 | 1460538.63137 | 449836.33033 |
| 507 | 1995.42 | 93.02 | 26.01 | 13.00 | 1460540.10668 | 449834.73849 |
| 508 | 1863.76 | 104.04 | 7.00 | 14.01 | 1460540.10668 | 449834.73849 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 510 | 1907.21 | 92.01 | 15.00 | 12.00 | 1460543.93814 | 449829.97776 |
| 511 | 1962.90 | 104.05 | 16.01 | 8.00 | 1460545.03681 | 449828.41712 |
| 512 | 1887.06 | 94.05 | 15.01 | 8.00 | 1460545.95610 | 449826.60037 |
| 513 | 1813.47 | 100.03 | 18.00 | 9.00 | 1460547.13055 | 449824.84022 |
| 514 | 1793.65 | 90.03 | 12.00 | 9.00 | 1460548.08227 | 449823.01286 |
| 515 | 1907.68 | 100.04 | 19.01 | 12.00 | 1460548.08227 | 449823.01286 |
| 517 | 1859.76 | 91.04 | 22.01 | 7.00 | 1460551.07383 | 449817.50870 |
| 518 | 1956.70 | 111.04 | 20.01 | 9.00 | 1460551.91641 | 449815.80846 |
| 519 | 1899.30 | 96.02 | 18.00 | 10.00 | 1460552.91549 | 449814.06844 |
| 520 | 1868.58 | 105.03 | 21.01 | 12.00 | 1460553.95892 | 449812.51087 |
| 521 | 1849.48 | 110.03 | 18.00 | 13.00 | 1460554.79211 | 449810.67383 |
| 523 | 1878.77 | 93.04 | 16.01 | 7.00 | 1460556.65657 | 449807.42068 |
| 524 | 1803.56 | 95.03 | 19.01 | 15.00 | 1460556.65657 | 449807.42068 |
| 527 | 1949.80 | 96.04 | 14.01 | 15.01 | 1460560.37420 | 449800.86856 |
| 529 | 1893.49 | 95.02 | 15.00 | 18.00 | 1460562.34486 | 449797.70160 |
| 531 | 2170.35 | 110.02 | 17.00 | 11.00 | 1460564.29234 | 449794.29437 |
| 532 | 2098.86 | 113.05 | 21.01 | 9.00 | 1460565.33585 | 449792.43028 |
| 533 | 2102.65 | 115.04 | 9.00 | 9.00 | 1460565.33585 | 449792.43028 |
| 534 | 2150.77 | 107.04 | 20.01 | 10.00 | 1460567.15750 | 449788.69465 |
| 535 | 2091.65 | 120.04 | 12.00 | 12.00 | 1460568.07481 | 449786.64187 |
| 536 | 2162.67 | 117.04 | 11.00 | 16.00 | 1460568.74397 | 449784.51324 |
| 537 | 2115.34 | 115.02 | 16.00 | 14.00 | 1460569.09811 | 449782.27787 |
| 538 | 2098.54 | 107.03 | 17.00 | 11.00 | 1460569.15900 | 449780.26859 |
| 539 | 2201.68 | 116.04 | 20.01 | 10.00 | 1460568.86379 | 449778.31379 |
| 540 | 2178.46 | 114.02 | 20.00 | 10.00 | 1460568.74495 | 449777.53442 |
| 541 | 2154.56 | 105.03 | 16.00 | 18.00 | 1460568.74495 | 449777.53442 |
| 542 | 2170.89 | 116.05 | 14.01 | 14.01 | 1460569.12472 | 449779.06305 |
| 543 | 2125.45 | 114.02 | 20.00 | 13.00 | 1460569.31788 | 449781.14914 |
| 544 | 2176.33 | 113.07 | 23.01 | 11.01 | 1460569.40153 | 449783.22580 |
| 545 | 2178.56 | 111.03 | 22.01 | 16.00 | 1460569.75921 | 449785.28700 |
| 546 | 2093.75 | 103.04 | 16.01 | 11.00 | 1460570.30698 | 449787.29486 |
| 547 | 2018.83 | 98.04 | 14.01 | 14.01 | 1460571.21824 | 449789.29263 |
| 548 | 1977.41 | 103.02 | 5.00 | 16.00 | 1460572.21623 | 449791.02627 |
| 549 | 1931.60 | 102.03 | 16.00 | 12.00 | 1460573.34501 | 449792.56181 |
| 550 | 2019.83 | 101.04 | 11.00 | 9.00 | 1460574.52327 | 449794.14449 |
| 551 | 2042.43 | 100.02 | 19.00 | 7.00 | 1460575.28409 | 449795.55879 |
| 552 | 1963.31 | 107.02 | 13.00 | 8.00 | 1460575.83630 | 449796.62064 |
| 553 | 2020.83 | 116.05 | 19.01 | 7.00 | 1460575.83223 | 449796.63578 |
| 554 | 2061.74 | 109.04 | 24.01 | 10.00 | 1460575.79935 | 449796.59637 |
| 555 | 2015.32 | 90.01 | 9.00 | 13.00 | 1460575.79935 | 449796.59637 |
| 556 | 1942.80 | 108.04 | 19.01 | 16.01 | 1460575.00800 | 449794.97315 |
| 557 | 2009.62 | 91.03 | 17.01 | 13.00 | 1460573.92542 | 449793.03582 |
| 558 | 2045.04 | 105.05 | 21.01 | 17.01 | 1460572.79356 | 449790.98785 |
| 559 | 2105.76 | 127.05 | 18.01 | 13.00 | 1460572.79356 | 449790.98785 |
| 560 | 2143.99 | 105.05 | 21.01 | 7.00 | 1460570.23610 | 449787.20739 |
| 561 | 2188.90 | 115.05 | 25.01 | 18.01 | 1460570.23610 | 449787.20739 |
| 562 | 2145.09 | 109.06 | 20.01 | 15.01 | 1460567.83360 | 449784.31031 |
| 563 | 2077.64 | 117.04 | 24.01 | 8.00 | 1460566.52331 | 449783.17345 |
| 565 | 2186.79 | 113.04 | 30.01 | 15.01 | 1460564.28468 | 449780.94331 |
| 566 | 2230.91 | 117.05 | 22.01 | 11.00 | 1460563.00545 | 449780.02838 |
| 567 | 2196.79 | 107.04 | 18.01 | 12.00 | 1460561.84135 | 449778.95919 |
| 568 | 2109.55 | 96.02 | 18.00 | 9.00 | 1460560.79770 | 449778.25989 |
| 569 | 2144.66 | 122.04 | 18.01 | 10.00 | 1460560.79770 | 449778.25989 |
| 571 | 2218.24 | 117.07 | 21.01 | 16.01 | 1460562.05964 | 449779.09517 |
| 572 | 2044.53 | 103.03 | 18.00 | 20.01 | 1460563.46363 | 449780.22843 |
| 573 | 2061.95 | 97.04 | 24.01 | 11.01 | 1460564.94771 | 449781.31428 |
| 574 | 2093.44 | 122.03 | 15.00 | 8.00 | 1460566.42574 | 449782.26907 |
| 575 | 2078.96 | 104.05 | 18.01 | 14.01 | 1460567.90744 | 449783.18786 |
| 576 | 2106.65 | 107.03 | 21.01 | 18.01 | 1460567.90744 | 449783.18786 |
| 577 | 2117.97 | 99.05 | 24.01 | 9.00 | 1460570.79455 | 449785.18646 |
| 578 | 2073.16 | 105.06 | 23.01 | 11.01 | 1460570.79455 | 449785.18646 |
| 579 | 2073.26 | 100.06 | 18.01 | 21.01 | 1460573.48221 | 449786.95238 |
| 580 | 2089.75 | 109.04 | 16.01 | 13.00 | 1460573.74861 | 449787.19504 |
| 581 | 2107.23 | 109.01 | 23.00 | 11.00 | 1460573.55487 | 449787.03336 |
| 582 | 2131.45 | 101.02 | 22.00 | 15.00 | 1460572.95257 | 449786.67832 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 583 | 2073.43 | 116.02 | 15.00 | 10.00 | 1460571.35061 | 449785.48580 |
| 584 | 2139.41 | 113.07 | 18.01 | 8.01 | 1460569.68571 | 449784.17810 |
| 585 | 2189.79 | 125.04 | 17.01 | 15.01 | 1460569.68571 | 449784.17810 |
| 586 | 2109.44 | 95.02 | 13.00 | 12.00 | 1460566.40978 | 449781.25964 |
| 587 | 2145.56 | 117.03 | 16.00 | 10.00 | 1460564.78078 | 449779.72585 |
| 588 | 2205.24 | 99.01 | 28.00 | 10.00 | 1460563.02646 | 449778.22399 |
| 589 | 2126.19 | 103.06 | 18.01 | 12.01 | 1460561.36213 | 449776.79779 |
| 590 | 2117.87 | 97.04 | 18.01 | 12.00 | 1460559.83874 | 449775.68507 |
| 591 | 2166.89 | 97.04 | 14.01 | 8.00 | 1460558.19657 | 449774.53634 |
| 592 | 2126.87 | 115.05 | 23.01 | 15.01 | 1460556.56483 | 449773.45475 |
| 593 | 2203.24 | 118.01 | 18.00 | 12.00 | 1460555.10534 | 449772.57008 |
| 594 | 2047.84 | 103.04 | 16.01 | 8.00 | 1460553.79006 | 449771.74380 |
| 595 | 2171.67 | 115.04 | 22.01 | 16.00 | 1460553.31058 | 449771.45016 |
| 596 | 2111.87 | 115.05 | 12.00 | 10.00 | 1460553.31058 | 449771.45016 |
| 597 | 2097.44 | 104.02 | 17.00 | 11.00 | 1460553.45961 | 449771.55849 |
| 598 | 2180.46 | 106.02 | 22.00 | 14.00 | 1460554.68482 | 449772.22481 |
| 599 | 2114.87 | 107.04 | 24.01 | 5.00 | 1460556.77155 | 449772.99290 |
| 600 | 2048.74 | 107.04 | 17.01 | 13.00 | 1460558.88754 | 449773.33170 |
| 601 | 2145.09 | 112.06 | 16.01 | 16.01 | 1460558.88754 | 449773.33170 |
| 602 | 2143.66 | 118.04 | 16.00 | 11.00 | 1460563.10183 | 449773.31922 |
| 603 | 2211.46 | 117.02 | 10.00 | 12.00 | 1460565.13348 | 449772.63640 |
| 604 | 2265.59 | 124.03 | 10.00 | 12.00 | 1460566.47756 | 449772.25255 |
| 605 | 2243.58 | 107.03 | 17.00 | 14.00 | 1460566.25541 | 449772.29800 |
| 606 | 2167.89 | 112.05 | 16.01 | 12.00 | 1460565.60390 | 449772.39681 |
| 607 | 2155.88 | 110.05 | 15.01 | 11.00 | 1460563.55276 | 449773.04077 |
| 608 | 2133.77 | 118.04 | 21.01 | 12.00 | 1460561.63889 | 449773.73639 |
| 609 | 2005.02 | 114.06 | 18.01 | 8.00 | 1460561.63889 | 449773.73639 |
| 610 | 2121.98 | 123.06 | 26.01 | 13.01 | 1460558.02106 | 449776.54774 |
| 611 | 2203.01 | 106.05 | 16.01 | 14.01 | 1460558.02106 | 449776.54774 |
| 612 | 2257.26 | 124.07 | 22.01 | 12.01 | 1460555.57914 | 449780.39910 |
| 613 | 2249.03 | 115.05 | 23.01 | 15.01 | 1460554.51214 | 449782.30358 |
| 614 | 2243.14 | 101.05 | 24.01 | 13.01 | 1460553.41074 | 449784.50087 |
| 615 | 2361.09 | 113.05 | 15.01 | 9.00 | 1460552.48465 | 449786.60891 |
| 617 | 2152.67 | 100.03 | 21.01 | 11.00 | 1460550.51586 | 449790.66462 |
| 618 | 1890.59 | 99.03 | 16.00 | 10.00 | 1460549.48273 | 449792.73094 |
| 619 | 1780.37 | 74.02 | 19.00 | 13.00 | 1460548.44747 | 449794.68881 |
| 620 | 1826.84 | 86.04 | 13.01 | 11.01 | 1460547.21521 | 449796.74157 |
| 621 | 1766.46 | 88.02 | 21.01 | 7.00 | 1460547.21521 | 449796.74157 |
| 622 | 1734.28 | 90.01 | 17.00 | 6.00 | 1460545.48572 | 449800.23878 |
| 623 | 1816.65 | 85.03 | 13.00 | 11.00 | 1460544.79822 | 449802.18521 |
| 624 | 1862.58 | 107.03 | 20.01 | 5.00 | 1460543.85494 | 449804.12869 |
| 625 | 1915.59 | 84.03 | 13.00 | 15.00 | 1460543.01593 | 449805.85115 |
| 627 | 1915.50 | 94.02 | 14.00 | 11.00 | 1460541.08235 | 449809.32979 |
| 628 | 1907.69 | 102.04 | 12.00 | 10.00 | 1460540.18511 | 449811.07994 |
| 629 | 1927.50 | 93.02 | 21.01 | 11.00 | 1460539.01908 | 449812.59959 |
| 630 | 1854.57 | 92.03 | 14.00 | 18.01 | 1460539.01908 | 449812.59959 |
| 631 | 1879.86 | 104.05 | 12.01 | 10.00 | 1460537.31267 | 449815.79988 |
| 633 | 1852.57 | 117.04 | 17.01 | 12.00 | 1460535.38233 | 449818.72644 |
| 635 | 1877.49 | 95.02 | 17.00 | 9.00 | 1460533.63958 | 449821.88708 |
| 636 | 1789.64 | 100.04 | 18.01 | 10.00 | 1460532.64366 | 449823.56185 |
| 637 | 1824.75 | 93.04 | 10.00 | 19.01 | 1460531.91756 | 449825.29371 |
| 638 | 1902.59 | 106.03 | 19.01 | 11.00 | 1460531.04924 | 449827.00877 |
| 639 | 1800.29 | 95.02 | 15.00 | 9.00 | 1460531.04924 | 449827.00877 |
| 640 | 1831.38 | 92.02 | 19.00 | 8.00 | 1460529.79754 | 449830.75929 |
| 641 | 1862.20 | 89.01 | 20.00 | 8.00 | 1460529.58572 | 449832.46201 |
| 642 | 1861.57 | 87.03 | 14.00 | 7.00 | 1460529.54194 | 449832.07507 |
| 644 | 1875.39 | 91.02 | 16.00 | 11.00 | 1460529.40741 | 449827.91552 |
| 645 | 1842.48 | 93.02 | 13.00 | 9.00 | 1460528.76359 | 449825.53066 |
| 646 | 1953.80 | 106.04 | 14.01 | 8.00 | 1460528.76359 | 449825.53066 |
| 648 | 2014.93 | 98.05 | 18.01 | 12.01 | 1460525.23487 | 449819.72831 |
| 649 | 1967.00 | 110.06 | 13.01 | 6.00 | 1460525.23487 | 449819.72831 |
| 650 | 2152.88 | 104.04 | 15.01 | 12.00 | 1460524.07131 | 449818.13428 |
| 651 | 1930.79 | 100.04 | 14.01 | 4.00 | 1460524.88328 | 449819.30429 |
| 652 | 1990.01 | 112.06 | 12.01 | 17.01 | 1460526.33683 | 449821.30733 |
| 653 | 1876.96 | 95.05 | 9.00 | 5.00 | 1460527.93246 | 449822.90059 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 654 | 1871.30 | 105.02 | 17.00 | 8.00 | 1460529.57919 | 449824.47646 |
| 655 | 1813.56 | 95.03 | 16.00 | 10.00 | 1460531.27031 | 449825.97341 |
| 656 | 1833.29 | 97.02 | 17.00 | 7.00 | 1460533.00436 | 449827.38631 |
| 657 | 1835.66 | 112.04 | 19.01 | 14.01 | 1460534.92401 | 449828.62266 |
| 658 | 1865.76 | 90.04 | 16.01 | 11.00 | 1460536.73070 | 449829.97179 |
| 659 | 1877.39 | 113.02 | 11.00 | 13.00 | 1460538.66991 | 449831.14629 |
| 660 | 1903.78 | 89.04 | 28.01 | 6.00 | 1460540.61958 | 449832.16227 |
| 661 | 2033.53 | 105.03 | 15.00 | 11.00 | 1460542.61814 | 449833.06688 |
| 662 | 2003.42 | 105.02 | 15.00 | 10.00 | 1460544.75534 | 449833.61603 |
| 663 | 1944.89 | 121.06 | 17.01 | 13.01 | 1460546.23608 | 449833.72024 |
| 664 | 1980.61 | 101.03 | 16.00 | 8.00 | 1460546.00130 | 449833.71965 |
| 665 | 1846.03 | 101.06 | 15.01 | 5.00 | 1460544.58567 | 449833.76859 |
| 666 | 1966.31 | 109.02 | 13.00 | 12.00 | 1460544.58567 | 449833.76859 |
| 667 | 1867.14 | 109.07 | 21.01 | 9.01 | 1460540.16111 | 449834.04184 |
| 668 | 1926.50 | 126.03 | 19.00 | 10.00 | 1460538.12734 | 449834.58141 |
| 669 | 1912.59 | 98.03 | 18.01 | 10.00 | 1460536.33930 | 449835.22812 |
| 670 | 1990.42 | 100.02 | 11.00 | 16.00 | 1460534.67807 | 449836.06411 |
| 671 | 1944.60 | 83.03 | 17.01 | 11.00 | 1460534.67807 | 449836.06411 |
| 672 | 1894.68 | 103.04 | 20.01 | 15.01 | 1460533.93726 | 449836.42143 |
| 673 | 1889.49 | 104.03 | 24.01 | 12.00 | 1460533.88571 | 449836.42327 |
| 674 | 1891.59 | 87.03 | 19.01 | 10.00 | 1460534.87202 | 449836.11637 |
| 675 | 1944.60 | 104.03 | 24.01 | 14.00 | 1460536.66698 | 449834.96796 |
| 676 | 1907.07 | 98.05 | 16.01 | 17.01 | 1460538.40294 | 449833.57866 |
| 677 | 1911.40 | 120.03 | 22.00 | 7.00 | 1460540.21433 | 449831.84923 |
| 678 | 1939.50 | 103.03 | 22.01 | 8.00 | 1460541.26663 | 449829.86654 |
| 679 | 1864.39 | 89.02 | 12.00 | 11.00 | 1460542.72263 | 449827.89517 |
| 680 | 1872.30 | 99.02 | 19.00 | 14.00 | 1460543.75024 | 449826.07628 |
| 681 | 1893.77 | 102.04 | 20.01 | 13.01 | 1460545.09389 | 449824.09974 |
| 682 | 1766.81 | 108.05 | 18.01 | 10.00 | 1460546.26026 | 449822.14259 |
| 683 | 1930.50 | 103.03 | 12.00 | 15.00 | 1460547.49960 | 449820.10606 |
| 684 | 1894.68 | 99.04 | 16.01 | 8.00 | 1460548.66993 | 449818.12141 |
| 685 | 1868.67 | 102.04 | 16.01 | 11.00 | 1460549.78152 | 449816.18536 |
| 687 | 1854.85 | 111.05 | 14.01 | 10.00 | 1460551.78641 | 449812.56431 |
| 688 | 1842.57 | 110.03 | 13.00 | 5.00 | 1460552.77092 | 449810.93760 |
| 689 | 1848.76 | 92.04 | 19.01 | 7.00 | 1460552.77092 | 449810.93760 |
| 690 | 1789.64 | 104.04 | 15.01 | 7.00 | 1460554.34034 | 449807.69832 |
| 691 | 1831.48 | 74.02 | 13.00 | 13.00 | 1460554.34034 | 449807.69832 |
| 692 | 1824.29 | 84.01 | 15.00 | 12.00 | 1460556.35311 | 449804.06361 |
| 693 | 1781.00 | 82.05 | 16.01 | 7.00 | 1460556.98351 | 449801.94473 |
| 694 | 1851.94 | 111.06 | 20.01 | 9.00 | 1460556.98351 | 449801.94473 |
| 696 | 1973.81 | 103.04 | 19.01 | 9.00 | 1460559.53772 | 449798.23173 |
| 697 | 2058.46 | 102.07 | 20.01 | 10.01 | 1460560.16789 | 449797.15970 |
| 698 | 1995.62 | 102.03 | 17.01 | 6.00 | 1460560.82430 | 449796.39200 |
| 699 | 2201.68 | 115.04 | 24.01 | 14.00 | 1460561.68035 | 449794.87573 |
| 700 | 2303.71 | 111.03 | 17.01 | 18.01 | 1460562.63865 | 449793.27842 |
| 701 | 2083.64 | 101.03 | 25.01 | 9.00 | 1460563.61742 | 449791.50934 |
| 702 | 2065.05 | 119.06 | 21.01 | 8.00 | 1460564.58986 | 449789.75564 |
| 703 | 2127.87 | 109.04 | 20.01 | 13.01 | 1460565.50570 | 449787.91311 |
| 705 | 2097.33 | 113.02 | 23.00 | 9.00 | 1460567.39619 | 449784.45106 |
| 706 | 2129.55 | 88.02 | 19.00 | 10.00 | 1460568.19365 | 449782.75709 |
| 707 | 2128.09 | 107.05 | 16.01 | 10.01 | 1460568.90985 | 449781.03847 |
| 708 | 2122.55 | 104.03 | 21.01 | 10.00 | 1460569.36155 | 449779.22079 |
| 709 | 2170.45 | 123.03 | 20.00 | 10.00 | 1460569.35043 | 449778.17038 |
| 710 | 2185.11 | 122.06 | 18.01 | 14.01 | 1460569.25910 | 449777.77395 |
| 711 | 2130.87 | 110.05 | 14.01 | 7.00 | 1460569.25541 | 449777.83262 |
| 712 | 2222.80 | 131.05 | 15.01 | 10.00 | 1460569.37461 | 449778.26522 |
| 713 | 2080.75 | 97.03 | 19.01 | 11.00 | 1460569.65231 | 449780.11126 |
| 714 | 2085.86 | 113.05 | 18.01 | 15.01 | 1460569.84099 | 449782.04983 |
| 715 | 2076.85 | 101.04 | 15.01 | 10.00 | 1460570.43552 | 449784.12576 |
| 716 | 2072.06 | 109.06 | 19.01 | 10.01 | 1460570.43552 | 449784.12576 |
| 717 | 2062.95 | 116.05 | 17.01 | 16.01 | 1460572.12349 | 449788.00897 |
| 718 | 1975.32 | 100.02 | 18.00 | 10.00 | 1460573.23287 | 449789.93529 |
| 719 | 1956.51 | 107.03 | 12.00 | 14.00 | 1460573.23287 | 449789.93529 |
| 720 | 2051.74 | 90.03 | 21.01 | 10.00 | 1460575.90707 | 449793.10657 |
| 721 | 2068.54 | 102.03 | 12.00 | 9.00 | 1460576.76111 | 449793.92226 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 722 | 2075.54 | 111.03 | 19.00 | 11.00 | 1460576.34171 | 449793.46222 |
| 723 | 2062.74 | 114.04 | 30.01 | 6.00 | 1460576.34171 | 449793.46222 |
| 725 | 2172.33 | 123.08 | 16.01 | 10.01 | 1460572.24134 | 449789.35414 |
| 726 | 2164.45 | 114.02 | 23.00 | 11.00 | 1460570.59475 | 449788.09071 |
| 727 | 2126.87 | 109.04 | 17.01 | 13.01 | 1460570.59475 | 449788.09071 |
| 728 | 2150.77 | 110.04 | 20.01 | 14.01 | 1460567.32364 | 449785.82137 |
| 729 | 2208.13 | 116.06 | 15.01 | 4.00 | 1460565.82109 | 449784.81455 |
| 730 | 2147.10 | 114.06 | 26.01 | 17.01 | 1460564.21366 | 449783.69747 |
| 731 | 2215.69 | 130.04 | 24.01 | 6.00 | 1460562.57052 | 449782.67375 |
| 732 | 2193.12 | 116.06 | 14.01 | 10.01 | 1460561.09829 | 449781.60676 |
| 733 | 2114.66 | 115.04 | 20.01 | 9.00 | 1460561.09829 | 449781.60676 |
| 734 | 2153.45 | 120.03 | 14.00 | 8.00 | 1460557.90879 | 449779.79802 |
| 735 | 2127.76 | 93.03 | 20.01 | 20.01 | 1460556.57718 | 449778.79331 |
| 736 | 2176.46 | 115.02 | 30.01 | 12.00 | 1460555.27444 | 449778.00461 |
| 737 | 2125.66 | 114.04 | 16.00 | 16.00 | 1460554.16664 | 449777.45191 |
| 738 | 2143.56 | 100.03 | 19.00 | 14.00 | 1460554.31964 | 449777.53489 |
| 739 | 2142.99 | 116.05 | 27.01 | 11.01 | 1460554.30921 | 449777.51031 |
| 741 | 2164.89 | 104.04 | 24.01 | 11.00 | 1460552.72555 | 449776.78507 |
| 742 | 2179.78 | 94.03 | 10.00 | 10.00 | 1460552.15423 | 449776.44309 |
| 743 | 2121.76 | 91.03 | 18.01 | 12.00 | 1460552.26102 | 449776.51134 |
| 744 | 2184.11 | 117.06 | 24.01 | 13.01 | 1460552.26102 | 449776.51134 |
| 745 | 2047.63 | 100.03 | 16.00 | 14.00 | 1460551.09972 | 449775.72963 |
| 746 | 2138.87 | 97.04 | 13.01 | 13.01 | 1460551.09972 | 449775.72963 |
| 748 | 2125.55 | 109.03 | 17.00 | 8.00 | 1460548.93194 | 449774.56280 |
| 749 | 2095.65 | 118.04 | 18.01 | 14.00 | 1460547.76683 | 449773.97977 |
| 750 | 2180.79 | 108.04 | 14.01 | 11.00 | 1460546.76498 | 449773.46080 |
| 751 | 2211.68 | 102.03 | 19.01 | 11.00 | 1460546.76498 | 449773.46080 |
| 752 | 2290.59 | 118.03 | 23.01 | 15.00 | 1460545.51953 | 449772.81607 |
| 753 | 2175.67 | 130.04 | 17.01 | 12.00 | 1460544.18713 | 449772.33398 |
| 754 | 2173.46 | 131.03 | 17.00 | 13.00 | 1460544.18713 | 449772.33398 |
| 759 | 2073.64 | 113.04 | 23.01 | 17.01 | 1460552.74617 | 449774.29695 |
| 760 | 2116.08 | 110.06 | 19.01 | 7.00 | 1460555.14497 | 449774.12955 |
| 761 | 2143.77 | 117.04 | 12.00 | 7.00 | 1460557.52825 | 449773.91812 |
| 762 | 2117.19 | 115.06 | 25.01 | 16.01 | 1460557.52825 | 449773.91812 |
| 766 | 2201.02 | 102.00 | 20.00 | 15.00 | 1460567.81510 | 449769.52011 |
| 767 | 2236.69 | 112.03 | 20.01 | 10.00 | 1460568.73317 | 449768.76498 |
| 769 | 2211.90 | 126.11 | 18.02 | 9.01 | 1460566.90394 | 449770.27981 |
| 770 | 2207.68 | 109.03 | 21.01 | 19.01 | 1460565.46905 | 449771.89980 |
| 771 | 2164.78 | 110.04 | 24.01 | 7.00 | 1460563.86563 | 449773.41811 |
| 772 | 2175.56 | 116.03 | 18.00 | 12.00 | 1460562.69704 | 449774.92877 |
| 773 | 2099.18 | 123.07 | 20.01 | 14.01 | 1460562.69704 | 449774.92877 |
| 774 | 2114.86 | 114.05 | 21.01 | 14.01 | 1460560.69241 | 449777.98933 |
| 775 | 2266.72 | 133.10 | 24.02 | 10.01 | 1460559.83753 | 449779.62033 |
| 776 | 2177.57 | 137.04 | 13.00 | 15.00 | 1460558.94281 | 449781.27719 |
| 777 | 2236.58 | 120.03 | 21.01 | 9.00 | 1460558.94281 | 449781.27719 |
| 779 | 2223.02 | 117.05 | 23.01 | 9.00 | 1460556.30529 | 449786.42861 |
| 780 | 2153.23 | 128.01 | 17.00 | 13.00 | 1460555.67308 | 449788.12602 |
| 782 | 2190.46 | 130.03 | 26.01 | 10.00 | 1460554.02333 | 449791.35079 |
| 783 | 2088.06 | 106.05 | 19.01 | 5.00 | 1460554.02333 | 449791.35079 |
| 785 | 1831.47 | 103.03 | 17.00 | 6.00 | 1460551.83861 | 449795.78454 |
| 786 | 1783.64 | 87.03 | 16.01 | 5.00 | 1460551.83861 | 449795.78454 |
| 788 | 1767.37 | 77.02 | 21.00 | 14.00 | 1460549.64043 | 449800.51348 |
| 789 | 1726.10 | 96.01 | 10.00 | 8.00 | 1460549.01907 | 449801.84929 |
| 790 | 1854.67 | 80.03 | 14.01 | 16.01 | 1460549.01907 | 449801.84929 |
| 791 | 1758.98 | 93.05 | 14.01 | 15.01 | 1460547.49550 | 449804.45308 |
| 793 | 1904.97 | 88.04 | 22.01 | 12.01 | 1460546.10076 | 449807.42608 |
| 794 | 1994.12 | 100.06 | 18.01 | 13.01 | 1460546.10076 | 449807.42608 |
| 795 | 1865.48 | 97.03 | 12.00 | 11.00 | 1460544.49196 | 449810.14178 |
| 796 | 1881.77 | 92.04 | 19.01 | 11.00 | 1460543.74800 | 449811.56951 |
| 797 | 1974.61 | 130.04 | 16.00 | 9.00 | 1460543.09325 | 449812.77667 |
| 798 | 2010.52 | 112.03 | 22.01 | 8.00 | 1460542.44509 | 449813.80240 |
| 799 | 1905.88 | 120.06 | 13.01 | 13.01 | 1460542.44509 | 449813.80240 |
| 800 | 1859.30 | 109.02 | 13.00 | 15.00 | 1460542.14766 | 449814.50931 |
| 801 | 1739.89 | 99.05 | 12.01 | 8.00 | 1460540.96989 | 449816.26876 |
| 802 | 1821.11 | 109.07 | 13.01 | 8.00 | 1460539.99627 | 449817.99657 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 803 | 1872.20 | 89.01 | 14.00 | 7.00 | 1460538.97871 | 449819.50402 |
| 804 | 1844.76 | 92.04 | 17.01 | 12.00 | 1460538.04870 | 449821.11514 |
| 805 | 1804.74 | 106.04 | 15.01 | 9.00 | 1460537.15251 | 449822.69408 |
| 806 | 1761.37 | 85.02 | 14.00 | 9.00 | 1460536.16378 | 449824.31007 |
| 807 | 1795.47 | 94.02 | 12.00 | 8.00 | 1460535.21399 | 449826.20578 |
| 808 | 1878.67 | 99.04 | 15.01 | 14.01 | 1460534.12128 | 449828.00647 |
| 809 | 1878.05 | 86.05 | 15.01 | 9.01 | 1460533.27590 | 449829.91723 |
| 812 | 1874.58 | 95.03 | 21.01 | 12.00 | 1460532.86934 | 449830.95668 |
| 813 | 1824.56 | 93.03 | 20.01 | 13.00 | 1460532.99722 | 449828.85353 |
| 814 | 1851.57 | 83.03 | 13.00 | 11.00 | 1460532.84719 | 449826.68313 |
| 815 | 1805.29 | 94.01 | 9.00 | 11.00 | 1460532.50521 | 449824.55669 |
| 816 | 1929.31 | 87.01 | 11.00 | 9.00 | 1460531.92010 | 449822.43385 |
| 818 | 1973.91 | 86.04 | 10.00 | 15.01 | 1460529.77098 | 449818.38360 |
| 819 | 2029.24 | 92.06 | 18.01 | 6.00 | 1460528.47390 | 449816.69638 |
| 820 | 1947.80 | 90.04 | 16.01 | 11.00 | 1460528.47390 | 449816.69638 |
| 821 | 1933.60 | 105.03 | 14.00 | 8.00 | 1460526.83389 | 449815.10746 |
| 822 | 1951.80 | 96.04 | 19.01 | 20.01 | 1460526.83389 | 449815.10746 |
| 823 | 1957.10 | 100.06 | 14.01 | 10.01 | 1460526.72015 | 449814.95804 |
| 824 | 2039.55 | 119.09 | 22.02 | 11.01 | 1460526.89493 | 449815.20430 |
| 825 | 2061.53 | 105.03 | 11.00 | 12.00 | 1460528.33648 | 449816.65704 |
| 827 | 1939.60 | 106.03 | 11.00 | 8.00 | 1460530.91760 | 449819.54820 |
| 828 | 1905.40 | 108.02 | 18.00 | 9.00 | 1460532.18063 | 449820.81374 |
| 829 | 1844.76 | 86.04 | 10.00 | 15.01 | 1460533.39066 | 449821.90257 |
| 830 | 1831.48 | 87.02 | 16.00 | 10.00 | 1460534.57740 | 449823.00859 |
| 831 | 1901.59 | 89.03 | 18.01 | 7.00 | 1460535.88446 | 449824.14671 |
| 832 | 1876.39 | 105.02 | 10.00 | 20.00 | 1460535.88446 | 449824.14671 |
| 834 | 1836.38 | 103.02 | 15.00 | 10.00 | 1460538.99968 | 449826.56511 |
| 835 | 1826.66 | 98.04 | 14.01 | 7.00 | 1460540.21837 | 449827.36831 |
| 836 | 1948.50 | 101.03 | 17.00 | 6.00 | 1460541.43227 | 449828.25954 |
| 837 | 1887.68 | 89.03 | 13.00 | 15.01 | 1460542.73283 | 449829.00567 |
| 838 | 1885.68 | 103.04 | 12.00 | 9.00 | 1460543.81441 | 449829.75491 |
| 839 | 1940.50 | 103.03 | 14.00 | 13.00 | 1460544.43558 | 449830.08840 |
| 840 | 1906.88 | 95.04 | 14.01 | 8.00 | 1460544.91097 | 449830.34515 |
| 841 | 1849.48 | 90.02 | 19.00 | 14.00 | 1460544.91097 | 449830.34515 |
| 842 | 1826.20 | 86.01 | 17.00 | 13.00 | 1460544.85906 | 449830.28582 |
| 843 | 1833.11 | 96.01 | 23.00 | 11.00 | 1460544.52026 | 449830.10173 |
| 844 | 1883.58 | 95.03 | 17.01 | 8.00 | 1460542.86465 | 449829.33639 |
| 845 | 1797.56 | 84.03 | 9.00 | 15.00 | 1460540.94343 | 449828.69985 |
| 846 | 1806.56 | 91.03 | 18.01 | 12.00 | 1460538.93572 | 449828.28813 |
| 847 | 1842.85 | 94.04 | 21.01 | 13.01 | 1460538.93572 | 449828.28813 |
| 849 | 1801.11 | 78.00 | 23.00 | 9.00 | 1460532.57301 | 449828.39651 |
| 850 | 1863.95 | 119.06 | 8.00 | 12.01 | 1460531.09298 | 449828.69285 |
| 851 | 1844.39 | 91.02 | 18.00 | 15.00 | 1460530.39131 | 449828.81223 |
| 852 | 1762.46 | 90.02 | 15.00 | 6.00 | 1460530.44794 | 449828.83309 |
| 853 | 1761.37 | 89.02 | 11.00 | 7.00 | 1460531.47273 | 449828.69078 |
| 854 | 1840.29 | 85.01 | 16.00 | 9.00 | 1460533.75733 | 449828.32840 |
| 855 | 1799.38 | 89.02 | 12.00 | 11.00 | 1460535.84782 | 449827.85726 |
| 856 | 1922.79 | 106.04 | 19.01 | 8.00 | 1460538.00131 | 449826.99722 |
| 857 | 1970.00 | 106.05 | 15.01 | 10.01 | 1460539.85353 | 449825.95070 |
| 858 | 1856.30 | 108.02 | 14.00 | 9.00 | 1460541.26765 | 449824.60040 |
| 859 | 1809.65 | 78.03 | 16.01 | 7.00 | 1460542.58923 | 449822.93912 |
| 860 | 1838.94 | 82.04 | 17.01 | 13.01 | 1460543.74189 | 449821.14082 |
| 861 | 1846.57 | 104.03 | 14.00 | 7.00 | 1460544.58965 | 449819.64962 |
| 863 | 1903.49 | 93.02 | 14.00 | 6.00 | 1460546.49588 | 449816.70313 |
| 864 | 1841.29 | 84.01 | 12.00 | 12.00 | 1460547.30436 | 449815.29643 |
| 865 | 1999.72 | 111.04 | 11.00 | 14.01 | 1460548.32170 | 449813.67914 |
| 866 | 2000.52 | 111.03 | 23.01 | 11.00 | 1460549.13632 | 449812.03737 |
| 867 | 1880.58 | 99.03 | 19.01 | 12.00 | 1460550.20115 | 449810.36161 |
| 868 | 1811.38 | 103.02 | 12.00 | 16.00 | 1460551.15185 | 449808.90309 |
| 869 | 1755.46 | 106.03 | 19.00 | 11.00 | 1460551.94509 | 449807.05838 |
| 870 | 1726.36 | 115.02 | 17.00 | 9.00 | 1460552.93004 | 449805.54152 |
| 871 | 1799.65 | 118.04 | 13.00 | 9.00 | 1460554.00357 | 449803.74990 |
| 872 | 1821.57 | 105.03 | 17.01 | 8.00 | 1460554.93615 | 449802.20716 |
| 873 | 1923.40 | 86.02 | 25.01 | 11.00 | 1460554.93615 | 449802.20716 |
| 874 | 2076.37 | 107.07 | 9.01 | 13.01 | 1460556.66168 | 449798.73042 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 875 | 2144.20 | 96.05 | 20.01 | 15.01 | 1460557.40389 | 449797.24798 |
| 876 | 2321.07 | 121.06 | 22.01 | 15.01 | 1460558.44143 | 449795.42251 |
| 877 | 2192.90 | 110.05 | 18.01 | 12.00 | 1460559.67935 | 449793.57553 |
| 878 | 2236.47 | 106.02 | 13.00 | 13.00 | 1460560.59079 | 449791.77671 |
| 879 | 2112.87 | 121.05 | 13.01 | 13.01 | 1460561.81244 | 449789.85674 |
| 880 | 2181.89 | 106.04 | 19.01 | 8.00 | 1460561.81244 | 449789.85674 |
| 881 | 2214.80 | 113.04 | 17.01 | 11.00 | 1460564.07682 | 449785.97936 |
| 882 | 2126.19 | 89.05 | 18.01 | 6.00 | 1460565.14139 | 449784.16023 |
| 883 | 2139.45 | 105.02 | 17.00 | 11.00 | 1460566.19537 | 449782.21438 |
| 884 | 2275.50 | 130.09 | 14.01 | 15.01 | 1460566.98184 | 449780.18309 |
| 885 | 2160.34 | 112.02 | 14.00 | 21.00 | 1460566.98184 | 449780.18309 |
| 888 | 2148.99 | 119.05 | 14.01 | 6.00 | 1460567.55883 | 449779.73077 |
| 889 | 2117.76 | 116.04 | 20.01 | 12.00 | 1460567.48710 | 449782.01074 |
| 890 | 2095.86 | 114.05 | 14.01 | 11.00 | 1460567.94629 | 449784.32187 |
| 891 | 2088.75 | 106.04 | 22.01 | 18.01 | 1460568.37473 | 449786.73514 |
| 892 | 2120.44 | 108.02 | 10.00 | 7.00 | 1460568.37473 | 449786.73514 |
| 893 | 1929.69 | 100.04 | 13.00 | 18.01 | 1460570.22680 | 449791.17364 |
| 894 | 1860.58 | 110.03 | 12.00 | 6.00 | 1460571.33027 | 449792.84432 |
| 895 | 1842.29 | 94.01 | 19.00 | 11.00 | 1460572.52532 | 449794.42231 |
| 897 | 1890.49 | 101.03 | 17.00 | 9.00 | 1460573.17743 | 449795.23586 |
| 898 | 1907.30 | 100.02 | 13.00 | 15.00 | 1460573.95098 | 449796.12139 |
| 899 | 1935.99 | 109.06 | 21.01 | 11.01 | 1460574.95656 | 449797.41571 |
| 900 | 1994.22 | 101.06 | 24.01 | 15.01 | 1460574.77279 | 449797.16139 |
| 901 | 1914.50 | 80.02 | 18.00 | 10.00 | 1460574.16440 | 449796.41683 |
| 902 | 1853.39 | 101.02 | 16.00 | 14.00 | 1460572.70640 | 449794.64587 |
| 903 | 2080.75 | 99.04 | 16.01 | 13.00 | 1460571.15552 | 449793.11819 |
| 905 | 2168.89 | 120.05 | 20.01 | 21.01 | 1460568.77660 | 449790.87805 |
| 906 | 2073.64 | 98.03 | 20.01 | 16.00 | 1460567.99837 | 449790.29928 |
| 907 | 2190.90 | 111.05 | 24.01 | 12.00 | 1460566.75712 | 449789.22991 |
| 908 | 2130.30 | 101.06 | 17.01 | 9.01 | 1460566.75712 | 449789.22991 |
| 910 | 2259.93 | 115.05 | 14.01 | 17.01 | 1460562.57165 | 449786.18517 |
| 911 | 2137.23 | 109.01 | 19.00 | 16.00 | 1460561.29586 | 449785.37705 |
| 912 | 2161.21 | 136.08 | 17.01 | 13.01 | 1460560.17307 | 449784.69698 |
| 913 | 2272.39 | 110.07 | 24.01 | 10.01 | 1460560.17307 | 449784.69698 |
| 914 | 2253.92 | 103.04 | 23.01 | 7.00 | 1460557.68811 | 449783.27293 |
| 915 | 2231.91 | 108.04 | 15.01 | 8.00 | 1460556.37124 | 449782.55677 |
| 916 | 2255.92 | 114.05 | 21.01 | 10.00 | 1460555.37082 | 449782.12811 |
| 917 | 2325.49 | 106.02 | 26.01 | 11.00 | 1460555.18853 | 449782.05936 |
| 918 | 2257.04 | 112.05 | 24.01 | 14.01 | 1460555.03132 | 449782.00431 |
| 919 | 2233.35 | 110.02 | 21.00 | 16.00 | 1460553.67102 | 449781.34428 |
| 920 | 2294.06 | 129.06 | 23.01 | 15.01 | 1460551.89121 | 449780.69571 |
| 921 | 2324.42 | 110.07 | 14.01 | 10.01 | 1460551.89121 | 449780.69571 |
| 922 | 2116.34 | 96.02 | 22.00 | 10.00 | 1460548.96544 | 449779.47439 |
| 923 | 2035.53 | 109.03 | 17.00 | 12.00 | 1460548.96544 | 449779.47439 |
| 925 | 2046.84 | 103.04 | 18.01 | 14.01 | 1460545.17518 | 449777.71716 |
| 926 | 2034.43 | 101.02 | 25.01 | 13.00 | 1460545.12802 | 449777.68716 |
| 927 | 2030.32 | 120.02 | 18.00 | 15.00 | 1460543.98478 | 449777.20937 |
| 928 | 2142.98 | 119.05 | 19.01 | 4.00 | 1460542.62170 | 449776.62739 |
| 929 | 2004.62 | 94.03 | 15.00 | 12.00 | 1460541.88083 | 449776.32288 |
| 930 | 2130.87 | 106.04 | 16.01 | 17.01 | 1460541.76211 | 449776.28572 |
| 931 | 2085.65 | 115.04 | 14.00 | 9.00 | 1460541.76211 | 449776.28572 |
| 933 | 2071.74 | 115.04 | 21.01 | 13.00 | 1460545.05226 | 449777.30533 |
| 935 | 2150.99 | 110.05 | 14.01 | 15.01 | 1460549.18346 | 449777.14058 |
| 936 | 2076.75 | 93.03 | 16.01 | 13.00 | 1460551.23549 | 449776.80662 |
| 937 | 2062.95 | 111.05 | 18.01 | 14.01 | 1460552.98349 | 449775.99335 |
| 938 | 2082.75 | 107.04 | 10.00 | 9.00 | 1460554.64541 | 449775.00773 |
| 939 | 2144.66 | 129.04 | 20.01 | 8.00 | 1460556.23549 | 449773.56027 |
| 940 | 2141.66 | 104.03 | 7.00 | 9.00 | 1460557.42755 | 449772.20003 |
| 941 | 2148.56 | 117.03 | 28.01 | 9.00 | 1460558.48504 | 449770.56936 |
| 942 | 2114.87 | 130.05 | 18.01 | 11.00 | 1460559.54092 | 449769.06629 |
| 943 | 2108.76 | 96.03 | 23.01 | 12.00 | 1460560.20541 | 449767.50483 |
| 944 | 2097.96 | 110.05 | 21.01 | 18.01 | 1460561.23775 | 449766.06313 |
| 945 | 2176.67 | 95.03 | 24.01 | 15.00 | 1460562.22857 | 449764.52292 |
| 946 | 2189.01 | 110.05 | 19.01 | 9.00 | 1460563.14262 | 449763.08614 |
| 947 | 2191.34 | 113.07 | 19.01 | 16.01 | 1460564.18333 | 449761.60012 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 948 | 2209.46 | 104.07 | 28.02 | 15.01 | 1460564.84471 | 449760.66015 |
| 949 | 2205.90 | 115.05 | 17.01 | 13.01 | 1460565.36456 | 449759.85847 |
| 950 | 2123.87 | 106.04 | 26.01 | 14.01 | 1460565.85037 | 449759.15823 |
| 951 | 2110.87 | 101.04 | 22.01 | 12.00 | 1460566.08641 | 449758.85421 |
| 952 | 2228.69 | 116.04 | 18.01 | 14.00 | 1460566.07985 | 449758.85176 |
| 953 | 2181.57 | 101.03 | 20.01 | 7.00 | 1460565.80768 | 449759.18546 |
| 954 | 2205.01 | 118.05 | 26.01 | 13.01 | 1460564.68179 | 449760.77804 |
| 955 | 2234.80 | 111.04 | 14.01 | 13.00 | 1460563.45934 | 449762.33312 |
| 956 | 2238.69 | 108.03 | 21.01 | 17.01 | 1460562.44684 | 449763.91526 |
| 958 | 2160.88 | 103.04 | 21.01 | 16.01 | 1460560.57886 | 449766.80495 |
| 959 | 2214.80 | 111.04 | 18.01 | 11.00 | 1460559.78574 | 449768.05855 |
| 960 | 2173.22 | 121.07 | 25.01 | 6.00 | 1460559.24334 | 449769.34189 |
| 961 | 2150.77 | 114.04 | 18.01 | 17.01 | 1460558.54464 | 449770.48417 |
| 962 | 2149.66 | 108.03 | 21.01 | 13.00 | 1460557.98883 | 449771.47163 |
| 963 | 2170.78 | 89.03 | 22.01 | 8.00 | 1460557.51090 | 449772.59145 |
| 964 | 2129.87 | 139.06 | 14.01 | 8.00 | 1460556.83389 | 449773.99348 |
| 965 | 2080.75 | 112.04 | 18.01 | 11.00 | 1460556.83389 | 449773.99348 |
| 966 | 2190.13 | 124.01 | 18.00 | 9.00 | 1460555.56601 | 449776.73263 |
| 967 | 2235.69 | 128.04 | 20.01 | 18.01 | 1460555.08758 | 449778.18932 |
| 970 | 2288.48 | 112.02 | 17.00 | 13.00 | 1460552.83953 | 449782.55369 |
| 971 | 2302.18 | 131.07 | 22.01 | 11.01 | 1460552.14098 | 449784.13756 |
| 972 | 2197.90 | 120.05 | 17.01 | 17.01 | 1460551.43185 | 449785.55571 |
| 973 | 2236.03 | 117.05 | 21.01 | 9.00 | 1460550.49597 | 449786.88861 |
| 977 | 1908.88 | 102.05 | 16.01 | 15.01 | 1460548.14187 | 449792.31187 |
| 978 | 1867.20 | 100.01 | 17.00 | 10.00 | 1460548.14187 | 449792.31187 |
| 979 | 1913.69 | 96.03 | 5.00 | 9.00 | 1460547.77424 | 449793.24376 |
| 980 | 1861.86 | 69.03 | 16.01 | 9.00 | 1460546.93615 | 449794.81777 |
| 981 | 1751.37 | 102.02 | 12.00 | 17.00 | 1460546.93615 | 449794.81777 |
| 982 | 1812.56 | 90.03 | 20.01 | 9.00 | 1460545.29458 | 449798.12002 |
| 983 | 1803.74 | 84.03 | 13.01 | 9.00 | 1460544.63089 | 449799.74253 |
| 984 | 1781.55 | 81.03 | 22.01 | 7.00 | 1460543.80748 | 449801.43754 |
| 985 | 1807.38 | 109.02 | 5.00 | 6.00 | 1460542.76608 | 449803.22413 |
| 986 | 1896.97 | 109.06 | 16.01 | 9.00 | 1460542.76608 | 449803.22413 |
| 987 | 1866.95 | 99.05 | 14.01 | 8.00 | 1460541.09675 | 449806.26811 |
| 988 | 1876.58 | 107.03 | 11.00 | 15.00 | 1460540.12561 | 449807.99523 |
| 989 | 1908.40 | 101.02 | 15.00 | 13.00 | 1460539.04733 | 449809.68099 |
| 990 | 1900.49 | 91.02 | 19.00 | 7.00 | 1460537.95959 | 449811.23724 |
| 991 | 1873.96 | 96.05 | 20.01 | 10.01 | 1460537.95959 | 449811.23724 |
| 993 | 1899.59 | 103.03 | 18.01 | 10.00 | 1460535.45098 | 449815.44668 |
| 994 | 1900.11 | 112.01 | 18.00 | 11.00 | 1460534.74450 | 449816.55326 |
| 995 | 1945.19 | 103.06 | 13.01 | 11.01 | 1460534.74450 | 449816.55326 |
| 996 | 1949.50 | 104.03 | 17.00 | 8.00 | 1460533.67101 | 449818.30008 |
| 997 | 1909.78 | 90.04 | 12.00 | 12.00 | 1460533.22299 | 449819.11789 |
| 998 | 1924.17 | 96.06 | 13.01 | 15.01 | 1460532.97676 | 449819.56155 |
| 999 | 1922.60 | 100.03 | 16.00 | 10.00 | 1460532.57598 | 449820.32379 |
| 1000 | 1880.30 | 91.01 | 17.00 | 9.00 | 1460531.83146 | 449821.41396 |
| 1001 | 1840.75 | 90.04 | 17.01 | 15.01 | 1460530.86626 | 449822.95531 |
| 1003 | 1887.58 | 96.03 | 22.01 | 10.00 | 1460528.98559 | 449826.10479 |
| 1004 | 1888.59 | 107.03 | 22.01 | 13.00 | 1460528.35052 | 449827.91930 |
| 1005 | 1822.20 | 101.01 | 16.00 | 10.00 | 1460528.00434 | 449829.77153 |
| 1006 | 1842.57 | 85.03 | 9.00 | 11.00 | 1460528.22915 | 449831.68926 |
| 1007 | 1832.66 | 78.03 | 14.01 | 6.00 | 1460528.73617 | 449833.54405 |
| 1008 | 1858.30 | 92.01 | 11.00 | 6.00 | 1460529.58639 | 449835.16152 |
| 1009 | 1880.58 | 93.03 | 12.00 | 11.00 | 1460529.58639 | 449835.16152 |
| 1010 | 1907.07 | 85.05 | 25.01 | 18.01 | 1460531.91290 | 449838.02659 |
| 1011 | 2018.63 | 105.03 | 30.01 | 13.00 | 1460531.91290 | 449838.02659 |
| 1012 | 2059.33 | 88.01 | 16.00 | 14.00 | 1460535.82106 | 449839.75413 |
| 1013 | 2126.55 | 116.03 | 24.01 | 15.00 | 1460535.82106 | 449839.75413 |
| 1014 | 2046.94 | 120.06 | 22.01 | 11.01 | 1460540.24618 | 449839.63486 |
| 1015 | 2078.37 | 112.07 | 24.02 | 11.01 | 1460542.25622 | 449838.99501 |
| 1016 | 2072.75 | 118.04 | 14.01 | 12.00 | 1460543.33584 | 449838.30870 |
| 1017 | 2008.62 | 112.03 | 20.01 | 11.00 | 1460543.91703 | 449837.83833 |
| 1018 | 1975.41 | 110.02 | 19.00 | 11.00 | 1460544.70913 | 449837.14815 |
| 1019 | 2081.85 | 108.04 | 18.01 | 12.00 | 1460546.02045 | 449835.68804 |
| 1020 | 1971.01 | 99.05 | 10.01 | 13.01 | 1460546.99559 | 449834.19745 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1021 | 1897.87 | 91.04 | 23.01 | 10.00 | 1460547.81245 | 449832.66249 |
| 1022 | 1890.40 | 105.02 | 27.01 | 18.00 | 1460548.88843 | 449831.03291 |
| 1023 | 1823.38 | 74.02 | 18.00 | 5.00 | 1460549.61816 | 449829.43678 |
| 1024 | 1799.38 | 97.02 | 10.00 | 10.00 | 1460550.64384 | 449828.14216 |
| 1025 | 1796.74 | 84.03 | 16.01 | 10.00 | 1460551.15180 | 449826.73590 |
| 1027 | 1909.40 | 90.02 | 15.00 | 12.00 | 1460552.87843 | 449824.27675 |
| 1030 | 1976.51 | 101.03 | 16.00 | 11.00 | 1460555.17423 | 449820.23431 |
| 1031 | 1930.70 | 94.03 | 17.01 | 10.00 | 1460555.78895 | 449819.07442 |
| 1032 | 1817.38 | 113.02 | 11.00 | 12.00 | 1460556.31752 | 449818.09822 |
| 1033 | 1800.20 | 96.01 | 20.00 | 11.00 | 1460556.83845 | 449816.96644 |
| 1034 | 1857.57 | 82.03 | 16.00 | 14.00 | 1460557.73706 | 449815.57897 |
| 1035 | 1917.17 | 77.05 | 17.01 | 9.01 | 1460557.73706 | 449815.57897 |
| 1037 | 1883.30 | 99.02 | 14.00 | 4.00 | 1460559.78229 | 449811.66866 |
| 1038 | 1898.49 | 89.02 | 16.00 | 15.00 | 1460560.18624 | 449810.71925 |
| 1039 | 1844.48 | 94.02 | 19.00 | 12.00 | 1460560.94377 | 449809.63818 |
| 1040 | 1867.86 | 82.04 | 8.00 | 12.01 | 1460561.59557 | 449807.92640 |
| 1041 | 1843.20 | 92.01 | 16.00 | 12.00 | 1460561.59557 | 449807.92640 |
| 1042 | 1835.48 | 103.03 | 18.00 | 5.00 | 1460563.28250 | 449805.20036 |
| 1043 | 1869.58 | 120.04 | 13.00 | 10.00 | 1460563.87852 | 449803.84894 |
| 1044 | 1766.37 | 79.02 | 14.00 | 9.00 | 1460564.70644 | 449802.36204 |
| 1045 | 1906.49 | 100.03 | 20.01 | 13.00 | 1460565.42941 | 449801.22247 |
| 1046 | 1831.48 | 111.03 | 20.01 | 7.00 | 1460566.23552 | 449799.90495 |
| 1047 | 1840.29 | 86.01 | 18.00 | 5.00 | 1460566.23552 | 449799.90495 |
| 1048 | 1866.30 | 105.02 | 16.00 | 11.00 | 1460567.78485 | 449796.91055 |
| 1049 | 1852.95 | 93.05 | 13.01 | 6.00 | 1460568.55522 | 449795.26193 |
| 1050 | 1936.50 | 96.02 | 17.00 | 11.00 | 1460569.67552 | 449793.69263 |
| 1051 | 1988.81 | 92.04 | 20.01 | 13.01 | 1460569.67552 | 449793.69263 |
| 1052 | 2055.53 | 112.03 | 26.01 | 11.00 | 1460571.69353 | 449790.47711 |
| 1053 | 2054.94 | 99.05 | 21.01 | 17.01 | 1460572.81008 | 449788.83356 |
| 1054 | 2068.74 | 135.05 | 30.01 | 11.00 | 1460574.09462 | 449787.38326 |
| 1055 | 2158.67 | 124.04 | 13.00 | 11.00 | 1460575.38470 | 449786.00288 |
| 1056 | 2102.18 | 97.05 | 16.01 | 16.01 | 1460576.71732 | 449784.59539 |
| 1057 | 2125.77 | 116.04 | 17.01 | 8.00 | 1460578.07463 | 449782.94476 |
| 1058 | 2172.54 | 123.09 | 17.01 | 15.01 | 1460579.21699 | 449781.59340 |
| 1059 | 2126.76 | 128.05 | 13.00 | 12.00 | 1460580.08484 | 449779.93421 |
| 1060 | 2137.66 | 114.04 | 25.01 | 16.00 | 1460581.17321 | 449778.17116 |
| 1061 | 2102.97 | 107.05 | 20.01 | 17.01 | 1460581.60439 | 449776.30216 |
| 1062 | 2270.82 | 99.04 | 16.01 | 16.01 | 1460581.74873 | 449774.29311 |
| 1063 | 2258.81 | 131.05 | 18.01 | 7.00 | 1460581.55997 | 449772.25089 |
| 1064 | 2274.36 | 126.02 | 19.00 | 13.00 | 1460580.96766 | 449770.06484 |
| 1065 | 2306.18 | 118.06 | 13.01 | 10.01 | 1460579.79577 | 449768.10603 |
| 1066 | 2202.01 | 115.05 | 19.01 | 13.01 | 1460578.24387 | 449766.54058 |
| 1067 | 2032.53 | 121.03 | 24.01 | 9.00 | 1460576.28791 | 449765.33055 |
| 1068 | 2187.57 | 121.03 | 22.01 | 13.00 | 1460574.05925 | 449764.67163 |
| 1069 | 2113.66 | 104.03 | 26.01 | 13.00 | 1460574.05925 | 449764.67163 |
| 1070 | 2237.14 | 125.06 | 15.01 | 14.01 | 1460569.32970 | 449765.05064 |
| 1071 | 2163.56 | 126.03 | 18.00 | 7.00 | 1460567.25193 | 449766.09457 |
| 1072 | 2173.22 | 130.07 | 15.01 | 11.01 | 1460565.41494 | 449767.61660 |
| 1073 | 2158.99 | 100.05 | 26.01 | 12.01 | 1460564.17816 | 449769.63140 |
| 1074 | 2168.67 | 107.03 | 20.01 | 18.01 | 1460563.32392 | 449771.54151 |
| 1075 | 2168.56 | 118.03 | 22.01 | 15.00 | 1460562.84569 | 449773.68031 |
| 1076 | 2138.98 | 102.05 | 20.01 | 17.01 | 1460562.45377 | 449775.84346 |
| 1077 | 2095.23 | 105.01 | 17.00 | 3.00 | 1460561.85489 | 449778.06172 |
| 1078 | 2227.80 | 102.04 | 14.01 | 13.00 | 1460561.24760 | 449780.14070 |
| 1079 | 2160.42 | 111.07 | 17.01 | 13.01 | 1460561.24760 | 449780.14070 |
| 1082 | 2206.23 | 93.05 | 14.01 | 13.01 | 1460558.21923 | 449787.52124 |
| 1083 | 2214.35 | 115.02 | 20.00 | 9.00 | 1460557.64326 | 449788.99465 |
| 1084 | 2211.35 | 136.08 | 25.02 | 11.01 | 1460557.61346 | 449789.11520 |
| 1085 | 2299.48 | 137.03 | 13.00 | 12.00 | 1460557.74236 | 449788.84607 |
| 1086 | 2327.95 | 107.04 | 24.01 | 11.00 | 1460557.74236 | 449788.84607 |
| 1088 | 2207.57 | 127.03 | 26.01 | 5.00 | 1460558.86064 | 449786.72424 |
| 1089 | 2218.80 | 128.05 | 16.01 | 18.01 | 1460559.65595 | 449785.31700 |
| 1090 | 2165.56 | 121.03 | 19.00 | 14.00 | 1460559.65595 | 449785.31700 |
| 1091 | 2191.57 | 101.03 | 23.01 | 18.00 | 1460561.06523 | 449783.24161 |
| 1092 | 2239.14 | 122.06 | 24.01 | 9.00 | 1460560.85128 | 449783.56040 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1093 | 2253.47 | 105.02 | 20.00 | 14.00 | 1460560.63269 | 449783.80147 |
| 1094 | 2211.35 | 101.02 | 22.00 | 18.00 | 1460560.63269 | 449783.80147 |
| 1095 | 2275.71 | 113.04 | 24.01 | 13.00 | 1460558.52046 | 449787.00470 |
| 1098 | 2288.74 | 129.10 | 22.02 | 13.01 | 1460556.26168 | 449791.21170 |
| 1099 | 2120.87 | 121.05 | 18.01 | 10.00 | 1460555.85649 | 449792.14755 |
| 1100 | 2119.12 | 110.01 | 18.00 | 14.00 | 1460555.85649 | 449792.14755 |
| 1101 | 2100.12 | 110.01 | 20.00 | 16.00 | 1460555.09033 | 449793.91237 |
| 1102 | 1994.72 | 116.04 | 10.00 | 15.01 | 1460554.62222 | 449795.17904 |
| 1103 | 1854.85 | 98.05 | 14.01 | 7.00 | 1460554.15757 | 449796.10113 |
| 1105 | 1811.65 | 108.04 | 14.01 | 6.00 | 1460553.94719 | 449796.57413 |
| 1107 | 1730.62 | 99.04 | 16.01 | 8.00 | 1460552.30489 | 449799.18849 |
| 1108 | 1754.54 | 94.03 | 13.00 | 11.00 | 1460551.65402 | 449800.75322 |
| 1109 | 1757.72 | 88.04 | 10.00 | 5.00 | 1460551.14101 | 449802.22029 |
| 1110 | 1719.53 | 83.03 | 16.00 | 4.00 | 1460550.37747 | 449803.38951 |
| 1111 | 1795.28 | 94.01 | 13.00 | 12.00 | 1460549.74728 | 449804.66633 |
| 1112 | 1842.20 | 104.01 | 17.00 | 15.00 | 1460549.29446 | 449805.83242 |
| 1113 | 1829.29 | 95.02 | 19.00 | 8.00 | 1460548.70971 | 449807.06537 |
| 1114 | 1894.40 | 81.02 | 13.00 | 9.00 | 1460548.15452 | 449808.23836 |
| 1115 | 1879.68 | 89.03 | 14.01 | 15.01 | 1460547.75024 | 449808.91301 |
| 1116 | 1954.51 | 104.03 | 17.00 | 11.00 | 1460547.07650 | 449810.15782 |
| 1117 | 1901.68 | 92.03 | 12.00 | 13.00 | 1460547.07650 | 449810.15782 |
| 1118 | 1877.39 | 88.02 | 8.00 | 12.00 | 1460545.68375 | 449812.75776 |
| 1119 | 1890.40 | 91.02 | 17.00 | 17.00 | 1460545.68375 | 449812.75776 |
| 1120 | 1912.97 | 112.06 | 18.01 | 16.01 | 1460544.69549 | 449814.67455 |
| 1121 | 1918.31 | 95.02 | 14.00 | 8.00 | 1460544.72031 | 449814.53386 |
| 1122 | 1911.59 | 98.03 | 22.01 | 8.00 | 1460543.97409 | 449815.74565 |
| 1123 | 1858.85 | 96.04 | 20.01 | 12.01 | 1460543.97409 | 449815.74565 |
| 1124 | 1757.54 | 95.03 | 17.01 | 13.00 | 1460542.21249 | 449818.57359 |
| 1125 | 1775.28 | 82.01 | 10.00 | 6.00 | 1460541.49519 | 449819.80035 |
| 1126 | 1878.68 | 97.03 | 10.00 | 11.00 | 1460541.17331 | 449820.18251 |
| 1127 | 1863.39 | 79.02 | 22.00 | 15.00 | 1460540.92260 | 449820.66296 |
| 1128 | 1857.23 | 108.07 | 23.02 | 7.00 | 1460540.92260 | 449820.66296 |
| 1129 | 1885.39 | 90.02 | 15.00 | 7.00 | 1460540.05356 | 449822.34887 |
| 1130 | 1921.21 | 102.01 | 16.00 | 14.00 | 1460539.19859 | 449823.68215 |
| 1131 | 1793.56 | 87.03 | 13.00 | 8.00 | 1460538.54458 | 449825.02676 |
| 1132 | 1809.29 | 86.01 | 15.00 | 7.00 | 1460537.72877 | 449826.47049 |
| 1133 | 1809.74 | 82.03 | 10.00 | 8.00 | 1460537.10262 | 449827.86760 |
| 1134 | 1863.95 | 114.06 | 19.01 | 11.01 | 1460536.55285 | 449829.36395 |
| 1135 | 1835.38 | 92.02 | 13.00 | 14.00 | 1460535.99808 | 449830.81568 |
| 1136 | 1923.79 | 90.04 | 20.01 | 12.00 | 1460535.54456 | 449832.56800 |
| 1137 | 1912.59 | 107.03 | 18.01 | 9.00 | 1460534.93190 | 449834.52078 |
| 1138 | 2039.94 | 104.05 | 17.01 | 17.01 | 1460534.74330 | 449836.69403 |
| 1139 | 2030.73 | 122.04 | 22.01 | 11.00 | 1460534.92304 | 449838.89539 |
| 1140 | 2069.64 | 105.03 | 9.00 | 7.00 | 1460535.95953 | 449841.04282 |
| 1141 | 2000.22 | 136.01 | 15.00 | 10.00 | 1460535.95953 | 449841.04282 |
| 1142 | 2112.44 | 111.02 | 17.00 | 11.00 | 1460539.22203 | 449844.53571 |
| 1143 | 2065.85 | 90.04 | 14.01 | 9.00 | 1460541.60928 | 449845.52009 |
| 1144 | 2153.56 | 118.03 | 20.01 | 11.00 | 1460541.60928 | 449845.52009 |
| 1145 | 2194.68 | 103.03 | 21.01 | 13.00 | 1460546.57728 | 449845.57248 |
| 1146 | 2211.02 | 113.05 | 12.01 | 11.01 | 1460548.93594 | 449844.59726 |
| 1147 | 2062.64 | 104.03 | 11.00 | 9.00 | 1460550.83699 | 449843.14258 |
| 1148 | 2038.04 | 110.06 | 23.01 | 14.01 | 1460550.83699 | 449843.14258 |
| 1149 | 2000.62 | 81.03 | 17.01 | 11.00 | 1460553.40771 | 449838.93495 |
| 1150 | 1910.69 | 110.04 | 19.01 | 12.00 | 1460554.21681 | 449836.86709 |
| 1151 | 1956.90 | 76.03 | 23.01 | 15.01 | 1460554.91873 | 449834.89060 |
| 1152 | 1895.21 | 113.01 | 16.00 | 9.00 | 1460555.82966 | 449833.11545 |
| 1153 | 1813.56 | 99.03 | 9.00 | 9.00 | 1460556.45595 | 449831.04593 |
| 1154 | 1826.75 | 102.04 | 13.01 | 16.01 | 1460557.21831 | 449829.88570 |
| 1155 | 1881.49 | 86.02 | 17.00 | 5.00 | 1460558.00993 | 449828.78526 |
| 1156 | 1840.12 | 82.05 | 15.01 | 11.01 | 1460558.48379 | 449828.08710 |
| 1157 | 1817.84 | 93.04 | 18.01 | 9.00 | 1460558.48379 | 449828.08710 |
| 1158 | 1878.39 | 90.02 | 18.00 | 17.00 | 1460560.01016 | 449825.32488 |
| 1159 | 1942.67 | 108.09 | 10.01 | 13.01 | 1460560.89929 | 449823.80887 |
| 1161 | 1887.77 | 78.03 | 16.01 | 14.01 | 1460562.73854 | 449821.10194 |
| 1162 | 1862.39 | 98.02 | 16.00 | 12.00 | 1460562.73854 | 449821.10194 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1163 | 1950.51 | 81.02 | 28.01 | 13.00 | 1460564.40995 | 449818.11621 |
| 1164 | 1897.49 | 85.02 | 27.01 | 10.00 | 1460564.40995 | 449818.11621 |
| 1165 | 1856.39 | 92.02 | 20.00 | 10.00 | 1460566.18225 | 449815.14394 |
| 1166 | 1853.76 | 92.04 | 11.00 | 10.00 | 1460566.63640 | 449813.45432 |
| 1167 | 1856.48 | 73.02 | 24.01 | 7.00 | 1460566.63640 | 449813.45432 |
| 1168 | 1908.35 | 95.07 | 6.00 | 11.01 | 1460568.65174 | 449810.39971 |
| 1169 | 1913.88 | 102.05 | 21.01 | 10.00 | 1460569.46925 | 449808.75756 |
| 1170 | 1897.40 | 96.02 | 18.00 | 10.00 | 1460570.36663 | 449807.38240 |
| 1171 | 2034.63 | 94.03 | 18.01 | 11.00 | 1460571.15431 | 449805.86016 |
| 1172 | 1888.87 | 101.05 | 17.01 | 9.00 | 1460571.86353 | 449804.47770 |
| 1173 | 1881.49 | 98.03 | 18.00 | 11.00 | 1460571.86353 | 449804.47770 |
| 1174 | 1838.29 | 97.02 | 22.00 | 6.00 | 1460573.62885 | 449801.44322 |
| 1175 | 1856.39 | 100.02 | 22.00 | 8.00 | 1460574.54894 | 449799.82250 |
| 1177 | 1988.62 | 84.03 | 20.01 | 15.00 | 1460576.19656 | 449796.45331 |
| 1178 | 2000.82 | 99.04 | 22.01 | 15.01 | 1460576.65517 | 449794.56528 |
| 1179 | 2097.86 | 100.04 | 13.01 | 20.01 | 1460576.68708 | 449792.43632 |
| 1180 | 2104.28 | 106.06 | 22.01 | 15.01 | 1460576.31663 | 449790.28290 |
| 1181 | 2070.43 | 121.03 | 23.00 | 13.00 | 1460576.31663 | 449790.28290 |
| 1182 | 2159.89 | 117.05 | 15.01 | 9.00 | 1460574.16119 | 449786.48203 |
| 1183 | 2113.87 | 117.05 | 17.01 | 5.00 | 1460572.43116 | 449785.04074 |
| 1184 | 2086.75 | 102.04 | 19.01 | 24.01 | 1460570.57454 | 449783.93888 |
| 1185 | 2118.87 | 114.05 | 21.01 | 12.00 | 1460568.38164 | 449783.29550 |
| 1186 | 2271.16 | 136.07 | 25.01 | 12.01 | 1460566.14272 | 449783.38087 |
| 1187 | 2217.57 | 117.03 | 23.01 | 7.00 | 1460566.14272 | 449783.38087 |
| 1188 | 2149.42 | 125.08 | 16.01 | 21.01 | 1460561.63184 | 449784.80600 |
| 1189 | 2234.58 | 121.03 | 19.00 | 16.00 | 1460559.54090 | 449785.99543 |
| 1190 | 2218.80 | 88.03 | 17.01 | 15.01 | 1460557.54169 | 449787.57545 |
| 1191 | 2270.38 | 119.07 | 13.01 | 18.01 | 1460555.63780 | 449788.90086 |
| 1192 | 2234.59 | 106.08 | 25.02 | 9.01 | 1460553.64484 | 449790.42285 |
| 1193 | 2107.55 | 116.03 | 24.01 | 14.00 | 1460551.52019 | 449791.42451 |
| 1194 | 2005.62 | 95.03 | 26.01 | 16.00 | 1460551.52019 | 449791.42451 |
| 1195 | 1879.96 | 94.05 | 18.01 | 13.01 | 1460547.76976 | 449793.45792 |
| 1196 | 1962.61 | 96.03 | 10.00 | 8.00 | 1460545.65872 | 449794.52076 |
| 1197 | 1978.21 | 100.06 | 24.01 | 7.00 | 1460543.47144 | 449795.42619 |
| 1198 | 1970.71 | 105.04 | 14.01 | 12.00 | 1460541.49073 | 449796.38729 |
| 1199 | 1871.58 | 99.03 | 15.00 | 10.00 | 1460539.15893 | 449797.00423 |
| 1200 | 1852.67 | 87.03 | 20.01 | 14.01 | 1460537.18739 | 449797.86955 |
| 1201 | 1970.81 | 116.05 | 17.01 | 17.01 | 1460537.18739 | 449797.86955 |
| 1202 | 1929.60 | 115.04 | 22.01 | 9.00 | 1460533.22883 | 449799.37272 |
| 1203 | 1944.80 | 117.05 | 13.01 | 6.00 | 1460531.03586 | 449800.11234 |
| 1204 | 1823.56 | 97.03 | 18.01 | 12.00 | 1460529.10987 | 449801.05132 |
| 1205 | 1887.49 | 97.03 | 7.00 | 11.00 | 1460527.01235 | 449801.68509 |
| 1206 | 1820.47 | 99.03 | 10.00 | 12.00 | 1460525.09720 | 449802.76428 |
| 1207 | 1775.82 | 91.04 | 13.01 | 17.01 | 1460523.22216 | 449804.00427 |
| 1208 | 1732.71 | 72.03 | 17.01 | 9.00 | 1460521.55944 | 449805.48035 |
| 1209 | 1839.66 | 98.04 | 19.01 | 12.00 | 1460520.14676 | 449807.14016 |
| 1210 | 1788.82 | 98.05 | 13.01 | 10.00 | 1460519.03095 | 449808.95395 |
| 1211 | 1988.52 | 110.03 | 14.00 | 11.00 | 1460518.04779 | 449810.94602 |
| 1212 | 2080.85 | 100.04 | 15.01 | 12.00 | 1460517.20646 | 449813.13405 |
| 1213 | 2054.74 | 109.04 | 18.01 | 10.00 | 1460517.20646 | 449813.13405 |
| 1215 | 2001.62 | 110.03 | 18.01 | 13.00 | 1460515.27760 | 449819.62732 |
| 1216 | 1948.51 | 91.02 | 20.01 | 13.00 | 1460514.76077 | 449821.69279 |
| 1217 | 1942.09 | 100.06 | 16.01 | 15.01 | 1460513.98564 | 449823.85308 |
| 1218 | 1929.60 | 124.04 | 24.01 | 9.00 | 1460513.05443 | 449826.02390 |
| 1219 | 1920.59 | 106.03 | 14.00 | 9.00 | 1460513.05443 | 449826.02390 |
| 1221 | 1980.41 | 92.02 | 24.01 | 15.00 | 1460507.67133 | 449829.57790 |
| 1222 | 1964.31 | 95.02 | 21.00 | 11.00 | 1460507.67133 | 449829.57790 |
| 1223 | 1973.61 | 105.03 | 19.01 | 13.00 | 1460503.82539 | 449829.60390 |
| 1224 | 1986.91 | 87.04 | 17.01 | 20.01 | 1460503.82539 | 449829.60390 |
| 1225 | 1884.87 | 103.05 | 9.00 | 4.00 | 1460501.65779 | 449829.26435 |
| 1226 | 1967.10 | 90.05 | 21.01 | 7.00 | 1460501.48882 | 449829.19849 |
| 1227 | 2044.25 | 116.07 | 19.01 | 18.01 | 1460501.72466 | 449829.31784 |
| 1228 | 2069.54 | 122.03 | 16.00 | 10.00 | 1460503.69336 | 449829.98956 |
| 1229 | 2034.43 | 114.02 | 16.00 | 11.00 | 1460505.64123 | 449830.87940 |
| 1230 | 1973.11 | 107.06 | 12.01 | 8.00 | 1460507.60551 | 449831.64138 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1231 | 1909.59 | 95.03 | 14.00 | 16.00 | 1460509.67480 | 449832.33880 |
| 1234 | 1970.61 | 125.04 | 24.01 | 12.00 | 1460515.05606 | 449834.83658 |
| 1235 | 1908.21 | 94.01 | 7.00 | 14.00 | 1460515.16827 | 449834.91012 |
| 1236 | 2022.22 | 93.01 | 14.00 | 8.00 | 1460514.65661 | 449834.64311 |
| 1237 | 1955.41 | 127.03 | 20.00 | 14.00 | 1460514.65661 | 449834.64311 |
| 1238 | 2090.96 | 91.04 | 14.01 | 12.01 | 1460510.87128 | 449832.75457 |
| 1239 | 1945.21 | 96.01 | 20.00 | 17.00 | 1460508.78782 | 449831.86832 |
| 1240 | 1990.62 | 107.03 | 20.01 | 8.00 | 1460506.76265 | 449831.06095 |
| 1241 | 1964.71 | 97.03 | 17.01 | 5.00 | 1460504.99024 | 449829.80107 |
| 1242 | 2101.86 | 116.05 | 20.01 | 16.01 | 1460503.51565 | 449828.21435 |
| 1243 | 1939.50 | 118.03 | 18.00 | 7.00 | 1460502.24145 | 449826.31986 |
| 1244 | 1894.11 | 111.01 | 18.00 | 9.00 | 1460501.55920 | 449824.20649 |
| 1245 | 1825.84 | 94.04 | 19.01 | 11.01 | 1460501.29316 | 449822.04535 |
| 1246 | 1873.05 | 86.05 | 18.01 | 15.01 | 1460501.44037 | 449819.69627 |
| 1247 | 1863.95 | 88.04 | 13.01 | 11.01 | 1460501.44037 | 449819.69627 |
| 1249 | 1749.63 | 87.03 | 17.01 | 9.00 | 1460502.67987 | 449814.45319 |
| 1250 | 1903.59 | 78.02 | 18.01 | 19.01 | 1460502.31769 | 449815.16681 |
| 1251 | 1897.59 | 111.03 | 16.00 | 11.00 | 1460501.57718 | 449817.08208 |
| 1252 | 1759.90 | 65.03 | 13.01 | 7.00 | 1460500.90912 | 449819.05531 |
| 1253 | 1894.40 | 95.02 | 13.00 | 8.00 | 1460500.13778 | 449820.73596 |
| 1254 | 1880.02 | 90.00 | 11.00 | 15.00 | 1460499.15686 | 449822.44079 |
| 1255 | 1814.74 | 90.04 | 11.00 | 10.00 | 1460498.00781 | 449824.06783 |
| 1256 | 1955.90 | 104.05 | 18.01 | 8.00 | 1460497.24441 | 449825.10710 |
| 1257 | 1939.31 | 100.02 | 19.00 | 13.00 | 1460496.46429 | 449826.11397 |
| 1258 | 2058.84 | 108.04 | 28.01 | 13.01 | 1460496.46429 | 449826.11397 |
| 1259 | 2105.07 | 103.05 | 20.01 | 10.01 | 1460495.23528 | 449827.82229 |
| 1260 | 2083.44 | 118.02 | 10.00 | 15.00 | 1460495.28151 | 449827.77230 |
| 1261 | 2128.66 | 106.03 | 15.00 | 7.00 | 1460495.32269 | 449827.68685 |
| 1262 | 2085.65 | 97.03 | 27.01 | 13.00 | 1460495.32110 | 449827.69069 |
| 1263 | 1961.41 | 97.02 | 14.00 | 8.00 | 1460495.96365 | 449826.81432 |
| 1264 | 1872.39 | 94.02 | 20.00 | 8.00 | 1460496.60143 | 449825.93934 |
| 1265 | 1871.77 | 88.04 | 18.01 | 18.01 | 1460497.46523 | 449824.50765 |
| 1266 | 1813.47 | 86.02 | 12.00 | 9.00 | 1460498.17935 | 449822.99528 |
| 1267 | 1811.74 | 92.04 | 12.00 | 13.01 | 1460498.90218 | 449821.36682 |
| 1268 | 1850.39 | 111.02 | 13.00 | 11.00 | 1460498.90218 | 449821.36682 |
| 1269 | 1838.29 | 108.02 | 26.00 | 14.00 | 1460500.53068 | 449818.33250 |
| 1270 | 1872.86 | 114.05 | 17.01 | 12.01 | 1460501.35934 | 449816.76786 |
| 1271 | 1764.28 | 91.01 | 20.00 | 12.00 | 1460502.43348 | 449815.27890 |
| 1272 | 1815.11 | 107.07 | 17.01 | 10.01 | 1460503.45632 | 449813.59939 |
| 1273 | 1847.57 | 89.03 | 20.01 | 11.00 | 1460504.52266 | 449812.01832 |
| 1274 | 1850.57 | 99.03 | 24.01 | 10.00 | 1460504.52266 | 449812.01832 |
| 1275 | 1936.70 | 91.03 | 21.01 | 9.00 | 1460506.39904 | 449808.76715 |
| 1276 | 1932.79 | 98.04 | 15.01 | 6.00 | 1460507.22764 | 449807.19501 |
| 1277 | 1968.71 | 93.03 | 29.01 | 18.01 | 1460508.11894 | 449805.66856 |
| 1278 | 1839.39 | 103.02 | 10.00 | 8.00 | 1460508.89724 | 449804.07264 |
| 1279 | 1890.25 | 101.07 | 13.01 | 12.01 | 1460509.79229 | 449802.41604 |
| 1280 | 1822.56 | 89.03 | 12.00 | 12.00 | 1460510.67290 | 449800.81517 |
| 1281 | 1786.73 | 100.04 | 22.01 | 10.00 | 1460511.43880 | 449799.36038 |
| 1284 | 1738.36 | 90.02 | 14.00 | 12.00 | 1460513.41378 | 449794.93363 |
| 1285 | 1830.48 | 105.03 | 31.01 | 9.00 | 1460514.21359 | 449793.49153 |
| 1286 | 1964.41 | 98.02 | 12.00 | 12.00 | 1460514.97879 | 449791.80143 |
| 1287 | 1895.68 | 100.04 | 14.01 | 10.00 | 1460515.74343 | 449790.13116 |
| 1288 | 2031.63 | 107.03 | 17.01 | 10.00 | 1460516.52131 | 449788.65129 |
| 1289 | 1996.92 | 108.05 | 24.01 | 18.01 | 1460517.17987 | 449787.24051 |
| 1290 | 2022.52 | 103.03 | 17.00 | 19.00 | 1460517.97749 | 449785.60303 |
| 1291 | 2040.94 | 102.05 | 10.00 | 9.00 | 1460518.74254 | 449784.16364 |
| 1292 | 2139.88 | 107.04 | 21.01 | 12.00 | 1460518.74254 | 449784.16364 |
| 1293 | 2208.80 | 113.04 | 21.01 | 19.01 | 1460520.36802 | 449781.47516 |
| 1294 | 2132.77 | 103.04 | 20.01 | 11.00 | 1460521.14984 | 449780.21577 |
| 1295 | 2027.83 | 111.05 | 12.00 | 16.01 | 1460521.84384 | 449778.87386 |
| 1296 | 2021.73 | 91.03 | 15.01 | 11.00 | 1460522.57945 | 449777.42334 |
| 1297 | 2007.82 | 110.05 | 17.01 | 11.00 | 1460522.57945 | 449777.42334 |
| 1298 | 1912.78 | 110.05 | 12.00 | 15.01 | 1460524.22097 | 449774.86836 |
| 1299 | 1925.79 | 92.04 | 14.01 | 21.01 | 1460524.90477 | 449773.65192 |
| 1300 | 1892.87 | 85.04 | 15.01 | 15.01 | 1460525.57905 | 449772.14571 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1301 | 1830.20 | 98.01 | 12.00 | 11.00 | 1460526.17746 | 449770.72202 |
| 1303 | 1997.62 | 120.04 | 14.00 | 8.00 | 1460527.43734 | 449768.30501 |
| 1304 | 1988.61 | 126.04 | 19.01 | 13.00 | 1460528.03619 | 449767.16224 |
| 1305 | 2038.63 | 114.04 | 16.00 | 11.00 | 1460528.70633 | 449765.68119 |
| 1306 | 2049.94 | 107.05 | 21.01 | 13.01 | 1460529.34429 | 449764.42123 |
| 1307 | 1998.02 | 97.05 | 16.01 | 8.00 | 1460530.15609 | 449763.21103 |
| 1308 | 1972.41 | 95.02 | 18.00 | 11.00 | 1460530.87663 | 449761.81263 |
| 1309 | 2008.22 | 107.01 | 16.00 | 16.00 | 1460531.87703 | 449760.41164 |
| 1310 | 1958.80 | 86.04 | 19.01 | 11.00 | 1460532.76545 | 449759.02614 |
| 1311 | 2009.62 | 101.03 | 19.01 | 12.00 | 1460533.66758 | 449757.49967 |
| 1312 | 2000.32 | 116.02 | 11.00 | 18.00 | 1460534.51358 | 449755.94903 |
| 1313 | 1911.50 | 86.02 | 15.00 | 19.00 | 1460534.51358 | 449755.94903 |
| 1314 | 1877.05 | 102.06 | 12.01 | 6.00 | 1460536.24384 | 449752.54630 |
| 1315 | 1888.59 | 98.03 | 21.01 | 12.00 | 1460537.16314 | 449750.78135 |
| 1316 | 1936.60 | 99.03 | 15.00 | 20.01 | 1460538.37076 | 449749.28349 |
| 1317 | 2142.45 | 103.02 | 21.00 | 15.00 | 1460539.90551 | 449747.76519 |
| 1318 | 1991.72 | 101.04 | 8.00 | 12.00 | 1460541.72228 | 449746.72831 |
| 1319 | 1965.31 | 80.01 | 23.00 | 12.00 | 1460543.84161 | 449746.35036 |
| 1320 | 2013.93 | 101.05 | 18.01 | 10.00 | 1460545.96659 | 449746.12589 |
| 1321 | 2039.04 | 96.05 | 24.01 | 11.01 | 1460547.92061 | 449746.42204 |
| 1322 | 2007.62 | 109.03 | 16.00 | 8.00 | 1460550.13562 | 449746.83765 |
| 1324 | 1955.61 | 111.03 | 19.01 | 10.00 | 1460552.97718 | 449748.18853 |
| 1325 | 1970.71 | 100.04 | 19.01 | 12.00 | 1460552.60976 | 449747.89669 |
| 1326 | 1983.22 | 105.01 | 19.00 | 7.00 | 1460552.28372 | 449747.69033 |
| 1327 | 1989.42 | 98.02 | 15.00 | 12.00 | 1460552.28372 | 449747.69033 |
| 1328 | 2010.52 | 114.03 | 19.00 | 8.00 | 1460550.06372 | 449746.25769 |
| 1329 | 2023.52 | 102.03 | 11.00 | 15.00 | 1460550.06372 | 449746.25769 |
| 1330 | 1978.71 | 113.04 | 14.01 | 15.01 | 1460547.51677 | 449744.78519 |
| 1331 | 2050.74 | 100.04 | 23.01 | 13.00 | 1460546.16411 | 449744.01757 |
| 1332 | 1995.32 | 102.02 | 19.00 | 9.00 | 1460544.64795 | 449742.98827 |
| 1333 | 2045.15 | 119.07 | 14.01 | 16.01 | 1460543.55110 | 449742.35243 |
| 1334 | 2023.42 | 96.02 | 24.01 | 13.00 | 1460542.54538 | 449741.65282 |
| 1335 | 2000.82 | 91.04 | 17.01 | 10.00 | 1460542.39550 | 449741.49821 |
| 1336 | 1980.81 | 90.04 | 17.01 | 5.00 | 1460542.41699 | 449741.48313 |
| 1337 | 1996.22 | 109.01 | 15.00 | 15.00 | 1460541.68462 | 449741.01240 |
| 1338 | 2108.76 | 91.03 | 20.01 | 7.00 | 1460540.56573 | 449740.29922 |
| 1339 | 2055.53 | 105.03 | 22.01 | 13.00 | 1460539.85340 | 449739.76510 |
| 1340 | 2059.05 | 96.05 | 17.01 | 11.01 | 1460539.85340 | 449739.76510 |
| 1341 | 2146.88 | 116.05 | 22.01 | 13.01 | 1460539.84672 | 449739.78039 |
| 1342 | 2069.64 | 116.04 | 18.01 | 17.01 | 1460539.83202 | 449739.76477 |
| 1343 | 2128.66 | 100.03 | 24.01 | 12.00 | 1460539.82983 | 449739.75541 |
| 1344 | 2054.43 | 111.02 | 22.00 | 12.00 | 1460540.24308 | 449739.99292 |
| 1345 | 1984.71 | 103.04 | 15.01 | 12.00 | 1460541.77138 | 449740.86007 |
| 1346 | 2035.14 | 111.06 | 15.01 | 7.00 | 1460543.69543 | 449741.94458 |
| 1347 | 2083.44 | 93.02 | 18.00 | 11.00 | 1460545.45998 | 449742.96545 |
| 1348 | 2123.66 | 101.03 | 23.01 | 5.00 | 1460547.27946 | 449744.11891 |
| 1349 | 2020.43 | 108.08 | 21.01 | 9.01 | 1460549.27435 | 449744.94894 |
| 1350 | 2082.85 | 107.04 | 28.01 | 13.01 | 1460551.44326 | 449746.03150 |
| 1351 | 1975.81 | 101.04 | 25.01 | 13.01 | 1460553.35085 | 449747.26636 |
| 1352 | 2040.94 | 97.04 | 20.01 | 9.00 | 1460555.29049 | 449748.42651 |
| 1353 | 2189.90 | 111.05 | 14.01 | 14.01 | 1460555.29049 | 449748.42651 |
| 1354 | 2227.80 | 111.04 | 16.01 | 7.00 | 1460558.86245 | 449750.55151 |
| 1355 | 2150.99 | 103.05 | 19.01 | 13.01 | 1460558.86245 | 449750.55151 |
| 1356 | 2094.75 | 97.03 | 12.00 | 7.00 | 1460562.71688 | 449752.73913 |
| 1357 | 2172.22 | 121.07 | 16.01 | 10.01 | 1460564.52321 | 449753.91203 |
| 1360 | 2156.99 | 105.05 | 19.01 | 18.01 | 1460570.79178 | 449756.69490 |
| 1361 | 2158.10 | 102.05 | 16.01 | 12.01 | 1460570.79178 | 449756.69490 |
| 1362 | 2070.74 | 117.04 | 13.00 | 20.01 | 1460574.74270 | 449758.96512 |
| 1363 | 2149.56 | 113.03 | 27.01 | 15.00 | 1460574.74270 | 449758.96512 |
| 1365 | 2194.90 | 108.04 | 12.00 | 15.01 | 1460580.64956 | 449762.33523 |
| 1366 | 2287.28 | 117.07 | 21.01 | 11.01 | 1460582.40106 | 449763.32717 |
| 1367 | 2241.81 | 109.04 | 26.01 | 9.00 | 1460584.27950 | 449764.46931 |
| 1369 | 2283.71 | 112.03 | 17.01 | 13.00 | 1460588.17073 | 449766.85935 |
| 1370 | 2278.16 | 125.06 | 21.01 | 14.01 | 1460590.25133 | 449767.80064 |
| 1371 | 2191.57 | 142.04 | 23.01 | 12.00 | 1460592.59612 | 449768.61610 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1372 | 2213.69 | 121.04 | 23.01 | 16.00 | 1460594.55363 | 449769.64053 |
| 1373 | 2279.71 | 118.04 | 26.01 | 11.00 | 1460596.05110 | 449770.59009 |
| 1374 | 2175.45 | 99.02 | 21.00 | 12.00 | 1460597.76876 | 449771.49350 |
| 1375 | 2152.88 | 103.04 | 21.01 | 19.01 | 1460599.05382 | 449773.15823 |
| 1376 | 2127.45 | 113.02 | 18.00 | 18.00 | 1460600.33770 | 449774.80359 |
| 1377 | 2161.56 | 118.03 | 22.01 | 15.00 | 1460601.20268 | 449776.73149 |
| 1378 | 2216.13 | 105.05 | 15.01 | 13.01 | 1460602.03106 | 449778.84997 |
| 1379 | 2105.86 | 117.05 | 19.01 | 10.00 | 1460602.23247 | 449781.04646 |
| 1380 | 2081.75 | 127.05 | 19.01 | 15.01 | 1460602.01913 | 449783.31736 |
| 1381 | 1985.71 | 100.04 | 18.01 | 12.00 | 1460601.67141 | 449785.51212 |
| 1382 | 2069.85 | 103.04 | 16.01 | 10.00 | 1460601.00092 | 449786.87482 |
| 1383 | 1992.72 | 108.04 | 19.01 | 13.00 | 1460601.01110 | 449786.90575 |
| 1385 | 2199.79 | 103.04 | 12.00 | 13.00 | 1460602.40970 | 449784.68789 |
| 1386 | 2212.24 | 102.06 | 18.01 | 13.01 | 1460603.35523 | 449783.03514 |
| 1387 | 2183.35 | 119.02 | 21.00 | 11.00 | 1460604.32333 | 449781.40483 |
| 1388 | 2183.79 | 125.05 | 22.01 | 12.00 | 1460605.14531 | 449780.18348 |
| 1389 | 2135.12 | 118.01 | 29.00 | 11.00 | 1460605.68183 | 449779.10805 |
| 1390 | 2176.89 | 96.04 | 22.01 | 10.00 | 1460606.11502 | 449778.33809 |
| 1391 | 2222.58 | 103.03 | 20.01 | 12.00 | 1460606.09804 | 449778.33591 |
| 1392 | 2136.77 | 122.04 | 21.01 | 10.00 | 1460606.19443 | 449778.26740 |
| 1393 | 2175.11 | 104.05 | 13.01 | 9.00 | 1460606.44426 | 449777.83458 |
| 1394 | 2085.44 | 125.03 | 13.00 | 19.00 | 1460606.33257 | 449778.04313 |
| 1395 | 2166.21 | 126.07 | 18.01 | 13.01 | 1460606.48414 | 449777.82301 |
| 1396 | 2180.68 | 123.04 | 14.00 | 13.00 | 1460606.45849 | 449777.89960 |
| 1397 | 2159.10 | 99.05 | 17.01 | 15.01 | 1460606.45849 | 449777.89960 |
| 1400 | 2235.92 | 114.05 | 17.01 | 7.00 | 1460605.26176 | 449780.03756 |
| 1401 | 2233.69 | 102.03 | 15.00 | 16.00 | 1460604.41551 | 449781.68420 |
| 1402 | 2092.86 | 130.05 | 11.00 | 16.01 | 1460603.84592 | 449783.08798 |
| 1403 | 2092.23 | 117.01 | 18.00 | 9.00 | 1460603.28909 | 449784.40862 |
| 1405 | 2001.92 | 96.04 | 25.01 | 8.00 | 1460601.84048 | 449787.20343 |
| 1406 | 2080.65 | 99.03 | 18.01 | 17.01 | 1460601.18048 | 449788.76026 |
| 1407 | 1994.62 | 97.03 | 14.00 | 9.00 | 1460600.44755 | 449790.22463 |
| 1408 | 2025.42 | 104.02 | 15.00 | 15.00 | 1460600.44755 | 449790.22463 |
| 1409 | 2114.76 | 124.04 | 18.01 | 17.01 | 1460598.86575 | 449792.82392 |
| 1410 | 1988.52 | 102.03 | 14.00 | 13.00 | 1460598.16948 | 449794.08451 |
| 1411 | 1932.89 | 93.04 | 12.01 | 13.01 | 1460597.41409 | 449795.62304 |
| 1413 | 1975.32 | 95.02 | 24.00 | 13.00 | 1460595.88213 | 449798.17744 |
| 1414 | 2010.52 | 95.02 | 16.00 | 7.00 | 1460595.32575 | 449799.28969 |
| 1415 | 1982.52 | 98.03 | 18.00 | 8.00 | 1460595.32575 | 449799.28969 |
| 1416 | 2000.42 | 113.02 | 17.00 | 12.00 | 1460594.11355 | 449801.78843 |
| 1417 | 1894.68 | 101.04 | 17.01 | 15.01 | 1460593.17308 | 449803.20959 |
| 1419 | 1997.62 | 103.03 | 20.01 | 14.00 | 1460592.46211 | 449804.44021 |
| 1420 | 2001.62 | 98.03 | 23.01 | 5.00 | 1460592.25594 | 449804.83589 |
| 1421 | 1855.39 | 80.02 | 17.00 | 15.00 | 1460591.25792 | 449806.59754 |
| 1422 | 1918.08 | 108.06 | 23.01 | 8.00 | 1460590.39101 | 449808.39320 |
| 1423 | 2013.32 | 101.02 | 12.00 | 14.00 | 1460589.25080 | 449809.94404 |
| 1424 | 1933.79 | 99.04 | 14.01 | 7.00 | 1460588.39220 | 449811.64964 |
| 1425 | 1882.58 | 90.03 | 14.00 | 11.00 | 1460587.38242 | 449813.13766 |
| 1426 | 1813.47 | 107.03 | 19.00 | 12.00 | 1460587.38242 | 449813.13766 |
| 1427 | 1898.78 | 108.04 | 14.01 | 8.00 | 1460585.42788 | 449816.38201 |
| 1428 | 1885.77 | 93.04 | 19.01 | 9.00 | 1460584.68788 | 449818.07686 |
| 1429 | 1938.89 | 97.04 | 19.01 | 10.00 | 1460583.70125 | 449819.48928 |
| 1430 | 1898.49 | 110.03 | 22.01 | 11.00 | 1460582.98286 | 449820.92114 |
| 1431 | 1928.18 | 108.07 | 14.01 | 13.01 | 1460582.98286 | 449820.92114 |
| 1432 | 1917.36 | 100.07 | 18.01 | 11.01 | 1460581.25244 | 449823.94859 |
| 1433 | 1956.41 | 111.02 | 18.00 | 12.00 | 1460580.40585 | 449825.40749 |
| 1434 | 1925.40 | 105.02 | 18.00 | 8.00 | 1460579.67352 | 449826.85826 |
| 1435 | 1865.67 | 88.03 | 22.01 | 6.00 | 1460578.66094 | 449828.21096 |
| 1436 | 1964.41 | 95.02 | 19.00 | 13.00 | 1460578.03385 | 449829.90747 |
| 1437 | 2027.32 | 97.02 | 19.00 | 8.00 | 1460577.09008 | 449831.48504 |
| 1438 | 2010.72 | 115.04 | 16.01 | 7.00 | 1460576.08383 | 449832.85238 |
| 1439 | 1964.41 | 102.02 | 16.00 | 15.00 | 1460575.22083 | 449834.57734 |
| 1440 | 1912.40 | 100.02 | 17.00 | 16.00 | 1460574.35154 | 449835.85632 |
| 1441 | 1837.57 | 81.03 | 16.00 | 7.00 | 1460573.63415 | 449837.35837 |
| 1442 | 1884.58 | 102.03 | 21.01 | 9.00 | 1460572.95058 | 449838.88732 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1443 | 1963.81 | 104.04 | 18.01 | 9.00 | 1460572.20022 | 449840.21152 |
| 1444 | 1900.30 | 91.01 | 15.00 | 14.00 | 1460571.61930 | 449841.54925 |
| 1445 | 1895.21 | 101.01 | 19.00 | 11.00 | 1460571.61930 | 449841.54925 |
| 1446 | 1822.84 | 108.05 | 25.01 | 6.00 | 1460569.94441 | 449844.00198 |
| 1447 | 1903.25 | 103.07 | 15.01 | 9.01 | 1460569.28297 | 449844.99186 |
| 1448 | 1831.75 | 92.04 | 14.01 | 10.00 | 1460569.13395 | 449845.30991 |
| 1449 | 1920.79 | 92.04 | 20.01 | 10.00 | 1460568.87821 | 449845.69087 |
| 1450 | 1854.85 | 79.04 | 14.01 | 14.01 | 1460567.95628 | 449847.49079 |
| 1451 | 1838.94 | 97.05 | 17.01 | 13.01 | 1460567.95628 | 449847.49079 |
| 1452 | 1857.95 | 110.06 | 14.01 | 7.00 | 1460566.28557 | 449850.67663 |
| 1453 | 1829.38 | 93.02 | 14.00 | 9.00 | 1460565.60216 | 449852.17055 |
| 1455 | 1873.77 | 107.04 | 6.00 | 8.00 | 1460563.04189 | 449855.32063 |
| 1456 | 1915.50 | 105.03 | 17.00 | 16.00 | 1460561.69477 | 449856.70859 |
| 1457 | 1791.38 | 108.02 | 18.00 | 12.00 | 1460560.24494 | 449857.86949 |
| 1458 | 1925.79 | 99.04 | 23.01 | 14.01 | 1460558.45143 | 449858.54029 |
| 1459 | 1926.79 | 88.04 | 22.01 | 11.00 | 1460558.45143 | 449858.54029 |
| 1462 | 2032.63 | 97.03 | 20.01 | 17.01 | 1460551.05445 | 449858.69505 |
| 1463 | 2095.23 | 97.01 | 21.00 | 13.00 | 1460549.35383 | 449857.92654 |
| 1464 | 2192.56 | 106.08 | 25.02 | 15.01 | 1460547.97428 | 449857.27852 |
| 1465 | 2075.75 | 113.04 | 22.01 | 11.00 | 1460546.85177 | 449856.65793 |
| 1466 | 2111.97 | 124.06 | 22.01 | 15.01 | 1460546.45177 | 449856.42971 |
| 1467 | 2222.58 | 114.03 | 27.01 | 9.00 | 1460546.43959 | 449856.41998 |
| 1468 | 2113.76 | 119.04 | 15.01 | 8.00 | 1460547.18783 | 449856.86990 |
| 1469 | 2083.23 | 128.01 | 22.00 | 7.00 | 1460547.18783 | 449856.86990 |
| 1472 | 1965.90 | 106.05 | 14.01 | 10.00 | 1460552.85418 | 449860.32087 |
| 1473 | 1965.71 | 100.04 | 19.01 | 15.01 | 1460552.85418 | 449860.32087 |
| 1476 | 1926.69 | 117.04 | 14.01 | 14.01 | 1460557.66092 | 449863.24817 |
| 1477 | 1893.40 | 118.02 | 17.00 | 13.00 | 1460557.50541 | 449863.11355 |
| 1478 | 1847.57 | 106.03 | 15.00 | 15.00 | 1460557.19687 | 449862.87375 |
| 1479 | 1874.14 | 89.05 | 10.01 | 9.01 | 1460557.21382 | 449862.86627 |
| 1480 | 1838.66 | 84.03 | 17.01 | 12.00 | 1460557.21288 | 449862.88590 |
| 1481 | 1949.31 | 111.02 | 20.00 | 8.00 | 1460557.24432 | 449862.88585 |
| 1482 | 1950.70 | 106.04 | 18.01 | 10.00 | 1460558.08681 | 449863.55561 |
| 1483 | 2073.06 | 100.05 | 25.01 | 8.00 | 1460559.03442 | 449864.10208 |
| 1484 | 1981.01 | 118.06 | 13.01 | 10.01 | 1460559.02394 | 449864.10833 |
| 1485 | 1987.71 | 107.04 | 17.01 | 11.00 | 1460558.82195 | 449863.97427 |
| 1486 | 2040.04 | 114.06 | 14.01 | 11.01 | 1460558.53547 | 449863.82007 |
| 1487 | 1919.07 | 116.06 | 8.00 | 9.01 | 1460558.55402 | 449863.81931 |
| 1488 | 1856.41 | 105.08 | 19.01 | 9.01 | 1460558.55426 | 449863.82825 |
| 1489 | 1982.41 | 106.08 | 17.01 | 12.01 | 1460557.66094 | 449863.23115 |
| 1490 | 1921.31 | 103.02 | 14.00 | 9.00 | 1460557.00430 | 449862.74983 |
| 1491 | 1866.48 | 102.03 | 22.01 | 6.00 | 1460557.00430 | 449862.74983 |
| 1492 | 1928.60 | 80.02 | 18.01 | 8.00 | 1460555.89058 | 449862.10892 |
| 1493 | 1884.58 | 94.03 | 16.00 | 14.00 | 1460555.78542 | 449862.02522 |
| 1494 | 1928.31 | 92.01 | 17.00 | 11.00 | 1460554.81780 | 449861.51269 |
| 1495 | 1946.51 | 105.03 | 20.01 | 5.00 | 1460553.88043 | 449860.88894 |
| 1496 | 2086.75 | 120.04 | 20.01 | 12.00 | 1460553.07048 | 449860.40412 |
| 1497 | 2137.98 | 104.05 | 10.00 | 5.00 | 1460552.12343 | 449859.81909 |
| 1498 | 2082.54 | 117.03 | 18.00 | 13.00 | 1460551.29283 | 449859.37316 |
| 1499 | 1937.60 | 101.03 | 11.00 | 6.00 | 1460550.42586 | 449858.88878 |
| 1500 | 2033.53 | 112.03 | 11.00 | 14.00 | 1460549.50298 | 449858.37228 |
| 1501 | 2219.91 | 107.04 | 24.01 | 7.00 | 1460549.50298 | 449858.37228 |
| 1502 | 2092.86 | 112.05 | 20.01 | 20.01 | 1460546.83383 | 449856.86905 |
| 1503 | 2161.21 | 116.06 | 29.02 | 13.01 | 1460545.63000 | 449856.12573 |
| 1504 | 2211.13 | 122.06 | 15.01 | 13.01 | 1460544.69797 | 449855.48526 |
| 1505 | 2197.57 | 122.03 | 11.00 | 13.00 | 1460544.69797 | 449855.48526 |
| 1507 | 2124.72 | 114.09 | 28.02 | 11.01 | 1460541.14363 | 449853.70012 |
| 1508 | 2144.09 | 100.05 | 23.01 | 13.01 | 1460539.94687 | 449852.90742 |
| 1509 | 2112.55 | 92.02 | 24.01 | 10.00 | 1460538.64129 | 449852.12155 |
| 1510 | 2174.11 | 120.06 | 24.01 | 11.01 | 1460537.34274 | 449851.46562 |
| 1511 | 2263.70 | 107.03 | 22.01 | 12.00 | 1460535.84968 | 449850.91635 |
| 1512 | 2288.82 | 139.05 | 23.01 | 12.00 | 1460534.39703 | 449850.23250 |
| 1513 | 2291.83 | 130.05 | 18.01 | 12.00 | 1460532.86268 | 449849.57832 |
| 1514 | 2274.82 | 138.05 | 19.01 | 17.01 | 1460532.86268 | 449849.57832 |
| 1515 | 2170.67 | 108.03 | 20.01 | 8.00 | 1460530.23037 | 449848.10566 |

## Pile 33, Pad 31

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1516 | 2232.14 | 127.06 | 17.01 | 13.01 | 1460528.76497 | 449847.50904 |
| 1517 | 2276.50 | 114.08 | 14.01 | 11.01 | 1460527.30977 | 449846.84745 |
| 1518 | 2160.21 | 116.06 | 15.01 | 11.01 | 1460525.72934 | 449846.05774 |
| 1519 | 2127.44 | 106.02 | 13.00 | 17.00 | 1460525.72934 | 449846.05774 |
| 1520 | 2134.45 | 145.03 | 22.00 | 14.00 | 1460522.91195 | 449844.30178 |
| 1521 | 2098.17 | 97.05 | 18.01 | 8.00 | 1460521.47494 | 449843.58959 |
| 1523 | 2181.68 | 131.04 | 17.01 | 13.00 | 1460518.25309 | 449841.55256 |
| 1524 | 2111.55 | 125.03 | 16.00 | 13.00 | 1460516.57732 | 449840.44419 |
| 1525 | 2038.83 | 96.04 | 18.01 | 15.01 | 1460515.01643 | 449839.40270 |
| 1526 | 2026.13 | 105.06 | 19.01 | 11.01 | 1460513.36011 | 449838.30101 |
| 1527 | 2081.65 | 116.04 | 19.01 | 15.00 | 1460511.89509 | 449837.05159 |
| 1528 | 1989.52 | 118.03 | 15.00 | 10.00 | 1460510.37785 | 449835.85751 |
| 1529 | 2036.94 | 106.05 | 25.01 | 12.01 | 1460508.75576 | 449834.75102 |
| 1530 | 2014.73 | 103.04 | 24.01 | 10.00 | 1460508.75576 | 449834.75102 |
| 1533 | 1926.79 | 92.04 | 20.01 | 9.00 | 1460502.97050 | 449829.86062 |
| 1534 | 1968.71 | 105.04 | 19.01 | 11.00 | 1460502.02013 | 449828.22764 |
| 1535 | 1979.91 | 118.05 | 21.01 | 10.00 | 1460502.02013 | 449828.22764 |
| 1537 | 1866.39 | 95.02 | 14.00 | 10.00 | 1460501.44041 | 449822.51514 |
| 1538 | 1871.67 | 102.04 | 16.01 | 9.00 | 1460501.72978 | 449821.13588 |
| 1539 | 1849.11 | 83.00 | 12.00 | 12.00 | 1460501.92752 | 449820.45656 |
| 0 | 2070.64 | 103.03 | 20.01 | 10.00 | 1460524.68972 | 449817.72090 |
| 1 | 2058.43 | 102.02 | 15.00 | 14.00 | 1460524.68938 | 449817.71493 |
| 2 | 2007.72 | 86.03 | 15.01 | 19.01 | 1460524.69195 | 449817.71343 |
| 3 | 1980.71 | 104.04 | 13.00 | 9.00 | 1460524.69146 | 449817.70659 |
| 4 | 1992.82 | 102.04 | 15.01 | 12.00 | 1460524.69146 | 449817.70659 |
| 5 | 2027.93 | 120.06 | 16.01 | 11.01 | 1460524.70446 | 449817.70397 |
| 6 | 1982.11 | 92.05 | 16.01 | 11.01 | 1460524.69254 | 449817.70318 |
| 7 | 1990.32 | 103.02 | 17.00 | 15.00 | 1460524.68654 | 449817.68732 |
| 8 | 2007.62 | 101.03 | 20.01 | 19.01 | 1460524.67264 | 449817.68557 |
| 9 | 1981.81 | 118.05 | 17.01 | 9.00 | 1460524.67264 | 449817.68557 |
| 10 | 2058.43 | 100.02 | 18.00 | 7.00 | 1460524.68019 | 449817.67557 |
| 11 | 2070.85 | 115.05 | 17.01 | 12.00 | 1460524.68090 | 449817.67492 |
| 12 | 2077.85 | 111.05 | 15.01 | 13.01 | 1460524.67506 | 449817.67800 |
| 13 | 1977.52 | 114.03 | 19.00 | 9.00 | 1460524.66946 | 449817.66846 |
| 14 | 2050.74 | 96.03 | 23.01 | 10.00 | 1460524.66938 | 449817.66890 |
| 15 | 2006.32 | 106.02 | 10.00 | 13.00 | 1460524.66938 | 449817.66890 |
| 16 | 1992.22 | 94.01 | 19.00 | 12.00 | 1460524.65474 | 449817.67645 |
| 17 | 2010.82 | 101.04 | 13.01 | 18.01 | 1460524.65458 | 449817.67273 |
| 18 | 2033.53 | 106.03 | 15.00 | 20.01 | 1460524.66068 | 449817.69529 |
| 19 | 2009.92 | 108.05 | 20.01 | 11.01 | 1460524.65960 | 449817.68888 |
| 20 | 2083.75 | 103.04 | 14.01 | 8.00 | 1460524.65415 | 449817.69303 |
| 21 | 2034.73 | 111.04 | 20.01 | 18.01 | 1460524.64788 | 449817.69864 |
| 23 | 2033.73 | 92.03 | 14.01 | 16.01 | 1460524.62541 | 449817.67136 |
| 24 | 2048.43 | 114.02 | 21.00 | 12.00 | 1460524.61851 | 449817.68707 |
| 25 | 2060.15 | 96.05 | 22.01 | 10.01 | 1460524.59201 | 449817.74108 |
| 26 | 1921.98 | 91.05 | 16.01 | 14.01 | 1460524.43220 | 449818.16232 |
| 27 | 1917.88 | 97.04 | 16.01 | 10.00 | 1460523.64560 | 449820.01448 |
| 28 | 1909.78 | 98.04 | 19.01 | 15.01 | 1460522.86469 | 449821.63636 |
| 29 | 1945.31 | 102.02 | 15.00 | 16.00 | 1460522.86469 | 449821.63636 |
| 30 | 2050.53 | 97.03 | 21.01 | 12.00 | 1460521.45445 | 449824.83106 |
| 31 | 1885.87 | 92.04 | 20.01 | 8.00 | 1460521.45445 | 449824.83106 |
| 32 | 1887.39 | 95.02 | 23.00 | 17.00 | 1460519.92349 | 449827.78496 |
| 33 | 1923.40 | 90.02 | 15.00 | 10.00 | 1460519.39730 | 449829.04958 |
| 34 | 1789.64 | 99.04 | 12.00 | 11.00 | 1460519.39730 | 449829.04958 |
| 35 | 1912.69 | 92.03 | 19.01 | 10.00 | 1460518.40894 | 449831.06057 |
| 36 | 1923.40 | 107.02 | 16.00 | 12.00 | 1460518.49808 | 449830.88292 |
| 37 | 1881.58 | 90.03 | 21.01 | 11.00 | 1460518.52741 | 449830.81628 |
| 38 | 1883.87 | 99.05 | 17.01 | 12.01 | 1460518.53425 | 449830.80708 |
| 39 | 1809.83 | 108.05 | 13.01 | 15.01 | 1460518.54557 | 449830.78673 |
| 40 | 1841.48 | 97.03 | 20.01 | 12.00 | 1460518.54953 | 449830.80236 |
| 41 | 1842.20 | 78.01 | 17.00 | 11.00 | 1460518.54544 | 449830.78438 |
| 42 | 1776.46 | 102.03 | 18.00 | 12.00 | 1460518.54173 | 449830.79202 |
| 43 | 1867.67 | 104.04 | 15.01 | 8.00 | 1460518.53212 | 449830.78708 |
| 46 | 1885.58 | 99.03 | 19.01 | 18.01 | 1460518.49790 | 449830.82232 |
| 47 | 1954.90 | 97.04 | 18.01 | 12.01 | 1460518.49790 | 449830.82232 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 49 | 1944.31 | 103.02 | 19.00 | 15.00 | 1460518.55149 | 449830.75146 |
| 50 | 1899.40 | 103.02 | 14.00 | 11.00 | 1460518.67230 | 449830.49895 |
| 51 | 1964.81 | 95.04 | 11.00 | 14.01 | 1460518.66034 | 449830.52670 |
| 52 | 1931.41 | 124.03 | 10.00 | 15.00 | 1460518.66650 | 449830.51941 |
| 53 | 1937.50 | 112.03 | 17.00 | 15.00 | 1460518.90538 | 449829.88157 |
| 55 | 1900.88 | 104.05 | 12.01 | 9.00 | 1460520.14781 | 449827.14296 |
| 56 | 1953.70 | 93.03 | 19.01 | 17.01 | 1460520.69536 | 449825.98020 |
| 57 | 1937.60 | 104.03 | 13.00 | 7.00 | 1460520.69536 | 449825.98020 |
| 58 | 1889.59 | 91.03 | 23.01 | 5.00 | 1460521.66286 | 449824.21000 |
| 59 | 1955.70 | 96.03 | 15.01 | 16.01 | 1460521.66286 | 449824.21000 |
| 60 | 2057.95 | 103.05 | 24.01 | 12.01 | 1460522.12136 | 449823.18315 |
| 61 | 1976.81 | 110.05 | 15.01 | 12.00 | 1460522.57445 | 449822.16270 |
| 62 | 1816.65 | 90.03 | 19.01 | 11.00 | 1460522.97180 | 449821.32477 |
| 63 | 1975.31 | 113.02 | 23.00 | 10.00 | 1460522.97180 | 449821.32477 |
| 64 | 1932.50 | 104.03 | 18.00 | 4.00 | 1460523.63351 | 449819.98985 |
| 65 | 1914.59 | 80.02 | 18.01 | 11.00 | 1460523.63351 | 449819.98985 |
| 66 | 1990.62 | 91.03 | 17.01 | 10.00 | 1460524.51965 | 449818.26474 |
| 67 | 2010.22 | 104.06 | 19.01 | 15.01 | 1460524.93286 | 449817.44463 |
| 68 | 1980.51 | 104.03 | 17.00 | 7.00 | 1460525.34035 | 449816.66940 |
| 69 | 1994.92 | 99.05 | 13.01 | 13.01 | 1460525.80571 | 449815.89206 |
| 70 | 2146.10 | 120.06 | 19.01 | 16.01 | 1460525.80571 | 449815.89206 |
| 71 | 1973.71 | 95.03 | 12.00 | 9.00 | 1460526.47300 | 449814.29509 |
| 72 | 1887.49 | 86.02 | 13.00 | 7.00 | 1460526.96095 | 449813.33371 |
| 73 | 1826.47 | 88.02 | 9.00 | 8.00 | 1460527.44472 | 449812.14668 |
| 75 | 1866.58 | 96.03 | 15.00 | 13.00 | 1460528.77775 | 449809.85422 |
| 76 | 1880.77 | 91.04 | 14.01 | 11.00 | 1460529.18706 | 449809.00967 |
| 77 | 1809.83 | 92.04 | 20.01 | 11.01 | 1460529.12654 | 449809.10606 |
| 78 | 1848.48 | 88.02 | 16.00 | 4.00 | 1460529.16078 | 449809.05958 |
| 79 | 1840.66 | 91.03 | 9.00 | 6.00 | 1460529.64756 | 449807.89056 |
| 80 | 1828.57 | 109.03 | 14.00 | 7.00 | 1460529.68382 | 449808.00519 |
| 81 | 1874.49 | 97.03 | 15.00 | 20.01 | 1460530.24644 | 449806.74903 |
| 83 | 1961.10 | 109.06 | 25.01 | 5.00 | 1460531.40227 | 449804.67039 |
| 84 | 1904.88 | 108.05 | 14.01 | 12.01 | 1460531.40227 | 449804.67039 |
| 86 | 1870.86 | 92.04 | 12.01 | 11.01 | 1460532.58094 | 449801.96792 |
| 87 | 1871.77 | 98.04 | 22.01 | 15.01 | 1460533.09105 | 449800.24713 |
| 88 | 1850.30 | 96.02 | 18.00 | 12.00 | 1460533.15139 | 449799.97403 |
| 89 | 1866.39 | 108.02 | 23.00 | 9.00 | 1460533.96189 | 449798.44947 |
| 91 | 1822.20 | 82.01 | 25.00 | 8.00 | 1460535.53980 | 449795.25693 |
| 92 | 1851.94 | 102.05 | 19.01 | 9.00 | 1460535.48720 | 449795.20692 |
| 93 | 1949.60 | 116.04 | 9.00 | 15.00 | 1460536.80414 | 449792.32642 |
| 94 | 1966.90 | 111.05 | 9.00 | 12.01 | 1460537.49338 | 449790.90745 |
| 95 | 2043.53 | 102.03 | 16.00 | 10.00 | 1460538.09219 | 449789.57828 |
| 96 | 2046.74 | 117.04 | 19.01 | 12.00 | 1460538.09219 | 449789.57828 |
| 97 | 1988.32 | 88.01 | 17.00 | 11.00 | 1460539.57737 | 449786.67392 |
| 98 | 1934.41 | 100.02 | 12.00 | 8.00 | 1460540.20489 | 449785.21381 |
| 99 | 1906.78 | 96.04 | 12.00 | 16.01 | 1460540.85857 | 449783.76198 |
| 100 | 1981.91 | 105.05 | 21.01 | 9.00 | 1460541.43396 | 449782.37659 |
| 101 | 1900.59 | 95.03 | 21.01 | 17.01 | 1460542.20972 | 449781.00936 |
| 102 | 1904.69 | 83.03 | 14.01 | 12.00 | 1460542.90585 | 449779.57399 |
| 103 | 1968.10 | 104.06 | 16.01 | 14.01 | 1460543.53742 | 449778.07134 |
| 104 | 2087.17 | 96.05 | 23.01 | 16.01 | 1460543.53742 | 449778.07134 |
| 105 | 2187.46 | 103.02 | 16.00 | 13.00 | 1460544.78493 | 449775.25553 |
| 106 | 2191.12 | 107.05 | 22.01 | 15.01 | 1460545.34010 | 449773.96880 |
| 107 | 2197.90 | 107.04 | 16.01 | 15.01 | 1460545.73359 | 449773.04746 |
| 109 | 2195.90 | 106.04 | 24.01 | 22.01 | 1460545.82189 | 449772.86770 |
| 110 | 2225.25 | 125.07 | 22.01 | 20.01 | 1460545.82189 | 449772.86770 |
| 111 | 2272.71 | 118.04 | 18.01 | 12.00 | 1460545.81470 | 449772.90433 |
| 112 | 2182.68 | 129.04 | 12.00 | 12.00 | 1460545.81470 | 449772.90433 |
| 114 | 2224.91 | 116.05 | 21.01 | 10.00 | 1460546.57019 | 449771.21697 |
| 115 | 2056.84 | 107.04 | 18.01 | 10.00 | 1460546.98795 | 449770.22154 |
| 116 | 2063.43 | 98.02 | 20.00 | 16.00 | 1460547.31299 | 449769.53122 |
| 117 | 2118.55 | 108.03 | 15.00 | 19.00 | 1460547.51054 | 449769.16413 |
| 118 | 2103.49 | 99.07 | 15.01 | 10.01 | 1460547.56039 | 449769.07129 |
| 119 | 2119.08 | 107.05 | 13.01 | 12.01 | 1460547.84875 | 449768.42615 |
| 120 | 2084.85 | 110.05 | 24.01 | 10.00 | 1460547.89284 | 449768.97432 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 121 | 2028.93 | 96.04 | 25.01 | 11.01 | 1460548.26092 | 449768.15953 |
| 122 | 2018.83 | 104.04 | 22.01 | 15.01 | 1460548.45823 | 449767.74649 |
| 123 | 2034.32 | 101.02 | 24.00 | 9.00 | 1460548.56935 | 449767.46033 |
| 125 | 2150.10 | 130.07 | 25.01 | 13.01 | 1460548.76779 | 449766.93121 |
| 126 | 2134.55 | 127.03 | 19.00 | 8.00 | 1460549.21974 | 449765.45099 |
| 127 | 2138.77 | 125.05 | 22.01 | 8.00 | 1460549.32490 | 449765.20200 |
| 128 | 2147.20 | 91.05 | 16.01 | 15.01 | 1460550.16208 | 449763.78286 |
| 129 | 1981.71 | 89.03 | 19.01 | 11.00 | 1460550.16208 | 449763.78286 |
| 130 | 1993.52 | 98.03 | 9.00 | 11.00 | 1460552.11608 | 449760.13956 |
| 131 | 2022.03 | 128.07 | 22.01 | 16.01 | 1460553.79259 | 449758.51693 |
| 132 | 1997.62 | 110.03 | 12.00 | 14.00 | 1460555.56187 | 449757.09262 |
| 133 | 2114.76 | 117.04 | 17.01 | 16.01 | 1460557.59923 | 449756.06610 |
| 134 | 2180.33 | 109.07 | 18.01 | 13.01 | 1460559.72121 | 449755.52112 |
| 135 | 2130.87 | 105.04 | 23.01 | 15.01 | 1460559.72121 | 449755.52112 |
| 136 | 2220.13 | 111.06 | 26.01 | 9.00 | 1460563.73829 | 449755.62389 |
| 137 | 2131.34 | 88.01 | 16.00 | 10.00 | 1460565.18790 | 449755.96689 |
| 138 | 2100.55 | 113.03 | 17.00 | 11.00 | 1460565.19352 | 449755.98739 |
| 139 | 2067.12 | 117.01 | 16.00 | 8.00 | 1460564.51961 | 449755.73854 |
| 140 | 2135.45 | 116.02 | 21.00 | 7.00 | 1460564.51961 | 449755.73854 |
| 141 | 2069.95 | 113.05 | 18.01 | 15.01 | 1460563.31579 | 449755.29753 |
| 142 | 2132.98 | 108.05 | 15.01 | 16.01 | 1460563.31579 | 449755.29753 |
| 143 | 2080.54 | 95.02 | 9.00 | 16.00 | 1460560.97140 | 449754.16862 |
| 144 | 1973.71 | 107.04 | 14.01 | 9.00 | 1460560.00858 | 449753.70656 |
| 145 | 2001.62 | 103.03 | 18.01 | 11.00 | 1460559.12716 | 449753.28557 |
| 146 | 1999.42 | 106.02 | 24.01 | 10.00 | 1460557.85816 | 449752.75588 |
| 147 | 2049.64 | 102.03 | 19.01 | 21.01 | 1460556.76605 | 449752.10817 |
| 148 | 1912.78 | 77.03 | 19.01 | 7.00 | 1460555.62685 | 449751.54200 |
| 149 | 2037.53 | 93.02 | 21.01 | 18.00 | 1460554.36368 | 449750.99251 |
| 150 | 1977.21 | 116.07 | 20.01 | 4.00 | 1460553.15775 | 449750.42403 |
| 151 | 1992.92 | 101.05 | 20.01 | 16.01 | 1460551.90390 | 449749.72409 |
| 152 | 2005.92 | 122.06 | 22.01 | 15.01 | 1460550.74583 | 449748.98894 |
| 153 | 2009.52 | 110.03 | 10.00 | 9.00 | 1460550.74583 | 449748.98894 |
| 154 | 2011.62 | 99.03 | 25.01 | 17.01 | 1460548.57660 | 449747.51166 |
| 155 | 1964.41 | 98.02 | 17.00 | 11.00 | 1460547.64794 | 449746.92330 |
| 156 | 1943.70 | 80.03 | 12.00 | 7.00 | 1460547.79037 | 449747.59783 |
| 157 | 1963.51 | 84.02 | 20.01 | 9.00 | 1460547.96301 | 449747.69105 |
| 158 | 1998.52 | 97.03 | 18.00 | 10.00 | 1460548.84080 | 449748.10418 |
| 159 | 1982.71 | 107.04 | 13.00 | 13.00 | 1460550.66917 | 449749.23413 |
| 160 | 1995.22 | 110.01 | 17.00 | 10.00 | 1460552.02502 | 449750.04993 |
| 161 | 2047.53 | 92.02 | 19.00 | 16.00 | 1460553.26406 | 449751.91645 |
| 162 | 2064.54 | 113.03 | 14.00 | 9.00 | 1460554.17048 | 449754.14248 |
| 163 | 1865.58 | 107.03 | 13.00 | 13.00 | 1460554.34041 | 449756.27306 |
| 164 | 1985.22 | 113.01 | 10.00 | 14.00 | 1460554.37963 | 449758.41369 |
| 165 | 1987.82 | 102.04 | 16.01 | 11.00 | 1460553.87746 | 449760.36009 |
| 166 | 2212.57 | 108.03 | 32.01 | 17.00 | 1460553.16592 | 449762.20987 |
| 167 | 2173.46 | 116.02 | 23.00 | 14.00 | 1460553.16592 | 449762.20987 |
| 169 | 2106.55 | 109.03 | 14.00 | 8.00 | 1460550.45669 | 449767.54926 |
| 170 | 2153.21 | 105.06 | 16.01 | 15.01 | 1460549.48253 | 449769.41969 |
| 171 | 2145.77 | 110.04 | 18.01 | 10.00 | 1460548.58578 | 449771.26612 |
| 172 | 2239.58 | 112.03 | 19.00 | 14.00 | 1460548.58578 | 449771.26612 |
| 173 | 2091.75 | 112.04 | 12.00 | 13.00 | 1460546.91039 | 449774.79030 |
| 174 | 2081.75 | 100.04 | 16.01 | 12.00 | 1460546.04913 | 449776.50908 |
| 175 | 1870.77 | 88.04 | 18.01 | 9.00 | 1460545.25096 | 449778.38062 |
| 177 | 1925.89 | 88.04 | 8.00 | 13.01 | 1460543.93179 | 449781.02585 |
| 178 | 2028.22 | 113.01 | 20.00 | 17.00 | 1460543.39769 | 449781.99484 |
| 179 | 2071.85 | 105.04 | 12.00 | 12.00 | 1460543.16687 | 449782.41212 |
| 180 | 1922.50 | 85.02 | 20.01 | 6.00 | 1460543.16687 | 449782.41212 |
| 181 | 2016.62 | 103.03 | 15.00 | 9.00 | 1460542.64086 | 449783.43089 |
| 182 | 2026.43 | 104.02 | 19.00 | 12.00 | 1460542.37547 | 449784.05828 |
| 183 | 2001.32 | 105.02 | 18.00 | 10.00 | 1460542.33796 | 449784.14842 |
| 184 | 2015.42 | 95.02 | 24.01 | 15.00 | 1460541.91120 | 449785.11110 |
| 185 | 2024.23 | 109.07 | 17.01 | 10.01 | 1460541.91120 | 449785.11110 |
| 186 | 1931.60 | 103.03 | 19.01 | 15.00 | 1460541.76950 | 449785.46819 |
| 187 | 2047.74 | 95.03 | 19.01 | 10.00 | 1460541.53674 | 449786.07489 |
| 188 | 1996.92 | 97.04 | 24.01 | 7.00 | 1460540.68345 | 449787.77353 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 189 | 2011.72 | 109.04 | 19.01 | 19.01 | 1460540.25296 | 449788.74106 |
| 190 | 2033.94 | 114.05 | 11.01 | 16.01 | 1460540.19230 | 449788.98142 |
| 191 | 2010.32 | 88.01 | 14.00 | 20.00 | 1460540.19230 | 449788.98142 |
| 193 | 2030.03 | 96.05 | 15.01 | 14.01 | 1460539.14071 | 449791.11939 |
| 194 | 2023.52 | 105.03 | 21.01 | 9.00 | 1460539.18626 | 449791.06188 |
| 195 | 1945.70 | 99.04 | 5.00 | 13.00 | 1460539.18626 | 449791.06188 |
| 196 | 2014.93 | 95.04 | 22.01 | 8.00 | 1460539.20375 | 449791.07324 |
| 197 | 1979.91 | 116.05 | 13.01 | 11.01 | 1460539.04538 | 449791.28491 |
| 198 | 1988.61 | 111.03 | 16.00 | 13.00 | 1460539.05763 | 449791.26644 |
| 199 | 1863.58 | 110.03 | 16.00 | 12.00 | 1460538.92529 | 449791.44419 |
| 200 | 1877.77 | 94.04 | 23.01 | 14.01 | 1460538.92529 | 449791.44419 |
| 201 | 1806.65 | 85.03 | 18.01 | 11.00 | 1460537.98346 | 449794.41065 |
| 202 | 1870.77 | 98.04 | 14.01 | 16.01 | 1460537.64164 | 449795.08376 |
| 203 | 1847.76 | 80.03 | 13.01 | 14.01 | 1460537.48972 | 449795.55560 |
| 204 | 1836.48 | 96.02 | 19.00 | 13.00 | 1460537.40628 | 449795.79516 |
| 205 | 1838.85 | 87.04 | 20.01 | 10.00 | 1460537.40628 | 449795.79516 |
| 206 | 1822.84 | 89.04 | 10.00 | 15.01 | 1460536.13458 | 449798.91267 |
| 207 | 1934.50 | 107.03 | 15.00 | 13.00 | 1460535.47293 | 449800.25508 |
| 208 | 1910.88 | 118.05 | 10.00 | 14.01 | 1460534.93739 | 449801.51488 |
| 209 | 1895.68 | 108.04 | 14.01 | 12.00 | 1460534.93739 | 449801.51488 |
| 210 | 2030.73 | 105.04 | 17.01 | 10.00 | 1460534.18217 | 449802.86044 |
| 211 | 1897.40 | 98.02 | 17.00 | 16.00 | 1460533.40407 | 449804.24260 |
| 212 | 1829.66 | 79.03 | 15.01 | 7.00 | 1460532.74452 | 449805.56212 |
| 213 | 1811.47 | 97.03 | 16.00 | 8.00 | 1460532.23428 | 449806.87914 |
| 214 | 1881.77 | 91.04 | 15.01 | 5.00 | 1460531.60097 | 449808.14705 |
| 215 | 1758.19 | 89.01 | 11.00 | 10.00 | 1460530.81197 | 449809.37117 |
| 216 | 1765.55 | 94.03 | 13.00 | 6.00 | 1460530.07007 | 449810.63225 |
| 217 | 1918.79 | 113.05 | 15.01 | 17.01 | 1460529.51843 | 449811.94959 |
| 218 | 1986.62 | 97.03 | 18.01 | 10.00 | 1460528.95145 | 449813.21024 |
| 219 | 2026.93 | 107.05 | 15.01 | 11.01 | 1460528.35503 | 449814.47164 |
| 221 | 2083.64 | 106.03 | 17.01 | 12.00 | 1460526.99000 | 449817.11758 |
| 222 | 1945.41 | 98.02 | 9.00 | 11.00 | 1460526.37288 | 449818.52656 |
| 223 | 1957.61 | 89.03 | 21.01 | 8.00 | 1460525.66830 | 449819.83059 |
| 224 | 1976.61 | 97.03 | 18.01 | 10.00 | 1460525.08358 | 449821.09029 |
| 225 | 1959.90 | 113.05 | 18.01 | 14.01 | 1460524.45276 | 449822.28263 |
| 226 | 2058.15 | 92.05 | 12.01 | 14.01 | 1460523.75847 | 449823.57231 |
| 227 | 1940.60 | 92.03 | 12.00 | 14.00 | 1460522.94994 | 449825.05522 |
| 228 | 1896.68 | 94.03 | 23.01 | 9.00 | 1460522.04162 | 449826.74477 |
| 229 | 1869.77 | 108.04 | 16.01 | 9.00 | 1460520.86483 | 449828.13779 |
| 230 | 1853.67 | 83.03 | 11.00 | 10.00 | 1460519.44253 | 449829.42221 |
| 231 | 1895.68 | 114.04 | 13.00 | 9.00 | 1460519.44253 | 449829.42221 |
| 232 | 1898.59 | 95.03 | 9.00 | 3.00 | 1460516.21682 | 449830.91113 |
| 233 | 1930.79 | 104.04 | 18.01 | 15.01 | 1460514.37146 | 449831.30493 |
| 234 | 1921.79 | 102.04 | 18.01 | 11.00 | 1460512.76708 | 449831.16246 |
| 235 | 1903.69 | 110.04 | 18.01 | 13.00 | 1460511.99462 | 449831.01910 |
| 236 | 1969.51 | 112.03 | 17.00 | 14.00 | 1460512.17960 | 449831.07132 |
| 237 | 1882.30 | 86.01 | 11.00 | 12.00 | 1460513.22592 | 449831.22195 |
| 238 | 1888.58 | 87.03 | 13.00 | 10.00 | 1460514.95929 | 449831.61305 |
| 239 | 1894.06 | 95.05 | 15.01 | 10.01 | 1460516.78576 | 449831.82715 |
| 240 | 1868.49 | 102.03 | 9.00 | 8.00 | 1460516.78576 | 449831.82715 |
| 242 | 1762.63 | 81.03 | 18.01 | 16.01 | 1460521.82148 | 449833.20092 |
| 243 | 1817.29 | 102.02 | 12.00 | 8.00 | 1460521.82148 | 449833.20092 |
| 244 | 1931.37 | 112.08 | 13.01 | 11.01 | 1460525.08597 | 449834.52927 |
| 245 | 1853.67 | 107.04 | 10.00 | 12.00 | 1460526.79321 | 449835.37723 |
| 246 | 1954.10 | 108.06 | 14.01 | 4.00 | 1460528.43347 | 449836.20485 |
| 247 | 1896.68 | 88.03 | 16.01 | 15.01 | 1460529.63695 | 449836.81894 |
| 248 | 1917.69 | 106.04 | 12.00 | 13.00 | 1460529.24305 | 449836.66757 |
| 249 | 1914.59 | 105.03 | 16.00 | 10.00 | 1460528.88237 | 449836.51599 |
| 250 | 1934.41 | 92.02 | 16.00 | 14.00 | 1460528.98419 | 449836.58482 |
| 251 | 1899.97 | 106.05 | 26.01 | 11.01 | 1460528.34751 | 449836.23714 |
| 252 | 1869.58 | 102.03 | 18.01 | 10.00 | 1460526.80513 | 449835.49651 |
| 253 | 1822.75 | 90.04 | 14.01 | 9.00 | 1460525.09851 | 449834.47932 |
| 255 | 1802.47 | 101.03 | 14.00 | 12.00 | 1460521.92802 | 449831.72454 |
| 256 | 1825.84 | 81.04 | 19.01 | 13.01 | 1460521.85475 | 449831.56069 |
| 257 | 1903.78 | 107.04 | 23.01 | 16.01 | 1460522.32977 | 449832.16945 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 258 | 1918.88 | 88.04 | 14.01 | 8.00 | 1460521.32732 | 449830.97428 |
| 259 | 1915.30 | 94.01 | 16.00 | 13.00 | 1460520.16739 | 449829.17675 |
| 260 | 1847.03 | 78.04 | 10.01 | 7.00 | 1460519.61825 | 449827.45223 |
| 261 | 1852.67 | 92.03 | 8.00 | 7.00 | 1460519.34340 | 449825.47947 |
| 263 | 1947.99 | 104.05 | 19.01 | 10.01 | 1460519.59905 | 449821.39302 |
| 264 | 1891.59 | 104.03 | 10.00 | 7.00 | 1460519.75063 | 449821.06676 |
| 265 | 1879.68 | 92.03 | 18.01 | 11.00 | 1460520.75527 | 449819.14366 |
| 266 | 2029.53 | 94.02 | 17.00 | 12.00 | 1460522.32760 | 449815.83566 |
| 267 | 1766.37 | 101.02 | 14.00 | 10.00 | 1460523.21754 | 449814.11191 |
| 268 | 1821.47 | 108.03 | 16.00 | 8.00 | 1460523.76549 | 449813.94260 |
| 269 | 1775.46 | 100.03 | 17.00 | 11.00 | 1460524.79578 | 449812.20733 |
| 270 | 1790.20 | 76.01 | 8.00 | 11.00 | 1460524.79578 | 449812.20733 |
| 271 | 1739.10 | 93.01 | 10.00 | 12.00 | 1460526.23804 | 449809.11595 |
| 273 | 1855.48 | 103.03 | 10.00 | 16.00 | 1460527.93480 | 449806.23134 |
| 274 | 1943.31 | 98.02 | 19.00 | 8.00 | 1460528.49097 | 449804.85044 |
| 275 | 1974.30 | 103.07 | 21.01 | 12.01 | 1460529.18095 | 449803.59596 |
| 276 | 1932.08 | 96.05 | 17.01 | 12.01 | 1460529.84439 | 449802.37819 |
| 277 | 1940.60 | 102.03 | 15.00 | 15.00 | 1460530.30706 | 449801.24400 |
| 278 | 1902.97 | 108.06 | 21.01 | 13.01 | 1460530.87886 | 449799.99553 |
| 279 | 1774.46 | 99.03 | 19.00 | 7.00 | 1460531.69827 | 449798.45574 |
| 280 | 1767.46 | 88.02 | 17.00 | 7.00 | 1460532.48270 | 449796.91245 |
| 281 | 1804.56 | 102.03 | 18.01 | 10.00 | 1460532.48270 | 449796.91245 |
| 282 | 1873.77 | 100.04 | 14.01 | 9.00 | 1460533.82347 | 449793.88313 |
| 283 | 1846.66 | 98.04 | 15.01 | 10.00 | 1460534.57307 | 449792.33417 |
| 284 | 1997.62 | 100.03 | 15.00 | 7.00 | 1460534.57307 | 449792.33417 |
| 285 | 1974.10 | 114.06 | 18.01 | 14.01 | 1460536.29096 | 449787.83343 |
| 286 | 1947.99 | 95.05 | 13.01 | 10.01 | 1460537.19917 | 449786.26864 |
| 287 | 1839.48 | 104.03 | 15.00 | 13.00 | 1460537.81463 | 449784.83179 |
| 288 | 1883.68 | 107.04 | 19.01 | 10.00 | 1460537.81463 | 449784.83179 |
| 289 | 1846.20 | 100.01 | 14.00 | 17.00 | 1460539.06761 | 449781.79978 |
| 291 | 1891.40 | 91.02 | 13.00 | 10.00 | 1460540.50496 | 449778.76984 |
| 292 | 1917.98 | 97.05 | 23.01 | 10.01 | 1460540.50496 | 449778.76984 |
| 294 | 2091.54 | 108.03 | 12.00 | 16.00 | 1460542.14570 | 449774.06690 |
| 295 | 2091.75 | 107.04 | 16.01 | 13.00 | 1460542.14570 | 449774.06690 |
| 296 | 2096.33 | 105.02 | 19.00 | 7.00 | 1460543.44714 | 449771.00382 |
| 297 | 2050.74 | 109.04 | 18.01 | 12.00 | 1460543.44714 | 449771.00382 |
| 298 | 1987.42 | 99.02 | 15.00 | 14.00 | 1460544.84537 | 449767.95854 |
| 299 | 1999.42 | 100.02 | 22.00 | 19.00 | 1460545.40458 | 449766.39797 |
| 300 | 1953.70 | 91.03 | 26.01 | 5.00 | 1460546.00551 | 449764.84404 |
| 301 | 1972.40 | 89.06 | 19.01 | 11.01 | 1460546.00551 | 449764.84404 |
| 302 | 1955.51 | 107.03 | 26.01 | 12.00 | 1460547.20240 | 449761.76075 |
| 303 | 1901.45 | 97.07 | 14.01 | 13.01 | 1460547.32727 | 449761.54107 |
| 304 | 1988.11 | 108.06 | 15.01 | 13.01 | 1460548.09140 | 449759.59004 |
| 305 | 1959.61 | 95.03 | 22.01 | 14.00 | 1460549.83362 | 449756.38068 |
| 306 | 2040.04 | 95.05 | 18.01 | 11.01 | 1460551.45311 | 449754.84117 |
| 307 | 1970.71 | 116.04 | 8.00 | 13.00 | 1460553.46039 | 449753.63254 |
| 308 | 1940.09 | 106.06 | 18.01 | 12.01 | 1460555.61615 | 449753.06300 |
| 309 | 1981.62 | 99.03 | 18.01 | 20.01 | 1460555.61615 | 449753.06300 |
| 310 | 2036.94 | 101.05 | 18.01 | 9.00 | 1460559.71693 | 449753.00409 |
| 311 | 2072.75 | 83.03 | 27.01 | 9.00 | 1460560.82581 | 449753.94873 |
| 312 | 2118.66 | 105.03 | 11.00 | 5.00 | 1460560.11269 | 449753.79490 |
| 313 | 2077.54 | 106.03 | 15.00 | 13.00 | 1460557.87258 | 449752.41368 |
| 314 | 2000.82 | 108.04 | 25.01 | 21.01 | 1460556.15742 | 449751.89631 |
| 315 | 2000.92 | 119.05 | 15.01 | 11.01 | 1460554.46812 | 449751.41400 |
| 317 | 2078.85 | 112.05 | 20.01 | 11.00 | 1460551.09918 | 449750.10559 |
| 318 | 1967.61 | 101.03 | 14.00 | 9.00 | 1460549.57821 | 449749.08384 |
| 319 | 1983.91 | 113.05 | 14.01 | 17.01 | 1460548.05849 | 449748.34042 |
| 320 | 1944.70 | 93.03 | 19.01 | 13.00 | 1460546.80987 | 449747.74187 |
| 321 | 1970.61 | 95.03 | 13.00 | 8.00 | 1460545.80424 | 449747.10176 |
| 322 | 2008.02 | 104.05 | 19.01 | 9.00 | 1460545.48473 | 449746.93736 |
| 323 | 2034.94 | 113.05 | 20.01 | 21.01 | 1460545.62531 | 449746.94635 |
| 324 | 2007.22 | 106.06 | 16.01 | 13.01 | 1460547.25608 | 449748.09133 |
| 325 | 1994.62 | 109.03 | 15.00 | 9.00 | 1460549.28373 | 449749.16290 |
| 326 | 1941.41 | 97.02 | 14.00 | 22.00 | 1460550.68212 | 449750.18398 |
| 327 | 2016.62 | 84.03 | 17.01 | 12.00 | 1460551.76882 | 449752.04109 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 328 | 2007.82 | 88.04 | 18.01 | 6.00 | 1460552.49940 | 449754.25908 |
| 329 | 1933.99 | 113.06 | 16.01 | 9.00 | 1460552.49940 | 449754.25908 |
| 330 | 1985.72 | 89.03 | 22.01 | 7.00 | 1460552.83790 | 449758.68924 |
| 331 | 2084.54 | 115.03 | 18.00 | 15.00 | 1460552.44646 | 449760.97252 |
| 333 | 2062.05 | 109.06 | 19.01 | 15.01 | 1460551.10066 | 449765.35095 |
| 334 | 2062.95 | 104.05 | 10.00 | 19.01 | 1460550.36924 | 449766.92029 |
| 335 | 2060.74 | 113.04 | 21.01 | 19.01 | 1460549.54522 | 449768.77123 |
| 336 | 2194.34 | 113.07 | 26.02 | 13.01 | 1460548.62564 | 449770.96305 |
| 337 | 2202.68 | 134.04 | 29.01 | 10.00 | 1460547.15150 | 449772.65318 |
| 338 | 2071.95 | 114.05 | 20.01 | 13.01 | 1460547.15150 | 449772.65318 |
| 339 | 2086.96 | 104.05 | 19.01 | 10.00 | 1460544.50877 | 449776.27707 |
| 340 | 1877.58 | 104.03 | 15.00 | 17.01 | 1460542.96479 | 449778.02943 |
| 341 | 1908.59 | 98.03 | 17.01 | 13.00 | 1460541.78160 | 449779.77283 |
| 342 | 1893.59 | 113.04 | 13.00 | 10.00 | 1460540.69316 | 449781.69814 |
| 343 | 1963.71 | 105.04 | 17.01 | 14.01 | 1460539.90965 | 449783.38686 |
| 344 | 2009.42 | 115.02 | 15.00 | 11.00 | 1460538.89374 | 449784.84792 |
| 345 | 2040.63 | 93.03 | 15.00 | 13.00 | 1460538.89374 | 449784.84792 |
| 346 | 2034.04 | 95.05 | 16.01 | 7.00 | 1460537.65531 | 449787.73463 |
| 347 | 1971.81 | 121.05 | 16.01 | 7.00 | 1460537.65531 | 449787.73463 |
| 348 | 1891.40 | 99.02 | 12.00 | 11.00 | 1460535.62741 | 449792.02456 |
| 349 | 1915.79 | 85.03 | 21.01 | 9.00 | 1460535.62741 | 449792.02456 |
| 350 | 1786.19 | 97.01 | 8.00 | 18.00 | 1460534.12662 | 449794.86709 |
| 351 | 1818.65 | 107.04 | 18.01 | 10.00 | 1460533.32533 | 449796.19688 |
| 352 | 1871.67 | 94.03 | 14.01 | 14.01 | 1460532.47372 | 449797.71656 |
| 353 | 1877.30 | 95.02 | 15.00 | 12.00 | 1460531.67253 | 449799.02367 |
| 354 | 1945.60 | 116.04 | 11.00 | 10.00 | 1460531.67253 | 449799.02367 |
| 355 | 1902.30 | 134.02 | 14.00 | 3.00 | 1460530.25085 | 449801.71807 |
| 357 | 1848.94 | 93.05 | 14.01 | 13.01 | 1460528.24353 | 449805.41962 |
| 358 | 1915.79 | 99.04 | 16.01 | 10.00 | 1460527.31165 | 449807.22790 |
| 359 | 1852.30 | 97.02 | 7.00 | 13.00 | 1460527.31165 | 449807.22790 |
| 360 | 1839.66 | 77.03 | 19.01 | 7.00 | 1460525.80516 | 449810.86805 |
| 361 | 1834.57 | 93.03 | 22.01 | 9.00 | 1460524.95487 | 449812.73381 |
| 362 | 1840.48 | 95.02 | 18.00 | 9.00 | 1460524.06100 | 449814.71607 |
| 363 | 2051.05 | 99.05 | 15.01 | 15.01 | 1460523.26407 | 449816.42541 |
| 364 | 1981.91 | 104.05 | 16.01 | 7.00 | 1460523.26407 | 449816.42541 |
| 365 | 1845.66 | 93.03 | 17.01 | 8.00 | 1460521.81201 | 449819.58295 |
| 366 | 1927.50 | 103.03 | 12.00 | 9.00 | 1460521.79054 | 449819.81990 |
| 367 | 1855.76 | 80.03 | 16.01 | 10.00 | 1460521.78271 | 449819.84914 |
| 368 | 1868.77 | 107.04 | 14.01 | 8.00 | 1460521.19612 | 449821.38511 |
| 369 | 1930.50 | 95.02 | 18.00 | 11.00 | 1460520.55914 | 449823.21391 |
| 371 | 1915.69 | 100.04 | 22.01 | 11.00 | 1460519.05711 | 449826.41682 |
| 372 | 1952.41 | 104.02 | 15.00 | 12.00 | 1460518.56488 | 449827.45368 |
| 373 | 1895.40 | 107.02 | 16.00 | 13.00 | 1460518.34020 | 449827.85988 |
| 374 | 1918.69 | 89.03 | 16.01 | 18.01 | 1460517.54213 | 449829.58894 |
| 375 | 1908.59 | 112.03 | 21.01 | 8.00 | 1460516.96178 | 449831.56735 |
| 376 | 1955.41 | 95.02 | 18.00 | 13.00 | 1460516.96555 | 449833.06671 |
| 377 | 1841.48 | 93.02 | 14.00 | 10.00 | 1460516.96555 | 449833.06671 |
| 378 | 1795.64 | 87.03 | 14.01 | 9.00 | 1460516.81432 | 449831.11186 |
| 379 | 1799.65 | 89.03 | 15.01 | 13.00 | 1460516.78496 | 449829.22027 |
| 380 | 1945.51 | 106.03 | 17.00 | 12.00 | 1460516.51634 | 449827.10838 |
| 381 | 2004.42 | 92.02 | 19.00 | 9.00 | 1460516.51634 | 449827.10838 |
| 383 | 1988.01 | 109.06 | 19.01 | 7.00 | 1460514.52482 | 449821.71726 |
| 384 | 2032.43 | 123.03 | 12.00 | 18.00 | 1460514.12496 | 449820.75057 |
| 385 | 2100.28 | 102.06 | 32.02 | 17.01 | 1460513.40648 | 449819.30484 |
| 386 | 2134.66 | 121.04 | 20.01 | 13.00 | 1460512.64909 | 449818.22444 |
| 387 | 2075.75 | 109.04 | 8.00 | 13.00 | 1460512.64909 | 449818.22444 |
| 388 | 2061.15 | 100.06 | 18.01 | 14.01 | 1460512.76040 | 449818.46993 |
| 389 | 2063.95 | 104.05 | 14.01 | 15.01 | 1460513.60673 | 449820.08785 |
| 390 | 2024.63 | 113.03 | 15.00 | 15.00 | 1460514.64144 | 449822.05212 |
| 391 | 1973.51 | 116.03 | 21.01 | 8.00 | 1460515.66753 | 449823.74368 |
| 392 | 1839.29 | 81.01 | 22.00 | 7.00 | 1460516.86900 | 449825.58484 |
| 393 | 1897.87 | 106.05 | 21.01 | 11.01 | 1460518.23708 | 449826.95562 |
| 394 | 1924.31 | 108.02 | 17.00 | 12.00 | 1460518.23708 | 449826.95562 |
| 395 | 1836.66 | 92.03 | 16.01 | 11.00 | 1460521.02109 | 449829.53183 |
| 397 | 1865.95 | 100.05 | 14.01 | 12.01 | 1460524.17888 | 449831.84980 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 398 | 1954.41 | 97.02 | 25.01 | 24.01 | 1460525.80824 | 449832.85784 |
| 399 | 1836.94 | 85.04 | 17.01 | 9.00 | 1460527.54148 | 449833.91989 |
| 400 | 1827.38 | 98.02 | 14.00 | 12.00 | 1460529.18746 | 449835.07982 |
| 401 | 1808.47 | 91.02 | 19.00 | 12.00 | 1460530.89677 | 449836.08167 |
| 402 | 1870.67 | 107.04 | 16.01 | 9.00 | 1460530.89677 | 449836.08167 |
| 403 | 1992.52 | 113.03 | 14.00 | 17.00 | 1460534.33257 | 449838.19666 |
| 404 | 1994.72 | 102.04 | 19.01 | 12.00 | 1460535.93771 | 449839.15683 |
| 405 | 1877.58 | 100.03 | 21.01 | 21.01 | 1460536.02316 | 449838.93778 |
| 406 | 1953.60 | 80.02 | 17.01 | 12.00 | 1460535.86742 | 449838.82469 |
| 407 | 1891.49 | 91.02 | 17.00 | 18.00 | 1460535.86742 | 449838.82469 |
| 408 | 1742.45 | 77.02 | 15.00 | 6.00 | 1460532.50589 | 449837.17661 |
| 409 | 1800.38 | 81.02 | 5.00 | 15.00 | 1460530.62632 | 449836.48101 |
| 410 | 1888.49 | 85.02 | 15.00 | 15.00 | 1460528.86754 | 449835.63100 |
| 411 | 1853.29 | 94.01 | 10.00 | 13.00 | 1460526.98851 | 449834.70246 |
| 412 | 1806.20 | 94.01 | 13.00 | 17.00 | 1460525.22147 | 449833.71301 |
| 413 | 1922.40 | 82.02 | 12.00 | 19.00 | 1460523.44682 | 449832.63306 |
| 414 | 1901.40 | 100.02 | 14.00 | 12.00 | 1460521.69690 | 449831.60073 |
| 415 | 1823.47 | 87.02 | 17.00 | 10.00 | 1460520.41823 | 449831.10584 |
| 416 | 1968.71 | 110.04 | 20.01 | 8.00 | 1460518.93311 | 449830.14301 |
| 417 | 1838.57 | 102.03 | 11.00 | 8.00 | 1460517.37906 | 449829.20882 |
| 418 | 1934.50 | 106.03 | 11.00 | 8.00 | 1460515.97090 | 449828.26513 |
| 419 | 1916.79 | 104.04 | 15.01 | 15.01 | 1460514.48557 | 449827.33446 |
| 421 | 1897.68 | 85.03 | 10.00 | 13.00 | 1460511.90273 | 449825.79474 |
| 422 | 1873.67 | 92.03 | 19.01 | 11.00 | 1460510.72501 | 449824.82315 |
| 423 | 1841.29 | 91.01 | 16.00 | 17.00 | 1460510.58308 | 449824.98730 |
| 424 | 1803.83 | 100.05 | 15.01 | 10.00 | 1460510.60326 | 449825.01220 |
| 425 | 1855.58 | 88.03 | 17.01 | 13.00 | 1460510.60326 | 449825.01220 |
| 426 | 1924.40 | 98.02 | 21.00 | 13.00 | 1460510.68205 | 449824.86754 |
| 427 | 1922.40 | 92.02 | 16.00 | 9.00 | 1460510.68205 | 449824.86754 |
| 428 | 1888.40 | 114.02 | 13.00 | 7.00 | 1460513.47734 | 449826.33882 |
| 431 | 1881.05 | 89.05 | 19.01 | 8.00 | 1460518.47569 | 449830.75388 |
| 432 | 1864.58 | 73.02 | 28.01 | 10.00 | 1460520.19497 | 449832.15501 |
| 433 | 1952.60 | 115.04 | 12.00 | 10.00 | 1460522.26687 | 449833.90261 |
| 434 | 1843.66 | 106.04 | 23.01 | 10.00 | 1460524.10410 | 449835.24089 |
| 435 | 1862.76 | 96.04 | 20.01 | 10.00 | 1460525.96289 | 449836.49928 |
| 436 | 1901.87 | 101.05 | 22.01 | 10.00 | 1460527.88071 | 449837.62956 |
| 437 | 1919.17 | 91.06 | 10.01 | 14.01 | 1460529.77098 | 449838.67376 |
| 438 | 1936.50 | 90.02 | 13.00 | 7.00 | 1460531.64876 | 449839.72455 |
| 439 | 2013.93 | 112.05 | 17.01 | 12.01 | 1460533.59322 | 449840.69752 |
| 440 | 2083.85 | 103.04 | 16.01 | 7.00 | 1460535.48155 | 449841.78637 |
| 442 | 2065.74 | 96.03 | 13.00 | 13.00 | 1460539.17954 | 449843.78913 |
| 443 | 2037.43 | 125.03 | 20.00 | 4.00 | 1460540.96865 | 449844.77418 |
| 446 | 2126.34 | 98.02 | 15.00 | 7.00 | 1460545.27358 | 449847.26986 |
| 447 | 2042.14 | 97.05 | 27.02 | 8.00 | 1460545.27358 | 449847.26986 |
| 448 | 2109.29 | 136.08 | 22.01 | 9.01 | 1460545.12465 | 449847.16391 |
| 449 | 2108.65 | 111.03 | 20.01 | 15.00 | 1460546.54644 | 449847.97115 |
| 451 | 2211.58 | 103.03 | 14.00 | 14.00 | 1460550.08516 | 449850.42778 |
| 452 | 2181.11 | 115.06 | 15.01 | 10.01 | 1460550.08516 | 449850.42778 |
| 453 | 2067.43 | 114.02 | 22.00 | 15.00 | 1460553.18796 | 449851.74146 |
| 454 | 2042.53 | 122.03 | 21.01 | 11.00 | 1460555.33280 | 449852.02056 |
| 455 | 2037.63 | 96.03 | 12.00 | 14.00 | 1460557.57879 | 449851.97397 |
| 456 | 1874.49 | 92.02 | 15.00 | 13.00 | 1460559.61988 | 449851.20959 |
| 457 | 1783.46 | 97.03 | 21.01 | 10.00 | 1460561.75774 | 449850.21079 |
| 458 | 1796.47 | 84.02 | 19.00 | 12.00 | 1460563.52388 | 449848.68489 |
| 459 | 1848.48 | 92.02 | 13.00 | 7.00 | 1460565.00330 | 449847.14250 |
| 460 | 1851.04 | 103.06 | 16.01 | 6.00 | 1460566.14874 | 449845.53107 |
| 461 | 1869.49 | 100.03 | 14.00 | 15.00 | 1460567.10626 | 449844.06033 |
| 462 | 1799.20 | 91.01 | 11.00 | 12.00 | 1460567.10626 | 449844.06033 |
| 463 | 1848.13 | 112.07 | 17.01 | 8.00 | 1460567.72735 | 449843.38774 |
| 464 | 1763.55 | 97.03 | 9.00 | 10.00 | 1460567.75640 | 449843.39842 |
| 465 | 1823.57 | 103.03 | 27.01 | 5.00 | 1460567.75640 | 449843.39842 |
| 466 | 1909.40 | 88.02 | 21.00 | 6.00 | 1460568.73578 | 449841.89005 |
| 467 | 1956.71 | 87.03 | 19.01 | 15.01 | 1460569.41812 | 449840.54328 |
| 468 | 1926.40 | 108.02 | 16.00 | 9.00 | 1460570.40663 | 449839.57041 |
| 469 | 1964.51 | 113.03 | 17.00 | 11.00 | 1460570.74657 | 449838.92231 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 470 | 1822.66 | 90.03 | 17.01 | 5.00 | 1460570.74657 | 449838.92231 |
| 472 | 1892.40 | 72.02 | 13.00 | 10.00 | 1460572.38401 | 449836.40904 |
| 473 | 1877.49 | 97.03 | 20.01 | 18.00 | 1460572.87919 | 449835.22817 |
| 475 | 2005.02 | 103.05 | 15.01 | 6.00 | 1460574.59941 | 449833.12939 |
| 477 | 1896.49 | 92.02 | 25.01 | 16.00 | 1460575.82804 | 449830.71832 |
| 478 | 1922.60 | 98.03 | 12.00 | 15.00 | 1460576.91106 | 449829.19245 |
| 479 | 1894.30 | 103.02 | 19.00 | 11.00 | 1460577.94028 | 449827.42394 |
| 480 | 1888.68 | 97.03 | 11.00 | 13.00 | 1460578.93709 | 449825.71939 |
| 481 | 1869.39 | 88.02 | 11.00 | 16.00 | 1460579.93861 | 449823.77901 |
| 484 | 1782.28 | 83.01 | 17.00 | 14.00 | 1460582.73528 | 449818.97711 |
| 485 | 1832.84 | 109.05 | 14.01 | 17.01 | 1460583.55271 | 449817.46837 |
| 486 | 1776.28 | 72.01 | 14.00 | 11.00 | 1460584.62796 | 449815.70027 |
| 487 | 1831.66 | 72.03 | 12.00 | 7.00 | 1460585.53568 | 449813.71965 |
| 489 | 1902.97 | 102.05 | 16.01 | 10.01 | 1460587.60825 | 449809.78424 |
| 490 | 1907.69 | 94.03 | 22.01 | 13.00 | 1460588.55597 | 449808.01086 |
| 491 | 1833.84 | 94.04 | 24.01 | 5.00 | 1460588.55597 | 449808.01086 |
| 492 | 1986.42 | 83.02 | 17.00 | 7.00 | 1460590.80718 | 449804.12036 |
| 493 | 1970.61 | 112.03 | 21.01 | 15.00 | 1460591.99311 | 449802.12409 |
| 494 | 1964.00 | 98.05 | 23.01 | 13.01 | 1460593.05706 | 449800.41124 |
| 495 | 1893.59 | 99.03 | 13.00 | 11.00 | 1460593.05706 | 449800.41124 |
| 498 | 1946.51 | 85.02 | 20.01 | 7.00 | 1460597.48998 | 449792.81001 |
| 500 | 2051.94 | 115.05 | 16.01 | 11.01 | 1460599.77848 | 449788.99634 |
| 501 | 2030.63 | 121.04 | 22.01 | 6.00 | 1460599.77848 | 449788.99634 |
| 503 | 1969.81 | 95.04 | 13.01 | 16.01 | 1460601.20111 | 449782.49368 |
| 504 | 2067.74 | 96.03 | 26.01 | 10.00 | 1460600.74783 | 449780.45465 |
| 505 | 2091.96 | 97.04 | 24.01 | 14.01 | 1460600.74783 | 449780.45465 |
| 508 | 2201.90 | 124.05 | 18.01 | 12.00 | 1460595.84989 | 449774.30115 |
| 509 | 2203.79 | 99.04 | 19.01 | 14.01 | 1460594.36761 | 449773.23488 |
| 511 | 2264.59 | 113.03 | 22.01 | 18.00 | 1460591.07552 | 449771.19373 |
| 512 | 2305.18 | 132.07 | 26.01 | 14.01 | 1460589.53912 | 449770.36049 |
| 513 | 2241.81 | 142.05 | 18.01 | 11.00 | 1460587.78266 | 449769.36391 |
| 514 | 2277.82 | 122.04 | 17.01 | 19.01 | 1460586.12908 | 449768.41701 |
| 516 | 2303.72 | 115.04 | 22.01 | 9.00 | 1460582.86160 | 449766.59077 |
| 517 | 2245.70 | 110.03 | 26.01 | 19.01 | 1460581.16885 | 449765.59003 |
| 518 | 2123.76 | 100.04 | 23.01 | 17.01 | 1460579.55247 | 449764.65091 |
| 519 | 2088.75 | 113.04 | 20.01 | 6.00 | 1460578.04631 | 449763.35729 |
| 520 | 2147.45 | 112.02 | 19.00 | 15.00 | 1460576.53064 | 449762.58321 |
| 521 | 2142.56 | 103.03 | 15.00 | 16.00 | 1460576.53064 | 449762.58321 |
| 523 | 2117.97 | 136.06 | 18.01 | 14.01 | 1460571.94189 | 449759.81582 |
| 526 | 2090.86 | 83.03 | 15.01 | 8.00 | 1460567.29847 | 449756.86036 |
| 527 | 2025.52 | 111.03 | 15.00 | 12.00 | 1460565.60656 | 449755.75704 |
| 529 | 2206.79 | 118.04 | 21.01 | 13.00 | 1460561.98595 | 449753.54986 |
| 530 | 2096.33 | 110.02 | 19.00 | 8.00 | 1460560.11127 | 449752.36112 |
| 531 | 2018.93 | 93.04 | 23.01 | 15.01 | 1460558.22407 | 449751.33152 |
| 532 | 1907.21 | 95.01 | 7.00 | 11.00 | 1460556.49953 | 449750.41306 |
| 533 | 1919.40 | 84.02 | 22.00 | 8.00 | 1460554.74686 | 449749.50539 |
| 534 | 2036.84 | 117.05 | 20.01 | 18.01 | 1460553.10630 | 449748.74592 |
| 535 | 2003.62 | 107.03 | 21.01 | 11.00 | 1460551.22748 | 449747.95498 |
| 536 | 1930.69 | 97.03 | 23.01 | 13.00 | 1460549.31422 | 449747.32279 |
| 537 | 1974.12 | 104.01 | 11.00 | 11.00 | 1460547.22959 | 449747.06404 |
| 538 | 1963.51 | 102.03 | 14.00 | 9.00 | 1460545.25399 | 449747.75417 |
| 539 | 1972.41 | 114.02 | 18.00 | 5.00 | 1460543.30827 | 449748.58469 |
| 540 | 1981.81 | 100.04 | 15.01 | 13.01 | 1460541.58332 | 449749.82204 |
| 541 | 1920.79 | 97.04 | 24.01 | 15.01 | 1460540.07354 | 449751.43466 |
| 542 | 1884.77 | 81.03 | 12.00 | 11.00 | 1460538.61704 | 449753.09012 |
| 543 | 2012.42 | 115.02 | 18.00 | 18.00 | 1460537.42953 | 449754.86461 |
| 544 | 1961.51 | 102.03 | 12.00 | 11.00 | 1460536.33050 | 449756.88831 |
| 545 | 1896.78 | 85.03 | 10.00 | 13.01 | 1460535.16094 | 449758.92698 |
| 546 | 2005.62 | 115.04 | 17.01 | 15.00 | 1460533.97944 | 449760.77339 |
| 547 | 1944.80 | 99.04 | 17.01 | 4.00 | 1460532.92087 | 449762.70594 |
| 548 | 2110.97 | 117.05 | 8.00 | 8.00 | 1460532.92087 | 449762.70594 |
| 549 | 1941.50 | 93.02 | 16.00 | 15.00 | 1460531.05108 | 449766.45949 |
| 551 | 1923.40 | 96.02 | 15.00 | 6.00 | 1460529.17864 | 449770.15889 |
| 552 | 1856.85 | 96.04 | 14.01 | 12.01 | 1460528.27654 | 449772.02750 |
| 553 | 1896.68 | 105.04 | 15.01 | 5.00 | 1460527.28158 | 449773.79250 |

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 554 | 2015.83 | 110.05 | 15.01 | 15.01 | 1460526.17338 | 449775.56585 |
| 555 | 2051.64 | 114.04 | 13.00 | 10.00 | 1460525.23295 | 449777.39109 |
| 556 | 2114.97 | 102.05 | 20.01 | 14.01 | 1460525.23295 | 449777.39109 |
| 557 | 2090.48 | 101.07 | 15.01 | 14.01 | 1460523.23558 | 449781.21968 |
| 558 | 2005.72 | 102.04 | 21.01 | 12.00 | 1460522.28953 | 449783.04290 |
| 559 | 1986.11 | 115.06 | 16.01 | 10.01 | 1460521.41933 | 449784.91924 |
| 560 | 2015.13 | 94.05 | 23.01 | 16.01 | 1460520.50846 | 449786.73993 |
| 561 | 2030.83 | 108.04 | 16.01 | 18.01 | 1460520.50846 | 449786.73993 |
| 562 | 1906.40 | 104.02 | 17.00 | 17.00 | 1460518.71696 | 449790.33927 |
| 563 | 1765.72 | 88.04 | 11.00 | 10.00 | 1460517.78609 | 449792.23635 |
| 564 | 1830.57 | 103.03 | 22.01 | 14.00 | 1460517.78609 | 449792.23635 |
| 566 | 1815.29 | 90.01 | 13.00 | 6.00 | 1460514.86699 | 449797.76858 |
| 567 | 1749.54 | 101.03 | 16.00 | 9.00 | 1460513.91818 | 449799.64363 |
| 568 | 1854.76 | 90.04 | 23.01 | 14.01 | 1460512.87539 | 449801.43086 |
| 569 | 1830.47 | 105.03 | 15.00 | 9.00 | 1460511.73376 | 449803.13908 |
| 570 | 1818.75 | 96.04 | 14.01 | 6.00 | 1460510.70479 | 449805.02734 |
| 571 | 1846.39 | 99.02 | 7.00 | 18.00 | 1460510.70479 | 449805.02734 |
| 572 | 1875.77 | 107.04 | 8.00 | 15.01 | 1460508.47851 | 449808.54561 |
| 573 | 1892.11 | 113.01 | 12.00 | 9.00 | 1460507.65722 | 449810.55499 |
| 574 | 1830.48 | 102.03 | 20.01 | 12.00 | 1460507.11388 | 449812.67445 |
| 575 | 1802.20 | 82.01 | 11.00 | 8.00 | 1460506.92062 | 449814.82667 |
| 576 | 1845.39 | 103.02 | 11.00 | 18.00 | 1460507.04815 | 449816.97663 |
| 577 | 1920.40 | 102.02 | 17.00 | 11.00 | 1460507.55068 | 449818.98608 |
| 578 | 1885.39 | 96.02 | 17.00 | 8.00 | 1460508.78945 | 449820.79114 |
| 579 | 1868.77 | 101.04 | 15.01 | 13.01 | 1460510.26654 | 449822.44303 |
| 581 | 1925.98 | 114.06 | 6.00 | 11.01 | 1460513.85108 | 449825.77831 |
| 582 | 1855.57 | 107.03 | 29.01 | 9.00 | 1460515.80070 | 449826.96655 |
| 583 | 1862.67 | 110.04 | 17.01 | 12.00 | 1460517.71044 | 449828.16525 |
| 584 | 1907.40 | 105.02 | 25.01 | 13.00 | 1460519.70551 | 449829.26362 |
| 587 | 1921.79 | 116.05 | 15.01 | 15.01 | 1460525.69812 | 449832.57081 |
| 588 | 1895.87 | 106.05 | 18.01 | 13.01 | 1460527.52649 | 449833.57738 |
| 589 | 1864.39 | 79.02 | 28.01 | 16.00 | 1460528.84742 | 449833.77941 |
| 590 | 1841.39 | 107.02 | 18.00 | 11.00 | 1460530.75423 | 449834.76818 |
| 591 | 1930.79 | 99.04 | 21.01 | 16.01 | 1460530.75423 | 449834.76818 |
| 592 | 1905.59 | 110.03 | 19.01 | 11.00 | 1460534.48668 | 449836.77964 |
| 593 | 1982.52 | 99.03 | 20.01 | 11.00 | 1460536.59575 | 449837.98067 |
| 594 | 2080.64 | 102.03 | 20.01 | 9.00 | 1460536.59575 | 449837.98067 |
| 595 | 2125.55 | 98.03 | 18.00 | 10.00 | 1460541.54810 | 449841.36542 |
| 597 | 2146.77 | 114.04 | 17.01 | 9.00 | 1460545.59112 | 449844.60895 |
| 598 | 2131.09 | 114.06 | 24.01 | 8.00 | 1460547.41512 | 449846.48244 |
| 599 | 2203.90 | 117.05 | 23.01 | 10.00 | 1460549.07145 | 449848.39051 |
| 600 | 2158.89 | 120.05 | 10.00 | 14.01 | 1460550.70783 | 449850.32278 |
| 601 | 2023.63 | 106.03 | 21.01 | 13.00 | 1460550.70783 | 449850.32278 |
| 602 | 2070.75 | 116.04 | 18.01 | 8.00 | 1460554.06099 | 449853.19382 |
| 603 | 2104.76 | 90.03 | 16.01 | 9.00 | 1460553.84208 | 449852.55482 |
| 605 | 2098.76 | 88.03 | 20.01 | 18.01 | 1460551.62177 | 449851.35295 |
| 606 | 2112.55 | 112.03 | 15.00 | 10.00 | 1460550.08071 | 449850.54976 |
| 607 | 2156.56 | 113.03 | 17.00 | 9.00 | 1460548.63534 | 449849.76176 |
| 608 | 2145.77 | 110.04 | 24.01 | 19.01 | 1460546.89160 | 449848.99792 |
| 609 | 2038.94 | 106.05 | 14.01 | 11.01 | 1460545.26463 | 449848.23025 |
| 610 | 2083.33 | 126.02 | 22.00 | 13.00 | 1460543.63977 | 449847.46772 |
| 611 | 2037.53 | 96.02 | 18.00 | 9.00 | 1460542.02539 | 449846.60956 |
| 612 | 2046.12 | 115.01 | 15.00 | 15.00 | 1460540.23730 | 449845.81335 |
| 613 | 2054.64 | 104.03 | 22.01 | 12.00 | 1460538.41149 | 449845.25652 |
| 614 | 2180.00 | 96.04 | 17.01 | 10.00 | 1460536.44642 | 449844.62480 |
| 615 | 2040.73 | 119.04 | 17.01 | 13.00 | 1460534.76415 | 449843.96551 |
| 616 | 1983.11 | 114.06 | 11.01 | 6.00 | 1460533.20214 | 449843.12619 |
| 617 | 1968.61 | 101.03 | 13.00 | 10.00 | 1460531.40927 | 449842.27569 |
| 618 | 1943.60 | 100.03 | 10.00 | 12.00 | 1460531.40927 | 449842.27569 |
| 619 | 1871.20 | 105.01 | 14.00 | 13.00 | 1460527.89403 | 449840.48799 |
| 621 | 1892.68 | 107.04 | 15.01 | 8.00 | 1460524.44978 | 449838.46590 |
| 624 | 1830.57 | 96.03 | 22.01 | 10.00 | 1460519.93864 | 449835.70914 |
| 625 | 1956.10 | 98.05 | 19.01 | 13.01 | 1460518.43119 | 449834.77012 |
| 626 | 1936.50 | 99.03 | 24.01 | 11.00 | 1460517.14638 | 449834.32740 |
| 627 | 1902.40 | 91.02 | 15.00 | 18.00 | 1460515.61261 | 449833.40323 |

## Pile 33, Pad 31

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 628 | 1865.76 | 111.05 | 18.01 | 5.00 | 1460515.61261 | 449833.40323 |
| 629 | 1999.92 | 89.04 | 17.01 | 5.00 | 1460512.56310 | 449831.62416 |
| 630 | 1940.50 | 107.03 | 19.00 | 6.00 | 1460511.09390 | 449830.75239 |
| 631 | 1926.79 | 92.04 | 24.01 | 10.00 | 1460509.60196 | 449829.75283 |
| 633 | 1999.42 | 90.02 | 14.00 | 16.00 | 1460506.68739 | 449827.81940 |
| 634 | 2047.04 | 117.06 | 17.01 | 5.00 | 1460505.18589 | 449826.83803 |
| 635 | 1967.61 | 99.03 | 14.00 | 15.00 | 1460503.70482 | 449825.87777 |
| 636 | 1889.68 | 105.04 | 14.01 | 14.01 | 1460502.12752 | 449824.96683 |
| 639 | 2073.54 | 110.03 | 21.01 | 16.00 | 1460501.45200 | 449824.55133 |
| 640 | 1998.12 | 112.06 | 19.01 | 12.01 | 1460503.55461 | 449825.70797 |
| 641 | 1982.32 | 101.02 | 13.00 | 13.00 | 1460505.73797 | 449826.68220 |
| 642 | 1911.59 | 104.03 | 19.01 | 10.00 | 1460505.73797 | 449826.68220 |
| 643 | 1884.15 | 96.06 | 18.01 | 9.01 | 1460509.99800 | 449828.68046 |
| 644 | 1928.40 | 91.02 | 20.00 | 10.00 | 1460512.12631 | 449829.70920 |
| 645 | 1835.38 | 109.02 | 19.00 | 11.00 | 1460514.13652 | 449830.63331 |
| 646 | 1858.76 | 99.04 | 11.00 | 11.00 | 1460516.07042 | 449831.83065 |
| 647 | 1887.49 | 85.02 | 17.00 | 7.00 | 1460516.07042 | 449831.83065 |
| 648 | 1920.17 | 108.07 | 16.01 | 19.01 | 1460519.41720 | 449834.05089 |
| 649 | 1813.56 | 113.04 | 15.00 | 9.00 | 1460521.17661 | 449835.28837 |
| 650 | 1915.69 | 105.04 | 10.00 | 13.00 | 1460522.93057 | 449836.50118 |
| 651 | 1878.58 | 106.03 | 14.00 | 10.00 | 1460524.56463 | 449837.86339 |
| 652 | 1936.41 | 89.02 | 12.00 | 9.00 | 1460526.21875 | 449839.09707 |
| 653 | 1970.71 | 83.03 | 18.01 | 15.01 | 1460527.93197 | 449840.12963 |
| 654 | 1884.58 | 91.03 | 15.00 | 10.00 | 1460529.60729 | 449841.45248 |
| 656 | 2079.06 | 119.06 | 21.01 | 8.00 | 1460533.01898 | 449843.63944 |
| 657 | 2126.02 | 108.00 | 20.00 | 24.00 | 1460534.68942 | 449844.78875 |
| 658 | 2083.27 | 93.06 | 25.02 | 14.01 | 1460536.31784 | 449845.76149 |
| 659 | 2100.18 | 126.07 | 20.01 | 9.01 | 1460537.44095 | 449846.38784 |
| 660 | 2109.39 | 129.09 | 11.01 | 11.01 | 1460537.28788 | 449846.31771 |
| 661 | 2168.00 | 107.05 | 14.01 | 9.00 | 1460537.30516 | 449846.33409 |
| 638 | 1874.20 | 91.01 | 12.00 | 11.00 | 1460500.70520 | 449824.18163 |
| 1358 | 2127.98 | 104.05 | 17.01 | 9.00 | 1460566.68873 | 449754.81327 |
| 1359 | 2214.46 | 110.02 | 15.00 | 10.00 | 1460566.68873 | 449754.81327 |
| 522 | 2103.55 | 110.03 | 20.01 | 14.00 | 1460573.53998 | 449760.70478 |
| 120 | 2010.32 | 104.02 | 17.00 | 10.00 | 1460520.80692 | 449816.65676 |
| 695 | 1914.88 | 93.04 | 13.01 | 10.00 | 1460558.92070 | 449799.26506 |
| 887 | 2084.33 | 117.02 | 19.00 | 11.00 | 1460567.63612 | 449777.48474 |
| 604 | 2091.38 | 120.08 | 15.01 | 8.01 | 1460553.28905 | 449852.27542 |
| 441 | 2049.74 | 106.04 | 21.01 | 9.00 | 1460537.36980 | 449842.77061 |
| 445 | 2101.23 | 120.01 | 21.00 | 11.00 | 1460544.23513 | 449846.68711 |
| 585 | 1803.83 | 83.04 | 9.00 | 14.01 | 1460521.75971 | 449830.43983 |
| 632 | 1921.69 | 85.03 | 13.00 | 12.00 | 1460508.14604 | 449828.84710 |
| 655 | 2047.43 | 123.03 | 17.00 | 13.00 | 1460531.32554 | 449842.52641 |
| 1026 | 1822.66 | 79.03 | 19.01 | 14.01 | 1460552.08625 | 449825.54808 |
| 616 | 2278.93 | 126.05 | 19.01 | 18.01 | 1460551.27004 | 449788.54437 |
| | 2478.26 | 158.06 | 37.02 | 26.02 | **Maximum** | |
| | 134.24 | 13.04 | 4.62 | 3.64 | **Std Dev** | |
| | 2028.46 | 107.61 | 18.29 | 12.27 | **Average** | |
| | 2982.10 | 178.53 | 39.60 | 28.60 | **3 σ Investigation Level** | |

Investigation Level Exceeded

Biased samples were collected at locations identified by **BOLD**

# EXCAVATED SOIL UNIT 108

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1 | 1886.38 | 120.02 | 20.00 | 19.00 | 6022359.12169 | 2090457.31449 |
| 2 | 1881.76 | 102.04 | 19.01 | 16.01 | 6022359.11509 | 2090457.33945 |
| 3 | 1859.84 | 92.04 | 14.01 | 10.00 | 6022359.10688 | 2090457.34343 |
| 4 | 1820.73 | 120.05 | 16.01 | 17.01 | 6022359.11368 | 2090457.36775 |
| 5 | 1989.60 | 124.04 | 18.01 | 17.01 | 6022359.10406 | 2090457.40793 |
| 6 | 1847.38 | 125.03 | 23.00 | 10.00 | 6022359.09744 | 2090457.42707 |
| 7 | 1925.68 | 123.04 | 18.01 | 16.01 | 6022359.09692 | 2090457.44179 |
| 8 | 1906.86 | 129.06 | 19.01 | 6.00 | 6022359.08948 | 2090457.45959 |
| 9 | 1966.99 | 101.05 | 16.01 | 9.00 | 6022359.07562 | 2090457.47611 |
| 10 | 1898.58 | 111.03 | 25.01 | 17.01 | 6022359.06310 | 2090457.49531 |
| 11 | 1818.73 | 111.04 | 22.01 | 11.00 | 6022359.06202 | 2090457.50970 |
| 12 | 1904.58 | 123.04 | 9.00 | 7.00 | 6022359.04838 | 2090457.52783 |
| 13 | 1857.84 | 100.05 | 23.01 | 17.01 | 6022359.03471 | 2090457.54808 |
| 14 | 1908.58 | 113.03 | 19.01 | 15.00 | 6022359.01870 | 2090457.55452 |
| 15 | 1896.39 | 118.02 | 19.00 | 7.00 | 6022359.01699 | 2090457.57427 |
| 16 | 1824.37 | 113.02 | 18.00 | 6.00 | 6022359.00872 | 2090457.56290 |
| 17 | 1834.37 | 107.02 | 15.00 | 13.00 | 6022358.99092 | 2090457.56660 |
| 18 | 1790.09 | 107.01 | 18.00 | 17.00 | 6022358.98495 | 2090457.57553 |
| 19 | 1815.64 | 105.04 | 20.01 | 8.00 | 6022358.97708 | 2090457.55495 |
| 20 | 1958.59 | 118.04 | 22.01 | 11.00 | 6022358.98689 | 2090457.55033 |
| 21 | 1868.57 | 111.03 | 19.01 | 9.00 | 6022358.97192 | 2090457.57975 |
| 22 | 1845.19 | 109.01 | 8.00 | 17.00 | 6022358.97162 | 2090457.57273 |
| 23 | 1777.54 | 105.03 | 22.01 | 10.00 | 6022358.98018 | 2090457.56954 |
| 24 | 1860.47 | 111.03 | 20.01 | 6.00 | 6022358.98752 | 2090457.55069 |
| 25 | 1837.65 | 113.04 | 25.01 | 11.00 | 6022358.99733 | 2090457.53714 |
| 26 | 1888.86 | 127.06 | 24.01 | 16.01 | 6022358.99183 | 2090457.54265 |
| 27 | 1879.66 | 106.04 | 23.01 | 11.00 | 6022358.99164 | 2090457.54300 |
| 28 | 1815.91 | 125.06 | 19.01 | 8.00 | 6022358.99601 | 2090457.56013 |
| 29 | 1917.39 | 127.03 | 17.00 | 14.00 | 6022359.00373 | 2090457.56000 |
| 30 | 1905.77 | 109.04 | 16.01 | 13.01 | 6022358.99695 | 2090457.57007 |
| 31 | 1778.54 | 103.03 | 15.00 | 14.00 | 6022358.99196 | 2090457.57602 |
| 32 | 1816.64 | 99.04 | 16.01 | 13.00 | 6022358.99148 | 2090457.57642 |
| 33 | 1976.70 | 134.05 | 21.01 | 18.01 | 6022358.98619 | 2090457.59411 |
| 34 | 1927.16 | 115.07 | 23.01 | 12.01 | 6022358.99180 | 2090457.60302 |
| 35 | 1897.96 | 110.06 | 17.01 | 12.01 | 6022358.98113 | 2090457.61943 |
| 36 | 1851.38 | 139.03 | 17.00 | 13.00 | 6022358.97956 | 2090457.61816 |
| 37 | 1842.93 | 116.06 | 14.01 | 10.01 | 6022358.97170 | 2090457.64258 |
| 38 | 1905.58 | 120.04 | 21.01 | 12.00 | 6022358.97086 | 2090457.64033 |
| 39 | 1825.37 | 130.03 | 18.00 | 12.00 | 6022358.97740 | 2090457.63696 |
| 40 | 1901.67 | 115.04 | 20.01 | 13.00 | 6022358.97169 | 2090457.65708 |
| 41 | 1858.19 | 133.01 | 21.00 | 12.00 | 6022358.96317 | 2090457.65811 |
| 42 | 2005.81 | 128.05 | 26.01 | 17.01 | 6022358.96169 | 2090457.67176 |
| 43 | 1848.56 | 130.04 | 18.01 | 14.00 | 6022358.96568 | 2090457.67281 |
| 44 | 1875.38 | 88.02 | 23.00 | 13.00 | 6022358.94262 | 2090457.68626 |
| 45 | 1906.77 | 125.05 | 25.01 | 17.01 | 6022358.94867 | 2090457.69166 |
| 46 | 1831.01 | 110.06 | 24.01 | 5.00 | 6022358.93399 | 2090457.70563 |
| 47 | 1900.77 | 154.06 | 22.01 | 6.00 | 6022358.91539 | 2090457.73893 |
| 48 | 1830.92 | 112.06 | 26.01 | 18.01 | 6022358.91347 | 2090457.73359 |
| 49 | 1885.95 | 103.05 | 13.01 | 14.01 | 6022358.91794 | 2090457.74349 |
| 50 | 1861.75 | 133.05 | 17.01 | 14.01 | 6022358.91180 | 2090457.76197 |
| 51 | 1820.64 | 107.04 | 21.01 | 12.00 | 6022358.91297 | 2090457.76516 |
| 52 | 1862.57 | 112.03 | 10.00 | 12.00 | 6022358.90555 | 2090457.79063 |
| 53 | 1882.57 | 109.03 | 18.01 | 8.00 | 6022358.91394 | 2090457.80132 |
| 54 | 1917.49 | 110.03 | 24.01 | 10.00 | 6022358.91673 | 2090457.80516 |
| 55 | 1814.46 | 120.03 | 20.01 | 9.00 | 6022358.91985 | 2090457.79906 |
| 56 | 1887.14 | 98.06 | 18.01 | 9.01 | 6022358.91718 | 2090457.80070 |
| 57 | 1904.68 | 129.05 | 25.01 | 9.00 | 6022358.91763 | 2090457.80294 |
| 58 | 1892.76 | 127.05 | 23.01 | 11.00 | 6022358.91999 | 2090457.80391 |
| 59 | 1885.57 | 114.03 | 15.00 | 7.00 | 6022358.85663 | 2090457.93792 |
| 60 | 1898.34 | 130.09 | 17.01 | 11.01 | 6022358.84994 | 2090457.92875 |
| 61 | 1842.65 | 104.04 | 20.01 | 4.00 | 6022358.85729 | 2090457.92933 |
| 62 | 1810.73 | 113.05 | 15.01 | 14.01 | 6022358.84661 | 2090457.92255 |
| 63 | 1911.06 | 103.06 | 20.01 | 13.01 | 6022358.84246 | 2090457.91174 |
| 64 | 1816.10 | 100.01 | 17.00 | 9.00 | 6022358.83995 | 2090457.91035 |
| 65 | 1778.45 | 111.03 | 24.01 | 10.00 | 6022358.85210 | 2090457.89020 |
| 66 | 1888.05 | 125.07 | 19.01 | 9.00 | 6022358.84801 | 2090457.89005 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 67 | 1841.56 | 102.03 | 20.01 | 11.00 | 6022358.86687 | 2090457.85196 |
| 68 | 1843.47 | 110.03 | 21.01 | 7.00 | 6022358.86941 | 2090457.84354 |
| 69 | 1924.20 | 94.01 | 13.00 | 9.00 | 6022358.86685 | 2090457.83692 |
| 70 | 1915.49 | 102.03 | 25.01 | 9.00 | 6022358.85952 | 2090457.84062 |
| 71 | 1869.38 | 112.02 | 14.00 | 15.00 | 6022358.85417 | 2090457.83462 |
| 72 | 1899.58 | 114.03 | 23.01 | 15.00 | 6022358.85349 | 2090457.83971 |
| 73 | 1796.91 | 112.06 | 20.01 | 10.01 | 6022358.86271 | 2090457.84347 |
| 74 | 1816.55 | 110.03 | 20.01 | 13.00 | 6022358.86608 | 2090457.82224 |
| 75 | 1810.55 | 98.03 | 17.01 | 14.00 | 6022358.85915 | 2090457.84562 |
| 76 | 1825.01 | 104.06 | 17.01 | 13.01 | 6022358.86545 | 2090457.82747 |
| 77 | 1960.40 | 126.03 | 21.00 | 12.00 | 6022358.86107 | 2090457.83454 |
| 78 | 1908.87 | 118.05 | 26.01 | 13.01 | 6022358.86567 | 2090457.82314 |
| 79 | 1860.03 | 126.07 | 21.01 | 11.01 | 6022358.86330 | 2090457.81407 |
| 80 | 1874.38 | 92.02 | 16.00 | 12.00 | 6022358.86653 | 2090457.81368 |
| 81 | 1877.76 | 126.05 | 18.01 | 12.00 | 6022358.86661 | 2090457.81574 |
| 82 | 1876.47 | 113.03 | 21.01 | 15.00 | 6022358.84907 | 2090457.82503 |
| 83 | 1823.46 | 96.02 | 14.00 | 13.00 | 6022358.83400 | 2090457.82684 |
| 84 | 1839.74 | 113.05 | 29.01 | 10.00 | 6022358.83324 | 2090457.82663 |
| 85 | 1924.68 | 114.04 | 18.01 | 9.00 | 6022358.82614 | 2090457.82934 |
| 86 | 1853.75 | 106.04 | 16.01 | 9.00 | 6022358.82501 | 2090457.83236 |
| 87 | 1853.75 | 118.05 | 15.01 | 9.00 | 6022358.83060 | 2090457.84385 |
| 88 | 1862.56 | 110.03 | 21.01 | 17.01 | 6022358.81531 | 2090457.84308 |
| 89 | 1881.57 | 115.03 | 18.01 | 13.00 | 6022358.80941 | 2090457.84035 |
| 90 | 1877.76 | 102.04 | 27.01 | 17.01 | 6022358.80682 | 2090457.85987 |
| 91 | 1774.07 | 124.07 | 19.01 | 13.01 | 6022358.78835 | 2090457.85779 |
| 92 | 1877.57 | 118.04 | 15.00 | 7.00 | 6022358.78397 | 2090457.83483 |
| 93 | 1750.62 | 111.04 | 16.01 | 12.00 | 6022358.78690 | 2090457.83518 |
| 94 | 1877.76 | 129.05 | 35.01 | 16.01 | 6022358.77447 | 2090457.80932 |
| 95 | 1890.86 | 115.05 | 16.01 | 10.00 | 6022358.76498 | 2090457.84203 |
| 96 | 1812.37 | 117.02 | 18.00 | 12.00 | 6022358.76275 | 2090457.81702 |
| 97 | 1860.84 | 123.06 | 23.01 | 10.00 | 6022358.77163 | 2090457.81386 |
| 98 | 1884.57 | 97.03 | 19.01 | 19.01 | 6022358.76828 | 2090457.81638 |
| 99 | 1861.28 | 110.02 | 19.00 | 11.00 | 6022358.77595 | 2090457.80307 |
| 100 | 1850.75 | 148.06 | 22.01 | 14.01 | 6022358.75732 | 2090457.83722 |
| 101 | 1873.47 | 108.03 | 16.00 | 9.00 | 6022358.75762 | 2090457.82350 |
| 102 | 1892.67 | 108.04 | 21.01 | 13.00 | 6022358.75813 | 2090457.82691 |
| 103 | 1879.76 | 123.05 | 23.01 | 9.00 | 6022358.75735 | 2090457.83496 |
| 104 | 1869.47 | 109.03 | 20.01 | 15.00 | 6022358.75198 | 2090457.84389 |
| 105 | 1835.74 | 127.05 | 24.01 | 16.01 | 6022358.75558 | 2090457.84589 |
| 106 | 1946.49 | 135.03 | 17.00 | 10.00 | 6022358.74898 | 2090457.84597 |
| 107 | 2009.51 | 123.03 | 27.01 | 18.00 | 6022358.28474 | 2090458.26539 |
| 108 | 1951.20 | 102.01 | 22.00 | 10.00 | 6022357.51622 | 2090458.85596 |
| 109 | 1974.80 | 103.04 | 19.01 | 14.01 | 6022357.17999 | 2090459.08332 |
| 110 | 1885.76 | 114.05 | 12.00 | 11.00 | 6022355.30670 | 2090460.55995 |
| 111 | 1854.47 | 107.03 | 25.01 | 14.00 | 6022353.29363 | 2090462.32437 |
| 112 | 1959.18 | 126.08 | 29.02 | 10.01 | 6022352.90294 | 2090462.62844 |
| 113 | 1906.44 | 113.09 | 17.01 | 10.01 | 6022352.63154 | 2090462.77638 |
| 114 | 1941.59 | 115.03 | 22.01 | 12.00 | 6022350.65643 | 2090464.49900 |
| 115 | 1812.19 | 115.08 | 16.01 | 9.01 | 6022349.26274 | 2090465.63660 |
| 116 | 1802.27 | 109.08 | 16.01 | 12.01 | 6022348.65146 | 2090466.18519 |
| 117 | 1803.55 | 97.03 | 18.01 | 13.00 | 6022348.60948 | 2090466.22885 |
| 118 | 1794.46 | 120.03 | 22.01 | 10.00 | 6022348.62012 | 2090466.24528 |
| 119 | 1724.52 | 110.03 | 15.00 | 7.00 | 6022348.61566 | 2090466.22810 |
| 120 | 1847.19 | 122.01 | 28.00 | 10.00 | 6022348.76713 | 2090466.07443 |
| 121 | 1904.39 | 136.03 | 15.00 | 13.00 | 6022349.68255 | 2090465.35919 |
| 122 | 1902.77 | 110.04 | 13.01 | 11.00 | 6022351.00082 | 2090464.36531 |
| 123 | 1900.67 | 104.04 | 19.01 | 11.00 | 6022352.02635 | 2090463.60898 |
| 124 | 1989.80 | 118.05 | 21.01 | 9.00 | 6022353.43273 | 2090462.39235 |
| 125 | 2003.41 | 116.02 | 25.01 | 10.00 | 6022354.78807 | 2090461.01765 |
| 126 | 1989.70 | 118.04 | 14.00 | 15.01 | 6022355.52309 | 2090460.06032 |
| 127 | 1798.00 | 115.06 | 24.01 | 5.00 | 6022356.40478 | 2090458.77465 |
| 128 | 1811.82 | 95.04 | 19.01 | 9.00 | 6022357.50661 | 2090456.13269 |
| 129 | 1792.28 | 104.02 | 19.00 | 15.00 | 6022357.58559 | 2090454.12566 |
| 130 | 1819.46 | 133.03 | 26.01 | 10.00 | 6022357.55494 | 2090453.67819 |
| 131 | 1866.38 | 115.02 | 21.00 | 13.00 | 6022357.56667 | 2090453.55963 |
| 132 | 1883.38 | 119.02 | 22.00 | 13.00 | 6022357.55552 | 2090452.62181 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 133 | 1734.79 | 124.06 | 17.01 | 11.00 | 6022357.33019 | 2090450.53309 |
| 134 | 1796.55 | 113.03 | 14.00 | 14.00 | 6022356.79726 | 2090448.71539 |
| 135 | 1751.62 | 111.04 | 17.01 | 10.00 | 6022356.18336 | 2090446.89067 |
| 136 | 1739.61 | 99.03 | 16.01 | 8.00 | 6022355.62222 | 2090445.77097 |
| 137 | 1755.71 | 98.04 | 22.01 | 7.00 | 6022355.19170 | 2090444.84874 |
| 138 | 1731.70 | 118.05 | 16.01 | 10.00 | 6022354.43939 | 2090443.71318 |
| 139 | 1720.61 | 98.03 | 17.01 | 4.00 | 6022353.36065 | 2090442.16327 |
| 140 | 1675.26 | 95.01 | 22.00 | 12.00 | 6022352.73973 | 2090441.21832 |
| 141 | 1756.62 | 123.04 | 23.01 | 7.00 | 6022352.17088 | 2090440.39079 |
| 142 | 1729.44 | 116.03 | 13.00 | 11.00 | 6022351.19567 | 2090439.29671 |
| 143 | 1789.72 | 116.05 | 12.00 | 8.00 | 6022351.05368 | 2090439.13109 |
| 144 | 1810.09 | 105.06 | 19.01 | 5.00 | 6022351.08285 | 2090439.11939 |
| 145 | 1712.43 | 110.03 | 25.01 | 8.00 | 6022351.12192 | 2090439.13929 |
| 146 | 1815.73 | 134.05 | 15.01 | 10.00 | 6022351.15291 | 2090439.16655 |
| 147 | 1706.77 | 109.05 | 15.01 | 8.00 | 6022351.15493 | 2090439.16736 |
| 148 | 1770.45 | 135.03 | 10.00 | 13.00 | 6022351.61781 | 2090439.63172 |
| 149 | 1704.77 | 117.05 | 14.01 | 9.00 | 6022352.82389 | 2090440.90824 |
| 150 | 1758.80 | 108.05 | 20.01 | 19.01 | 6022353.04543 | 2090441.12761 |
| 151 | 1710.61 | 106.04 | 16.01 | 14.00 | 6022353.13984 | 2090441.23105 |
| 152 | 1679.59 | 93.03 | 18.01 | 11.00 | 6022353.56548 | 2090441.69679 |
| 153 | 1787.45 | 115.03 | 24.01 | 12.00 | 6022354.38958 | 2090442.66070 |
| 154 | 1782.54 | 127.04 | 16.00 | 13.00 | 6022355.11653 | 2090443.63302 |
| 155 | 1783.19 | 116.01 | 22.00 | 14.00 | 6022355.62678 | 2090444.34022 |
| 156 | 1721.87 | 88.04 | 22.01 | 14.01 | 6022356.09408 | 2090444.98279 |
| 157 | 1780.90 | 109.05 | 19.01 | 9.00 | 6022356.45319 | 2090445.56647 |
| 158 | 1791.81 | 115.05 | 21.01 | 11.00 | 6022357.19664 | 2090446.53400 |
| 159 | 1817.55 | 112.03 | 19.01 | 11.00 | 6022357.96309 | 2090447.69581 |
| 160 | 1862.66 | 114.04 | 13.00 | 8.00 | 6022358.69519 | 2090448.61159 |
| 161 | 1776.81 | 101.05 | 13.01 | 8.00 | 6022359.82080 | 2090449.85956 |
| 162 | 1881.85 | 128.06 | 21.01 | 14.01 | 6022360.63152 | 2090450.79764 |
| 163 | 1871.38 | 108.02 | 20.00 | 9.00 | 6022361.47473 | 2090452.07175 |
| 164 | 1855.93 | 116.06 | 29.01 | 14.01 | 6022362.40144 | 2090453.27328 |
| 165 | 1888.67 | 112.04 | 16.01 | 7.00 | 6022362.90133 | 2090453.88334 |
| 166 | 1800.46 | 100.03 | 13.00 | 6.00 | 6022361.76205 | 2090452.40515 |
| 167 | 1837.02 | 120.07 | 17.01 | 15.01 | 6022361.01054 | 2090451.30361 |
| 168 | 1822.19 | 106.01 | 17.00 | 11.00 | 6022360.39274 | 2090450.49255 |
| 169 | 1824.19 | 98.01 | 17.00 | 14.00 | 6022359.18998 | 2090449.10785 |
| 170 | 1823.65 | 119.04 | 25.01 | 8.00 | 6022358.18039 | 2090447.93170 |
| 171 | 1765.06 | 129.08 | 20.01 | 11.01 | 6022357.83154 | 2090447.44301 |
| 172 | 1806.82 | 90.04 | 14.01 | 6.00 | 6022356.90886 | 2090446.09406 |
| 173 | 1842.02 | 119.07 | 20.01 | 9.00 | 6022355.70423 | 2090444.59705 |
| 174 | 1699.35 | 108.02 | 16.00 | 12.00 | 6022354.87706 | 2090443.59390 |
| 175 | 1676.51 | 112.03 | 19.01 | 11.00 | 6022354.39559 | 2090443.02254 |
| 176 | 1819.28 | 111.02 | 26.00 | 6.00 | 6022353.32818 | 2090441.65321 |
| 177 | 1712.52 | 115.03 | 10.00 | 12.00 | 6022352.17244 | 2090439.94506 |
| 178 | 1670.26 | 101.08 | 19.01 | 7.01 | 6022351.14266 | 2090438.76458 |
| 179 | 1775.54 | 110.03 | 15.00 | 7.00 | 6022350.88753 | 2090438.45220 |
| 180 | 1772.54 | 123.04 | 14.00 | 13.00 | 6022350.18142 | 2090437.40964 |
| 181 | 1796.27 | 99.02 | 24.00 | 16.00 | 6022349.14985 | 2090435.67538 |
| 182 | 1779.45 | 92.02 | 18.00 | 4.00 | 6022347.79625 | 2090434.21428 |
| 183 | 1760.54 | 95.03 | 25.01 | 7.00 | 6022346.59342 | 2090433.10279 |
| 184 | 1820.74 | 115.05 | 21.01 | 9.00 | 6022345.51698 | 2090432.14335 |
| 185 | 1801.82 | 106.05 | 17.01 | 8.00 | 6022344.68540 | 2090431.60376 |
| 186 | 1849.30 | 106.07 | 17.01 | 12.01 | 6022343.50012 | 2090430.99526 |
| 187 | 1975.99 | 128.06 | 23.01 | 8.00 | 6022341.17940 | 2090430.32146 |
| 188 | 2051.52 | 127.03 | 24.01 | 19.00 | 6022339.06785 | 2090430.14194 |
| 189 | 2012.71 | 108.04 | 16.01 | 24.01 | 6022337.63203 | 2090429.03756 |
| 190 | 1915.87 | 111.05 | 32.01 | 15.01 | 6022335.66507 | 2090429.60029 |
| 191 | 1870.76 | 123.05 | 21.01 | 13.01 | 6022334.09953 | 2090430.13301 |
| 192 | 1893.57 | 129.04 | 20.01 | 11.00 | 6022332.95654 | 2090430.49152 |
| 193 | 1983.80 | 125.05 | 18.01 | 15.01 | 6022331.64175 | 2090431.11241 |
| 194 | 1864.66 | 126.04 | 15.01 | 7.00 | 6022330.22452 | 2090431.99634 |
| 195 | 1972.90 | 129.06 | 23.01 | 10.00 | 6022329.45163 | 2090432.53387 |
| 196 | 1953.40 | 132.03 | 24.00 | 16.00 | 6022328.59467 | 2090433.16433 |
| 197 | 2028.82 | 118.05 | 20.01 | 10.00 | 6022328.76724 | 2090432.41530 |
| 198 | 1915.68 | 105.04 | 17.01 | 17.01 | 6022328.82289 | 2090432.34675 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 199 | 1950.79 | 125.05 | 17.01 | 8.00 | 6022328.84991 | 2090432.29859 |
| 200 | 1885.57 | 120.04 | 15.00 | 12.00 | 6022328.78068 | 2090432.39007 |
| 201 | 1861.94 | 136.07 | 23.01 | 19.01 | 6022327.96198 | 2090433.15142 |
| 202 | 1903.39 | 116.02 | 15.00 | 9.00 | 6022326.32486 | 2090434.47797 |
| 203 | 2010.81 | 126.05 | 26.01 | 8.00 | 6022326.56733 | 2090434.31692 |
| 204 | 1895.67 | 126.04 | 14.00 | 17.01 | 6022326.66214 | 2090434.28775 |
| 205 | 1903.15 | 104.06 | 22.01 | 11.01 | 6022326.66974 | 2090434.31343 |
| 206 | 1961.60 | 150.05 | 23.01 | 17.01 | 6022326.85094 | 2090434.21127 |
| 207 | 1933.78 | 109.04 | 19.01 | 20.01 | 6022327.50957 | 2090433.83614 |
| 208 | 1993.81 | 120.05 | 18.01 | 10.00 | 6022328.59536 | 2090432.93617 |
| 209 | 1925.97 | 97.05 | 16.01 | 11.01 | 6022329.08567 | 2090432.58109 |
| 210 | 1934.20 | 132.01 | 19.00 | 8.00 | 6022329.12667 | 2090432.58912 |
| 211 | 1883.67 | 108.04 | 23.01 | 13.00 | 6022329.58301 | 2090432.23176 |
| 212 | 1831.37 | 134.03 | 18.00 | 6.00 | 6022330.92632 | 2090431.01893 |
| 213 | 1935.68 | 113.04 | 19.01 | 7.00 | 6022332.31646 | 2090429.95145 |
| 214 | 2033.92 | 121.06 | 17.01 | 15.01 | 6022333.51265 | 2090429.17809 |
| 215 | 2037.82 | 116.05 | 24.01 | 8.00 | 6022334.13291 | 2090429.26607 |
| 216 | 1931.88 | 122.06 | 22.01 | 16.01 | 6022332.94221 | 2090430.04484 |
| 217 | 1962.99 | 108.05 | 20.01 | 9.00 | 6022331.90028 | 2090430.78954 |
| 218 | 1945.30 | 125.02 | 19.00 | 13.00 | 6022330.43070 | 2090431.85417 |
| 219 | 1963.99 | 121.06 | 24.01 | 9.00 | 6022329.42925 | 2090432.75060 |
| 220 | 2025.02 | 134.07 | 18.01 | 7.00 | 6022327.96134 | 2090433.76230 |
| 221 | 2011.91 | 144.07 | 22.01 | 16.01 | 6022326.25233 | 2090434.92240 |
| 222 | 1960.69 | 101.04 | 25.01 | 9.00 | 6022325.11093 | 2090435.85177 |
| 223 | 1923.07 | 132.07 | 15.01 | 12.01 | 6022324.11386 | 2090436.64035 |
| 224 | 1964.60 | 109.03 | 26.01 | 12.00 | 6022322.98802 | 2090437.59267 |
| 225 | 1887.57 | 109.03 | 23.01 | 9.00 | 6022321.35881 | 2090438.90512 |
| 226 | 1959.60 | 124.04 | 17.01 | 6.00 | 6022320.06689 | 2090439.92192 |
| 227 | 1958.89 | 125.06 | 28.01 | 12.01 | 6022319.18831 | 2090440.65336 |
| 228 | 1885.67 | 131.05 | 12.00 | 9.00 | 6022318.69307 | 2090441.15191 |
| 229 | 2010.51 | 135.03 | 20.01 | 14.00 | 6022317.82317 | 2090441.95727 |
| 230 | 1907.77 | 110.04 | 13.01 | 15.01 | 6022316.20194 | 2090443.20203 |
| 231 | 1936.40 | 100.02 | 16.00 | 14.00 | 6022314.67136 | 2090444.40554 |
| 232 | 1941.69 | 124.04 | 17.01 | 12.00 | 6022313.42998 | 2090445.51459 |
| 233 | 1939.78 | 116.05 | 24.01 | 15.01 | 6022312.23623 | 2090446.48105 |
| 234 | 1927.97 | 113.06 | 18.01 | 6.00 | 6022310.94538 | 2090447.56369 |
| 235 | 1929.88 | 111.05 | 20.01 | 11.01 | 6022309.83345 | 2090448.45587 |
| 236 | 1932.68 | 120.04 | 19.01 | 5.00 | 6022308.55226 | 2090449.48403 |
| 237 | 1890.67 | 121.04 | 19.01 | 10.00 | 6022307.32753 | 2090450.50617 |
| 238 | 1881.32 | 125.09 | 26.02 | 6.00 | 6022306.63249 | 2090451.13317 |
| 239 | 1937.69 | 114.04 | 21.01 | 14.00 | 6022305.96947 | 2090451.66713 |
| 240 | 1828.65 | 101.04 | 18.01 | 9.00 | 6022304.56567 | 2090452.72901 |
| 241 | 1864.47 | 118.03 | 14.00 | 6.00 | 6022303.49735 | 2090453.64493 |
| 242 | 1883.67 | 139.05 | 20.01 | 10.00 | 6022302.97737 | 2090454.04354 |
| 243 | 1869.76 | 99.04 | 19.01 | 12.00 | 6022301.97760 | 2090454.97737 |
| 244 | 1856.75 | 124.05 | 20.01 | 16.01 | 6022301.43538 | 2090455.51322 |
| 245 | 1872.76 | 113.05 | 27.01 | 6.00 | 6022300.79185 | 2090456.03484 |
| 246 | 1841.37 | 128.03 | 18.00 | 14.00 | 6022298.93551 | 2090457.48016 |
| 247 | 1942.88 | 136.06 | 20.01 | 13.01 | 6022297.78018 | 2090458.55633 |
| 248 | 1810.55 | 92.03 | 18.01 | 11.00 | 6022296.86052 | 2090459.40492 |
| 249 | 1811.28 | 124.02 | 15.00 | 12.00 | 6022295.17142 | 2090460.57678 |
| 250 | 1849.65 | 106.04 | 23.01 | 11.00 | 6022294.22549 | 2090461.39125 |
| 251 | 1973.40 | 129.03 | 24.00 | 10.00 | 6022294.07555 | 2090461.51551 |
| 252 | 1835.56 | 111.03 | 17.01 | 9.00 | 6022293.23222 | 2090462.25733 |
| 253 | 1833.93 | 112.06 | 21.01 | 9.00 | 6022291.88320 | 2090463.31428 |
| 254 | 1890.38 | 111.02 | 19.00 | 17.00 | 6022290.36291 | 2090464.40587 |
| 255 | 1860.38 | 122.02 | 16.00 | 7.00 | 6022289.19051 | 2090465.29005 |
| 256 | 1927.39 | 120.02 | 27.01 | 11.00 | 6022287.89700 | 2090466.39253 |
| 257 | 1961.50 | 110.03 | 20.01 | 14.00 | 6022287.83378 | 2090466.44206 |
| 258 | 1901.39 | 87.02 | 24.00 | 10.00 | 6022287.74711 | 2090466.52871 |
| 259 | 1892.86 | 115.05 | 21.01 | 13.01 | 6022287.36222 | 2090466.85463 |
| 260 | 1882.38 | 139.03 | 14.00 | 7.00 | 6022286.36287 | 2090467.53336 |
| 261 | 1859.47 | 123.03 | 14.00 | 15.00 | 6022285.84047 | 2090467.91128 |
| 262 | 1850.66 | 114.04 | 16.01 | 14.00 | 6022285.52249 | 2090468.22341 |
| 263 | 1859.57 | 102.03 | 20.01 | 16.00 | 6022285.00747 | 2090468.75839 |
| 264 | 1931.59 | 130.04 | 15.00 | 12.00 | 6022283.64786 | 2090470.27390 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 265 | 1873.85 | 125.06 | 15.01 | 18.01 | 6022282.53783 | 2090472.89147 |
| 266 | 1888.48 | 100.03 | 17.00 | 10.00 | 6022282.45214 | 2090475.55007 |
| 267 | 1836.02 | 110.06 | 23.01 | 12.01 | 6022282.86904 | 2090477.85551 |
| 268 | 1838.65 | 123.04 | 22.01 | 16.01 | 6022283.73910 | 2090479.81408 |
| 269 | 1772.63 | 88.03 | 24.01 | 10.00 | 6022284.62472 | 2090481.69370 |
| 270 | 1861.75 | 114.05 | 19.01 | 12.00 | 6022285.44985 | 2090483.39348 |
| 271 | 1819.83 | 113.05 | 20.01 | 13.01 | 6022286.29429 | 2090484.87861 |
| 272 | 1788.63 | 107.04 | 23.01 | 12.00 | 6022287.12519 | 2090486.16281 |
| 273 | 1763.63 | 109.04 | 18.01 | 12.00 | 6022287.93466 | 2090487.19333 |
| 274 | 1715.61 | 133.05 | 17.01 | 12.00 | 6022287.90004 | 2090487.13208 |
| 275 | 1848.75 | 113.05 | 14.01 | 8.00 | 6022287.86435 | 2090487.08758 |
| 276 | 1841.47 | 116.03 | 20.01 | 10.00 | 6022287.76954 | 2090486.98370 |
| 277 | 1803.37 | 116.02 | 23.00 | 17.00 | 6022287.71609 | 2090486.91383 |
| 278 | 1736.53 | 107.03 | 15.00 | 7.00 | 6022287.69159 | 2090486.90176 |
| 279 | 1784.36 | 106.02 | 22.00 | 6.00 | 6022287.15127 | 2090486.26097 |
| 280 | 1911.48 | 122.03 | 21.01 | 9.00 | 6022285.98973 | 2090484.89134 |
| 281 | 1783.81 | 115.05 | 17.01 | 4.00 | 6022285.08728 | 2090483.83571 |
| 282 | 1765.18 | 92.01 | 25.00 | 10.00 | 6022284.12587 | 2090482.73979 |
| 283 | 1726.96 | 115.06 | 21.01 | 12.01 | 6022283.43702 | 2090481.89493 |
| 284 | 1769.45 | 125.03 | 11.00 | 17.00 | 6022282.97436 | 2090481.26946 |
| 285 | 1893.48 | 125.03 | 14.00 | 13.00 | 6022282.18140 | 2090480.31537 |
| 286 | 1810.64 | 126.04 | 24.01 | 14.00 | 6022282.63899 | 2090481.21580 |
| 287 | 1769.63 | 113.04 | 14.00 | 12.00 | 6022283.38765 | 2090482.24648 |
| 288 | 1691.51 | 111.03 | 18.01 | 11.00 | 6022283.86697 | 2090482.94206 |
| 289 | 1725.52 | 103.03 | 17.01 | 10.00 | 6022284.55334 | 2090483.84966 |
| 290 | 1785.81 | 115.05 | 16.01 | 10.00 | 6022285.07368 | 2090484.61784 |
| 291 | 1777.89 | 107.05 | 15.01 | 20.01 | 6022285.71807 | 2090485.48460 |
| 292 | 1782.54 | 119.04 | 15.00 | 12.00 | 6022286.39889 | 2090486.43326 |
| 293 | 1792.37 | 120.02 | 20.00 | 11.00 | 6022287.09030 | 2090487.36363 |
| 294 | 1833.20 | 120.08 | 20.01 | 12.01 | 6022287.56364 | 2090487.99105 |
| 295 | 1850.75 | 119.05 | 15.01 | 12.00 | 6022288.37239 | 2090489.08399 |
| 296 | 1878.57 | 123.04 | 17.01 | 13.00 | 6022288.56727 | 2090489.31885 |
| 297 | 1851.56 | 93.03 | 25.01 | 12.00 | 6022288.71635 | 2090489.51325 |
| 298 | 1865.29 | 113.02 | 19.00 | 18.00 | 6022289.35306 | 2090490.37628 |
| 299 | 1910.25 | 99.06 | 18.01 | 16.01 | 6022289.83196 | 2090491.04960 |
| 300 | 1912.35 | 124.09 | 18.01 | 9.01 | 6022290.34288 | 2090491.66312 |
| 301 | 1851.65 | 141.05 | 21.01 | 17.01 | 6022291.00479 | 2090492.57134 |
| 302 | 1988.10 | 139.08 | 24.01 | 12.01 | 6022291.61687 | 2090493.37987 |
| 303 | 1991.71 | 115.04 | 14.00 | 17.01 | 6022292.45947 | 2090494.61097 |
| 304 | 1855.57 | 96.03 | 16.00 | 12.00 | 6022292.79280 | 2090495.08602 |
| 305 | 2003.71 | 133.05 | 14.00 | 13.00 | 6022292.91190 | 2090495.31655 |
| 306 | 1968.99 | 129.07 | 21.01 | 18.01 | 6022293.04737 | 2090495.60598 |
| 307 | 1981.80 | 142.06 | 16.01 | 18.01 | 6022293.47559 | 2090496.23848 |
| 308 | 1969.90 | 119.05 | 21.01 | 7.00 | 6022293.84263 | 2090496.72171 |
| 309 | 1875.66 | 119.04 | 27.01 | 12.00 | 6022294.26868 | 2090497.20624 |
| 310 | 1891.95 | 120.06 | 19.01 | 10.01 | 6022295.27655 | 2090498.56444 |
| 311 | 1879.57 | 106.03 | 14.00 | 15.00 | 6022295.87823 | 2090499.46342 |
| 312 | 2010.81 | 112.05 | 22.01 | 15.01 | 6022296.82029 | 2090500.53857 |
| 313 | 2031.52 | 124.03 | 26.01 | 12.00 | 6022298.48072 | 2090501.73746 |
| 314 | 1896.39 | 119.02 | 12.00 | 12.00 | 6022300.15554 | 2090502.46095 |
| 315 | 2043.62 | 107.03 | 22.01 | 13.00 | 6022301.40444 | 2090502.78741 |
| 316 | 1925.39 | 120.02 | 18.00 | 10.00 | 6022303.48857 | 2090502.92719 |
| 317 | 1958.99 | 120.06 | 17.01 | 16.01 | 6022305.36831 | 2090502.70704 |
| 318 | 1904.77 | 127.05 | 26.01 | 10.00 | 6022306.67400 | 2090502.33200 |
| 319 | 1960.60 | 118.04 | 22.01 | 10.00 | 6022308.33448 | 2090501.76694 |
| 320 | 1954.18 | 132.08 | 17.01 | 14.01 | 6022309.95346 | 2090501.00899 |
| 321 | 1904.15 | 129.08 | 31.02 | 14.01 | 6022310.95490 | 2090500.35822 |
| 322 | 1849.84 | 100.05 | 16.01 | 14.01 | 6022311.30303 | 2090500.11131 |
| 323 | 1822.74 | 117.05 | 18.01 | 11.00 | 6022312.64110 | 2090499.09177 |
| 324 | 1782.90 | 94.05 | 18.01 | 8.00 | 6022314.33053 | 2090497.87961 |
| 325 | 1800.55 | 112.03 | 20.01 | 6.00 | 6022315.08296 | 2090497.30222 |
| 326 | 1857.84 | 86.04 | 26.01 | 16.01 | 6022315.04605 | 2090497.31252 |
| 327 | 1861.85 | 124.06 | 14.01 | 10.00 | 6022315.02313 | 2090497.30528 |
| 328 | 1832.74 | 105.04 | 10.00 | 8.00 | 6022315.00568 | 2090497.30556 |
| 329 | 1916.39 | 110.02 | 26.01 | 14.00 | 6022314.96186 | 2090497.33723 |
| 330 | 1858.57 | 98.03 | 18.01 | 10.00 | 6022314.91499 | 2090497.35330 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 331 | 1877.48 | 112.03 | 23.01 | 4.00 | 6022314.12636 | 2090497.99593 |
| 332 | 1835.47 | 112.03 | 20.01 | 9.00 | 6022313.14026 | 2090498.78844 |
| 333 | 1817.10 | 112.07 | 24.01 | 18.01 | 6022312.61970 | 2090499.16284 |
| 334 | 1911.49 | 122.03 | 20.01 | 14.00 | 6022311.74461 | 2090499.88074 |
| 335 | 2002.81 | 114.05 | 12.00 | 15.01 | 6022310.32517 | 2090501.03786 |
| 336 | 1850.56 | 113.03 | 16.00 | 11.00 | 6022308.86718 | 2090502.07818 |
| 337 | 1867.19 | 118.01 | 15.00 | 9.00 | 6022308.53306 | 2090502.35239 |
| 338 | 1909.49 | 103.03 | 21.01 | 14.00 | 6022307.41718 | 2090503.16271 |
| 339 | 2037.03 | 131.07 | 18.01 | 13.01 | 6022306.36737 | 2090503.99056 |
| 340 | 2075.84 | 133.05 | 20.01 | 7.00 | 6022305.11636 | 2090504.72390 |
| 341 | 1974.60 | 122.04 | 32.01 | 10.00 | 6022304.32217 | 2090505.20982 |
| 342 | 1954.79 | 136.05 | 22.01 | 16.01 | 6022304.32954 | 2090505.19485 |
| 343 | 1936.69 | 113.04 | 20.01 | 12.00 | 6022304.21433 | 2090505.26790 |
| 344 | 1990.90 | 138.06 | 25.01 | 9.00 | 6022303.78071 | 2090505.61123 |
| 345 | 1946.98 | 120.06 | 23.01 | 12.01 | 6022303.43636 | 2090505.89827 |
| 346 | 1914.58 | 110.03 | 21.01 | 10.00 | 6022303.01599 | 2090506.28892 |
| 347 | 1943.79 | 123.05 | 19.01 | 7.00 | 6022302.29531 | 2090507.05500 |
| 348 | 1982.00 | 124.06 | 19.01 | 12.01 | 6022302.41778 | 2090506.95072 |
| 349 | 1948.69 | 103.04 | 22.01 | 14.00 | 6022302.39904 | 2090506.97937 |
| 350 | 1967.99 | 136.07 | 20.01 | 17.01 | 6022302.48222 | 2090506.90731 |
| 351 | 1957.69 | 125.04 | 23.01 | 9.00 | 6022302.53974 | 2090506.85279 |
| 352 | 2002.81 | 117.05 | 25.01 | 12.00 | 6022302.55698 | 2090506.83954 |
| 353 | 1952.50 | 113.03 | 28.01 | 10.00 | 6022302.57883 | 2090506.81923 |
| 354 | 1982.30 | 111.07 | 15.01 | 15.01 | 6022303.17960 | 2090506.23162 |
| 355 | 2007.71 | 127.05 | 16.01 | 13.00 | 6022304.69922 | 2090504.90877 |
| 356 | 1960.79 | 127.05 | 22.01 | 15.01 | 6022305.99841 | 2090503.93000 |
| 357 | 1902.67 | 113.04 | 20.01 | 8.00 | 6022306.18096 | 2090503.78118 |
| 358 | 1959.09 | 110.06 | 21.01 | 12.01 | 6022307.04692 | 2090503.10745 |
| 359 | 1872.76 | 118.05 | 21.01 | 13.01 | 6022308.57419 | 2090502.01208 |
| 360 | 1832.65 | 101.04 | 18.01 | 10.00 | 6022309.80143 | 2090501.11541 |
| 361 | 1916.68 | 113.04 | 20.01 | 9.00 | 6022310.66710 | 2090500.60043 |
| 362 | 1919.58 | 120.04 | 18.01 | 10.00 | 6022310.77904 | 2090500.50906 |
| 363 | 1882.48 | 124.03 | 17.00 | 13.00 | 6022310.83331 | 2090500.48216 |
| 364 | 1900.58 | 109.03 | 12.00 | 15.00 | 6022310.94598 | 2090500.40118 |
| 365 | 1863.75 | 107.04 | 10.00 | 11.00 | 6022311.24775 | 2090500.16926 |
| 366 | 1884.48 | 99.03 | 19.00 | 11.00 | 6022311.98840 | 2090499.56938 |
| 367 | 1899.15 | 120.07 | 19.01 | 14.01 | 6022313.37074 | 2090498.62125 |
| 368 | 1873.57 | 110.03 | 12.00 | 10.00 | 6022314.26392 | 2090497.94010 |
| 369 | 1813.55 | 126.04 | 18.01 | 8.00 | 6022315.16052 | 2090497.34383 |
| 370 | 1836.83 | 117.05 | 22.01 | 7.00 | 6022316.15630 | 2090496.69970 |
| 371 | 1891.58 | 117.04 | 23.01 | 4.00 | 6022316.60550 | 2090496.38242 |
| 372 | 1785.81 | 138.06 | 25.01 | 8.00 | 6022317.36027 | 2090495.87893 |
| 373 | 1731.35 | 123.03 | 19.00 | 11.00 | 6022318.57207 | 2090495.13206 |
| 374 | 1764.63 | 113.04 | 13.00 | 4.00 | 6022319.17021 | 2090494.61156 |
| 375 | 1816.46 | 123.03 | 22.01 | 11.00 | 6022319.56761 | 2090494.28118 |
| 376 | 1802.82 | 111.05 | 23.01 | 15.01 | 6022320.44452 | 2090493.57338 |
| 377 | 1774.81 | 117.05 | 20.01 | 13.01 | 6022321.78886 | 2090492.59984 |
| 378 | 1806.55 | 108.03 | 16.00 | 9.00 | 6022322.65708 | 2090492.10463 |
| 379 | 1765.71 | 119.05 | 15.01 | 7.00 | 6022323.57591 | 2090491.41579 |
| 380 | 1652.59 | 98.03 | 19.01 | 5.00 | 6022324.74339 | 2090490.47525 |
| 381 | 1601.73 | 89.04 | 19.01 | 12.01 | 6022325.25679 | 2090490.13490 |
| 382 | 1625.17 | 101.01 | 15.00 | 15.00 | 6022326.16701 | 2090489.39371 |
| 383 | 1671.76 | 95.04 | 30.01 | 15.01 | 6022327.35350 | 2090488.55349 |
| 384 | 1657.67 | 102.04 | 15.01 | 12.00 | 6022327.98737 | 2090488.08096 |
| 385 | 1678.59 | 111.04 | 13.00 | 10.00 | 6022328.46067 | 2090487.82293 |
| 386 | 1754.62 | 120.04 | 22.01 | 9.00 | 6022329.46319 | 2090487.07347 |
| 387 | 1613.57 | 99.04 | 16.01 | 7.00 | 6022329.60989 | 2090486.95888 |
| 388 | 1695.52 | 102.03 | 16.00 | 5.00 | 6022330.96522 | 2090486.06920 |
| 389 | 1668.59 | 110.04 | 15.01 | 5.00 | 6022332.20324 | 2090485.08803 |
| 390 | 1763.45 | 107.03 | 19.00 | 8.00 | 6022333.30790 | 2090484.35420 |
| 391 | 1658.59 | 84.03 | 19.01 | 10.00 | 6022334.78847 | 2090483.23318 |
| 392 | 1737.53 | 117.04 | 12.00 | 11.00 | 6022335.79899 | 2090482.60173 |
| 393 | 1664.75 | 83.04 | 12.01 | 9.00 | 6022336.20128 | 2090482.29849 |
| 394 | 1774.54 | 103.03 | 14.00 | 16.00 | 6022337.17314 | 2090481.47453 |
| 395 | 1687.68 | 109.04 | 19.01 | 8.00 | 6022338.12748 | 2090480.69452 |
| 396 | 1734.44 | 125.03 | 21.01 | 8.00 | 6022339.16315 | 2090479.77550 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 397 | 1670.34 | 87.02 | 11.00 | 11.00 | 6022340.37978 | 2090478.96406 |
| 398 | 1668.93 | 105.06 | 16.01 | 9.00 | 6022341.37035 | 2090478.06515 |
| 399 | 1715.95 | 115.06 | 22.01 | 13.01 | 6022341.59603 | 2090477.90365 |
| 400 | 1632.50 | 96.03 | 14.00 | 11.00 | 6022342.79563 | 2090476.96228 |
| 401 | 1659.25 | 101.02 | 15.00 | 12.00 | 6022343.55756 | 2090476.27690 |
| 402 | 1675.51 | 99.03 | 12.00 | 12.00 | 6022343.87136 | 2090476.03140 |
| 403 | 1660.42 | 99.03 | 17.00 | 7.00 | 6022345.19204 | 2090474.99444 |
| 404 | 1597.65 | 102.04 | 13.01 | 9.00 | 6022346.31572 | 2090474.07852 |
| 405 | 1701.35 | 108.02 | 15.00 | 10.00 | 6022347.42948 | 2090473.27964 |
| 406 | 1724.78 | 104.05 | 21.01 | 9.00 | 6022347.94258 | 2090472.85800 |
| 407 | 1708.60 | 105.04 | 17.01 | 2.00 | 6022349.07329 | 2090472.03471 |
| 408 | 1772.45 | 104.03 | 21.01 | 5.00 | 6022349.74877 | 2090471.47020 |
| 409 | 1734.53 | 125.04 | 15.00 | 11.00 | 6022350.89001 | 2090470.71384 |
| 410 | 1721.27 | 113.02 | 8.00 | 18.00 | 6022352.21550 | 2090469.70377 |
| 411 | 1724.18 | 116.01 | 16.00 | 17.00 | 6022352.17344 | 2090469.73741 |
| 412 | 1738.70 | 114.05 | 16.01 | 9.00 | 6022352.88072 | 2090469.19601 |
| 413 | 1740.79 | 127.06 | 17.01 | 9.00 | 6022354.22477 | 2090468.12868 |
| 414 | 1771.63 | 104.04 | 12.00 | 13.00 | 6022354.95938 | 2090467.65134 |
| 415 | 1753.80 | 108.05 | 19.01 | 6.00 | 6022355.22961 | 2090467.48313 |
| 416 | 1838.56 | 108.03 | 20.01 | 10.00 | 6022356.18691 | 2090466.64249 |
| 417 | 1764.89 | 84.04 | 19.01 | 18.01 | 6022357.14550 | 2090465.88150 |
| 418 | 1813.10 | 124.08 | 17.01 | 14.01 | 6022358.24256 | 2090465.15711 |
| 419 | 1844.19 | 110.01 | 25.00 | 16.00 | 6022358.26948 | 2090465.14677 |
| 420 | 1757.54 | 104.03 | 14.00 | 10.00 | 6022358.65830 | 2090464.89488 |
| 421 | 1796.55 | 119.04 | 14.00 | 7.00 | 6022360.10891 | 2090463.61152 |
| 422 | 1859.75 | 108.04 | 16.01 | 15.01 | 6022361.43425 | 2090461.82714 |
| 423 | 1865.57 | 113.03 | 17.01 | 11.00 | 6022362.15627 | 2090459.13851 |
| 424 | 1833.65 | 103.04 | 13.00 | 14.00 | 6022362.13757 | 2090457.27945 |
| 425 | 1871.48 | 123.03 | 29.01 | 15.00 | 6022362.08928 | 2090456.42259 |
| 426 | 1874.76 | 125.05 | 22.01 | 15.01 | 6022361.80677 | 2090455.79505 |
| 427 | 1849.38 | 126.03 | 16.00 | 16.00 | 6022361.26284 | 2090454.80381 |
| 428 | 1741.53 | 108.03 | 18.01 | 11.00 | 6022360.94248 | 2090454.21617 |
| 429 | 1869.66 | 123.04 | 23.01 | 10.00 | 6022360.88025 | 2090454.06364 |
| 430 | 1878.48 | 109.03 | 18.00 | 13.00 | 6022360.14991 | 2090453.17804 |
| 431 | 1821.55 | 108.03 | 23.01 | 10.00 | 6022359.63849 | 2090452.27675 |
| 432 | 1771.07 | 85.05 | 18.01 | 9.01 | 6022359.67986 | 2090452.31920 |
| 433 | 1828.65 | 104.04 | 18.01 | 14.00 | 6022359.73684 | 2090452.34534 |
| 434 | 1858.75 | 123.05 | 20.01 | 11.00 | 6022359.74720 | 2090452.33897 |
| 435 | 1845.21 | 108.07 | 20.01 | 7.00 | 6022359.75623 | 2090452.36892 |
| 436 | 1858.38 | 113.02 | 23.00 | 8.00 | 6022359.75674 | 2090452.38045 |
| 437 | 1881.57 | 120.04 | 22.01 | 12.00 | 6022359.76807 | 2090452.38479 |
| 438 | 1886.57 | 128.04 | 14.00 | 11.00 | 6022359.76363 | 2090452.37503 |
| 439 | 1850.56 | 112.03 | 22.01 | 11.00 | 6022359.76416 | 2090452.38670 |
| 440 | 1793.81 | 108.05 | 11.00 | 13.01 | 6022359.76276 | 2090452.43537 |
| 441 | 1823.01 | 118.07 | 21.01 | 15.01 | 6022359.77762 | 2090452.44196 |
| 442 | 1914.77 | 119.05 | 19.01 | 10.00 | 6022359.78182 | 2090452.45362 |
| 443 | 1852.93 | 119.06 | 21.01 | 12.01 | 6022359.78531 | 2090452.46995 |
| 444 | 1938.78 | 113.05 | 23.01 | 19.01 | 6022359.59572 | 2090452.02991 |
| 445 | 1856.47 | 127.03 | 20.01 | 13.00 | 6022359.63160 | 2090452.15271 |
| 446 | 1816.46 | 100.03 | 19.00 | 12.00 | 6022359.63672 | 2090452.17323 |
| 447 | 1936.69 | 125.04 | 29.01 | 15.01 | 6022359.63629 | 2090452.16789 |
| 448 | 1808.73 | 121.05 | 19.01 | 18.01 | 6022360.18201 | 2090452.87395 |
| 449 | 1897.67 | 114.04 | 21.01 | 12.00 | 6022361.17132 | 2090454.19257 |
| 450 | 1890.10 | 110.01 | 20.00 | 20.00 | 6022362.07208 | 2090455.23175 |
| 451 | 1921.58 | 110.03 | 29.01 | 12.00 | 6022362.08563 | 2090455.25501 |
| 452 | 1992.51 | 120.03 | 19.00 | 9.00 | 6022362.27912 | 2090455.47661 |
| 453 | 1849.30 | 107.08 | 18.01 | 13.01 | 6022362.03311 | 2090455.07631 |
| 454 | 1849.66 | 115.04 | 17.01 | 13.00 | 6022361.41327 | 2090454.30763 |
| 455 | 1841.56 | 97.03 | 22.01 | 12.00 | 6022361.29955 | 2090454.14932 |
| 456 | 1841.28 | 119.02 | 19.00 | 11.00 | 6022360.51268 | 2090452.91511 |
| 457 | 1814.64 | 104.04 | 18.01 | 15.01 | 6022359.97577 | 2090452.24866 |
| 458 | 1786.46 | 86.02 | 15.00 | 11.00 | 6022359.63333 | 2090451.49196 |
| 459 | 1836.56 | 107.03 | 19.01 | 8.00 | 6022358.37622 | 2090449.87165 |
| 460 | 1760.62 | 110.04 | 13.00 | 12.00 | 6022357.66105 | 2090448.74443 |
| 461 | 1774.27 | 101.02 | 15.00 | 16.00 | 6022357.05996 | 2090447.95247 |
| 462 | 1795.28 | 102.02 | 16.00 | 8.00 | 6022356.29532 | 2090446.80483 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 463 | 1775.27 | 104.02 | 15.00 | 12.00 | 6022355.55848 | 2090445.92483 |
| 464 | 1742.71 | 108.04 | 13.01 | 9.00 | 6022354.87181 | 2090445.01236 |
| 465 | 1731.70 | 108.04 | 16.01 | 9.00 | 6022354.23426 | 2090444.25470 |
| 466 | 1797.46 | 125.03 | 27.01 | 9.00 | 6022354.10814 | 2090444.06252 |
| 467 | 1769.62 | 110.04 | 14.00 | 7.00 | 6022353.30311 | 2090442.98934 |
| 468 | 1754.97 | 119.07 | 14.01 | 12.01 | 6022352.55325 | 2090442.04446 |
| 469 | 1748.79 | 118.05 | 19.01 | 8.00 | 6022352.14348 | 2090441.53869 |
| 470 | 1804.46 | 107.03 | 21.01 | 10.00 | 6022351.02164 | 2090440.20941 |
| 471 | 1772.36 | 115.02 | 15.00 | 12.00 | 6022349.94646 | 2090438.82483 |
| 472 | 1715.52 | 113.03 | 13.00 | 9.00 | 6022349.33175 | 2090438.20907 |
| 473 | 1761.98 | 95.05 | 16.01 | 12.01 | 6022349.24797 | 2090438.12539 |
| 474 | 1765.45 | 126.03 | 12.00 | 8.00 | 6022348.53834 | 2090437.31234 |
| 475 | 1697.86 | 103.05 | 14.01 | 10.01 | 6022348.24466 | 2090436.99590 |
| 476 | 1738.44 | 120.03 | 19.00 | 10.00 | 6022347.61927 | 2090436.43446 |
| 477 | 1834.65 | 108.04 | 16.01 | 7.00 | 6022346.49312 | 2090435.10977 |
| 478 | 1775.45 | 110.03 | 17.00 | 6.00 | 6022345.68019 | 2090434.17908 |
| 479 | 1842.65 | 93.03 | 17.01 | 10.00 | 6022344.87882 | 2090433.51911 |
| 480 | 1882.57 | 117.04 | 22.01 | 15.00 | 6022344.12658 | 2090432.86830 |
| 481 | 1857.57 | 98.03 | 28.01 | 6.00 | 6022342.60111 | 2090431.81048 |
| 482 | 1849.47 | 116.03 | 18.00 | 12.00 | 6022340.67052 | 2090431.36871 |
| 483 | 1977.50 | 100.03 | 19.00 | 14.00 | 6022339.76160 | 2090431.24639 |
| 484 | 1967.70 | 119.04 | 19.01 | 15.01 | 6022338.63131 | 2090431.36035 |
| 485 | 1900.86 | 136.06 | 18.01 | 13.01 | 6022336.50621 | 2090431.88256 |
| 486 | 1827.01 | 116.06 | 14.01 | 13.01 | 6022335.08216 | 2090432.49336 |
| 487 | 1839.47 | 116.03 | 13.00 | 13.00 | 6022334.67802 | 2090432.14542 |
| 488 | 1795.37 | 100.02 | 21.00 | 13.00 | 6022333.25519 | 2090432.77434 |
| 489 | 1801.37 | 134.03 | 17.00 | 18.00 | 6022331.35685 | 2090433.70115 |
| 490 | 1817.01 | 116.06 | 18.01 | 14.01 | 6022330.86738 | 2090433.93423 |
| 491 | 1830.92 | 119.06 | 21.01 | 12.01 | 6022329.92072 | 2090435.00382 |
| 492 | 1860.75 | 132.05 | 21.01 | 17.01 | 6022329.07959 | 2090435.50929 |
| 493 | 1945.59 | 108.03 | 22.01 | 17.01 | 6022329.10194 | 2090435.50251 |
| 494 | 1868.85 | 114.05 | 18.01 | 9.00 | 6022329.13736 | 2090435.47236 |
| 495 | 1849.39 | 127.10 | 20.02 | 18.01 | 6022329.14634 | 2090435.47484 |
| 496 | 1911.49 | 107.03 | 17.00 | 13.00 | 6022329.14953 | 2090435.47888 |
| 497 | 1827.74 | 124.05 | 28.01 | 6.00 | 6022329.36375 | 2090435.34032 |
| 498 | 1860.66 | 115.04 | 15.01 | 11.00 | 6022330.12697 | 2090434.71809 |
| 499 | 1801.82 | 97.04 | 19.01 | 12.01 | 6022330.94202 | 2090434.10949 |
| 500 | 1929.39 | 103.02 | 24.00 | 9.00 | 6022331.94400 | 2090433.25094 |
| 501 | 1872.47 | 119.03 | 13.00 | 11.00 | 6022332.97891 | 2090432.43916 |
| 502 | 1922.68 | 104.04 | 21.01 | 11.00 | 6022332.94103 | 2090432.45105 |
| 503 | 1944.20 | 131.01 | 18.00 | 13.00 | 6022333.15578 | 2090432.28536 |
| 504 | 2027.72 | 126.04 | 14.00 | 18.01 | 6022334.70148 | 2090431.13915 |
| 505 | 2034.72 | 119.04 | 25.01 | 10.00 | 6022335.76004 | 2090430.34856 |
| 506 | 2088.95 | 115.05 | 26.01 | 15.01 | 6022336.36124 | 2090429.93267 |
| 507 | 2071.84 | 118.05 | 19.01 | 14.01 | 6022337.25939 | 2090429.24829 |
| 508 | 2094.95 | 131.06 | 22.01 | 16.01 | 6022336.48240 | 2090429.83472 |
| 509 | 1997.11 | 126.07 | 20.01 | 9.00 | 6022335.66887 | 2090430.48815 |
| 510 | 1976.70 | 126.04 | 23.01 | 10.00 | 6022335.03879 | 2090430.99898 |
| 511 | 1937.78 | 136.06 | 18.01 | 16.01 | 6022333.93226 | 2090431.83301 |
| 512 | 1882.48 | 120.03 | 20.01 | 13.00 | 6022333.38568 | 2090432.18054 |
| 513 | 1860.31 | 122.09 | 18.01 | 5.00 | 6022332.79658 | 2090432.63443 |
| 514 | 1858.57 | 119.04 | 17.01 | 14.00 | 6022331.55534 | 2090433.56450 |
| 515 | 1847.65 | 127.05 | 17.01 | 14.00 | 6022330.66303 | 2090434.25503 |
| 516 | 1838.19 | 123.01 | 16.00 | 12.00 | 6022329.22137 | 2090435.34931 |
| 517 | 1927.97 | 124.06 | 18.01 | 10.01 | 6022328.20557 | 2090436.09129 |
| 518 | 1951.98 | 127.06 | 23.01 | 9.00 | 6022327.31674 | 2090436.73701 |
| 519 | 2015.71 | 119.04 | 26.01 | 17.01 | 6022326.50053 | 2090437.38795 |
| 520 | 1922.45 | 129.10 | 17.01 | 7.01 | 6022325.50526 | 2090438.12360 |
| 521 | 1878.57 | 123.04 | 20.01 | 13.00 | 6022324.43268 | 2090439.04429 |
| 522 | 1845.84 | 93.04 | 20.01 | 6.00 | 6022322.96930 | 2090440.18306 |
| 523 | 1822.01 | 127.07 | 27.01 | 16.01 | 6022321.96825 | 2090441.03345 |
| 524 | 1897.67 | 136.05 | 20.01 | 4.00 | 6022321.32382 | 2090441.56166 |
| 525 | 1858.47 | 120.03 | 19.00 | 7.00 | 6022320.27418 | 2090442.45754 |
| 526 | 1861.57 | 117.04 | 20.01 | 22.01 | 6022318.87998 | 2090443.73881 |
| 527 | 1862.47 | 115.03 | 15.00 | 7.00 | 6022317.66849 | 2090444.66676 |
| 528 | 1950.69 | 120.04 | 27.01 | 11.00 | 6022317.19643 | 2090445.03876 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 529 | 1965.80 | 145.06 | 25.01 | 11.00 | 6022316.56999 | 2090445.54852 |
| 530 | 1963.40 | 129.03 | 30.01 | 13.00 | 6022315.11301 | 2090446.71393 |
| 531 | 1964.09 | 111.06 | 22.01 | 22.01 | 6022313.93527 | 2090447.71454 |
| 532 | 2051.93 | 125.06 | 16.01 | 18.01 | 6022313.58718 | 2090448.00048 |
| 533 | 1934.69 | 119.04 | 20.01 | 10.00 | 6022313.50800 | 2090448.07804 |
| 534 | 2010.31 | 124.02 | 21.00 | 15.00 | 6022313.35211 | 2090448.22297 |
| 535 | 2060.04 | 130.07 | 19.01 | 14.01 | 6022312.60974 | 2090448.83208 |
| 536 | 1876.29 | 120.02 | 14.00 | 13.00 | 6022311.65277 | 2090449.58575 |
| 537 | 1926.30 | 86.01 | 18.00 | 13.00 | 6022310.73837 | 2090450.28624 |
| 538 | 1893.48 | 136.03 | 13.00 | 10.00 | 6022309.39071 | 2090451.44509 |
| 539 | 1794.99 | 115.06 | 24.01 | 11.01 | 6022308.71303 | 2090452.03175 |
| 540 | 1836.84 | 131.06 | 22.01 | 11.01 | 6022307.73391 | 2090452.85047 |
| 541 | 1804.64 | 124.04 | 21.01 | 4.00 | 6022306.56999 | 2090453.62364 |
| 542 | 1905.06 | 108.06 | 28.02 | 15.01 | 6022305.49930 | 2090454.49834 |
| 543 | 1955.79 | 129.05 | 18.01 | 13.01 | 6022304.55052 | 2090455.25938 |
| 544 | 1895.58 | 129.04 | 9.00 | 14.00 | 6022303.83501 | 2090455.88089 |
| 545 | 1906.87 | 127.06 | 18.01 | 10.00 | 6022303.18880 | 2090456.42010 |
| 546 | 1829.65 | 131.05 | 26.01 | 16.01 | 6022303.04020 | 2090456.53324 |
| 547 | 1889.76 | 120.05 | 18.01 | 17.01 | 6022302.62284 | 2090456.89014 |
| 548 | 1712.52 | 102.03 | 18.01 | 10.00 | 6022300.74673 | 2090458.32191 |
| 549 | 1784.36 | 110.02 | 19.00 | 9.00 | 6022299.89263 | 2090459.07516 |
| 550 | 1822.01 | 108.06 | 20.01 | 15.01 | 6022299.25036 | 2090459.60334 |
| 551 | 1886.86 | 149.07 | 21.01 | 12.01 | 6022298.07535 | 2090460.51847 |
| 552 | 1830.74 | 113.05 | 13.01 | 8.00 | 6022297.15486 | 2090461.31651 |
| 553 | 1862.66 | 122.04 | 21.01 | 12.00 | 6022295.88640 | 2090462.43286 |
| 554 | 1845.56 | 128.04 | 17.01 | 9.00 | 6022295.09089 | 2090463.09887 |
| 555 | 1811.55 | 101.03 | 15.00 | 14.00 | 6022294.74973 | 2090463.42175 |
| 556 | 1862.94 | 125.06 | 21.01 | 19.01 | 6022294.42152 | 2090463.71163 |
| 557 | 1881.67 | 126.04 | 17.01 | 15.01 | 6022293.87459 | 2090464.17078 |
| 558 | 1799.82 | 121.05 | 22.01 | 6.00 | 6022293.02103 | 2090464.79755 |
| 559 | 1816.73 | 116.05 | 22.01 | 10.00 | 6022291.84360 | 2090465.77541 |
| 560 | 1814.10 | 106.01 | 19.00 | 11.00 | 6022291.19997 | 2090466.37661 |
| 561 | 1906.67 | 119.04 | 23.01 | 10.00 | 6022290.83459 | 2090466.64672 |
| 562 | 1914.58 | 110.03 | 21.01 | 9.00 | 6022290.34026 | 2090467.05254 |
| 563 | 1870.48 | 105.03 | 27.01 | 10.00 | 6022289.64517 | 2090467.61889 |
| 564 | 1922.49 | 127.03 | 29.01 | 12.00 | 6022289.16183 | 2090468.02345 |
| 565 | 1839.37 | 131.03 | 17.00 | 12.00 | 6022288.62774 | 2090468.53830 |
| 566 | 1893.96 | 111.06 | 18.01 | 18.01 | 6022288.19570 | 2090468.85505 |
| 567 | 1981.80 | 113.05 | 22.01 | 12.00 | 6022287.41279 | 2090469.54666 |
| 568 | 1837.65 | 105.04 | 18.01 | 13.00 | 6022286.05898 | 2090471.12638 |
| 569 | 1919.87 | 123.06 | 21.01 | 16.01 | 6022285.03655 | 2090473.42589 |
| 570 | 1835.02 | 126.07 | 14.01 | 7.00 | 6022284.98398 | 2090475.71111 |
| 571 | 1885.57 | 118.04 | 21.01 | 13.00 | 6022284.97738 | 2090477.63178 |
| 572 | 1801.09 | 122.07 | 14.01 | 8.00 | 6022285.48027 | 2090479.04800 |
| 573 | 1755.45 | 101.03 | 21.01 | 9.00 | 6022285.96505 | 2090480.37263 |
| 574 | 1777.99 | 99.05 | 18.01 | 6.00 | 6022286.60542 | 2090481.65337 |
| 575 | 1806.64 | 108.04 | 20.01 | 10.00 | 6022287.09412 | 2090482.77955 |
| 576 | 1798.82 | 108.05 | 16.01 | 12.01 | 6022287.55371 | 2090483.60530 |
| 577 | 1754.50 | 112.10 | 14.01 | 8.01 | 6022287.44528 | 2090483.45638 |
| 578 | 1769.18 | 107.01 | 21.00 | 11.00 | 6022287.33514 | 2090483.32989 |
| 579 | 1808.46 | 116.03 | 17.00 | 17.00 | 6022287.31604 | 2090483.34776 |
| 580 | 1756.54 | 116.04 | 14.00 | 11.00 | 6022287.30157 | 2090483.32015 |
| 581 | 1778.63 | 104.04 | 8.00 | 19.01 | 6022287.28208 | 2090483.31479 |
| 582 | 1808.64 | 98.03 | 14.00 | 11.00 | 6022287.26757 | 2090483.32875 |
| 583 | 1800.82 | 107.05 | 13.01 | 12.01 | 6022286.99219 | 2090482.86377 |
| 584 | 1813.37 | 112.02 | 15.00 | 8.00 | 6022286.28565 | 2090481.75424 |
| 585 | 1762.45 | 115.03 | 14.00 | 14.00 | 6022285.07514 | 2090480.10671 |
| 586 | 1898.20 | 114.01 | 16.00 | 8.00 | 6022284.19820 | 2090478.81635 |
| 587 | 1816.01 | 118.07 | 16.01 | 11.01 | 6022283.59301 | 2090478.06950 |
| 588 | 1842.38 | 117.02 | 18.00 | 9.00 | 6022283.36461 | 2090477.74353 |
| 589 | 1877.57 | 110.03 | 19.01 | 8.00 | 6022283.12347 | 2090477.37335 |
| 590 | 1877.76 | 95.04 | 26.01 | 8.00 | 6022282.62419 | 2090476.73912 |
| 591 | 1831.65 | 126.04 | 10.00 | 8.00 | 6022282.07133 | 2090475.95032 |
| 592 | 1905.68 | 123.04 | 13.00 | 16.01 | 6022282.35948 | 2090476.80230 |
| 593 | 1779.54 | 114.03 | 29.01 | 9.00 | 6022282.96393 | 2090477.70545 |
| 594 | 1796.00 | 96.05 | 25.01 | 11.01 | 6022283.76733 | 2090479.01503 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 595 | 1732.70 | 100.04 | 28.01 | 12.00 | 6022284.46759 | 2090480.20465 |
| 596 | 1779.72 | 115.05 | 21.01 | 11.00 | 6022284.97184 | 2090480.95357 |
| 597 | 1781.63 | 110.04 | 18.01 | 13.00 | 6022285.21040 | 2090481.41086 |
| 598 | 1839.30 | 101.07 | 10.01 | 8.01 | 6022285.69911 | 2090482.09874 |
| 599 | 1777.81 | 93.04 | 23.01 | 9.00 | 6022286.45926 | 2090483.36657 |
| 600 | 1765.63 | 110.04 | 16.01 | 8.00 | 6022287.10439 | 2090484.37376 |
| 601 | 1757.45 | 106.03 | 12.00 | 7.00 | 6022287.35687 | 2090484.76982 |
| 602 | 1817.74 | 105.04 | 17.01 | 7.00 | 6022287.90584 | 2090485.66040 |
| 603 | 1721.52 | 103.03 | 18.01 | 11.00 | 6022288.46324 | 2090486.53150 |
| 604 | 1760.62 | 113.04 | 14.00 | 9.00 | 6022288.83406 | 2090486.99572 |
| 605 | 1796.55 | 108.03 | 25.01 | 12.00 | 6022289.46300 | 2090487.74600 |
| 606 | 1848.47 | 96.02 | 19.00 | 15.00 | 6022290.30254 | 2090489.07346 |
| 607 | 1773.45 | 95.02 | 24.01 | 12.00 | 6022290.62713 | 2090489.47242 |
| 608 | 1811.92 | 105.05 | 16.01 | 6.00 | 6022291.12415 | 2090490.11017 |
| 609 | 1932.78 | 120.05 | 21.01 | 9.00 | 6022291.62992 | 2090490.87690 |
| 610 | 1889.58 | 109.03 | 15.00 | 5.00 | 6022291.81229 | 2090491.16590 |
| 611 | 1973.00 | 139.07 | 24.01 | 14.01 | 6022292.62694 | 2090492.18067 |
| 612 | 1888.58 | 112.03 | 20.01 | 14.00 | 6022293.40070 | 2090493.19033 |
| 613 | 1841.38 | 104.02 | 22.00 | 15.00 | 6022293.74020 | 2090493.63227 |
| 614 | 1973.09 | 110.06 | 17.01 | 19.01 | 6022294.10608 | 2090494.18646 |
| 615 | 1965.60 | 120.04 | 26.01 | 16.00 | 6022294.58632 | 2090494.73156 |
| 616 | 1958.79 | 108.04 | 11.00 | 11.00 | 6022294.67344 | 2090494.89759 |
| 617 | 1890.67 | 105.04 | 20.01 | 17.01 | 6022295.43051 | 2090496.02636 |
| 618 | 1937.59 | 122.04 | 21.01 | 9.00 | 6022295.97269 | 2090496.70437 |
| 619 | 1952.99 | 124.06 | 17.01 | 13.01 | 6022296.71328 | 2090497.73418 |
| 620 | 1996.01 | 100.05 | 19.01 | 14.01 | 6022297.62853 | 2090498.96101 |
| 621 | 1861.57 | 114.03 | 21.01 | 6.00 | 6022298.27904 | 2090499.53267 |
| 622 | 1922.49 | 121.03 | 23.01 | 15.00 | 6022298.97505 | 2090500.11660 |
| 623 | 1911.68 | 115.04 | 22.01 | 10.00 | 6022301.00974 | 2090501.10805 |
| 624 | 1984.20 | 132.08 | 15.01 | 12.01 | 6022303.30537 | 2090501.58933 |
| 625 | 1988.60 | 117.04 | 17.01 | 12.00 | 6022304.69262 | 2090501.45257 |
| 626 | 1869.85 | 114.05 | 21.01 | 17.01 | 6022305.38734 | 2090501.28474 |
| 627 | 1983.70 | 137.05 | 22.01 | 17.01 | 6022307.14813 | 2090500.57357 |
| 628 | 1934.88 | 127.06 | 20.01 | 9.00 | 6022308.36174 | 2090499.83871 |
| 629 | 1946.59 | 134.04 | 25.01 | 11.00 | 6022309.06022 | 2090499.36801 |
| 630 | 1871.85 | 122.06 | 15.01 | 9.00 | 6022309.90828 | 2090498.81228 |
| 631 | 1974.30 | 113.02 | 21.00 | 10.00 | 6022310.10956 | 2090498.68474 |
| 632 | 1937.59 | 99.03 | 17.01 | 14.00 | 6022310.10239 | 2090498.67310 |
| 633 | 1892.95 | 135.07 | 11.01 | 16.01 | 6022310.08176 | 2090498.66639 |
| 634 | 1931.88 | 105.05 | 24.01 | 13.01 | 6022309.92758 | 2090498.74127 |
| 635 | 1914.97 | 114.06 | 31.02 | 17.01 | 6022309.86181 | 2090498.73545 |
| 636 | 1935.46 | 126.10 | 25.02 | 11.01 | 6022309.63950 | 2090498.85952 |
| 637 | 1932.36 | 114.08 | 22.02 | 17.01 | 6022308.61913 | 2090499.48625 |
| 638 | 1920.78 | 125.05 | 24.01 | 9.00 | 6022307.38536 | 2090500.34850 |
| 639 | 1951.89 | 127.06 | 22.01 | 12.01 | 6022307.11574 | 2090500.47340 |
| 640 | 2006.71 | 121.04 | 28.01 | 15.01 | 6022306.17122 | 2090500.99546 |
| 641 | 2062.83 | 131.05 | 21.01 | 11.00 | 6022304.55905 | 2090502.04982 |
| 642 | 1925.78 | 133.05 | 21.01 | 9.00 | 6022303.58481 | 2090502.67029 |
| 643 | 1975.70 | 133.05 | 25.01 | 10.00 | 6022303.33785 | 2090502.83019 |
| 644 | 2047.62 | 135.04 | 24.01 | 10.00 | 6022302.81503 | 2090503.17307 |
| 645 | 2041.42 | 142.03 | 28.01 | 12.00 | 6022301.91570 | 2090503.73678 |
| 646 | 2034.32 | 130.02 | 29.00 | 16.00 | 6022301.86443 | 2090503.76066 |
| 647 | 1953.30 | 107.02 | 28.00 | 16.00 | 6022301.81023 | 2090503.77832 |
| 648 | 2015.51 | 132.03 | 20.01 | 10.00 | 6022301.58725 | 2090503.88789 |
| 649 | 1873.38 | 119.02 | 23.00 | 19.00 | 6022300.90686 | 2090504.27016 |
| 650 | 2009.71 | 131.05 | 17.01 | 12.00 | 6022300.54259 | 2090504.47744 |
| 651 | 1932.78 | 147.06 | 17.01 | 9.00 | 6022300.59036 | 2090504.44875 |
| 652 | 1994.11 | 112.06 | 21.01 | 12.01 | 6022300.59592 | 2090504.45165 |
| 653 | 1972.90 | 124.06 | 15.01 | 16.01 | 6022300.60413 | 2090504.46086 |
| 654 | 2000.61 | 119.04 | 21.01 | 13.00 | 6022300.64554 | 2090504.45007 |
| 655 | 1937.07 | 107.06 | 25.01 | 8.00 | 6022300.66066 | 2090504.46069 |
| 656 | 1994.81 | 120.05 | 27.01 | 14.01 | 6022300.67763 | 2090504.44377 |
| 657 | 1968.60 | 124.04 | 18.01 | 12.00 | 6022301.51903 | 2090504.00217 |
| 658 | 2017.41 | 115.02 | 22.00 | 18.00 | 6022303.35779 | 2090502.89678 |
| 659 | 1927.07 | 127.07 | 19.01 | 10.01 | 6022304.35042 | 2090502.28786 |
| 660 | 2011.71 | 124.04 | 22.01 | 13.00 | 6022304.57944 | 2090502.10166 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 661 | 1930.78 | 113.05 | 17.01 | 14.01 | 6022305.38882 | 2090501.57465 |
| 662 | 1939.88 | 132.06 | 20.01 | 9.00 | 6022306.40524 | 2090500.95238 |
| 663 | 1887.14 | 120.07 | 22.01 | 13.01 | 6022307.77983 | 2090500.13398 |
| 664 | 1940.08 | 128.07 | 19.01 | 13.01 | 6022309.23067 | 2090499.12729 |
| 665 | 1774.72 | 103.04 | 19.01 | 13.01 | 6022310.30324 | 2090498.45719 |
| 666 | 1801.46 | 104.03 | 15.00 | 9.00 | 6022311.29331 | 2090497.77558 |
| 667 | 1899.67 | 119.04 | 19.01 | 8.00 | 6022312.66373 | 2090496.81878 |
| 668 | 1849.38 | 121.02 | 11.00 | 8.00 | 6022314.07220 | 2090495.84408 |
| 669 | 1888.14 | 112.07 | 21.01 | 14.01 | 6022314.78117 | 2090495.37433 |
| 670 | 1809.46 | 131.03 | 11.00 | 11.00 | 6022315.59635 | 2090494.78331 |
| 671 | 1846.75 | 110.04 | 18.01 | 14.01 | 6022316.99846 | 2090493.72523 |
| 672 | 1871.48 | 116.03 | 19.00 | 15.00 | 6022318.10315 | 2090492.96299 |
| 673 | 1843.65 | 136.05 | 23.01 | 13.00 | 6022318.51765 | 2090492.70687 |
| 674 | 1848.38 | 118.02 | 18.00 | 7.00 | 6022319.32722 | 2090492.11584 |
| 675 | 1938.78 | 116.05 | 19.01 | 15.01 | 6022320.58433 | 2090491.11462 |
| 676 | 1883.14 | 121.07 | 25.02 | 9.01 | 6022321.92758 | 2090490.07750 |
| 677 | 1760.54 | 116.04 | 20.01 | 12.00 | 6022322.61163 | 2090489.59069 |
| 678 | 1718.44 | 121.03 | 19.00 | 10.00 | 6022323.31420 | 2090489.10518 |
| 679 | 1728.70 | 104.04 | 20.01 | 7.00 | 6022324.09301 | 2090488.45389 |
| 680 | 1667.51 | 97.03 | 25.01 | 12.00 | 6022325.77226 | 2090487.26795 |
| 681 | 1719.78 | 96.04 | 14.01 | 14.01 | 6022326.98740 | 2090486.42614 |
| 682 | 1743.05 | 113.07 | 12.01 | 10.01 | 6022327.38352 | 2090486.15961 |
| 683 | 1687.09 | 109.01 | 9.00 | 16.00 | 6022327.97783 | 2090485.63769 |
| 684 | 1727.04 | 104.06 | 15.01 | 7.00 | 6022328.68352 | 2090485.05832 |
| 685 | 1723.87 | 106.05 | 23.01 | 11.01 | 6022330.36424 | 2090483.79500 |
| 686 | 1714.61 | 94.03 | 24.01 | 12.00 | 6022331.89059 | 2090482.76527 |
| 687 | 1787.63 | 124.04 | 10.00 | 12.00 | 6022333.23815 | 2090481.64408 |
| 688 | 1725.61 | 92.03 | 14.00 | 9.00 | 6022334.35620 | 2090480.90461 |
| 689 | 1665.59 | 99.04 | 15.01 | 12.00 | 6022335.44116 | 2090480.05080 |
| 690 | 1726.44 | 110.03 | 15.00 | 9.00 | 6022336.69221 | 2090479.07061 |
| 691 | 1663.34 | 119.02 | 14.00 | 12.00 | 6022338.00518 | 2090478.05640 |
| 692 | 1739.62 | 116.04 | 12.00 | 8.00 | 6022339.12665 | 2090477.32076 |
| 693 | 1720.18 | 114.01 | 11.00 | 8.00 | 6022340.03169 | 2090476.63192 |
| 694 | 1694.52 | 110.03 | 20.01 | 11.00 | 6022341.02372 | 2090475.87597 |
| 695 | 1721.95 | 128.07 | 19.01 | 8.00 | 6022342.34251 | 2090474.75690 |
| 696 | 1659.76 | 93.04 | 14.01 | 3.00 | 6022343.35745 | 2090474.06799 |
| 697 | 1596.32 | 97.02 | 12.00 | 9.00 | 6022343.99499 | 2090473.60386 |
| 698 | 1650.42 | 116.03 | 14.00 | 3.00 | 6022344.38435 | 2090473.31593 |
| 699 | 1615.49 | 90.03 | 10.00 | 7.00 | 6022345.41283 | 2090472.50508 |
| 700 | 1761.45 | 116.03 | 11.00 | 7.00 | 6022346.00701 | 2090472.00041 |
| 701 | 1579.72 | 88.04 | 22.01 | 7.00 | 6022346.16471 | 2090471.88140 |
| 702 | 1661.76 | 93.04 | 9.00 | 14.01 | 6022347.27735 | 2090470.99380 |
| 703 | 1679.34 | 109.02 | 21.00 | 9.00 | 6022348.69180 | 2090470.02581 |
| 704 | 1799.46 | 107.03 | 20.01 | 10.00 | 6022349.68743 | 2090469.21528 |
| 705 | 1690.60 | 91.03 | 18.01 | 14.00 | 6022350.94275 | 2090468.40827 |
| 706 | 1845.56 | 129.04 | 15.00 | 7.00 | 6022351.49134 | 2090467.92095 |
| 707 | 1705.03 | 115.07 | 14.01 | 12.01 | 6022351.72087 | 2090467.74218 |
| 708 | 1785.45 | 113.03 | 14.00 | 8.00 | 6022352.26786 | 2090467.28151 |
| 709 | 1817.64 | 109.04 | 22.01 | 6.00 | 6022353.00539 | 2090466.61909 |
| 710 | 1770.54 | 112.03 | 19.01 | 10.00 | 6022354.67525 | 2090464.97060 |
| 711 | 1697.94 | 99.05 | 13.01 | 12.01 | 6022355.73292 | 2090464.27579 |
| 712 | 1869.57 | 125.04 | 13.00 | 8.00 | 6022355.69593 | 2090464.29968 |
| 713 | 1745.44 | 104.03 | 22.01 | 7.00 | 6022355.63264 | 2090464.77803 |
| 714 | 1875.67 | 113.04 | 11.00 | 10.00 | 6022356.47673 | 2090463.54278 |
| 715 | 1792.81 | 117.05 | 21.01 | 12.01 | 6022357.15205 | 2090462.96782 |
| 716 | 1992.51 | 113.03 | 17.00 | 15.00 | 6022358.07844 | 2090461.58469 |
| 717 | 1969.60 | 113.03 | 20.01 | 10.00 | 6022359.14239 | 2090459.73891 |
| 718 | 1834.56 | 131.04 | 22.01 | 12.00 | 6022359.46058 | 2090457.96809 |
| 719 | 1854.94 | 102.05 | 27.01 | 6.00 | 6022359.32465 | 2090456.66186 |
| 720 | 1737.62 | 83.03 | 12.00 | 11.00 | 6022359.19713 | 2090455.05910 |
| 721 | 1903.67 | 121.04 | 11.00 | 14.00 | 6022359.13550 | 2090454.88173 |
| 722 | 1890.86 | 119.05 | 30.01 | 12.01 | 6022359.12460 | 2090454.81063 |
| 723 | 1851.84 | 125.06 | 19.01 | 18.01 | 6022359.05359 | 2090454.59889 |
| 724 | 1848.66 | 115.04 | 20.01 | 10.00 | 6022358.87934 | 2090454.21494 |
| 725 | 1804.00 | 112.06 | 16.01 | 17.01 | 6022358.37694 | 2090453.26395 |
| 726 | 1829.74 | 113.05 | 16.01 | 9.00 | 6022357.30439 | 2090451.70255 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 727 | 1844.65 | 122.04 | 19.01 | 16.01 | 6022355.45760 | 2090450.11061 |
| 728 | 1785.46 | 105.03 | 23.01 | 11.00 | 6022353.71744 | 2090449.28284 |
| 729 | 1855.12 | 109.07 | 14.01 | 13.01 | 6022352.10662 | 2090448.98412 |
| 730 | 1739.27 | 139.02 | 17.00 | 9.00 | 6022350.53742 | 2090448.97479 |
| 731 | 1861.85 | 105.05 | 19.01 | 6.00 | 6022349.10944 | 2090449.14403 |
| 732 | 1918.87 | 121.06 | 24.01 | 14.01 | 6022347.46007 | 2090449.51017 |
| 733 | 1840.74 | 105.04 | 19.01 | 7.00 | 6022345.40684 | 2090450.13044 |
| 734 | 1759.27 | 98.02 | 24.00 | 9.00 | 6022344.10991 | 2090450.05902 |
| 735 | 1907.87 | 122.06 | 11.00 | 14.01 | 6022342.68703 | 2090450.71950 |
| 736 | 1952.69 | 121.04 | 24.01 | 14.00 | 6022341.03602 | 2090452.20851 |
| 737 | 1843.38 | 116.02 | 15.00 | 13.00 | 6022339.84894 | 2090453.06298 |
| 738 | 1753.53 | 111.03 | 18.01 | 15.00 | 6022338.36866 | 2090454.20504 |
| 739 | 1861.66 | 136.05 | 22.01 | 12.00 | 6022337.45956 | 2090455.06942 |
| 740 | 1863.57 | 104.03 | 24.01 | 9.00 | 6022336.65680 | 2090455.93675 |
| 741 | 1910.35 | 116.08 | 22.02 | 11.01 | 6022335.68008 | 2090456.96465 |
| 742 | 1886.20 | 123.01 | 19.00 | 10.00 | 6022334.36964 | 2090458.36840 |
| 743 | 1827.37 | 126.03 | 15.00 | 9.00 | 6022333.56085 | 2090459.22934 |
| 744 | 1740.97 | 111.06 | 12.01 | 15.01 | 6022333.20160 | 2090459.65001 |
| 745 | 1776.72 | 109.04 | 21.01 | 11.00 | 6022332.16760 | 2090460.51905 |
| 746 | 1787.37 | 100.02 | 25.01 | 6.00 | 6022330.68072 | 2090461.38212 |
| 747 | 1695.60 | 116.04 | 15.01 | 9.00 | 6022329.73711 | 2090461.84727 |
| 748 | 1720.87 | 133.07 | 21.01 | 14.01 | 6022329.65340 | 2090461.90583 |
| 749 | 1766.71 | 109.04 | 15.01 | 10.00 | 6022329.25804 | 2090462.00355 |
| 750 | 1731.53 | 123.04 | 14.00 | 8.00 | 6022327.62376 | 2090462.47343 |
| 751 | 1683.43 | 78.02 | 13.00 | 17.00 | 6022326.32918 | 2090462.84958 |
| 752 | 1650.42 | 109.03 | 16.00 | 11.00 | 6022325.43892 | 2090462.98397 |
| 753 | 1684.34 | 111.02 | 20.00 | 10.00 | 6022323.92304 | 2090463.36719 |
| 754 | 1741.18 | 105.01 | 13.00 | 2.00 | 6022322.31345 | 2090463.83136 |
| 755 | 1765.24 | 103.07 | 19.01 | 8.01 | 6022320.13215 | 2090464.67257 |
| 756 | 1877.85 | 124.06 | 14.01 | 12.01 | 6022318.22217 | 2090465.27791 |
| 757 | 2178.55 | 142.04 | 23.01 | 16.00 | 6022316.98726 | 2090465.82886 |
| 758 | 2095.58 | 139.11 | 19.01 | 14.01 | 6022315.91750 | 2090465.69988 |
| 759 | 1960.50 | 121.03 | 23.01 | 16.00 | 6022314.58966 | 2090466.45997 |
| 760 | 2023.82 | 131.05 | 20.01 | 17.01 | 6022313.20483 | 2090467.38488 |
| 761 | 2079.05 | 132.07 | 20.01 | 7.00 | 6022311.55308 | 2090469.09891 |
| 762 | 2000.01 | 105.05 | 30.02 | 14.01 | 6022310.63679 | 2090469.76529 |
| 763 | 1990.70 | 145.05 | 15.01 | 10.00 | 6022309.91334 | 2090470.28425 |
| 764 | 1978.00 | 99.05 | 14.01 | 8.00 | 6022309.57672 | 2090470.46037 |
| 765 | 2123.75 | 138.05 | 23.01 | 16.01 | 6022309.48030 | 2090470.52657 |
| 766 | 2019.82 | 129.05 | 19.01 | 11.00 | 6022308.76911 | 2090471.07849 |
| 767 | 1878.29 | 135.02 | 25.00 | 9.00 | 6022306.95965 | 2090472.54375 |
| 768 | 1958.99 | 115.06 | 12.01 | 10.01 | 6022305.58682 | 2090473.59083 |
| 769 | 1937.78 | 119.05 | 24.01 | 9.00 | 6022304.71734 | 2090474.28427 |
| 770 | 2008.41 | 118.02 | 20.00 | 16.00 | 6022303.62100 | 2090475.22671 |
| 771 | 2106.06 | 134.07 | 24.01 | 13.01 | 6022302.15653 | 2090476.42554 |
| 772 | 2120.18 | 119.07 | 20.01 | 17.01 | 6022301.28347 | 2090477.17244 |
| 773 | 2118.28 | 126.08 | 27.02 | 14.01 | 6022301.32424 | 2090477.13517 |
| 774 | 2079.63 | 150.05 | 32.01 | 8.00 | 6022300.88209 | 2090477.55621 |
| 775 | 2010.01 | 135.07 | 22.01 | 12.01 | 6022299.92658 | 2090478.37382 |
| 776 | 2132.86 | 127.05 | 17.01 | 19.01 | 6022299.47813 | 2090478.82266 |
| 777 | 1954.50 | 119.03 | 21.01 | 12.00 | 6022298.62548 | 2090479.66643 |
| 778 | 1955.60 | 95.03 | 20.01 | 10.00 | 6022297.56826 | 2090480.77809 |
| 779 | 1949.59 | 119.04 | 21.01 | 14.00 | 6022297.37926 | 2090481.01845 |
| 780 | 1911.87 | 142.06 | 20.01 | 12.01 | 6022297.15450 | 2090481.26896 |
| 781 | 1786.45 | 104.03 | 18.00 | 11.00 | 6022296.12582 | 2090482.80405 |
| 782 | 1841.02 | 127.07 | 19.01 | 16.01 | 6022295.19255 | 2090484.78565 |
| 783 | 1842.47 | 108.03 | 21.01 | 9.00 | 6022294.93602 | 2090486.34072 |
| 784 | 1859.57 | 120.04 | 13.00 | 18.01 | 6022294.83306 | 2090487.31401 |
| 785 | 1717.52 | 95.03 | 18.01 | 13.00 | 6022294.92572 | 2090488.33254 |
| 786 | 1751.62 | 110.04 | 22.01 | 10.00 | 6022294.95877 | 2090488.48000 |
| 787 | 1778.45 | 123.03 | 20.01 | 14.00 | 6022295.04878 | 2090489.15558 |
| 788 | 1827.37 | 123.03 | 18.00 | 15.00 | 6022295.47532 | 2090491.19250 |
| 789 | 1879.86 | 118.05 | 14.01 | 9.00 | 6022295.98052 | 2090492.41937 |
| 790 | 1942.20 | 127.01 | 24.00 | 13.00 | 6022296.27591 | 2090493.02031 |
| 791 | 1779.54 | 118.04 | 18.01 | 8.00 | 6022296.27312 | 2090493.03071 |
| 792 | 1815.92 | 109.06 | 22.01 | 8.00 | 6022296.35308 | 2090493.12363 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 793 | 1907.77 | 132.05 | 21.01 | 11.00 | 6022296.58618 | 2090493.38583 |
| 794 | 1944.69 | 112.04 | 19.01 | 9.00 | 6022297.52336 | 2090494.91673 |
| 795 | 2037.64 | 119.10 | 20.02 | 10.01 | 6022299.72156 | 2090496.67738 |
| 796 | 1921.68 | 125.04 | 18.01 | 19.01 | 6022302.08453 | 2090497.54593 |
| 797 | 1884.67 | 134.05 | 29.01 | 7.00 | 6022303.98290 | 2090497.60810 |
| 798 | 1944.89 | 119.05 | 18.01 | 11.01 | 6022305.82287 | 2090497.24091 |
| 799 | 1816.64 | 101.04 | 19.01 | 12.00 | 6022307.55762 | 2090496.63072 |
| 800 | 1916.78 | 111.04 | 22.01 | 11.00 | 6022308.62342 | 2090496.11432 |
| 801 | 1871.76 | 118.05 | 18.01 | 7.00 | 6022309.70995 | 2090495.44413 |
| 802 | 1949.50 | 120.03 | 18.00 | 14.00 | 6022311.22674 | 2090494.51378 |
| 803 | 1938.07 | 129.07 | 18.01 | 13.01 | 6022312.82695 | 2090493.57288 |
| 804 | 1907.39 | 115.02 | 17.00 | 13.00 | 6022314.23089 | 2090492.58461 |
| 805 | 1882.48 | 106.03 | 25.01 | 9.00 | 6022315.58901 | 2090491.65816 |
| 806 | 1729.70 | 112.05 | 23.01 | 12.00 | 6022316.80225 | 2090490.77735 |
| 807 | 1741.97 | 103.06 | 18.01 | 13.01 | 6022317.67221 | 2090490.09782 |
| 808 | 1757.06 | 101.06 | 20.01 | 14.01 | 6022318.73423 | 2090489.42869 |
| 809 | 1824.83 | 100.05 | 19.01 | 14.01 | 6022320.30511 | 2090488.45704 |
| 810 | 1825.92 | 91.05 | 29.01 | 8.00 | 6022321.63712 | 2090487.60345 |
| 811 | 1821.55 | 90.03 | 20.01 | 10.00 | 6022322.59933 | 2090486.76392 |
| 812 | 1791.55 | 104.03 | 23.01 | 17.01 | 6022324.00898 | 2090485.94472 |
| 813 | 1837.74 | 120.05 | 21.01 | 10.00 | 6022325.23601 | 2090485.07800 |
| 814 | 1855.19 | 112.01 | 28.00 | 14.00 | 6022325.61470 | 2090484.82137 |
| 815 | 1797.55 | 110.03 | 18.01 | 13.00 | 6022326.74509 | 2090484.06964 |
| 816 | 1699.43 | 108.03 | 24.01 | 10.00 | 6022328.14610 | 2090482.80245 |
| 817 | 1663.84 | 101.05 | 18.01 | 15.01 | 6022329.51354 | 2090481.82275 |
| 818 | 1731.61 | 116.04 | 16.01 | 6.00 | 6022330.49757 | 2090481.19406 |
| 819 | 1668.17 | 89.01 | 20.00 | 6.00 | 6022330.82166 | 2090481.00030 |
| 820 | 1728.53 | 117.04 | 13.00 | 9.00 | 6022330.95401 | 2090480.91068 |
| 821 | 1687.77 | 102.05 | 19.01 | 11.00 | 6022331.98347 | 2090480.27225 |
| 822 | 1689.35 | 109.02 | 20.00 | 4.00 | 6022333.59080 | 2090479.02880 |
| 823 | 1692.43 | 118.03 | 17.00 | 9.00 | 6022334.89193 | 2090477.97890 |
| 824 | 1686.60 | 115.04 | 13.00 | 6.00 | 6022336.30074 | 2090476.95607 |
| 825 | 1785.72 | 97.04 | 27.01 | 4.00 | 6022337.49123 | 2090476.01474 |
| 826 | 1662.09 | 93.01 | 24.00 | 8.00 | 6022338.32133 | 2090475.37896 |
| 827 | 1687.68 | 105.04 | 22.01 | 16.01 | 6022338.76430 | 2090474.92343 |
| 828 | 1700.43 | 103.03 | 17.00 | 7.00 | 6022340.17126 | 2090473.73667 |
| 829 | 1616.41 | 110.03 | 14.00 | 11.00 | 6022341.48728 | 2090472.67470 |
| 830 | 1619.49 | 98.03 | 8.00 | 4.00 | 6022341.92444 | 2090472.20393 |
| 831 | 1642.66 | 90.04 | 14.01 | 8.00 | 6022342.48597 | 2090471.80964 |
| 832 | 1617.66 | 83.03 | 20.01 | 9.00 | 6022343.55497 | 2090470.94875 |
| 833 | 1694.35 | 110.02 | 24.00 | 4.00 | 6022344.97619 | 2090469.94814 |
| 834 | 1674.60 | 112.04 | 18.01 | 8.00 | 6022345.86196 | 2090469.27629 |
| 835 | 1744.62 | 108.04 | 23.01 | 13.00 | 6022347.31441 | 2090468.04251 |
| 836 | 1722.18 | 116.01 | 26.00 | 12.00 | 6022348.76438 | 2090466.89736 |
| 837 | 1783.36 | 135.03 | 21.00 | 9.00 | 6022349.34247 | 2090466.49081 |
| 838 | 1959.40 | 134.03 | 24.00 | 6.00 | 6022350.22158 | 2090465.75750 |
| 839 | 1849.56 | 113.03 | 19.01 | 9.00 | 6022351.81370 | 2090464.48183 |
| 840 | 1929.78 | 124.05 | 16.01 | 10.00 | 6022353.08362 | 2090463.39019 |
| 841 | 2009.31 | 132.02 | 24.00 | 12.00 | 6022353.19773 | 2090463.29962 |
| 842 | 1871.57 | 131.04 | 22.01 | 14.00 | 6022353.47323 | 2090463.03935 |
| 843 | 1874.66 | 87.03 | 18.01 | 13.00 | 6022354.84884 | 2090461.73903 |
| 844 | 1988.80 | 115.05 | 14.01 | 18.01 | 6022356.23798 | 2090460.20670 |
| 845 | 1971.90 | 121.06 | 18.01 | 13.01 | 6022357.18970 | 2090458.95384 |
| 846 | 1959.70 | 110.04 | 17.01 | 10.00 | 6022357.82024 | 2090457.89579 |
| 847 | 1750.53 | 99.03 | 20.01 | 9.00 | 6022358.59949 | 2090456.08864 |
| 848 | 1792.82 | 109.05 | 18.01 | 7.00 | 6022358.61483 | 2090453.99826 |
| 849 | 1780.54 | 126.04 | 30.01 | 13.00 | 6022358.58990 | 2090453.66771 |
| 850 | 1877.67 | 124.04 | 17.01 | 7.00 | 6022358.56056 | 2090453.42544 |
| 851 | 1841.38 | 108.02 | 19.00 | 11.00 | 6022358.38507 | 2090452.67061 |
| 852 | 1832.47 | 115.03 | 21.01 | 11.00 | 6022357.96500 | 2090451.47460 |
| 853 | 1735.61 | 99.04 | 18.01 | 11.00 | 6022357.21393 | 2090449.78101 |
| 854 | 1773.27 | 112.02 | 17.00 | 12.00 | 6022356.53445 | 2090448.97153 |
| 855 | 1839.65 | 103.04 | 16.01 | 6.00 | 6022356.04769 | 2090447.36609 |
| 856 | 1818.83 | 114.05 | 30.01 | 11.01 | 6022355.65901 | 2090447.00212 |
| 857 | 1758.15 | 110.07 | 17.01 | 7.00 | 6022355.14844 | 2090447.73748 |
| 858 | 1762.10 | 100.01 | 17.00 | 13.00 | 6022354.10618 | 2090447.18074 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 859 | 1706.86 | 99.05 | 18.01 | 5.00 | 6022352.92149 | 2090446.72674 |
| 860 | 1808.82 | 119.05 | 20.01 | 12.01 | 6022352.09269 | 2090446.57422 |
| 861 | 1819.65 | 113.04 | 16.01 | 12.00 | 6022351.97343 | 2090446.52727 |
| 862 | 1819.46 | 96.02 | 19.00 | 10.00 | 6022349.95510 | 2090446.34371 |
| 863 | 1861.57 | 117.04 | 15.00 | 8.00 | 6022348.61124 | 2090446.69939 |
| 864 | 1819.92 | 118.06 | 21.01 | 12.01 | 6022348.11796 | 2090446.00209 |
| 865 | 1709.78 | 113.05 | 12.01 | 12.01 | 6022346.50670 | 2090446.93888 |
| 866 | 1681.51 | 91.03 | 15.00 | 10.00 | 6022345.12396 | 2090447.72079 |
| 867 | 1634.50 | 101.03 | 21.01 | 9.00 | 6022344.47283 | 2090448.06113 |
| 868 | 1718.70 | 101.04 | 18.01 | 9.00 | 6022343.44283 | 2090448.62252 |
| 869 | 1740.53 | 130.04 | 25.01 | 10.00 | 6022342.15599 | 2090449.34977 |
| 870 | 1769.81 | 121.06 | 25.01 | 10.00 | 6022341.59597 | 2090449.72254 |
| 871 | 1810.82 | 107.05 | 14.01 | 17.01 | 6022340.78824 | 2090450.14079 |
| 872 | 1884.14 | 133.08 | 22.01 | 11.01 | 6022338.62545 | 2090451.92160 |
| 873 | 1755.71 | 110.04 | 27.01 | 9.00 | 6022336.71620 | 2090452.52649 |
| 874 | 1864.47 | 117.03 | 19.00 | 8.00 | 6022335.79660 | 2090452.73854 |
| 875 | 1760.63 | 98.03 | 10.00 | 16.01 | 6022335.07220 | 2090452.85350 |
| 876 | 1801.82 | 100.05 | 27.01 | 11.01 | 6022334.26324 | 2090452.91856 |
| 877 | 1727.35 | 116.02 | 18.00 | 18.00 | 6022333.46912 | 2090452.79430 |
| 878 | 1773.25 | 115.08 | 20.01 | 7.00 | 6022332.29291 | 2090452.79127 |
| 879 | 1774.63 | 101.04 | 17.01 | 12.00 | 6022331.40145 | 2090452.78757 |
| 880 | 1719.35 | 102.02 | 22.00 | 8.00 | 6022330.65599 | 2090452.74935 |
| 881 | 1649.91 | 117.06 | 18.01 | 9.00 | 6022329.24650 | 2090452.94283 |
| 882 | 1775.36 | 113.02 | 21.00 | 8.00 | 6022328.24545 | 2090452.26978 |
| 883 | 1689.18 | 107.01 | 17.00 | 11.00 | 6022325.56951 | 2090454.46596 |
| 884 | 1663.26 | 96.01 | 17.00 | 6.00 | 6022323.98697 | 2090455.83296 |
| 885 | 1834.47 | 105.03 | 17.00 | 10.00 | 6022322.58568 | 2090457.29148 |
| 886 | 1818.28 | 111.02 | 22.00 | 13.00 | 6022321.28219 | 2090458.68885 |
| 887 | 1884.57 | 110.03 | 12.00 | 15.00 | 6022320.07813 | 2090459.73255 |
| 888 | 1925.59 | 119.04 | 26.01 | 19.01 | 6022319.41392 | 2090460.33118 |
| 889 | 2047.62 | 116.04 | 23.01 | 16.00 | 6022319.02448 | 2090460.64279 |
| 890 | 2033.52 | 129.03 | 18.00 | 13.00 | 6022318.08320 | 2090461.42115 |
| 891 | 2026.12 | 106.06 | 19.01 | 8.00 | 6022317.12912 | 2090462.27836 |
| 892 | 2086.43 | 138.03 | 15.00 | 12.00 | 6022316.40289 | 2090462.86238 |
| 893 | 2081.47 | 130.09 | 22.02 | 15.01 | 6022315.77142 | 2090463.34901 |
| 894 | 2078.84 | 109.04 | 21.01 | 15.01 | 6022314.48369 | 2090464.49651 |
| 895 | 2040.62 | 107.03 | 24.01 | 11.00 | 6022313.30491 | 2090465.38282 |
| 896 | 1931.36 | 113.08 | 21.01 | 13.01 | 6022312.44887 | 2090466.08457 |
| 897 | 1892.95 | 121.06 | 22.01 | 13.01 | 6022311.17652 | 2090467.03625 |
| 898 | 1941.59 | 112.03 | 16.00 | 13.00 | 6022309.87703 | 2090468.03663 |
| 899 | 1901.67 | 105.04 | 17.01 | 16.01 | 6022308.87478 | 2090468.82008 |
| 900 | 1852.47 | 125.03 | 16.00 | 12.00 | 6022308.23932 | 2090469.22368 |
| 901 | 1837.65 | 119.04 | 15.01 | 12.00 | 6022308.07194 | 2090469.37881 |
| 902 | 1735.62 | 111.04 | 17.01 | 14.00 | 6022307.08049 | 2090470.12163 |
| 903 | 1775.54 | 106.03 | 20.01 | 4.00 | 6022305.56154 | 2090471.23972 |
| 904 | 1837.65 | 125.04 | 20.01 | 8.00 | 6022304.59501 | 2090472.07688 |
| 905 | 1792.55 | 104.03 | 18.01 | 14.00 | 6022304.06933 | 2090472.52946 |
| 906 | 1956.60 | 102.03 | 15.00 | 19.01 | 6022303.03139 | 2090473.37509 |
| 907 | 1937.40 | 130.03 | 16.00 | 8.00 | 6022301.82989 | 2090474.32405 |
| 908 | 2064.63 | 116.04 | 20.01 | 19.01 | 6022301.23377 | 2090474.89821 |
| 909 | 2079.32 | 135.02 | 16.00 | 17.00 | 6022300.74287 | 2090475.36593 |
| 910 | 2034.11 | 109.01 | 24.00 | 14.00 | 6022300.43465 | 2090475.65972 |
| 911 | 2110.17 | 120.07 | 29.02 | 14.01 | 6022300.31021 | 2090475.79962 |
| 912 | 2007.81 | 132.05 | 21.01 | 8.00 | 6022299.90090 | 2090476.15622 |
| 913 | 1963.09 | 126.07 | 17.01 | 15.01 | 6022298.48690 | 2090477.30969 |
| 914 | 1860.19 | 109.01 | 20.00 | 17.00 | 6022297.10387 | 2090478.37024 |
| 915 | 1847.93 | 107.05 | 17.01 | 10.01 | 6022296.17017 | 2090479.21498 |
| 916 | 1875.66 | 118.04 | 22.01 | 13.00 | 6022295.72023 | 2090479.66007 |
| 917 | 1714.52 | 98.03 | 16.00 | 16.00 | 6022294.89819 | 2090480.42659 |
| 918 | 1592.72 | 106.05 | 18.01 | 11.01 | 6022294.06550 | 2090481.72715 |
| 919 | 1650.34 | 95.02 | 13.00 | 12.00 | 6022293.47265 | 2090483.23552 |
| 920 | 1710.35 | 105.02 | 4.00 | 20.00 | 6022293.19421 | 2090484.96482 |
| 921 | 1784.99 | 108.06 | 21.01 | 7.00 | 6022293.19875 | 2090486.47848 |
| 922 | 1860.75 | 128.05 | 13.01 | 17.01 | 6022293.58540 | 2090487.60247 |
| 923 | 1727.70 | 109.04 | 16.01 | 7.00 | 6022294.04816 | 2090488.60896 |
| 924 | 1803.73 | 108.04 | 22.01 | 7.00 | 6022294.57214 | 2090489.75005 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 925 | 1822.65 | 114.04 | 19.01 | 10.00 | 6022295.54789 | 2090491.12289 |
| 926 | 1875.67 | 109.04 | 19.01 | 13.00 | 6022296.37759 | 2090492.22025 |
| 927 | 1781.54 | 101.03 | 18.01 | 9.00 | 6022296.24762 | 2090492.08679 |
| 928 | 1842.29 | 120.02 | 25.00 | 8.00 | 6022296.24449 | 2090492.07749 |
| 929 | 1883.57 | 136.04 | 23.01 | 18.01 | 6022296.24584 | 2090492.09361 |
| 930 | 1802.09 | 97.06 | 20.01 | 11.01 | 6022296.39707 | 2090492.19311 |
| 931 | 1819.28 | 98.02 | 16.00 | 10.00 | 6022296.52780 | 2090492.31294 |
| 932 | 1877.57 | 119.04 | 20.01 | 12.00 | 6022297.56432 | 2090493.24453 |
| 933 | 1865.57 | 119.04 | 23.01 | 8.00 | 6022299.43474 | 2090494.68642 |
| 934 | 1875.29 | 111.02 | 12.00 | 9.00 | 6022300.52567 | 2090495.20323 |
| 935 | 1826.01 | 108.06 | 25.01 | 7.00 | 6022301.89944 | 2090495.72044 |
| 936 | 1836.74 | 114.05 | 9.00 | 9.00 | 6022303.83323 | 2090496.20159 |
| 937 | 1792.82 | 116.05 | 17.01 | 10.00 | 6022305.17105 | 2090496.21517 |
| 938 | 1868.48 | 109.03 | 16.00 | 9.00 | 6022306.09992 | 2090496.19313 |
| 939 | 1896.86 | 106.05 | 17.01 | 8.00 | 6022306.92159 | 2090496.07454 |
| 940 | 1918.39 | 114.02 | 24.00 | 8.00 | 6022306.95923 | 2090496.04946 |
| 941 | 1944.79 | 115.05 | 18.01 | 12.00 | 6022307.30883 | 2090495.97143 |
| 942 | 1872.76 | 113.05 | 19.01 | 10.00 | 6022308.02598 | 2090495.77419 |
| 943 | 1957.69 | 112.04 | 21.01 | 12.00 | 6022308.84699 | 2090495.52924 |
| 944 | 1901.68 | 124.04 | 19.01 | 8.00 | 6022310.18240 | 2090494.96286 |
| 945 | 1909.77 | 114.05 | 22.01 | 14.01 | 6022311.03574 | 2090494.56011 |
| 946 | 1918.49 | 119.03 | 18.00 | 8.00 | 6022312.01303 | 2090494.20861 |
| 947 | 1912.06 | 143.08 | 16.01 | 10.01 | 6022313.64898 | 2090493.35568 |
| 948 | 1954.38 | 133.09 | 29.02 | 12.01 | 6022314.67789 | 2090492.73974 |
| 949 | 1959.20 | 122.01 | 19.00 | 16.00 | 6022315.54584 | 2090492.09565 |
| 950 | 1823.01 | 113.06 | 22.01 | 15.01 | 6022316.61352 | 2090491.37110 |
| 951 | 1840.74 | 111.04 | 29.01 | 14.01 | 6022317.32068 | 2090490.90895 |
| 952 | 1855.29 | 114.02 | 18.00 | 11.00 | 6022317.47567 | 2090490.78980 |
| 953 | 1794.08 | 96.06 | 25.02 | 10.01 | 6022318.50654 | 2090490.12126 |
| 954 | 1826.83 | 126.06 | 19.01 | 13.01 | 6022320.04970 | 2090489.20094 |
| 955 | 1896.48 | 121.03 | 17.00 | 7.00 | 6022321.10006 | 2090488.53499 |
| 956 | 1850.66 | 104.04 | 33.01 | 16.01 | 6022321.93216 | 2090487.96036 |
| 957 | 1852.38 | 104.02 | 21.00 | 9.00 | 6022322.71172 | 2090487.37549 |
| 958 | 1764.80 | 110.05 | 22.01 | 10.00 | 6022324.00622 | 2090486.49219 |
| 959 | 1747.88 | 111.06 | 20.01 | 12.01 | 6022325.24725 | 2090485.71393 |
| 960 | 1844.66 | 98.03 | 27.01 | 9.00 | 6022325.76535 | 2090485.37463 |
| 961 | 1815.83 | 113.05 | 24.01 | 9.00 | 6022326.30700 | 2090484.97834 |
| 962 | 1742.45 | 110.03 | 18.00 | 8.00 | 6022326.96079 | 2090484.48759 |
| 963 | 1747.79 | 110.05 | 10.00 | 12.01 | 6022327.76642 | 2090483.77989 |
| 964 | 1791.55 | 115.04 | 17.01 | 20.01 | 6022328.61658 | 2090483.11484 |
| 965 | 1750.53 | 104.03 | 20.01 | 10.00 | 6022330.17241 | 2090482.00958 |
| 966 | 1742.71 | 83.03 | 20.01 | 13.01 | 6022330.77751 | 2090481.64825 |
| 967 | 1749.36 | 101.02 | 20.00 | 10.00 | 6022330.61887 | 2090481.73275 |
| 968 | 1737.53 | 115.04 | 17.01 | 14.00 | 6022331.14867 | 2090481.42067 |
| 969 | 1668.68 | 104.04 | 18.01 | 8.00 | 6022332.23726 | 2090480.68018 |
| 970 | 1648.34 | 91.02 | 10.00 | 9.00 | 6022333.00605 | 2090480.08100 |
| 971 | 1681.43 | 104.03 | 17.00 | 7.00 | 6022333.61077 | 2090479.59960 |
| 972 | 1683.43 | 100.03 | 9.00 | 14.00 | 6022334.83984 | 2090478.65574 |
| 973 | 1651.59 | 83.03 | 17.01 | 6.00 | 6022335.84921 | 2090477.89598 |
| 974 | 1740.62 | 93.03 | 22.01 | 10.00 | 6022336.21396 | 2090477.65553 |
| 975 | 1721.70 | 101.04 | 19.01 | 8.00 | 6022337.48356 | 2090476.67843 |
| 976 | 1667.51 | 98.03 | 8.00 | 8.00 | 6022338.90104 | 2090475.49168 |
| 977 | 1718.52 | 115.04 | 24.01 | 14.00 | 6022339.64430 | 2090474.80227 |
| 978 | 1701.43 | 85.02 | 22.01 | 11.00 | 6022340.83917 | 2090473.90638 |
| 979 | 1682.17 | 96.01 | 23.00 | 18.00 | 6022341.68020 | 2090473.26824 |
| 980 | 1659.51 | 97.03 | 14.00 | 11.00 | 6022342.40349 | 2090472.53794 |
| 981 | 1616.49 | 93.03 | 7.00 | 8.00 | 6022343.54828 | 2090471.61532 |
| 982 | 1603.65 | 104.04 | 11.00 | 6.00 | 6022344.30809 | 2090471.03333 |
| 983 | 1557.63 | 102.04 | 16.01 | 17.01 | 6022345.04817 | 2090470.47755 |
| 984 | 1602.33 | 83.02 | 23.00 | 14.00 | 6022345.53404 | 2090470.17403 |
| 985 | 1587.32 | 100.02 | 12.00 | 7.00 | 6022345.69440 | 2090470.08009 |
| 986 | 1655.50 | 102.03 | 15.00 | 9.00 | 6022345.87715 | 2090469.96625 |
| 987 | 1693.43 | 100.03 | 16.00 | 9.00 | 6022346.76606 | 2090469.14418 |
| 988 | 1729.27 | 106.02 | 20.00 | 15.00 | 6022347.84322 | 2090468.15399 |
| 989 | 1772.63 | 113.04 | 16.01 | 10.00 | 6022348.55455 | 2090467.59016 |
| 990 | 1727.70 | 120.05 | 22.01 | 4.00 | 6022348.86047 | 2090467.32486 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 991 | 1769.63 | 114.04 | 20.01 | 11.00 | 6022349.59686 | 2090466.80833 |
| 992 | 1913.58 | 113.03 | 23.01 | 11.00 | 6022351.05813 | 2090465.60780 |
| 993 | 1937.17 | 96.06 | 17.01 | 9.01 | 6022352.42797 | 2090464.53231 |
| 994 | 1893.95 | 113.06 | 26.01 | 15.01 | 6022353.56655 | 2090463.49470 |
| 995 | 1849.66 | 118.04 | 17.01 | 5.00 | 6022354.59636 | 2090462.62209 |
| 996 | 1915.39 | 122.03 | 24.00 | 9.00 | 6022355.50325 | 2090461.58042 |
| 997 | 2008.51 | 127.03 | 20.01 | 12.00 | 6022356.59849 | 2090459.76499 |
| 998 | 1978.41 | 133.03 | 17.00 | 8.00 | 6022357.11944 | 2090458.45978 |
| 999 | 1904.39 | 126.03 | 20.00 | 9.00 | 6022357.59579 | 2090457.22225 |
| 1000 | 1805.55 | 104.03 | 36.01 | 8.00 | 6022357.76725 | 2090455.68393 |
| 1001 | 1729.44 | 93.02 | 15.00 | 9.00 | 6022357.70075 | 2090454.09181 |
| 1002 | 1864.29 | 110.02 | 22.00 | 13.00 | 6022357.62519 | 2090453.85861 |
| 1003 | 1749.62 | 104.04 | 20.01 | 11.00 | 6022357.56166 | 2090453.69904 |
| 1004 | 1842.47 | 126.03 | 25.01 | 13.00 | 6022357.28065 | 2090452.64051 |
| 1005 | 1779.81 | 113.05 | 17.01 | 17.01 | 6022356.70760 | 2090450.99646 |
| 1006 | 1829.10 | 116.01 | 18.00 | 11.00 | 6022356.40029 | 2090450.10070 |
| 1007 | 1879.67 | 113.04 | 20.01 | 10.00 | 6022356.13616 | 2090449.40037 |
| 1008 | 1743.18 | 115.01 | 19.00 | 9.00 | 6022355.19614 | 2090447.81193 |
| 1009 | 1763.54 | 90.03 | 20.01 | 13.00 | 6022353.54857 | 2090444.96783 |
| 1010 | 1746.53 | 114.03 | 21.01 | 11.00 | 6022352.14153 | 2090445.15083 |
| 1011 | 1808.82 | 105.05 | 21.01 | 10.00 | 6022351.25202 | 2090444.76742 |
| 1012 | 1727.53 | 118.04 | 20.01 | 8.00 | 6022350.25052 | 2090444.44130 |
| 1013 | 1807.37 | 105.02 | 15.00 | 13.00 | 6022348.64208 | 2090444.37681 |
| 1014 | 1778.90 | 109.06 | 16.01 | 5.00 | 6022347.06729 | 2090444.56521 |
| 1015 | 1679.34 | 110.02 | 19.00 | 12.00 | 6022345.45968 | 2090444.96877 |
| 1016 | 1705.60 | 104.04 | 19.01 | 9.00 | 6022344.12450 | 2090445.44324 |
| 1017 | 1651.34 | 88.02 | 24.00 | 9.00 | 6022342.47302 | 2090446.10294 |
| 1018 | 1608.25 | 79.01 | 14.00 | 10.00 | 6022340.63222 | 2090446.85607 |
| 1019 | 1719.44 | 117.03 | 13.00 | 6.00 | 6022338.68968 | 2090447.61159 |
| 1020 | 1874.32 | 127.09 | 18.01 | 6.00 | 6022336.88810 | 2090448.30645 |
| 1021 | 1915.16 | 116.07 | 24.01 | 11.01 | 6022335.54806 | 2090448.82545 |
| 1022 | 1865.66 | 110.04 | 23.01 | 13.00 | 6022335.23800 | 2090448.91875 |
| 1023 | 1881.76 | 115.05 | 20.01 | 15.01 | 6022335.22606 | 2090448.93678 |
| 1024 | 1916.58 | 128.04 | 24.01 | 12.00 | 6022335.18566 | 2090448.96650 |
| 1025 | 1799.19 | 99.01 | 28.00 | 9.00 | 6022334.95589 | 2090449.03691 |
| 1026 | 1748.71 | 126.05 | 14.01 | 12.00 | 6022333.94556 | 2090449.31982 |
| 1027 | 1749.71 | 107.04 | 18.01 | 14.01 | 6022332.68761 | 2090449.84748 |
| 1028 | 1684.51 | 106.03 | 19.01 | 11.00 | 6022331.20080 | 2090450.54081 |
| 1029 | 1658.51 | 95.03 | 15.00 | 5.00 | 6022330.27078 | 2090450.36972 |
| 1030 | 1671.51 | 100.03 | 11.00 | 11.00 | 6022329.12205 | 2090450.91135 |
| 1031 | 1804.28 | 112.02 | 20.00 | 15.00 | 6022328.22846 | 2090451.49172 |
| 1032 | 1724.18 | 114.01 | 18.00 | 14.00 | 6022327.08391 | 2090452.18620 |
| 1033 | 1724.87 | 113.06 | 24.01 | 10.01 | 6022325.53917 | 2090453.16375 |
| 1034 | 1653.92 | 98.05 | 15.01 | 18.01 | 6022325.10441 | 2090453.49448 |
| 1035 | 1622.49 | 98.03 | 10.00 | 12.00 | 6022324.87713 | 2090453.63736 |
| 1036 | 1689.11 | 105.07 | 20.01 | 10.01 | 6022323.45394 | 2090454.59212 |
| 1037 | 1703.60 | 115.04 | 14.00 | 12.00 | 6022322.32968 | 2090455.46868 |
| 1038 | 1769.89 | 94.05 | 21.01 | 8.00 | 6022321.71139 | 2090455.84767 |
| 1039 | 1834.93 | 112.06 | 10.01 | 12.01 | 6022318.93769 | 2090458.61467 |
| 1040 | 1940.59 | 126.04 | 25.01 | 13.00 | 6022317.53818 | 2090459.56084 |
| 1041 | 1924.87 | 128.06 | 23.01 | 8.00 | 6022317.22309 | 2090459.81907 |
| 1042 | 1917.59 | 129.04 | 26.01 | 10.00 | 6022316.16290 | 2090460.75311 |
| 1043 | 1911.39 | 129.03 | 17.00 | 14.00 | 6022314.74934 | 2090461.91676 |
| 1044 | 1918.39 | 110.02 | 24.00 | 16.00 | 6022314.14242 | 2090462.29619 |
| 1045 | 1924.49 | 124.03 | 14.00 | 11.00 | 6022314.00666 | 2090462.38815 |
| 1046 | 1838.74 | 113.05 | 14.01 | 15.01 | 6022313.11884 | 2090462.95064 |
| 1047 | 1825.65 | 106.04 | 15.01 | 12.00 | 6022311.49277 | 2090464.12299 |
| 1048 | 1734.27 | 93.01 | 12.00 | 11.00 | 6022310.56388 | 2090464.96292 |
| 1049 | 1780.10 | 100.01 | 10.00 | 14.00 | 6022309.92879 | 2090465.43554 |
| 1050 | 1589.41 | 94.02 | 17.00 | 7.00 | 6022308.71175 | 2090466.42074 |
| 1051 | 1592.25 | 97.01 | 19.00 | 5.00 | 6022307.13326 | 2090467.57804 |
| 1052 | 1650.26 | 105.02 | 12.00 | 12.00 | 6022306.22385 | 2090468.26981 |
| 1053 | 1681.26 | 94.01 | 9.00 | 5.00 | 6022305.68817 | 2090468.70791 |
| 1054 | 1725.70 | 102.04 | 23.01 | 12.00 | 6022304.59371 | 2090469.51584 |
| 1055 | 1798.64 | 100.04 | 16.01 | 5.00 | 6022304.01360 | 2090469.99673 |
| 1056 | 1792.55 | 127.04 | 8.00 | 10.00 | 6022303.14336 | 2090470.72656 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1057 | 1793.73 | 95.04 | 21.01 | 15.01 | 6022302.11776 | 2090471.55584 |
| 1058 | 1833.56 | 101.03 | 24.01 | 10.00 | 6022301.76278 | 2090471.85066 |
| 1059 | 1900.39 | 107.02 | 23.00 | 17.00 | 6022301.70814 | 2090471.89831 |
| 1060 | 1918.26 | 109.07 | 14.01 | 16.01 | 6022301.29581 | 2090472.19062 |
| 1061 | 1926.78 | 92.04 | 26.01 | 14.01 | 6022300.20884 | 2090473.08142 |
| 1062 | 2029.82 | 132.05 | 17.01 | 16.01 | 6022299.05491 | 2090474.06012 |
| 1063 | 1895.67 | 112.04 | 20.01 | 14.00 | 6022298.35676 | 2090474.53476 |
| 1064 | 2057.42 | 140.03 | 22.00 | 10.00 | 6022298.28187 | 2090474.57677 |
| 1065 | 1799.73 | 111.04 | 27.01 | 8.00 | 6022297.66465 | 2090475.03939 |
| 1066 | 1846.03 | 104.06 | 15.01 | 11.01 | 6022296.68221 | 2090475.75447 |
| 1067 | 1849.56 | 120.04 | 20.01 | 10.00 | 6022296.27364 | 2090475.99067 |
| 1068 | 1716.44 | 90.02 | 12.00 | 9.00 | 6022295.91873 | 2090476.27890 |
| 1069 | 1802.73 | 110.04 | 16.01 | 6.00 | 6022294.16144 | 2090477.42620 |
| 1070 | 1726.61 | 101.04 | 17.01 | 9.00 | 6022292.82029 | 2090478.48349 |
| 1071 | 1715.87 | 106.05 | 14.01 | 14.01 | 6022291.94867 | 2090479.36241 |
| 1072 | 1711.52 | 102.03 | 23.01 | 14.00 | 6022291.18323 | 2090480.41017 |
| 1073 | 1722.18 | 103.01 | 19.00 | 11.00 | 6022290.52894 | 2090481.77963 |
| 1074 | 1780.72 | 116.05 | 21.01 | 13.01 | 6022290.26982 | 2090482.75903 |
| 1075 | 1738.70 | 100.04 | 22.01 | 10.00 | 6022290.14303 | 2090483.53176 |
| 1076 | 1721.96 | 107.06 | 21.01 | 17.01 | 6022290.15033 | 2090484.60202 |
| 1077 | 1761.71 | 116.05 | 10.00 | 12.00 | 6022290.27784 | 2090485.85498 |
| 1078 | 1829.56 | 101.03 | 18.01 | 11.00 | 6022290.41092 | 2090486.45935 |
| 1079 | 1754.36 | 100.02 | 27.01 | 11.00 | 6022290.53818 | 2090486.83949 |
| 1080 | 1777.28 | 120.02 | 17.00 | 13.00 | 6022290.81282 | 2090487.65246 |
| 1081 | 1863.47 | 127.03 | 20.01 | 13.00 | 6022291.81292 | 2090489.31161 |
| 1082 | 1841.28 | 112.02 | 22.00 | 12.00 | 6022292.71123 | 2090490.57220 |
| 1083 | 1857.47 | 116.03 | 15.00 | 13.00 | 6022293.39075 | 2090491.22634 |
| 1084 | 1833.47 | 111.03 | 23.01 | 10.00 | 6022294.87425 | 2090492.32714 |
| 1085 | 1916.49 | 111.03 | 20.01 | 13.00 | 6022296.17058 | 2090493.02849 |
| 1086 | 1959.50 | 111.03 | 18.00 | 12.00 | 6022296.40360 | 2090493.11719 |
| 1087 | 1819.83 | 102.05 | 22.01 | 10.00 | 6022297.16965 | 2090493.48308 |
| 1088 | 1868.94 | 121.06 | 18.01 | 16.01 | 6022299.22921 | 2090494.17180 |
| 1089 | 1871.85 | 95.04 | 21.01 | 21.01 | 6022300.55747 | 2090494.42073 |
| 1090 | 1768.07 | 114.07 | 21.01 | 6.00 | 6022301.84359 | 2090494.61712 |
| 1091 | 1895.48 | 119.03 | 19.00 | 13.00 | 6022303.11755 | 2090494.62173 |
| 1092 | 1848.75 | 108.04 | 14.01 | 11.00 | 6022304.26655 | 2090494.61182 |
| 1093 | 1929.78 | 109.04 | 19.01 | 6.00 | 6022306.08187 | 2090494.22910 |
| 1094 | 1939.49 | 123.03 | 12.00 | 11.00 | 6022307.02020 | 2090494.00121 |
| 1095 | 1872.38 | 116.02 | 21.00 | 13.00 | 6022307.26159 | 2090493.88720 |
| 1096 | 1925.49 | 121.03 | 23.01 | 10.00 | 6022307.83987 | 2090493.69628 |
| 1097 | 1840.38 | 117.02 | 28.01 | 11.00 | 6022309.24763 | 2090493.25391 |
| 1098 | 1901.68 | 123.04 | 15.01 | 11.00 | 6022311.04014 | 2090492.49380 |
| 1099 | 1959.99 | 117.06 | 10.01 | 12.01 | 6022311.98677 | 2090491.95905 |
| 1100 | 1882.76 | 106.04 | 21.01 | 14.01 | 6022313.15816 | 2090491.26092 |
| 1101 | 1845.84 | 120.05 | 16.01 | 10.00 | 6022314.56165 | 2090490.41382 |
| 1102 | 1895.58 | 129.04 | 17.01 | 10.00 | 6022315.40677 | 2090489.92750 |
| 1103 | 1837.75 | 116.05 | 17.01 | 14.01 | 6022315.37633 | 2090489.95422 |
| 1104 | 1795.64 | 96.03 | 14.00 | 11.00 | 6022316.07921 | 2090489.42107 |
| 1105 | 1714.35 | 98.02 | 23.00 | 8.00 | 6022317.71812 | 2090488.46992 |
| 1106 | 1704.43 | 101.03 | 20.01 | 7.00 | 6022318.63190 | 2090487.96091 |
| 1107 | 1762.45 | 94.02 | 21.01 | 10.00 | 6022319.19714 | 2090487.62693 |
| 1108 | 1837.56 | 118.04 | 25.01 | 10.00 | 6022320.02758 | 2090487.04704 |
| 1109 | 1760.54 | 110.03 | 15.00 | 5.00 | 6022320.98280 | 2090486.24180 |
| 1110 | 1798.55 | 125.04 | 17.01 | 12.00 | 6022322.35197 | 2090485.24127 |
| 1111 | 1833.47 | 114.03 | 18.00 | 14.00 | 6022323.07817 | 2090484.78820 |
| 1112 | 1767.07 | 111.07 | 12.01 | 15.01 | 6022323.17483 | 2090484.73059 |
| 1113 | 1797.73 | 106.04 | 24.01 | 12.00 | 6022323.88811 | 2090484.25072 |
| 1114 | 1803.82 | 107.05 | 23.01 | 9.00 | 6022325.57321 | 2090483.01851 |
| 1115 | 1782.54 | 105.03 | 23.01 | 12.00 | 6022326.72454 | 2090482.02482 |
| 1116 | 1659.51 | 106.03 | 16.00 | 14.00 | 6022327.56213 | 2090481.33092 |
| 1117 | 1708.35 | 109.02 | 14.00 | 17.00 | 6022328.90935 | 2090480.36131 |
| 1118 | 1739.31 | 128.10 | 15.01 | 8.01 | 6022330.10679 | 2090479.61850 |
| 1119 | 1720.27 | 105.02 | 13.00 | 20.00 | 6022330.91360 | 2090479.01386 |
| 1120 | 1739.70 | 128.05 | 19.01 | 15.01 | 6022331.47488 | 2090478.53547 |
| 1121 | 1711.52 | 130.04 | 15.00 | 13.00 | 6022332.64594 | 2090477.47499 |
| 1122 | 1694.69 | 94.04 | 16.01 | 16.01 | 6022333.85597 | 2090476.60823 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1123 | 1715.61 | 103.04 | 21.01 | 12.00 | 6022333.98646 | 2090476.54896 |
| 1124 | 1699.35 | 100.02 | 15.00 | 15.00 | 6022335.19631 | 2090475.73992 |
| 1125 | 1736.44 | 98.02 | 24.01 | 5.00 | 6022336.40438 | 2090474.77781 |
| 1126 | 1724.70 | 92.04 | 12.00 | 13.01 | 6022337.29949 | 2090473.96356 |
| 1127 | 1668.34 | 108.02 | 19.00 | 11.00 | 6022338.27420 | 2090473.13009 |
| 1128 | 1751.53 | 105.03 | 22.01 | 10.00 | 6022339.26217 | 2090472.38702 |
| 1129 | 1649.25 | 119.02 | 17.00 | 8.00 | 6022339.72763 | 2090471.96115 |
| 1130 | 1746.97 | 107.06 | 19.01 | 12.01 | 6022340.72901 | 2090471.08239 |
| 1131 | 1733.35 | 85.02 | 19.00 | 13.00 | 6022341.52002 | 2090470.40656 |
| 1132 | 1786.37 | 106.02 | 15.00 | 4.00 | 6022341.95195 | 2090470.05825 |
| 1133 | 1676.85 | 97.05 | 17.01 | 9.00 | 6022342.93247 | 2090469.26151 |
| 1134 | 1774.54 | 117.04 | 26.01 | 13.00 | 6022344.01437 | 2090468.32657 |
| 1135 | 1735.79 | 123.06 | 19.01 | 13.01 | 6022344.08201 | 2090468.24675 |
| 1136 | 1706.61 | 114.04 | 23.01 | 10.00 | 6022345.13347 | 2090467.44344 |
| 1137 | 1769.72 | 108.04 | 20.01 | 9.00 | 6022346.34388 | 2090466.48395 |
| 1138 | 1789.64 | 100.04 | 25.01 | 14.00 | 6022346.42012 | 2090466.37409 |
| 1139 | 1796.19 | 125.01 | 12.00 | 13.00 | 6022346.92290 | 2090465.97271 |
| 1140 | 1735.62 | 109.04 | 18.01 | 11.00 | 6022348.50757 | 2090464.58943 |
| 1141 | 1769.45 | 106.03 | 15.00 | 13.00 | 6022349.05999 | 2090464.11346 |
| 1142 | 1809.28 | 121.02 | 16.00 | 13.00 | 6022349.43005 | 2090463.83573 |
| 1143 | 1852.12 | 109.07 | 19.01 | 16.01 | 6022350.39243 | 2090463.12876 |
| 1144 | 1952.60 | 112.03 | 25.01 | 11.00 | 6022351.24468 | 2090462.43311 |
| 1145 | 1958.69 | 130.05 | 16.01 | 19.01 | 6022351.50108 | 2090462.16834 |
| 1146 | 1968.40 | 119.02 | 27.01 | 15.00 | 6022351.93015 | 2090461.70358 |
| 1147 | 1956.60 | 122.04 | 18.01 | 14.00 | 6022352.63954 | 2090460.99462 |
| 1148 | 1925.20 | 112.01 | 31.00 | 10.00 | 6022352.80815 | 2090460.77363 |
| 1149 | 1939.69 | 132.05 | 26.01 | 11.00 | 6022352.80656 | 2090460.80649 |
| 1150 | 1941.79 | 104.04 | 12.00 | 9.00 | 6022352.80115 | 2090460.79195 |
| 1151 | 1980.80 | 136.06 | 25.01 | 10.00 | 6022352.79284 | 2090460.79254 |
| 1152 | 1842.65 | 105.04 | 17.01 | 11.00 | 6022352.78887 | 2090460.78852 |
| 1153 | 2021.41 | 124.03 | 26.01 | 14.00 | 6022352.77604 | 2090460.77525 |
| 1154 | 1966.40 | 116.02 | 20.00 | 19.00 | 6022352.77991 | 2090460.75754 |
| 1155 | 1913.68 | 129.05 | 20.01 | 17.01 | 6022352.78178 | 2090460.76061 |
| 1156 | 1905.77 | 127.05 | 20.01 | 10.00 | 6022352.77706 | 2090460.74326 |
| 1157 | 1979.80 | 136.06 | 16.01 | 17.01 | 6022352.76980 | 2090460.74163 |
| 1158 | 1957.09 | 119.07 | 22.01 | 11.01 | 6022352.77201 | 2090460.74252 |
| 1159 | 1961.79 | 120.05 | 21.01 | 9.00 | 6022352.77354 | 2090460.73716 |
| 1160 | 1862.76 | 105.04 | 22.01 | 11.00 | 6022352.78554 | 2090460.74161 |
| 1161 | 1933.98 | 120.06 | 21.01 | 22.01 | 6022352.78400 | 2090460.72995 |
| 1162 | 1918.78 | 110.04 | 23.01 | 11.00 | 6022352.78699 | 2090460.73014 |
| 1163 | 1940.79 | 122.05 | 14.01 | 11.00 | 6022352.79756 | 2090460.71951 |
| 1164 | 1962.79 | 119.05 | 19.01 | 16.01 | 6022352.79413 | 2090460.70148 |
| 1165 | 2016.22 | 128.08 | 29.02 | 20.01 | 6022353.08911 | 2090460.39293 |
| 1166 | 2004.31 | 124.02 | 25.00 | 22.00 | 6022353.70446 | 2090459.46197 |
| 1167 | 1949.18 | 133.08 | 24.01 | 21.01 | 6022354.27615 | 2090458.42191 |
| 1168 | 1937.88 | 105.05 | 29.01 | 6.00 | 6022354.29981 | 2090458.37024 |
| 1169 | 1945.50 | 104.03 | 16.00 | 13.00 | 6022354.32575 | 2090458.31143 |
| 1170 | 1939.30 | 105.02 | 19.00 | 9.00 | 6022354.36380 | 2090458.24689 |
| 1171 | 2010.71 | 126.04 | 23.01 | 13.00 | 6022354.38996 | 2090458.17482 |
| 1172 | 1984.80 | 107.04 | 10.00 | 15.01 | 6022354.41993 | 2090458.09292 |
| 1173 | 2062.94 | 126.06 | 17.01 | 18.01 | 6022354.44816 | 2090457.98314 |
| 1174 | 1848.47 | 114.03 | 15.00 | 8.00 | 6022354.81397 | 2090457.08385 |
| 1175 | 1773.63 | 100.04 | 16.01 | 4.00 | 6022355.43804 | 2090454.68008 |
| 1176 | 1770.07 | 90.05 | 11.01 | 7.00 | 6022355.49379 | 2090453.25444 |
| 1177 | 1864.85 | 128.06 | 18.01 | 10.00 | 6022355.44548 | 2090451.68295 |
| 1178 | 1808.19 | 129.08 | 18.01 | 10.01 | 6022355.27383 | 2090450.32959 |
| 1179 | 1852.56 | 95.03 | 18.01 | 11.00 | 6022355.08256 | 2090449.44226 |
| 1180 | 1902.77 | 99.04 | 11.00 | 11.00 | 6022354.82308 | 2090448.45633 |
| 1181 | 1697.18 | 112.01 | 14.00 | 10.00 | 6022354.56832 | 2090447.79024 |
| 1182 | 1744.97 | 122.07 | 28.02 | 14.01 | 6022354.56807 | 2090447.79295 |
| 1183 | 1899.96 | 123.06 | 21.01 | 10.01 | 6022354.52232 | 2090447.72350 |
| 1184 | 1709.95 | 103.06 | 26.01 | 8.00 | 6022354.17865 | 2090446.91899 |
| 1185 | 1756.18 | 107.01 | 7.00 | 9.00 | 6022353.23933 | 2090444.35408 |
| 1186 | 1790.37 | 108.02 | 8.00 | 14.00 | 6022352.40585 | 2090443.32148 |
| 1187 | 1728.53 | 96.03 | 12.00 | 8.00 | 6022352.07751 | 2090442.91280 |
| 1188 | 1808.82 | 94.04 | 14.01 | 20.01 | 6022351.71970 | 2090443.59647 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1189 | 1788.36 | 114.02 | 20.00 | 14.00 | 6022350.21056 | 2090442.77698 |
| 1190 | 1709.52 | 121.04 | 22.01 | 8.00 | 6022348.24072 | 2090441.98578 |
| 1191 | 1763.45 | 120.03 | 17.00 | 18.00 | 6022347.34340 | 2090441.82506 |
| 1192 | 1751.71 | 98.04 | 20.01 | 7.00 | 6022346.72965 | 2090441.75667 |
| 1193 | 1729.79 | 99.05 | 21.01 | 12.01 | 6022346.01834 | 2090441.73103 |
| 1194 | 1668.26 | 117.02 | 24.00 | 8.00 | 6022345.92310 | 2090441.73049 |
| 1195 | 1707.78 | 98.04 | 10.00 | 14.01 | 6022345.92693 | 2090441.73852 |
| 1196 | 1723.35 | 125.03 | 22.00 | 9.00 | 6022345.29926 | 2090441.75102 |
| 1197 | 1770.89 | 121.06 | 13.01 | 6.00 | 6022344.01715 | 2090441.81489 |
| 1198 | 1665.26 | 123.02 | 15.00 | 16.00 | 6022341.93014 | 2090442.15388 |
| 1199 | 1761.36 | 112.02 | 15.00 | 7.00 | 6022339.97976 | 2090442.73870 |
| 1200 | 1703.60 | 91.03 | 24.01 | 6.00 | 6022338.22189 | 2090443.31945 |
| 1201 | 1768.36 | 100.02 | 21.00 | 9.00 | 6022336.57632 | 2090444.05461 |
| 1202 | 1807.37 | 117.02 | 13.00 | 11.00 | 6022335.25085 | 2090444.68386 |
| 1203 | 1848.84 | 108.05 | 24.01 | 10.00 | 6022334.10527 | 2090445.20182 |
| 1204 | 1941.40 | 118.02 | 22.00 | 7.00 | 6022334.56612 | 2090444.33760 |
| 1205 | 2033.62 | 109.03 | 20.01 | 12.00 | 6022334.18130 | 2090444.58286 |
| 1206 | 1977.70 | 124.04 | 15.01 | 13.00 | 6022332.82725 | 2090445.36789 |
| 1207 | 1842.56 | 101.03 | 17.01 | 13.00 | 6022331.02393 | 2090446.38311 |
| 1208 | 1766.36 | 97.02 | 21.00 | 8.00 | 6022329.77957 | 2090447.13844 |
| 1209 | 1741.36 | 106.02 | 18.00 | 5.00 | 6022329.13202 | 2090447.61456 |
| 1210 | 1768.81 | 106.05 | 21.01 | 13.01 | 6022327.95447 | 2090448.30842 |
| 1211 | 1674.51 | 109.03 | 18.01 | 6.00 | 6022326.52595 | 2090449.38762 |
| 1212 | 1683.26 | 106.02 | 12.00 | 11.00 | 6022325.14576 | 2090450.33913 |
| 1213 | 1745.62 | 150.05 | 15.01 | 14.00 | 6022324.19365 | 2090450.94432 |
| 1214 | 1639.50 | 100.03 | 16.00 | 13.00 | 6022323.52724 | 2090451.36347 |
| 1215 | 1757.80 | 118.05 | 12.01 | 10.00 | 6022323.07495 | 2090451.69888 |
| 1216 | 1683.77 | 123.06 | 18.01 | 13.01 | 6022322.14116 | 2090452.36207 |
| 1217 | 1752.53 | 113.03 | 18.01 | 9.00 | 6022319.96946 | 2090454.48116 |
| 1218 | 1732.62 | 105.04 | 15.01 | 12.00 | 6022319.18530 | 2090455.04288 |
| 1219 | 1754.36 | 110.02 | 18.00 | 6.00 | 6022318.53354 | 2090455.58019 |
| 1220 | 1771.89 | 107.05 | 24.01 | 11.01 | 6022317.72286 | 2090456.16719 |
| 1221 | 1739.62 | 106.04 | 12.00 | 10.00 | 6022316.55660 | 2090457.02457 |
| 1222 | 1801.19 | 118.01 | 26.00 | 11.00 | 6022315.40772 | 2090457.90301 |
| 1223 | 1907.96 | 110.06 | 22.01 | 12.01 | 6022314.58279 | 2090458.57829 |
| 1224 | 1803.46 | 95.02 | 20.01 | 10.00 | 6022314.19988 | 2090458.87844 |
| 1225 | 1828.74 | 115.05 | 20.01 | 13.01 | 6022313.52865 | 2090459.34826 |
| 1226 | 1810.55 | 110.03 | 19.01 | 11.00 | 6022312.33840 | 2090460.12954 |
| 1227 | 1829.01 | 90.05 | 24.01 | 15.01 | 6022311.13353 | 2090460.90384 |
| 1228 | 1845.47 | 108.03 | 27.01 | 9.00 | 6022309.93481 | 2090461.92492 |
| 1229 | 1798.55 | 117.04 | 10.00 | 10.00 | 6022309.28784 | 2090462.40716 |
| 1230 | 1804.18 | 115.08 | 15.01 | 8.01 | 6022308.73558 | 2090462.78725 |
| 1231 | 1768.80 | 104.05 | 15.01 | 19.01 | 6022308.04988 | 2090463.29100 |
| 1232 | 1693.60 | 108.04 | 22.01 | 8.00 | 6022307.70536 | 2090463.58624 |
| 1233 | 1687.94 | 94.05 | 16.01 | 12.01 | 6022307.87433 | 2090463.47228 |
| 1234 | 1757.89 | 107.05 | 17.01 | 7.00 | 6022307.82514 | 2090463.51640 |
| 1235 | 1739.62 | 99.04 | 24.01 | 12.00 | 6022307.83926 | 2090463.52620 |
| 1236 | 1814.46 | 118.03 | 24.01 | 18.00 | 6022307.85984 | 2090463.51462 |
| 1237 | 1735.62 | 119.04 | 23.01 | 7.00 | 6022307.85567 | 2090463.53861 |
| 1238 | 1697.26 | 100.02 | 11.00 | 7.00 | 6022307.85403 | 2090463.53051 |
| 1239 | 1728.53 | 113.03 | 15.00 | 11.00 | 6022307.82375 | 2090463.58069 |
| 1240 | 1760.45 | 119.03 | 11.00 | 9.00 | 6022307.77621 | 2090463.61802 |
| 1241 | 1788.72 | 99.04 | 24.01 | 12.00 | 6022307.69228 | 2090463.69960 |
| 1242 | 1661.51 | 107.03 | 15.00 | 11.00 | 6022307.51370 | 2090463.85770 |
| 1243 | 1540.39 | 81.02 | 14.00 | 14.00 | 6022306.34657 | 2090464.81668 |
| 1244 | 1612.25 | 116.02 | 9.00 | 3.00 | 6022305.33913 | 2090465.65312 |
| 1245 | 1605.65 | 94.04 | 12.00 | 10.00 | 6022304.86149 | 2090465.96982 |
| 1246 | 1679.51 | 111.03 | 17.01 | 15.00 | 6022304.23624 | 2090466.54441 |
| 1247 | 1625.50 | 97.03 | 13.00 | 12.00 | 6022303.83119 | 2090466.87110 |
| 1248 | 1682.51 | 107.03 | 15.00 | 14.00 | 6022303.83395 | 2090466.88116 |
| 1249 | 1634.91 | 85.05 | 19.01 | 8.00 | 6022303.83374 | 2090466.88241 |
| 1250 | 1659.76 | 104.05 | 21.01 | 3.00 | 6022303.83873 | 2090466.88943 |
| 1251 | 1583.16 | 104.01 | 11.00 | 13.00 | 6022303.81195 | 2090466.91201 |
| 1252 | 1596.57 | 102.04 | 23.01 | 8.00 | 6022303.76582 | 2090466.95853 |
| 1253 | 1619.17 | 77.01 | 21.00 | 10.00 | 6022303.67732 | 2090467.02444 |
| 1254 | 1692.77 | 109.05 | 18.01 | 6.00 | 6022303.52332 | 2090467.15175 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1255 | 1608.73 | 100.05 | 16.01 | 11.01 | 6022303.05034 | 2090467.54893 |
| 1256 | 1661.42 | 110.03 | 19.00 | 9.00 | 6022302.35163 | 2090468.10548 |
| 1257 | 1596.49 | 97.03 | 15.00 | 22.01 | 6022301.62871 | 2090468.69623 |
| 1258 | 1661.51 | 92.03 | 17.01 | 11.00 | 6022301.40909 | 2090468.88539 |
| 1259 | 1631.25 | 100.02 | 18.00 | 6.00 | 6022301.24692 | 2090469.04103 |
| 1260 | 1691.69 | 95.04 | 18.01 | 5.00 | 6022300.52594 | 2090469.49665 |
| 1261 | 1727.61 | 99.04 | 13.00 | 10.00 | 6022300.39456 | 2090469.62174 |
| 1262 | 1757.54 | 114.03 | 24.01 | 8.00 | 6022300.38743 | 2090469.64637 |
| 1263 | 1672.59 | 101.04 | 16.01 | 13.00 | 6022300.38033 | 2090469.66612 |
| 1264 | 1680.68 | 98.04 | 11.00 | 5.00 | 6022300.37846 | 2090469.66774 |
| 1265 | 1690.02 | 89.05 | 20.01 | 9.01 | 6022300.38246 | 2090469.68413 |
| 1266 | 1754.27 | 112.02 | 25.00 | 15.00 | 6022300.36998 | 2090469.69335 |
| 1267 | 1692.52 | 100.03 | 17.01 | 13.00 | 6022300.36631 | 2090469.69808 |
| 1268 | 1657.51 | 96.03 | 13.00 | 15.00 | 6022300.36909 | 2090469.69766 |
| 1269 | 1653.34 | 119.02 | 18.00 | 5.00 | 6022300.36410 | 2090469.68783 |
| 1270 | 1672.68 | 101.04 | 10.00 | 8.00 | 6022300.33243 | 2090469.71211 |
| 1271 | 1673.43 | 104.03 | 16.00 | 13.00 | 6022300.05886 | 2090469.90133 |
| 1272 | 1757.98 | 99.06 | 19.01 | 10.01 | 6022299.38983 | 2090470.40452 |
| 1273 | 1754.45 | 115.03 | 12.00 | 10.00 | 6022298.47537 | 2090471.13163 |
| 1274 | 1767.54 | 121.04 | 16.00 | 6.00 | 6022298.00309 | 2090471.47697 |
| 1275 | 1693.69 | 86.03 | 17.01 | 12.00 | 6022298.04200 | 2090471.44325 |
| 1276 | 1741.62 | 91.03 | 21.01 | 13.00 | 6022298.01993 | 2090471.44737 |
| 1277 | 1750.89 | 128.06 | 14.01 | 16.01 | 6022297.99698 | 2090471.47415 |
| 1278 | 1775.90 | 92.05 | 13.01 | 13.01 | 6022297.89453 | 2090471.56828 |
| 1279 | 1786.54 | 105.03 | 20.01 | 6.00 | 6022297.48742 | 2090471.83627 |
| 1280 | 1771.63 | 84.03 | 10.00 | 19.01 | 6022296.91671 | 2090472.18833 |
| 1281 | 1882.48 | 109.03 | 16.00 | 5.00 | 6022296.85386 | 2090472.20032 |
| 1282 | 1846.29 | 112.02 | 23.00 | 12.00 | 6022296.12976 | 2090472.68898 |
| 1283 | 1754.88 | 113.06 | 8.00 | 10.01 | 6022294.81149 | 2090473.63423 |
| 1284 | 1823.01 | 122.07 | 24.01 | 11.01 | 6022293.92380 | 2090474.35097 |
| 1285 | 1835.47 | 115.03 | 31.01 | 11.00 | 6022292.86657 | 2090475.13071 |
| 1286 | 1797.37 | 115.02 | 26.01 | 7.00 | 6022292.66528 | 2090475.27576 |
| 1287 | 1773.81 | 125.06 | 25.01 | 13.01 | 6022292.31576 | 2090475.53734 |
| 1288 | 1791.73 | 117.05 | 21.01 | 10.00 | 6022290.93268 | 2090476.68635 |
| 1289 | 1782.54 | 104.03 | 18.01 | 10.00 | 6022289.77959 | 2090478.29684 |
| 1290 | 1802.00 | 99.06 | 20.01 | 10.01 | 6022289.01499 | 2090480.03838 |
| 1291 | 1788.63 | 124.04 | 17.01 | 12.00 | 6022288.66617 | 2090481.62505 |
| 1292 | 1780.08 | 109.07 | 16.01 | 9.01 | 6022288.62181 | 2090482.40996 |
| 1293 | 1764.63 | 105.04 | 15.01 | 8.00 | 6022288.61374 | 2090482.83312 |
| 1294 | 1777.63 | 98.03 | 17.01 | 12.00 | 6022288.74227 | 2090483.84274 |
| 1295 | 1755.71 | 97.04 | 18.01 | 12.00 | 6022289.04492 | 2090485.63030 |
| 1296 | 1745.71 | 88.04 | 21.01 | 9.00 | 6022289.63587 | 2090486.98033 |
| 1297 | 1851.66 | 109.04 | 20.01 | 16.01 | 6022290.15326 | 2090487.87413 |
| 1298 | 1837.74 | 120.05 | 15.01 | 11.00 | 6022290.91698 | 2090488.78084 |
| 1299 | 1917.06 | 138.08 | 19.01 | 12.01 | 6022291.37284 | 2090489.28270 |
| 1300 | 1949.79 | 130.05 | 27.01 | 13.01 | 6022291.48245 | 2090489.40857 |
| 1301 | 1931.68 | 122.04 | 22.01 | 14.00 | 6022292.01175 | 2090490.01985 |
| 1302 | 1893.29 | 109.02 | 23.00 | 14.00 | 6022292.80748 | 2090490.70335 |
| 1303 | 1833.65 | 111.04 | 15.01 | 11.00 | 6022293.98726 | 2090491.44705 |
| 1304 | 1820.56 | 126.04 | 24.01 | 16.00 | 6022294.86231 | 2090491.85048 |
| 1305 | 1855.47 | 114.03 | 21.01 | 6.00 | 6022295.45974 | 2090492.10232 |
| 1306 | 1911.78 | 107.04 | 11.00 | 10.00 | 6022296.10062 | 2090492.41355 |
| 1307 | 1901.86 | 106.05 | 23.01 | 16.01 | 6022296.35449 | 2090492.51425 |
| 1308 | 1927.40 | 133.03 | 16.00 | 7.00 | 6022297.25019 | 2090492.82869 |
| 1309 | 1928.88 | 112.05 | 18.01 | 12.01 | 6022299.19379 | 2090493.17979 |
| 1310 | 1786.55 | 116.04 | 22.01 | 9.00 | 6022301.09694 | 2090493.29857 |
| 1311 | 1746.36 | 106.02 | 26.01 | 7.00 | 6022302.67128 | 2090493.01610 |
| 1312 | 1873.57 | 125.04 | 21.01 | 8.00 | 6022303.02705 | 2090492.94184 |
| 1313 | 1848.56 | 123.04 | 18.01 | 11.00 | 6022302.97369 | 2090492.95043 |
| 1314 | 1840.65 | 99.04 | 29.01 | 11.00 | 6022303.04775 | 2090492.94873 |
| 1315 | 1801.55 | 108.03 | 12.00 | 15.00 | 6022304.17373 | 2090492.61147 |
| 1316 | 1839.84 | 122.06 | 18.01 | 11.01 | 6022306.07020 | 2090491.68923 |
| 1317 | 1879.76 | 102.04 | 14.01 | 8.00 | 6022306.88799 | 2090491.29847 |
| 1318 | 1823.83 | 115.05 | 15.01 | 13.01 | 6022306.92839 | 2090491.28825 |
| 1319 | 1882.57 | 115.03 | 23.01 | 11.00 | 6022307.04886 | 2090491.21669 |
| 1320 | 1933.07 | 140.08 | 15.01 | 9.01 | 6022307.79625 | 2090490.79889 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1321 | 1851.38 | 127.03 | 18.00 | 9.00 | 6022309.09749 | 2090490.14553 |
| 1322 | 1869.66 | 110.04 | 21.01 | 11.00 | 6022309.56184 | 2090489.92964 |
| 1323 | 1863.57 | 105.03 | 16.00 | 10.00 | 6022309.85820 | 2090489.74249 |
| 1324 | 1991.61 | 111.03 | 14.00 | 15.00 | 6022310.55023 | 2090489.29397 |
| 1325 | 1900.48 | 119.03 | 23.01 | 16.00 | 6022310.64337 | 2090489.27373 |
| 1326 | 1893.33 | 127.09 | 21.01 | 16.01 | 6022310.63864 | 2090489.30077 |
| 1327 | 1915.16 | 117.07 | 12.01 | 8.00 | 6022310.64372 | 2090489.29497 |
| 1328 | 1887.58 | 126.04 | 19.01 | 16.00 | 6022310.68066 | 2090489.28835 |
| 1329 | 1949.50 | 124.03 | 21.01 | 9.00 | 6022310.63547 | 2090489.30742 |
| 1330 | 1899.87 | 108.05 | 12.01 | 18.01 | 6022310.64381 | 2090489.32742 |
| 1331 | 1878.76 | 131.05 | 19.01 | 12.00 | 6022310.64063 | 2090489.33785 |
| 1332 | 1889.67 | 125.04 | 17.01 | 14.00 | 6022310.35505 | 2090489.54295 |
| 1333 | 1892.48 | 127.03 | 20.01 | 11.00 | 6022309.04692 | 2090490.31555 |
| 1334 | 1883.05 | 113.06 | 21.01 | 8.00 | 6022306.91468 | 2090491.21587 |
| 1335 | 1795.46 | 118.03 | 23.01 | 9.00 | 6022304.64955 | 2090491.94892 |
| 1336 | 1857.12 | 116.07 | 23.01 | 13.01 | 6022303.02686 | 2090492.19937 |
| 1337 | 1864.66 | 118.04 | 16.01 | 13.00 | 6022301.47301 | 2090492.27654 |
| 1338 | 1859.47 | 134.03 | 13.00 | 14.00 | 6022300.35281 | 2090492.14952 |
| 1339 | 1894.48 | 103.03 | 24.01 | 12.00 | 6022299.75920 | 2090492.11871 |
| 1340 | 1938.98 | 117.06 | 25.01 | 12.01 | 6022299.74663 | 2090492.09840 |
| 1341 | 1915.97 | 138.07 | 26.01 | 12.01 | 6022299.81554 | 2090492.08726 |
| 1342 | 1850.75 | 117.05 | 19.01 | 18.01 | 6022299.84567 | 2090492.07939 |
| 1343 | 1905.68 | 124.04 | 20.01 | 10.00 | 6022299.89672 | 2090492.08215 |
| 1344 | 1829.47 | 120.03 | 20.01 | 10.00 | 6022299.90074 | 2090492.07394 |
| 1345 | 1911.58 | 117.04 | 30.01 | 10.00 | 6022299.91729 | 2090492.07557 |
| 1346 | 1918.68 | 131.05 | 20.01 | 11.00 | 6022299.91524 | 2090492.06515 |
| 1347 | 1951.50 | 131.03 | 19.00 | 6.00 | 6022299.91917 | 2090492.05586 |
| 1348 | 1864.31 | 99.07 | 17.01 | 12.01 | 6022300.47469 | 2090492.03494 |
| 1349 | 1738.23 | 109.08 | 17.01 | 8.01 | 6022302.24944 | 2090492.08803 |
| 1350 | 1873.38 | 100.02 | 21.00 | 14.00 | 6022303.75074 | 2090492.02627 |
| 1351 | 1855.57 | 111.03 | 18.01 | 11.00 | 6022304.98972 | 2090491.92525 |
| 1352 | 1876.67 | 111.04 | 22.01 | 19.01 | 6022306.46505 | 2090491.74760 |
| 1353 | 1909.25 | 131.09 | 17.01 | 14.01 | 6022307.44809 | 2090491.56645 |
| 1354 | 1954.50 | 114.03 | 18.00 | 5.00 | 6022308.58134 | 2090491.33785 |
| 1355 | 1873.76 | 98.04 | 16.01 | 19.01 | 6022310.00626 | 2090491.12062 |
| 1356 | 1930.78 | 116.05 | 19.01 | 6.00 | 6022311.35804 | 2090490.74219 |
| 1357 | 1937.17 | 133.08 | 16.01 | 9.01 | 6022312.74535 | 2090490.24942 |
| 1358 | 1879.95 | 116.06 | 22.01 | 8.00 | 6022314.38751 | 2090489.58222 |
| 1359 | 1887.67 | 144.05 | 22.01 | 15.01 | 6022314.91903 | 2090489.38115 |
| 1360 | 1820.65 | 125.04 | 18.01 | 11.00 | 6022314.92541 | 2090489.37876 |
| 1361 | 1877.04 | 130.07 | 18.01 | 21.01 | 6022314.94452 | 2090489.37763 |
| 1362 | 1848.66 | 100.04 | 20.01 | 12.00 | 6022314.96406 | 2090489.37051 |
| 1363 | 1861.66 | 111.04 | 15.01 | 16.01 | 6022314.97881 | 2090489.37839 |
| 1364 | 1882.05 | 112.06 | 21.01 | 9.01 | 6022315.10046 | 2090489.32916 |
| 1365 | 1888.95 | 132.07 | 19.01 | 9.00 | 6022315.79359 | 2090489.01326 |
| 1366 | 1752.45 | 102.03 | 17.00 | 9.00 | 6022316.91202 | 2090488.45609 |
| 1367 | 1810.55 | 104.03 | 16.00 | 9.00 | 6022318.41563 | 2090487.41466 |
| 1368 | 1802.46 | 124.03 | 19.00 | 8.00 | 6022319.54478 | 2090486.32786 |
| 1369 | 1805.55 | 125.04 | 15.00 | 11.00 | 6022320.46772 | 2090485.33485 |
| 1370 | 1818.65 | 107.04 | 22.01 | 4.00 | 6022321.53213 | 2090484.33675 |
| 1371 | 1813.92 | 120.06 | 22.01 | 10.01 | 6022322.53639 | 2090483.42702 |
| 1372 | 1795.46 | 110.03 | 12.00 | 11.00 | 6022322.69738 | 2090483.25883 |
| 1373 | 1768.36 | 114.02 | 25.01 | 10.00 | 6022323.47200 | 2090482.53563 |
| 1374 | 1940.69 | 116.04 | 17.01 | 13.00 | 6022324.35032 | 2090481.80262 |
| 1375 | 1848.29 | 117.02 | 13.00 | 16.00 | 6022324.28901 | 2090481.85348 |
| 1376 | 1843.02 | 101.06 | 11.01 | 12.01 | 6022324.27198 | 2090481.88943 |
| 1377 | 1787.54 | 123.04 | 10.00 | 13.00 | 6022324.61623 | 2090481.60188 |
| 1378 | 1774.63 | 109.04 | 26.01 | 12.00 | 6022325.76832 | 2090480.79559 |
| 1379 | 1759.18 | 111.01 | 20.00 | 12.00 | 6022327.51743 | 2090479.15248 |
| 1380 | 1735.44 | 105.03 | 22.01 | 19.00 | 6022329.01660 | 2090477.57075 |
| 1381 | 1680.51 | 89.03 | 18.01 | 17.01 | 6022330.34549 | 2090476.24662 |
| 1382 | 1698.60 | 120.04 | 16.01 | 15.01 | 6022331.58034 | 2090475.04311 |
| 1383 | 1720.35 | 122.02 | 27.01 | 12.00 | 6022332.34402 | 2090474.34026 |
| 1384 | 1757.62 | 115.04 | 19.01 | 13.00 | 6022332.19094 | 2090474.45624 |
| 1385 | 1782.45 | 105.03 | 19.00 | 13.00 | 6022332.09877 | 2090473.80794 |
| 1386 | 1752.97 | 125.07 | 16.01 | 8.00 | 6022332.03746 | 2090473.82485 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1387 | 1851.31 | 120.08 | 21.01 | 7.00 | 6022331.89058 | 2090473.95329 |
| 1388 | 1755.80 | 94.04 | 21.01 | 7.00 | 6022331.05191 | 2090474.75440 |
| 1389 | 1760.36 | 120.02 | 15.00 | 4.00 | 6022329.48673 | 2090476.58391 |
| 1390 | 1773.63 | 103.04 | 18.01 | 13.00 | 6022327.70148 | 2090477.62688 |
| 1391 | 1801.28 | 126.02 | 13.00 | 13.00 | 6022326.05072 | 2090478.80869 |
| 1392 | 1779.63 | 120.04 | 15.01 | 8.00 | 6022324.81184 | 2090479.81105 |
| 1393 | 1839.65 | 112.04 | 13.00 | 12.00 | 6022323.83188 | 2090480.56328 |
| 1394 | 1752.15 | 111.07 | 19.01 | 8.01 | 6022322.81899 | 2090481.44242 |
| 1395 | 1769.45 | 110.03 | 18.00 | 15.00 | 6022321.62556 | 2090482.43383 |
| 1396 | 1838.56 | 123.04 | 17.01 | 10.00 | 6022320.20647 | 2090483.73772 |
| 1397 | 1803.82 | 110.05 | 16.01 | 10.00 | 6022319.57277 | 2090484.12601 |
| 1398 | 1861.66 | 107.04 | 20.01 | 5.00 | 6022319.27512 | 2090484.33382 |
| 1399 | 1703.52 | 98.03 | 16.00 | 16.00 | 6022317.78256 | 2090485.04293 |
| 1400 | 1727.70 | 102.04 | 15.01 | 14.01 | 6022316.21387 | 2090485.78888 |
| 1401 | 1726.79 | 109.05 | 17.01 | 10.00 | 6022314.87223 | 2090486.22229 |
| 1402 | 1813.37 | 100.02 | 21.00 | 10.00 | 6022313.62476 | 2090486.80436 |
| 1403 | 1835.74 | 117.05 | 21.01 | 12.00 | 6022313.03081 | 2090487.03946 |
| 1404 | 1825.83 | 115.05 | 28.01 | 13.01 | 6022313.03983 | 2090487.01457 |
| 1405 | 1815.37 | 118.02 | 8.00 | 12.00 | 6022313.04917 | 2090486.99211 |
| 1406 | 1835.65 | 111.04 | 16.01 | 7.00 | 6022313.07987 | 2090486.97341 |
| 1407 | 1790.46 | 90.02 | 25.01 | 7.00 | 6022313.10150 | 2090486.95868 |
| 1408 | 1792.46 | 105.03 | 20.01 | 11.00 | 6022313.14531 | 2090486.93709 |
| 1409 | 1852.57 | 121.04 | 12.00 | 7.00 | 6022314.19115 | 2090486.47600 |
| 1410 | 1797.82 | 114.05 | 21.01 | 16.01 | 6022315.44574 | 2090485.93179 |
| 1411 | 1754.45 | 116.03 | 16.00 | 9.00 | 6022316.25111 | 2090485.60288 |
| 1412 | 1779.72 | 118.05 | 17.01 | 10.00 | 6022317.13803 | 2090485.12406 |
| 1413 | 1803.91 | 110.06 | 11.01 | 15.01 | 6022317.73610 | 2090484.82875 |
| 1414 | 1736.79 | 104.05 | 17.01 | 10.00 | 6022318.27000 | 2090484.47476 |
| 1415 | 1786.08 | 132.08 | 17.01 | 8.00 | 6022318.90832 | 2090484.04774 |
| 1416 | 1889.77 | 125.05 | 18.01 | 17.01 | 6022319.70116 | 2090483.57553 |
| 1417 | 1823.46 | 110.03 | 21.01 | 11.00 | 6022321.10941 | 2090482.37259 |
| 1418 | 1836.65 | 123.04 | 12.00 | 12.00 | 6022321.85388 | 2090481.84396 |
| 1419 | 1828.74 | 108.04 | 11.00 | 16.01 | 6022322.46873 | 2090481.32235 |
| 1420 | 1781.37 | 111.02 | 26.01 | 10.00 | 6022323.93416 | 2090480.25808 |
| 1421 | 1733.44 | 92.02 | 18.00 | 12.00 | 6022325.45243 | 2090479.24984 |
| 1422 | 1762.54 | 106.03 | 26.01 | 16.00 | 6022326.64339 | 2090478.38433 |
| 1423 | 1751.45 | 132.03 | 10.00 | 11.00 | 6022327.43524 | 2090477.69813 |
| 1424 | 1767.89 | 110.06 | 16.01 | 16.01 | 6022328.69269 | 2090476.79354 |
| 1425 | 1780.72 | 129.05 | 15.01 | 8.00 | 6022329.97517 | 2090475.88167 |
| 1426 | 1817.74 | 114.05 | 18.01 | 9.00 | 6022330.96319 | 2090475.15286 |
| 1427 | 1757.18 | 129.01 | 15.00 | 7.00 | 6022332.08918 | 2090474.33819 |
| 1428 | 1706.52 | 101.03 | 18.01 | 6.00 | 6022333.45144 | 2090473.40224 |
| 1429 | 1710.35 | 119.02 | 26.01 | 9.00 | 6022334.99376 | 2090472.38196 |
| 1430 | 1746.45 | 113.03 | 22.01 | 9.00 | 6022335.45381 | 2090472.00328 |
| 1431 | 1784.72 | 105.04 | 22.01 | 10.00 | 6022335.81887 | 2090471.72670 |
| 1432 | 1826.65 | 132.05 | 23.01 | 9.00 | 6022337.52687 | 2090470.45965 |
| 1433 | 1864.76 | 116.05 | 22.01 | 7.00 | 6022338.66921 | 2090469.58069 |
| 1434 | 1753.36 | 128.03 | 17.00 | 14.00 | 6022340.00721 | 2090468.46139 |
| 1435 | 1785.63 | 105.04 | 15.01 | 10.00 | 6022341.25419 | 2090467.59406 |
| 1436 | 1785.81 | 115.05 | 15.01 | 11.01 | 6022342.58119 | 2090466.41103 |
| 1437 | 1719.52 | 112.03 | 16.00 | 10.00 | 6022342.82492 | 2090466.18152 |
| 1438 | 1782.99 | 118.07 | 21.01 | 10.01 | 6022343.91276 | 2090465.25340 |
| 1439 | 1803.73 | 118.05 | 20.01 | 8.00 | 6022345.45204 | 2090463.85927 |
| 1440 | 1774.27 | 111.02 | 22.00 | 9.00 | 6022346.36938 | 2090462.92560 |
| 1441 | 1885.67 | 111.04 | 17.01 | 12.00 | 6022347.04798 | 2090462.16290 |
| 1442 | 1757.36 | 109.02 | 21.00 | 12.00 | 6022347.11284 | 2090462.09660 |
| 1443 | 1812.64 | 108.04 | 16.01 | 9.00 | 6022347.16954 | 2090462.05988 |
| 1444 | 1839.38 | 121.02 | 12.00 | 11.00 | 6022347.39487 | 2090461.84366 |
| 1445 | 1857.38 | 119.02 | 19.00 | 11.00 | 6022347.87942 | 2090461.31660 |
| 1446 | 1878.67 | 116.04 | 10.00 | 10.00 | 6022348.31372 | 2090460.86747 |
| 1447 | 2009.51 | 116.03 | 22.01 | 6.00 | 6022349.19774 | 2090459.91020 |
| 1448 | 1949.50 | 113.03 | 22.01 | 14.00 | 6022349.97422 | 2090459.09755 |
| 1449 | 1862.94 | 111.06 | 9.00 | 19.01 | 6022350.22412 | 2090458.82595 |
| 1450 | 1915.26 | 118.08 | 12.01 | 11.01 | 6022351.23298 | 2090457.64269 |
| 1451 | 1913.97 | 129.07 | 29.01 | 14.01 | 6022352.19909 | 2090456.58860 |
| 1452 | 1930.78 | 141.06 | 18.01 | 15.01 | 6022352.31611 | 2090456.36780 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1453 | 2034.42 | 115.02 | 27.01 | 14.00 | 6022352.77088 | 2090455.73386 |
| 1454 | 1832.47 | 116.03 | 21.01 | 11.00 | 6022353.89988 | 2090454.21793 |
| 1455 | 1795.55 | 114.03 | 21.01 | 3.00 | 6022354.62002 | 2090453.12916 |
| 1456 | 1737.53 | 122.04 | 18.01 | 12.00 | 6022355.26728 | 2090451.78984 |
| 1457 | 1773.54 | 122.04 | 28.01 | 14.00 | 6022355.50152 | 2090450.64879 |
| 1458 | 1771.90 | 90.05 | 24.01 | 15.01 | 6022355.69335 | 2090449.54944 |
| 1459 | 1763.98 | 109.06 | 17.01 | 8.00 | 6022355.69059 | 2090448.30291 |
| 1460 | 1824.19 | 123.01 | 28.00 | 12.00 | 6022355.63005 | 2090447.63604 |
| 1461 | 1802.18 | 110.07 | 16.01 | 8.01 | 6022355.07527 | 2090445.95536 |
| 1462 | 1721.61 | 121.04 | 17.01 | 10.00 | 6022354.63685 | 2090445.14373 |
| 1463 | 1718.52 | 95.03 | 16.00 | 14.00 | 6022354.23871 | 2090444.46971 |
| 1464 | 1774.28 | 81.01 | 18.00 | 8.00 | 6022353.14196 | 2090442.91764 |
| 1465 | 1779.36 | 110.02 | 20.00 | 14.00 | 6022351.71284 | 2090441.68149 |
| 1466 | 1806.37 | 104.02 | 21.00 | 6.00 | 6022349.82933 | 2090440.78571 |
| 1467 | 1791.54 | 106.03 | 27.01 | 9.00 | 6022347.99644 | 2090440.08559 |
| 1468 | 1665.59 | 90.03 | 14.00 | 13.00 | 6022346.43525 | 2090439.79497 |
| 1469 | 1758.36 | 104.02 | 17.00 | 14.00 | 6022345.10300 | 2090439.72526 |
| 1470 | 1788.81 | 99.05 | 16.01 | 13.01 | 6022343.38836 | 2090439.77736 |
| 1471 | 1686.01 | 109.00 | 16.00 | 11.00 | 6022341.19464 | 2090439.95072 |
| 1472 | 1692.43 | 115.03 | 21.01 | 15.00 | 6022339.21625 | 2090440.56536 |
| 1473 | 1542.16 | 88.01 | 10.00 | 10.00 | 6022337.90516 | 2090441.00870 |
| 1474 | 1608.41 | 87.02 | 22.01 | 10.00 | 6022336.83948 | 2090441.42034 |
| 1475 | 1665.42 | 119.03 | 12.00 | 13.00 | 6022335.27458 | 2090442.11100 |
| 1476 | 1772.36 | 110.02 | 13.00 | 10.00 | 6022333.98214 | 2090442.74053 |
| 1477 | 1906.68 | 124.04 | 20.01 | 13.00 | 6022332.75735 | 2090443.44424 |
| 1478 | 1901.39 | 108.02 | 14.00 | 14.00 | 6022331.73112 | 2090444.05393 |
| 1479 | 1787.08 | 110.07 | 11.01 | 7.00 | 6022330.87279 | 2090444.57559 |
| 1480 | 1857.57 | 108.03 | 16.00 | 15.00 | 6022329.55073 | 2090445.35766 |
| 1481 | 1844.66 | 111.04 | 16.01 | 13.00 | 6022328.49292 | 2090445.97304 |
| 1482 | 1782.35 | 106.08 | 16.01 | 6.00 | 6022327.71199 | 2090446.45348 |
| 1483 | 1715.87 | 101.05 | 17.01 | 14.01 | 6022326.26232 | 2090447.46649 |
| 1484 | 1712.95 | 89.05 | 13.01 | 21.01 | 6022325.41685 | 2090448.01975 |
| 1485 | 1713.69 | 105.04 | 25.01 | 5.00 | 6022324.06576 | 2090448.90036 |
| 1486 | 1603.33 | 91.02 | 15.00 | 10.00 | 6022322.55401 | 2090449.89663 |
| 1487 | 1785.81 | 125.06 | 20.01 | 10.00 | 6022321.65830 | 2090450.40395 |
| 1488 | 1705.52 | 130.04 | 16.00 | 10.00 | 6022320.80747 | 2090451.03486 |
| 1489 | 1760.45 | 116.03 | 20.01 | 11.00 | 6022319.38826 | 2090452.19968 |
| 1490 | 1787.37 | 108.02 | 10.00 | 7.00 | 6022318.13449 | 2090453.02818 |
| 1491 | 1852.66 | 106.04 | 25.01 | 16.01 | 6022317.47713 | 2090453.52575 |
| 1492 | 1886.86 | 122.06 | 17.01 | 18.01 | 6022316.27948 | 2090454.38585 |
| 1493 | 1798.00 | 96.05 | 11.01 | 14.01 | 6022315.52745 | 2090455.01098 |
| 1494 | 1760.45 | 96.02 | 12.00 | 13.00 | 6022315.09728 | 2090455.31464 |
| 1495 | 1828.83 | 106.05 | 21.01 | 12.01 | 6022314.25799 | 2090455.87188 |
| 1496 | 1812.82 | 100.05 | 18.01 | 16.01 | 6022313.34160 | 2090456.43641 |
| 1497 | 1812.55 | 117.04 | 17.01 | 10.00 | 6022313.24156 | 2090456.50749 |
| 1498 | 1858.47 | 105.03 | 24.01 | 6.00 | 6022312.75911 | 2090456.84967 |
| 1499 | 1853.47 | 142.04 | 13.00 | 12.00 | 6022311.45355 | 2090457.90458 |
| 1500 | 1951.08 | 127.07 | 17.01 | 10.01 | 6022310.88128 | 2090458.44296 |
| 1501 | 1872.95 | 111.06 | 21.01 | 18.01 | 6022309.89546 | 2090459.14619 |
| 1502 | 1938.49 | 123.03 | 17.00 | 7.00 | 6022309.08239 | 2090459.78208 |
| 1503 | 1902.68 | 116.04 | 20.01 | 8.00 | 6022308.79637 | 2090459.93398 |
| 1504 | 1895.48 | 109.03 | 20.01 | 7.00 | 6022308.15955 | 2090460.36702 |
| 1505 | 1872.13 | 131.08 | 17.01 | 13.01 | 6022307.10062 | 2090461.18978 |
| 1506 | 1807.55 | 119.04 | 17.01 | 14.00 | 6022306.87283 | 2090461.38593 |
| 1507 | 1662.76 | 98.04 | 14.01 | 10.00 | 6022306.14461 | 2090461.97009 |
| 1508 | 1659.51 | 113.03 | 18.01 | 14.00 | 6022304.80627 | 2090462.97620 |
| 1509 | 1546.24 | 82.01 | 17.00 | 8.00 | 6022304.32881 | 2090463.38337 |
| 1510 | 1534.78 | 114.06 | 16.01 | 10.01 | 6022304.00918 | 2090463.61944 |
| 1511 | 1513.54 | 98.03 | 13.00 | 8.00 | 6022302.75394 | 2090464.66495 |
| 1512 | 1576.72 | 94.04 | 21.01 | 5.00 | 6022301.88908 | 2090465.35314 |
| 1513 | 1547.47 | 92.03 | 22.01 | 11.00 | 6022301.84166 | 2090465.40673 |
| 1514 | 1542.08 | 106.01 | 10.00 | 7.00 | 6022300.41217 | 2090466.44103 |
| 1515 | 1654.25 | 109.02 | 22.00 | 8.00 | 6022298.77909 | 2090467.62357 |
| 1516 | 1630.74 | 104.05 | 20.01 | 8.00 | 6022298.27215 | 2090468.05504 |
| 1517 | 1627.66 | 122.05 | 14.01 | 10.00 | 6022297.81459 | 2090468.38737 |
| 1518 | 1735.96 | 101.06 | 18.01 | 14.01 | 6022296.86206 | 2090469.04066 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1519 | 1778.36 | 112.02 | 19.00 | 16.00 | 6022295.73536 | 2090469.80942 |
| 1520 | 1730.70 | 106.04 | 16.01 | 10.00 | 6022295.51808 | 2090470.00961 |
| 1521 | 1862.75 | 112.05 | 24.01 | 12.00 | 6022294.83816 | 2090470.50825 |
| 1522 | 1811.74 | 115.05 | 14.01 | 7.00 | 6022293.82764 | 2090471.38114 |
| 1523 | 1790.55 | 117.04 | 24.01 | 10.00 | 6022293.19036 | 2090471.83342 |
| 1524 | 1711.04 | 111.07 | 15.01 | 12.01 | 6022292.53482 | 2090472.51039 |
| 1525 | 1771.89 | 103.05 | 17.01 | 12.01 | 6022291.90083 | 2090473.05233 |
| 1526 | 1831.56 | 119.04 | 21.01 | 11.00 | 6022291.33664 | 2090473.67473 |
| 1527 | 1873.48 | 119.03 | 14.00 | 14.00 | 6022290.44936 | 2090474.76631 |
| 1528 | 1873.13 | 107.06 | 22.01 | 19.01 | 6022289.58146 | 2090476.24659 |
| 1529 | 1821.46 | 112.03 | 13.00 | 8.00 | 6022289.33047 | 2090476.92083 |
| 1530 | 1819.56 | 117.04 | 14.00 | 7.00 | 6022289.03992 | 2090477.69524 |
| 1531 | 1813.55 | 110.03 | 19.01 | 9.00 | 6022288.58646 | 2090479.69093 |
| 1532 | 1782.72 | 99.04 | 24.01 | 13.01 | 6022288.52161 | 2090481.12865 |
| 1533 | 1772.81 | 116.05 | 20.01 | 10.00 | 6022288.66502 | 2090482.32128 |
| 1534 | 1732.62 | 111.04 | 10.00 | 7.00 | 6022289.03417 | 2090483.90056 |
| 1535 | 1776.28 | 100.02 | 19.00 | 14.00 | 6022289.43108 | 2090484.85799 |
| 1536 | 1686.18 | 91.01 | 10.00 | 8.00 | 6022289.99907 | 2090485.88882 |
| 1537 | 1769.63 | 98.03 | 18.01 | 14.00 | 6022290.98869 | 2090487.25595 |
| 1538 | 1864.29 | 135.02 | 26.00 | 9.00 | 6022291.77226 | 2090488.16664 |
| 1539 | 1922.07 | 120.07 | 14.01 | 18.01 | 6022293.03454 | 2090489.12646 |
| 1540 | 1831.28 | 103.02 | 23.00 | 16.00 | 6022295.30484 | 2090490.16282 |
| 1541 | 1854.47 | 116.03 | 19.00 | 19.00 | 6022297.48768 | 2090490.66236 |
| 1542 | 1901.30 | 108.02 | 20.00 | 12.00 | 6022299.30512 | 2090490.90616 |
| 1543 | 1865.85 | 107.05 | 14.01 | 16.01 | 6022301.07275 | 2090489.83412 |
| 1544 | 1830.47 | 122.03 | 20.01 | 16.00 | 6022302.62709 | 2090489.50541 |
| 1545 | 1876.85 | 107.05 | 18.01 | 16.01 | 6022303.85537 | 2090490.09309 |
| 1546 | 1906.39 | 121.02 | 10.00 | 7.00 | 6022305.67400 | 2090489.37809 |
| 1547 | 1893.77 | 124.05 | 20.01 | 11.00 | 6022307.37680 | 2090488.65177 |
| 1548 | 1991.51 | 134.03 | 19.00 | 17.00 | 6022307.92855 | 2090488.30131 |
| 1549 | 2006.91 | 98.04 | 26.01 | 13.01 | 6022307.85656 | 2090488.32929 |
| 1550 | 1916.58 | 96.03 | 20.01 | 10.00 | 6022308.03493 | 2090488.18390 |
| 1551 | 1913.78 | 112.05 | 19.01 | 15.01 | 6022309.12083 | 2090487.58549 |
| 1552 | 1914.58 | 106.03 | 19.01 | 11.00 | 6022310.14845 | 2090487.00083 |
| 1553 | 1788.81 | 102.05 | 20.01 | 14.01 | 6022311.70171 | 2090486.17464 |
| 1554 | 1810.92 | 104.05 | 19.01 | 19.01 | 6022312.98546 | 2090485.44980 |
| 1555 | 1793.73 | 102.04 | 25.01 | 12.00 | 6022313.67141 | 2090485.10922 |
| 1556 | 1836.74 | 118.05 | 18.01 | 13.01 | 6022314.93650 | 2090484.27350 |
| 1557 | 1812.28 | 118.02 | 21.00 | 11.00 | 6022316.42449 | 2090483.35474 |
| 1558 | 1813.74 | 129.05 | 22.01 | 7.00 | 6022317.24128 | 2090482.77941 |
| 1559 | 1744.62 | 116.04 | 18.01 | 8.00 | 6022317.16753 | 2090482.86190 |
| 1560 | 1812.55 | 120.04 | 11.00 | 13.00 | 6022317.81884 | 2090481.46914 |
| 1561 | 1882.86 | 119.05 | 21.01 | 10.00 | 6022319.64783 | 2090480.22430 |
| 1562 | 1822.83 | 105.05 | 19.01 | 11.01 | 6022320.27199 | 2090479.77609 |
| 1563 | 1855.85 | 120.05 | 13.01 | 13.01 | 6022320.66805 | 2090479.53411 |
| 1564 | 1729.35 | 114.02 | 25.01 | 11.00 | 6022322.30605 | 2090478.22719 |
| 1565 | 1763.54 | 98.03 | 12.00 | 9.00 | 6022323.10976 | 2090477.61878 |
| 1566 | 1707.78 | 120.05 | 21.01 | 11.01 | 6022323.36551 | 2090477.49141 |
| 1567 | 1732.70 | 92.04 | 20.01 | 7.00 | 6022324.62897 | 2090476.59069 |
| 1568 | 1815.10 | 116.07 | 12.01 | 14.01 | 6022325.96304 | 2090475.52747 |
| 1569 | 1770.45 | 104.03 | 24.01 | 10.00 | 6022326.78966 | 2090474.88996 |
| 1570 | 1793.46 | 115.03 | 27.01 | 11.00 | 6022326.96524 | 2090474.77498 |
| 1571 | 1740.05 | 105.06 | 13.01 | 15.01 | 6022328.39143 | 2090473.74944 |
| 1572 | 1718.35 | 99.02 | 16.00 | 8.00 | 6022329.60591 | 2090472.78782 |
| 1573 | 1775.81 | 108.05 | 18.01 | 10.00 | 6022331.19848 | 2090471.47636 |
| 1574 | 1614.82 | 96.05 | 19.01 | 10.01 | 6022332.21889 | 2090470.61368 |
| 1575 | 1683.68 | 105.04 | 12.00 | 7.00 | 6022333.18781 | 2090469.87774 |
| 1576 | 1804.55 | 106.03 | 18.01 | 9.00 | 6022334.48438 | 2090468.74842 |
| 1577 | 1791.46 | 121.03 | 16.00 | 9.00 | 6022335.54402 | 2090467.96833 |
| 1578 | 1751.18 | 92.01 | 15.00 | 17.00 | 6022336.50908 | 2090467.28447 |
| 1579 | 1766.45 | 99.03 | 17.00 | 15.00 | 6022337.86431 | 2090466.14012 |
| 1580 | 1683.43 | 112.03 | 18.00 | 5.00 | 6022338.67851 | 2090465.38719 |
| 1581 | 1776.81 | 113.05 | 18.01 | 10.00 | 6022339.04345 | 2090465.18279 |
| 1582 | 1765.80 | 109.05 | 19.01 | 6.00 | 6022339.92327 | 2090464.47642 |
| 1583 | 1670.43 | 100.03 | 14.00 | 12.00 | 6022341.10265 | 2090463.57258 |
| 1584 | 1632.33 | 121.02 | 17.00 | 11.00 | 6022341.42618 | 2090463.33263 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1585 | 1761.54 | 99.03 | 14.00 | 9.00 | 6022341.60080 | 2090463.23056 |
| 1586 | 1728.53 | 103.03 | 17.01 | 13.00 | 6022342.61425 | 2090462.53391 |
| 1587 | 1669.51 | 110.03 | 16.00 | 8.00 | 6022343.99987 | 2090461.41658 |
| 1588 | 1788.46 | 110.03 | 14.00 | 15.00 | 6022345.18307 | 2090460.61617 |
| 1589 | 1808.37 | 117.02 | 21.00 | 6.00 | 6022345.74202 | 2090460.21442 |
| 1590 | 1834.93 | 115.06 | 22.01 | 12.01 | 6022346.91092 | 2090459.18968 |
| 1591 | 1829.47 | 110.03 | 17.00 | 9.00 | 6022348.22200 | 2090457.97946 |
| 1592 | 1906.06 | 104.06 | 19.01 | 10.01 | 6022349.61542 | 2090456.66200 |
| 1593 | 1859.47 | 99.03 | 18.00 | 6.00 | 6022350.60656 | 2090455.27273 |
| 1594 | 1917.16 | 116.07 | 19.01 | 19.01 | 6022350.94802 | 2090454.69235 |
| 1595 | 1832.28 | 120.02 | 24.00 | 10.00 | 6022350.99418 | 2090454.63775 |
| 1596 | 1884.58 | 112.03 | 22.01 | 13.00 | 6022351.40332 | 2090453.92701 |
| 1597 | 1874.76 | 112.05 | 26.01 | 10.00 | 6022352.31795 | 2090451.96802 |
| 1598 | 1793.28 | 114.02 | 26.00 | 18.00 | 6022352.90274 | 2090450.33651 |
| 1599 | 1825.74 | 128.05 | 18.01 | 9.00 | 6022353.06568 | 2090449.15029 |
| 1600 | 1796.46 | 125.03 | 13.00 | 11.00 | 6022353.15346 | 2090447.49585 |
| 1601 | 1881.57 | 139.04 | 21.01 | 12.00 | 6022353.16227 | 2090445.39265 |
| 1602 | 1837.20 | 89.06 | 22.01 | 13.01 | 6022352.78434 | 2090444.10128 |
| 1603 | 1785.37 | 116.02 | 21.00 | 7.00 | 6022352.12794 | 2090442.97167 |
| 1604 | 1858.38 | 117.02 | 18.00 | 20.00 | 6022350.89518 | 2090441.49013 |
| 1605 | 1704.03 | 108.07 | 23.01 | 4.00 | 6022349.30671 | 2090440.28730 |
| 1606 | 1778.81 | 122.06 | 17.01 | 11.01 | 6022348.01860 | 2090439.62699 |
| 1607 | 1732.96 | 129.07 | 20.01 | 11.01 | 6022346.43161 | 2090438.95451 |
| 1608 | 1795.46 | 116.03 | 18.00 | 11.00 | 6022344.66726 | 2090438.42974 |
| 1609 | 1732.62 | 126.04 | 18.01 | 10.00 | 6022342.76505 | 2090438.14265 |
| 1610 | 1915.30 | 116.02 | 21.00 | 9.00 | 6022340.92409 | 2090438.12899 |
| 1611 | 1949.30 | 109.02 | 17.00 | 22.00 | 6022339.30130 | 2090438.29007 |
| 1612 | 1948.60 | 114.03 | 21.01 | 15.00 | 6022338.50062 | 2090438.43868 |
| 1613 | 1738.44 | 108.03 | 24.01 | 3.00 | 6022337.47393 | 2090438.73360 |
| 1614 | 1695.52 | 92.03 | 18.01 | 11.00 | 6022336.01915 | 2090439.22875 |
| 1615 | 1699.52 | 117.04 | 20.01 | 9.00 | 6022334.30380 | 2090439.89119 |
| 1616 | 1708.52 | 94.03 | 12.00 | 6.00 | 6022332.89357 | 2090440.48383 |
| 1617 | 1871.48 | 101.03 | 25.01 | 7.00 | 6022331.55569 | 2090441.01988 |
| 1618 | 1901.58 | 142.04 | 14.00 | 10.00 | 6022330.56877 | 2090441.52845 |
| 1619 | 1937.88 | 133.06 | 26.01 | 16.01 | 6022329.71636 | 2090441.96907 |
| 1620 | 1931.78 | 113.05 | 24.01 | 13.01 | 6022328.09700 | 2090442.99315 |
| 1621 | 1932.98 | 121.06 | 20.01 | 15.01 | 6022327.79599 | 2090443.23257 |
| 1622 | 1788.55 | 114.03 | 26.01 | 14.00 | 6022326.46017 | 2090443.94785 |
| 1623 | 1754.36 | 114.02 | 23.00 | 7.00 | 6022325.01795 | 2090444.91861 |
| 1624 | 1720.61 | 118.04 | 21.01 | 8.00 | 6022324.24695 | 2090445.45420 |
| 1625 | 1710.86 | 86.04 | 12.01 | 11.01 | 6022322.65012 | 2090446.39212 |
| 1626 | 1701.69 | 94.04 | 6.00 | 10.00 | 6022321.49047 | 2090447.16845 |
| 1627 | 1811.73 | 130.05 | 24.01 | 12.00 | 6022320.69331 | 2090447.74256 |
| 1628 | 1866.66 | 116.04 | 31.01 | 6.00 | 6022319.52894 | 2090448.58344 |
| 1629 | 1778.08 | 122.07 | 12.01 | 12.01 | 6022318.08300 | 2090449.58094 |
| 1630 | 1837.30 | 104.07 | 14.01 | 18.01 | 6022317.32644 | 2090450.14750 |
| 1631 | 1914.68 | 132.05 | 21.01 | 12.00 | 6022316.41938 | 2090450.81588 |
| 1632 | 1908.96 | 122.06 | 17.01 | 16.01 | 6022315.21482 | 2090451.74054 |
| 1633 | 1897.77 | 97.04 | 17.01 | 8.00 | 6022314.24616 | 2090452.47360 |
| 1634 | 1891.67 | 115.04 | 17.01 | 7.00 | 6022313.48350 | 2090453.06280 |
| 1635 | 1923.88 | 110.05 | 22.01 | 12.01 | 6022312.48145 | 2090453.78750 |
| 1636 | 1940.08 | 127.07 | 12.01 | 17.01 | 6022311.33072 | 2090454.56572 |
| 1637 | 1863.57 | 121.04 | 20.01 | 6.00 | 6022310.71301 | 2090455.02616 |
| 1638 | 1921.78 | 130.05 | 17.01 | 12.00 | 6022310.25113 | 2090455.32094 |
| 1639 | 1884.05 | 117.07 | 20.01 | 18.01 | 6022309.85140 | 2090455.63497 |
| 1640 | 1835.84 | 111.05 | 18.01 | 9.00 | 6022309.82632 | 2090455.64570 |
| 1641 | 1841.47 | 101.03 | 20.01 | 10.00 | 6022308.82784 | 2090456.57689 |
| 1642 | 1872.76 | 119.05 | 20.01 | 14.01 | 6022307.03210 | 2090457.79110 |
| 1643 | 1872.85 | 110.05 | 29.01 | 11.01 | 6022305.93649 | 2090458.63707 |
| 1644 | 1793.91 | 119.06 | 15.01 | 7.00 | 6022305.55246 | 2090458.88831 |
| 1645 | 1703.26 | 117.02 | 19.00 | 4.00 | 6022305.14740 | 2090459.00546 |
| 1646 | 1592.25 | 99.02 | 20.00 | 10.00 | 6022303.33404 | 2090460.24539 |
| 1647 | 1658.51 | 116.04 | 19.01 | 6.00 | 6022301.53954 | 2090461.63112 |
| 1648 | 1690.35 | 118.02 | 21.00 | 9.00 | 6022300.70381 | 2090462.30202 |
| 1649 | 1625.74 | 125.06 | 12.01 | 7.00 | 6022299.83307 | 2090462.88568 |
| 1650 | 1679.68 | 95.04 | 24.01 | 11.00 | 6022298.28049 | 2090464.00494 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1651 | 1669.59 | 106.04 | 13.00 | 10.00 | 6022297.06933 | 2090465.00270 |
| 1652 | 1763.80 | 103.05 | 24.01 | 7.00 | 6022296.72196 | 2090465.25766 |
| 1653 | 1760.10 | 113.01 | 17.00 | 11.00 | 6022296.22264 | 2090465.65826 |
| 1654 | 1782.37 | 95.02 | 14.00 | 12.00 | 6022295.25225 | 2090466.42437 |
| 1655 | 1753.53 | 115.04 | 13.00 | 14.00 | 6022294.19824 | 2090467.23574 |
| 1656 | 1703.44 | 83.02 | 22.01 | 17.00 | 6022293.25309 | 2090467.89981 |
| 1657 | 1763.45 | 108.03 | 14.00 | 14.00 | 6022292.76014 | 2090468.23324 |
| 1658 | 1677.51 | 117.04 | 25.01 | 13.00 | 6022292.24598 | 2090468.59393 |
| 1659 | 1642.42 | 111.03 | 14.00 | 9.00 | 6022291.54052 | 2090469.18564 |
| 1660 | 1692.43 | 98.03 | 18.00 | 11.00 | 6022290.89592 | 2090469.76649 |
| 1661 | 1756.06 | 102.06 | 23.01 | 13.01 | 6022290.38941 | 2090470.27386 |
| 1662 | 1832.02 | 131.07 | 19.01 | 12.01 | 6022289.90063 | 2090470.77370 |
| 1663 | 1882.38 | 121.02 | 19.00 | 15.00 | 6022288.82470 | 2090472.09657 |
| 1664 | 1795.64 | 118.04 | 15.01 | 11.00 | 6022287.83994 | 2090474.26880 |
| 1665 | 1860.66 | 124.04 | 16.01 | 10.00 | 6022287.64200 | 2090475.79234 |
| 1666 | 1789.37 | 102.02 | 14.00 | 13.00 | 6022287.66390 | 2090476.52021 |
| 1667 | 1780.28 | 108.02 | 20.00 | 11.00 | 6022287.71077 | 2090476.99219 |
| 1668 | 1856.12 | 107.06 | 24.01 | 8.00 | 6022287.92312 | 2090478.24908 |
| 1669 | 1856.66 | 115.04 | 15.01 | 17.01 | 6022288.40309 | 2090479.68912 |
| 1670 | 1754.71 | 99.04 | 23.01 | 7.00 | 6022289.17463 | 2090481.04169 |
| 1671 | 1668.59 | 89.03 | 11.00 | 10.00 | 6022290.07414 | 2090482.23207 |
| 1672 | 1742.18 | 107.01 | 24.00 | 10.00 | 6022291.05064 | 2090483.22009 |
| 1673 | 1728.79 | 111.05 | 14.01 | 7.00 | 6022292.07913 | 2090484.08972 |
| 1674 | 1790.64 | 129.05 | 20.01 | 12.00 | 6022292.47364 | 2090484.34573 |
| 1675 | 1722.44 | 113.03 | 14.00 | 14.00 | 6022292.63520 | 2090484.39419 |
| 1676 | 1944.88 | 134.06 | 19.01 | 15.01 | 6022293.26856 | 2090484.74871 |
| 1677 | 1859.85 | 124.06 | 17.01 | 14.01 | 6022294.02592 | 2090485.17176 |
| 1678 | 1869.10 | 106.01 | 27.00 | 9.00 | 6022294.58531 | 2090485.41468 |
| 1679 | 1827.47 | 95.02 | 12.00 | 14.00 | 6022295.94714 | 2090486.02915 |
| 1680 | 1887.77 | 110.04 | 17.01 | 11.00 | 6022297.56276 | 2090486.63696 |
| 1681 | 1906.77 | 109.04 | 20.01 | 3.00 | 6022298.37204 | 2090486.85388 |
| 1682 | 1817.56 | 114.03 | 20.01 | 15.00 | 6022298.96684 | 2090487.02722 |
| 1683 | 1905.87 | 112.05 | 23.01 | 6.00 | 6022300.79977 | 2090487.41302 |
| 1684 | 1968.09 | 137.08 | 14.01 | 7.00 | 6022302.14166 | 2090487.63339 |
| 1685 | 1865.57 | 128.04 | 21.01 | 15.00 | 6022302.82922 | 2090487.59460 |
| 1686 | 1899.77 | 110.04 | 29.01 | 17.01 | 6022304.42016 | 2090487.44841 |
| 1687 | 2005.61 | 114.03 | 16.00 | 8.00 | 6022306.29504 | 2090486.84394 |
| 1688 | 2007.91 | 118.05 | 22.01 | 16.01 | 6022307.47008 | 2090486.30067 |
| 1689 | 1930.49 | 128.03 | 15.00 | 13.00 | 6022307.68830 | 2090486.17890 |
| 1690 | 2029.52 | 114.03 | 26.01 | 12.00 | 6022308.32992 | 2090485.78019 |
| 1691 | 1919.68 | 133.05 | 14.00 | 10.00 | 6022309.31802 | 2090485.22969 |
| 1692 | 1857.57 | 135.04 | 23.01 | 13.00 | 6022310.15590 | 2090484.66711 |
| 1693 | 1889.67 | 116.04 | 19.01 | 13.00 | 6022311.20663 | 2090484.04273 |
| 1694 | 1819.65 | 125.04 | 24.01 | 17.01 | 6022312.31378 | 2090483.28036 |
| 1695 | 1762.54 | 100.03 | 24.01 | 12.00 | 6022313.47357 | 2090482.47478 |
| 1696 | 1818.65 | 111.04 | 24.01 | 9.00 | 6022314.77703 | 2090481.63783 |
| 1697 | 1791.82 | 96.04 | 18.01 | 12.01 | 6022315.41275 | 2090481.20321 |
| 1698 | 1778.36 | 103.02 | 14.00 | 12.00 | 6022315.81609 | 2090480.94498 |
| 1699 | 1793.73 | 109.04 | 16.01 | 10.00 | 6022316.71499 | 2090480.31749 |
| 1700 | 1739.71 | 121.05 | 24.01 | 12.00 | 6022318.14580 | 2090479.30115 |
| 1701 | 1804.46 | 107.03 | 22.01 | 10.00 | 6022319.28904 | 2090478.49773 |
| 1702 | 1810.83 | 97.04 | 16.01 | 9.00 | 6022319.18708 | 2090478.61861 |
| 1703 | 1743.36 | 97.02 | 19.00 | 12.00 | 6022320.18987 | 2090477.84033 |
| 1704 | 1768.45 | 137.04 | 16.00 | 6.00 | 6022322.04193 | 2090476.58107 |
| 1705 | 1797.55 | 110.03 | 19.01 | 10.00 | 6022323.06162 | 2090475.66699 |
| 1706 | 1808.55 | 99.03 | 25.01 | 14.00 | 6022323.56060 | 2090475.34356 |
| 1707 | 1657.75 | 93.04 | 21.01 | 7.00 | 6022324.12741 | 2090474.97153 |
| 1708 | 1736.53 | 112.03 | 25.01 | 9.00 | 6022325.77533 | 2090473.60283 |
| 1709 | 1655.75 | 103.05 | 13.01 | 8.00 | 6022326.98308 | 2090472.84591 |
| 1710 | 1655.67 | 103.04 | 16.01 | 10.00 | 6022327.62877 | 2090472.26507 |
| 1711 | 1722.44 | 119.03 | 15.00 | 8.00 | 6022327.64346 | 2090472.26437 |
| 1712 | 1709.44 | 104.03 | 16.00 | 6.00 | 6022328.29775 | 2090471.68821 |
| 1713 | 1637.34 | 108.02 | 16.00 | 11.00 | 6022330.02441 | 2090470.32303 |
| 1714 | 1685.60 | 120.04 | 25.01 | 9.00 | 6022330.84537 | 2090469.68727 |
| 1715 | 1726.27 | 99.02 | 15.00 | 13.00 | 6022330.84758 | 2090469.70886 |
| 1716 | 1634.58 | 89.03 | 19.01 | 18.01 | 6022330.98011 | 2090469.61557 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1717 | 1757.71 | 90.04 | 13.01 | 18.01 | 6022331.94208 | 2090468.86822 |
| 1718 | 1777.27 | 104.02 | 19.00 | 11.00 | 6022333.65266 | 2090467.47432 |
| 1719 | 1738.44 | 103.03 | 15.00 | 10.00 | 6022335.40140 | 2090466.13675 |
| 1720 | 1827.20 | 96.06 | 22.01 | 11.01 | 6022336.77049 | 2090464.95625 |
| 1721 | 1692.52 | 86.03 | 11.00 | 14.00 | 6022337.32170 | 2090464.39487 |
| 1722 | 1790.55 | 114.03 | 15.00 | 11.00 | 6022337.54983 | 2090464.14195 |
| 1723 | 1779.45 | 106.03 | 15.00 | 11.00 | 6022338.40244 | 2090463.46108 |
| 1724 | 1653.59 | 97.03 | 18.01 | 5.00 | 6022339.64356 | 2090462.23341 |
| 1725 | 1654.84 | 105.05 | 12.01 | 7.00 | 6022340.48397 | 2090461.44091 |
| 1726 | 1710.18 | 100.01 | 16.00 | 7.00 | 6022340.76305 | 2090461.14992 |
| 1727 | 1744.44 | 107.03 | 19.00 | 12.00 | 6022341.20917 | 2090460.67875 |
| 1728 | 1741.71 | 75.03 | 16.01 | 8.00 | 6022342.05620 | 2090459.78784 |
| 1729 | 1693.52 | 112.03 | 22.01 | 14.00 | 6022343.10567 | 2090458.79229 |
| 1730 | 1776.72 | 115.05 | 25.01 | 13.01 | 6022343.73253 | 2090458.15317 |
| 1731 | 1817.92 | 101.05 | 18.01 | 6.00 | 6022344.41519 | 2090457.47910 |
| 1732 | 1846.75 | 114.05 | 13.01 | 7.00 | 6022345.30037 | 2090456.52002 |
| 1733 | 1734.27 | 122.02 | 18.00 | 10.00 | 6022346.83621 | 2090455.08705 |
| 1734 | 1838.65 | 111.04 | 22.01 | 6.00 | 6022348.08960 | 2090453.63576 |
| 1735 | 1820.56 | 105.03 | 14.00 | 15.00 | 6022348.95103 | 2090452.74498 |
| 1736 | 1959.21 | 129.01 | 21.00 | 7.00 | 6022349.58037 | 2090452.04137 |
| 1737 | 1892.39 | 118.02 | 22.00 | 12.00 | 6022350.55553 | 2090450.82217 |
| 1738 | 1874.38 | 116.02 | 18.00 | 15.00 | 6022351.12091 | 2090449.76806 |
| 1739 | 1940.88 | 128.06 | 28.01 | 7.00 | 6022351.36797 | 2090449.17568 |
| 1740 | 1826.47 | 104.03 | 19.00 | 9.00 | 6022351.61545 | 2090448.10174 |
| 1741 | 1804.55 | 116.04 | 23.01 | 12.00 | 6022351.93187 | 2090446.17101 |
| 1742 | 1825.74 | 106.04 | 18.01 | 13.01 | 6022351.90600 | 2090444.72407 |
| 1743 | 1851.47 | 104.03 | 19.00 | 15.00 | 6022351.83896 | 2090444.49294 |
| 1744 | 1759.54 | 106.03 | 17.01 | 8.00 | 6022351.67700 | 2090443.56681 |
| 1745 | 1725.09 | 84.00 | 19.00 | 11.00 | 6022350.93599 | 2090441.71268 |
| 1746 | 1820.47 | 118.03 | 24.01 | 6.00 | 6022349.99616 | 2090439.94289 |
| 1747 | 1752.71 | 107.04 | 16.01 | 11.00 | 6022348.86078 | 2090438.71424 |
| 1748 | 1735.27 | 110.02 | 14.00 | 4.00 | 6022347.98860 | 2090437.93335 |
| 1749 | 1770.63 | 99.04 | 18.01 | 12.00 | 6022346.90887 | 2090437.23469 |
| 1750 | 1686.01 | 115.00 | 14.00 | 14.00 | 6022345.23250 | 2090436.32759 |
| 1751 | 1803.46 | 122.03 | 16.00 | 10.00 | 6022343.53372 | 2090435.91331 |
| 1752 | 1895.48 | 111.03 | 28.01 | 12.00 | 6022342.22812 | 2090435.86171 |
| 1753 | 2086.43 | 134.03 | 22.00 | 6.00 | 6022340.68493 | 2090435.93426 |
| 1754 | 2113.33 | 133.02 | 17.00 | 13.00 | 6022338.78264 | 2090436.09882 |
| 1755 | 2125.65 | 124.04 | 22.01 | 19.01 | 6022337.76497 | 2090436.24039 |
| 1756 | 2040.72 | 120.04 | 22.01 | 14.00 | 6022336.82459 | 2090436.46454 |
| 1757 | 1812.55 | 96.03 | 17.01 | 6.00 | 6022335.81571 | 2090436.94289 |
| 1758 | 1788.46 | 119.03 | 21.01 | 7.00 | 6022334.14378 | 2090437.56055 |
| 1759 | 1823.28 | 105.02 | 20.00 | 12.00 | 6022332.76365 | 2090438.08554 |
| 1760 | 1801.37 | 129.03 | 16.00 | 12.00 | 6022331.82332 | 2090438.51942 |
| 1761 | 1902.29 | 106.02 | 29.00 | 18.00 | 6022330.89782 | 2090438.92669 |
| 1762 | 1830.28 | 108.02 | 22.00 | 13.00 | 6022330.14200 | 2090439.40035 |
| 1763 | 1870.38 | 118.02 | 19.00 | 12.00 | 6022329.15596 | 2090439.87593 |
| 1764 | 1967.99 | 125.06 | 21.01 | 12.01 | 6022328.36467 | 2090440.35470 |
| 1765 | 1953.89 | 110.05 | 27.01 | 15.01 | 6022327.79275 | 2090440.73359 |
| 1766 | 1916.49 | 114.03 | 16.00 | 12.00 | 6022326.49708 | 2090441.53477 |
| 1767 | 1861.47 | 109.03 | 16.00 | 14.00 | 6022324.54362 | 2090442.58220 |
| 1768 | 1729.62 | 109.04 | 25.01 | 9.00 | 6022322.96295 | 2090443.62719 |
| 1769 | 1686.68 | 94.04 | 17.01 | 13.01 | 6022321.68846 | 2090444.51131 |
| 1770 | 1739.44 | 111.03 | 21.01 | 4.00 | 6022320.55943 | 2090445.27407 |
| 1771 | 1840.56 | 104.03 | 15.00 | 9.00 | 6022318.98061 | 2090446.37680 |
| 1772 | 1877.76 | 147.06 | 24.01 | 18.01 | 6022317.71468 | 2090447.24770 |
| 1773 | 1958.30 | 117.02 | 23.00 | 8.00 | 6022316.83505 | 2090447.75708 |
| 1774 | 2050.52 | 129.03 | 24.01 | 13.00 | 6022316.38127 | 2090448.12690 |
| 1775 | 1975.50 | 109.03 | 27.01 | 8.00 | 6022315.61667 | 2090448.71714 |
| 1776 | 2004.31 | 121.08 | 29.02 | 13.01 | 6022314.78768 | 2090449.34271 |
| 1777 | 2004.51 | 106.03 | 20.01 | 12.00 | 6022313.76580 | 2090450.01905 |
| 1778 | 1919.78 | 109.04 | 12.00 | 14.01 | 6022312.74968 | 2090450.79249 |
| 1779 | 1894.86 | 98.04 | 24.01 | 18.01 | 6022311.39335 | 2090451.79111 |
| 1780 | 1818.92 | 120.06 | 23.01 | 12.01 | 6022309.83751 | 2090452.94894 |
| 1781 | 1898.48 | 113.03 | 21.01 | 12.00 | 6022308.54202 | 2090453.78229 |
| 1782 | 1954.20 | 120.01 | 26.00 | 14.00 | 6022308.08441 | 2090454.11086 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1783 | 1921.78 | 137.06 | 15.01 | 15.01 | 6022306.32555 | 2090455.35297 |
| 1784 | 1875.57 | 107.03 | 21.01 | 15.00 | 6022304.28968 | 2090456.80785 |
| 1785 | 1868.66 | 131.05 | 20.01 | 14.00 | 6022303.36765 | 2090457.44006 |
| 1786 | 1845.19 | 107.01 | 23.00 | 11.00 | 6022302.34269 | 2090458.13878 |
| 1787 | 1759.80 | 107.05 | 15.01 | 10.00 | 6022300.79149 | 2090459.17882 |
| 1788 | 1744.62 | 119.04 | 18.01 | 9.00 | 6022299.50623 | 2090459.96363 |
| 1789 | 1720.53 | 110.03 | 18.01 | 14.00 | 6022298.90980 | 2090460.36702 |
| 1790 | 1719.61 | 119.04 | 19.01 | 12.00 | 6022297.97495 | 2090461.02085 |
| 1791 | 1750.15 | 119.08 | 22.01 | 15.01 | 6022296.30039 | 2090462.17649 |
| 1792 | 1795.91 | 97.05 | 21.01 | 14.01 | 6022295.00236 | 2090463.15183 |
| 1793 | 1854.47 | 131.03 | 19.00 | 10.00 | 6022294.71832 | 2090463.35188 |
| 1794 | 1808.73 | 103.04 | 14.01 | 20.01 | 6022293.91230 | 2090463.95444 |
| 1795 | 1820.65 | 123.04 | 18.01 | 13.00 | 6022292.62413 | 2090464.95691 |
| 1796 | 1729.61 | 82.03 | 19.01 | 12.00 | 6022291.49311 | 2090465.91105 |
| 1797 | 1793.35 | 99.07 | 20.02 | 6.00 | 6022290.31867 | 2090467.21256 |
| 1798 | 1737.36 | 102.02 | 17.00 | 8.00 | 6022289.12088 | 2090468.84631 |
| 1799 | 1836.47 | 116.03 | 17.00 | 9.00 | 6022288.58600 | 2090469.86247 |
| 1800 | 1852.29 | 110.02 | 24.00 | 6.00 | 6022288.13880 | 2090470.76320 |
| 1801 | 1794.64 | 109.04 | 25.01 | 8.00 | 6022287.50843 | 2090472.37812 |
| 1802 | 1955.60 | 117.04 | 14.00 | 9.00 | 6022287.19671 | 2090473.67379 |
| 1803 | 1859.47 | 125.03 | 21.01 | 11.00 | 6022287.07919 | 2090474.41600 |
| 1804 | 1812.55 | 121.04 | 18.01 | 11.00 | 6022287.02108 | 2090475.46856 |
| 1805 | 1796.91 | 119.06 | 14.01 | 16.01 | 6022287.06241 | 2090476.76257 |
| 1806 | 1848.29 | 104.02 | 11.00 | 11.00 | 6022287.15932 | 2090477.80328 |
| 1807 | 1793.00 | 114.06 | 21.01 | 11.01 | 6022287.27883 | 2090478.60879 |
| 1808 | 1865.32 | 110.08 | 17.01 | 14.01 | 6022287.49166 | 2090479.56909 |
| 1809 | 1872.66 | 118.04 | 24.01 | 10.00 | 6022288.11385 | 2090481.45239 |
| 1810 | 1780.72 | 118.05 | 21.01 | 9.00 | 6022288.93667 | 2090483.11298 |
| 1811 | 1713.52 | 105.03 | 20.01 | 16.00 | 6022289.56913 | 2090483.88610 |
| 1812 | 1817.92 | 100.05 | 21.01 | 12.01 | 6022289.98013 | 2090484.32333 |
| 1813 | 1815.19 | 108.01 | 14.00 | 11.00 | 6022290.67587 | 2090485.05443 |
| 1814 | 1869.57 | 140.04 | 17.01 | 8.00 | 6022292.05700 | 2090486.24622 |
| 1815 | 1780.45 | 96.02 | 17.00 | 12.00 | 6022293.41842 | 2090486.92511 |
| 1816 | 1807.82 | 99.05 | 19.01 | 14.01 | 6022294.81569 | 2090487.60199 |
| 1817 | 1729.61 | 113.04 | 11.00 | 6.00 | 6022296.16821 | 2090488.13770 |
| 1818 | 1791.82 | 117.05 | 13.01 | 12.01 | 6022297.05136 | 2090488.17528 |
| 1819 | 1912.49 | 129.03 | 27.01 | 9.00 | 6022298.25767 | 2090488.33221 |
| 1820 | 1888.76 | 114.05 | 17.01 | 15.01 | 6022299.97817 | 2090488.15746 |
| 1821 | 1894.05 | 111.06 | 15.01 | 15.01 | 6022301.27222 | 2090487.81197 |
| 1822 | 1907.68 | 129.05 | 14.00 | 11.00 | 6022302.08481 | 2090487.39355 |
| 1823 | 2007.41 | 115.02 | 21.00 | 11.00 | 6022303.66102 | 2090486.63373 |
| 1824 | 1988.51 | 117.03 | 30.01 | 9.00 | 6022304.96680 | 2090486.00025 |
| 1825 | 2011.61 | 150.05 | 20.01 | 11.00 | 6022305.86857 | 2090485.35526 |
| 1826 | 1977.10 | 146.08 | 23.01 | 15.01 | 6022306.39696 | 2090484.93922 |
| 1827 | 1934.98 | 133.07 | 20.01 | 13.01 | 6022306.85428 | 2090484.65644 |
| 1828 | 1929.59 | 114.03 | 25.01 | 10.00 | 6022307.82110 | 2090484.06688 |
| 1829 | 1889.76 | 119.05 | 14.01 | 16.01 | 6022308.92340 | 2090483.44848 |
| 1830 | 1924.40 | 130.03 | 15.00 | 11.00 | 6022310.05832 | 2090482.79027 |
| 1831 | 1917.49 | 118.03 | 17.00 | 11.00 | 6022311.00115 | 2090482.17892 |
| 1832 | 1865.66 | 137.05 | 17.01 | 12.00 | 6022311.62837 | 2090481.77108 |
| 1833 | 1859.57 | 106.03 | 16.00 | 20.01 | 6022312.67945 | 2090481.04719 |
| 1834 | 1792.73 | 109.04 | 15.01 | 9.00 | 6022313.96592 | 2090480.04895 |
| 1835 | 1704.95 | 104.06 | 22.01 | 10.01 | 6022315.24663 | 2090479.13818 |
| 1836 | 1857.57 | 107.03 | 22.01 | 10.00 | 6022316.24287 | 2090478.43852 |
| 1837 | 1752.45 | 109.03 | 17.00 | 12.00 | 6022317.48362 | 2090477.60606 |
| 1838 | 1770.45 | 115.03 | 15.00 | 12.00 | 6022318.63561 | 2090476.61655 |
| 1839 | 1762.54 | 111.03 | 22.01 | 8.00 | 6022319.63175 | 2090475.90386 |
| 1840 | 1731.27 | 98.02 | 21.00 | 7.00 | 6022320.19969 | 2090475.44754 |
| 1841 | 1754.62 | 119.04 | 16.01 | 12.00 | 6022321.06137 | 2090474.74929 |
| 1842 | 1644.67 | 91.04 | 17.01 | 9.00 | 6022322.61391 | 2090473.56145 |
| 1843 | 1713.18 | 112.01 | 14.00 | 10.00 | 6022324.21499 | 2090472.36446 |
| 1844 | 1691.35 | 115.02 | 15.00 | 13.00 | 6022324.64812 | 2090471.98680 |
| 1845 | 1742.27 | 117.02 | 15.00 | 11.00 | 6022324.63901 | 2090471.99109 |
| 1846 | 1677.68 | 112.05 | 18.01 | 13.01 | 6022325.00849 | 2090471.64278 |
| 1847 | 1659.51 | 108.03 | 20.01 | 11.00 | 6022326.31829 | 2090470.71088 |
| 1848 | 1674.51 | 102.03 | 16.00 | 9.00 | 6022328.04207 | 2090469.21626 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1849 | 1670.59 | 104.04 | 23.01 | 10.00 | 6022329.76768 | 2090467.88760 |
| 1850 | 1725.70 | 105.04 | 21.01 | 6.00 | 6022331.01531 | 2090466.87497 |
| 1851 | 1676.26 | 102.02 | 9.00 | 8.00 | 6022332.09746 | 2090465.95237 |
| 1852 | 1724.70 | 86.03 | 14.01 | 19.01 | 6022332.61346 | 2090465.53132 |
| 1853 | 1734.70 | 103.04 | 14.01 | 12.00 | 6022333.71753 | 2090464.48429 |
| 1854 | 1817.83 | 112.05 | 18.01 | 14.01 | 6022334.99359 | 2090463.42748 |
| 1855 | 1836.74 | 121.05 | 20.01 | 11.00 | 6022335.80603 | 2090462.83289 |
| 1856 | 1641.01 | 98.00 | 13.00 | 17.00 | 6022336.53403 | 2090462.14856 |
| 1857 | 1715.61 | 112.04 | 11.00 | 10.00 | 6022337.55595 | 2090461.25481 |
| 1858 | 1712.04 | 135.08 | 21.01 | 9.01 | 6022338.66080 | 2090460.25557 |
| 1859 | 1642.34 | 101.02 | 14.00 | 7.00 | 6022339.16656 | 2090459.75322 |
| 1860 | 1772.63 | 109.04 | 24.01 | 13.00 | 6022339.87000 | 2090459.12529 |
| 1861 | 1772.36 | 98.02 | 23.00 | 14.00 | 6022341.25905 | 2090457.93809 |
| 1862 | 1790.82 | 112.05 | 16.01 | 8.00 | 6022341.88689 | 2090457.37564 |
| 1863 | 1847.38 | 122.02 | 19.00 | 9.00 | 6022342.37032 | 2090456.93772 |
| 1864 | 1833.56 | 127.04 | 26.01 | 18.01 | 6022343.72963 | 2090455.70138 |
| 1865 | 1935.59 | 121.04 | 23.01 | 17.01 | 6022344.98188 | 2090454.51561 |
| 1866 | 1898.58 | 116.04 | 27.01 | 9.00 | 6022345.70555 | 2090453.96891 |
| 1867 | 1854.57 | 118.04 | 29.01 | 6.00 | 6022346.78360 | 2090453.05490 |
| 1868 | 1933.78 | 137.06 | 20.01 | 11.00 | 6022347.99763 | 2090451.79790 |
| 1869 | 1926.07 | 124.07 | 18.01 | 15.01 | 6022348.95807 | 2090450.63847 |
| 1870 | 1922.59 | 108.03 | 29.01 | 16.00 | 6022349.88499 | 2090449.23346 |
| 1871 | 1872.57 | 113.03 | 24.01 | 14.00 | 6022350.45258 | 2090447.75327 |
| 1872 | 1836.19 | 123.01 | 11.00 | 16.00 | 6022350.81384 | 2090446.27435 |
| 1873 | 1893.39 | 94.02 | 18.00 | 13.00 | 6022350.88670 | 2090444.60217 |
| 1874 | 1767.72 | 91.04 | 28.01 | 7.00 | 6022350.54496 | 2090442.90979 |
| 1875 | 1833.74 | 108.04 | 11.00 | 9.00 | 6022349.85765 | 2090441.25171 |
| 1876 | 1861.76 | 115.05 | 17.01 | 7.00 | 6022348.69151 | 2090439.61740 |
| 1877 | 1780.54 | 107.03 | 18.01 | 11.00 | 6022347.31844 | 2090438.52944 |
| 1878 | 1718.70 | 97.04 | 14.01 | 7.00 | 6022345.95467 | 2090437.68140 |
| 1879 | 1779.45 | 89.02 | 21.01 | 10.00 | 6022344.51319 | 2090437.27269 |
| 1880 | 1810.73 | 125.05 | 20.01 | 7.00 | 6022343.45958 | 2090437.11387 |
| 1881 | 1862.85 | 116.05 | 12.01 | 11.01 | 6022342.24698 | 2090437.08510 |
| 1882 | 1909.49 | 111.03 | 21.01 | 11.00 | 6022340.24666 | 2090437.49695 |
| 1883 | 1768.72 | 115.05 | 15.01 | 8.00 | 6022338.62824 | 2090438.46773 |
| 1884 | 1723.35 | 96.02 | 16.00 | 14.00 | 6022337.38937 | 2090439.61033 |
| 1885 | 1654.34 | 93.02 | 11.00 | 8.00 | 6022336.25163 | 2090440.92381 |
| 1886 | 1657.26 | 90.01 | 18.00 | 8.00 | 6022335.24465 | 2090442.24430 |
| 1887 | 1819.74 | 99.04 | 26.01 | 10.00 | 6022334.51400 | 2090443.26499 |
| 1888 | 1846.03 | 107.06 | 15.01 | 17.01 | 6022334.07621 | 2090444.25467 |
| 1889 | 1912.25 | 117.08 | 12.01 | 15.01 | 6022333.98849 | 2090444.61853 |
| 1890 | 2087.06 | 120.06 | 19.01 | 11.01 | 6022333.71806 | 2090445.72673 |
| 1891 | 2072.84 | 135.05 | 18.01 | 13.01 | 6022333.61311 | 2090446.16484 |
| 1892 | 1980.70 | 129.05 | 25.01 | 9.00 | 6022333.58421 | 2090446.51461 |
| 1893 | 2024.82 | 124.05 | 14.01 | 11.00 | 6022333.41178 | 2090447.58144 |
| 1894 | 1855.03 | 124.07 | 17.01 | 16.01 | 6022333.41647 | 2090447.64915 |
| 1895 | 1907.58 | 96.03 | 28.01 | 12.00 | 6022333.35551 | 2090448.16844 |
| 1896 | 1874.48 | 127.03 | 19.00 | 13.00 | 6022333.37345 | 2090448.73594 |
| 1897 | 1758.63 | 119.04 | 18.01 | 8.00 | 6022333.34059 | 2090449.91540 |
| 1898 | 1772.27 | 107.02 | 11.00 | 17.00 | 6022333.49608 | 2090451.84609 |
| 1899 | 1881.67 | 132.05 | 14.00 | 18.01 | 6022333.92278 | 2090453.53173 |
| 1900 | 1905.87 | 100.05 | 16.01 | 14.01 | 6022334.31833 | 2090454.72561 |
| 1901 | 1903.96 | 121.06 | 28.01 | 9.00 | 6022334.39566 | 2090455.08765 |
| 1902 | 1929.49 | 133.03 | 18.00 | 12.00 | 6022334.55987 | 2090455.60536 |
| 1903 | 1842.38 | 127.03 | 17.00 | 12.00 | 6022335.09027 | 2090457.38938 |
| 1904 | 1878.39 | 124.03 | 30.01 | 6.00 | 6022335.77366 | 2090459.43226 |
| 1905 | 1728.27 | 84.01 | 19.00 | 12.00 | 6022336.56827 | 2090461.03569 |
| 1906 | 1614.90 | 129.07 | 12.01 | 8.00 | 6022337.34750 | 2090462.67016 |
| 1907 | 1769.18 | 93.01 | 18.00 | 17.00 | 6022337.94187 | 2090464.47039 |
| 1908 | 1805.82 | 86.04 | 17.01 | 10.00 | 6022338.26390 | 2090465.92778 |
| 1909 | 1745.45 | 109.03 | 20.01 | 13.00 | 6022338.54609 | 2090466.97922 |
| 1910 | 1845.03 | 122.07 | 14.01 | 5.00 | 6022338.45895 | 2090468.21694 |
| 1911 | 1752.71 | 128.05 | 19.01 | 3.00 | 6022338.38178 | 2090469.72043 |
| 1912 | 1724.53 | 113.03 | 14.00 | 11.00 | 6022338.08428 | 2090470.60983 |
| 1913 | 1646.58 | 101.04 | 16.01 | 11.00 | 6022337.58214 | 2090471.67983 |
| 1914 | 1613.17 | 102.01 | 8.00 | 8.00 | 6022336.40297 | 2090473.03758 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1915 | 1685.60 | 116.04 | 19.01 | 12.00 | 6022334.56292 | 2090474.49576 |
| 1916 | 1660.59 | 93.03 | 22.01 | 15.01 | 6022332.89597 | 2090475.29606 |
| 1917 | 1721.53 | 104.03 | 19.01 | 8.00 | 6022331.29805 | 2090475.50403 |
| 1918 | 1710.27 | 99.02 | 20.00 | 9.00 | 6022329.75011 | 2090475.24188 |
| 1919 | 1756.36 | 103.02 | 30.01 | 15.00 | 6022328.76106 | 2090475.27976 |
| 1920 | 1668.76 | 103.05 | 11.01 | 16.01 | 6022328.63882 | 2090475.26346 |
| 1921 | 1769.89 | 105.05 | 16.01 | 12.01 | 6022327.94117 | 2090475.03582 |
| 1922 | 1770.45 | 119.03 | 18.00 | 9.00 | 6022326.30928 | 2090473.75985 |
| 1923 | 1693.69 | 94.04 | 19.01 | 8.00 | 6022324.94072 | 2090472.48054 |
| 1924 | 1715.44 | 97.02 | 18.00 | 9.00 | 6022324.39928 | 2090471.31880 |
| 1925 | 1656.34 | 100.02 | 14.00 | 10.00 | 6022323.96856 | 2090470.47062 |
| 1926 | 1718.18 | 110.01 | 15.00 | 12.00 | 6022323.67952 | 2090468.90191 |
| 1927 | 1758.36 | 111.02 | 19.00 | 8.00 | 6022323.78532 | 2090467.65712 |
| 1928 | 1665.68 | 111.05 | 19.01 | 6.00 | 6022323.81649 | 2090467.59183 |
| 1929 | 1686.18 | 110.01 | 17.00 | 15.00 | 6022323.93377 | 2090466.78757 |
| 1930 | 1760.45 | 109.03 | 15.00 | 8.00 | 6022324.05111 | 2090465.20319 |
| 1931 | 1680.34 | 97.02 | 19.00 | 10.00 | 6022323.97012 | 2090464.63783 |
| 1932 | 1620.25 | 85.01 | 24.00 | 8.00 | 6022323.96663 | 2090464.61250 |
| 1933 | 1692.26 | 105.02 | 21.00 | 7.00 | 6022323.95616 | 2090464.59539 |
| 1934 | 1629.74 | 91.04 | 23.01 | 9.00 | 6022323.94085 | 2090464.58422 |
| 1935 | 1665.26 | 93.01 | 12.00 | 5.00 | 6022323.87574 | 2090463.79718 |
| 1936 | 1643.25 | 87.01 | 12.00 | 9.00 | 6022323.73970 | 2090462.50878 |
| 1937 | 1606.73 | 112.05 | 14.01 | 8.00 | 6022323.47605 | 2090461.91055 |
| 1938 | 1625.42 | 98.03 | 12.00 | 11.00 | 6022323.53201 | 2090462.01967 |
| 1939 | 1690.26 | 105.02 | 20.00 | 7.00 | 6022323.25151 | 2090461.30197 |
| 1940 | 1705.43 | 114.03 | 15.00 | 10.00 | 6022322.69651 | 2090460.03230 |
| 1941 | 1734.36 | 106.02 | 20.00 | 5.00 | 6022322.24921 | 2090459.00659 |
| 1942 | 1772.36 | 105.02 | 21.00 | 12.00 | 6022321.55676 | 2090457.86389 |
| 1943 | 1729.53 | 129.04 | 14.00 | 8.00 | 6022320.06073 | 2090456.30906 |
| 1944 | 1707.69 | 100.04 | 14.01 | 11.00 | 6022318.07145 | 2090455.19315 |
| 1945 | 1851.66 | 116.04 | 21.01 | 17.01 | 6022315.83330 | 2090454.61604 |
| 1946 | 1762.24 | 112.08 | 15.01 | 6.00 | 6022313.60971 | 2090454.80139 |
| 1947 | 1888.95 | 114.06 | 16.01 | 11.01 | 6022311.40942 | 2090455.46741 |
| 1948 | 1879.39 | 118.02 | 14.00 | 9.00 | 6022309.20411 | 2090456.51960 |
| 1949 | 1804.64 | 108.04 | 18.01 | 8.00 | 6022307.10976 | 2090457.92610 |
| 1950 | 1687.68 | 115.05 | 16.01 | 6.00 | 6022304.94441 | 2090459.59822 |
| 1951 | 1635.91 | 117.07 | 16.01 | 11.01 | 6022302.81124 | 2090461.10654 |
| 1952 | 1572.80 | 90.05 | 16.01 | 7.00 | 6022300.98603 | 2090462.65849 |
| 1953 | 1645.34 | 98.02 | 25.01 | 9.00 | 6022299.41950 | 2090463.84073 |
| 1954 | 1582.56 | 98.03 | 8.00 | 10.00 | 6022297.74912 | 2090465.16235 |
| 1955 | 1716.04 | 104.06 | 17.01 | 10.01 | 6022296.22069 | 2090466.30813 |
| 1956 | 1810.55 | 106.03 | 22.01 | 12.00 | 6022294.93429 | 2090467.21397 |
| 1957 | 1690.52 | 67.02 | 15.00 | 10.00 | 6022293.23445 | 2090468.28512 |
| 1958 | 1720.78 | 98.04 | 18.01 | 11.01 | 6022291.34199 | 2090469.54364 |
| 1959 | 1835.56 | 122.04 | 19.01 | 11.00 | 6022289.99547 | 2090470.91859 |
| 1960 | 1843.47 | 111.03 | 22.01 | 13.00 | 6022288.86243 | 2090472.46075 |
| 1961 | 1870.48 | 137.03 | 23.01 | 15.00 | 6022287.87289 | 2090474.94136 |
| 1962 | 1737.44 | 108.03 | 14.00 | 7.00 | 6022287.87699 | 2090477.13683 |
| 1963 | 1773.81 | 120.05 | 18.01 | 9.00 | 6022288.35199 | 2090478.95541 |
| 1964 | 1818.28 | 113.02 | 22.00 | 11.00 | 6022288.97366 | 2090480.17206 |
| 1965 | 1745.62 | 117.04 | 17.01 | 11.00 | 6022290.05001 | 2090481.55229 |
| 1966 | 1761.63 | 84.03 | 20.01 | 7.00 | 6022291.80940 | 2090482.96364 |
| 1967 | 1762.16 | 117.08 | 26.02 | 11.01 | 6022293.11939 | 2090483.58698 |
| 1968 | 1804.64 | 108.04 | 12.00 | 16.01 | 6022294.34473 | 2090484.00774 |
| 1969 | 1801.73 | 112.05 | 29.01 | 9.00 | 6022295.59664 | 2090484.37883 |
| 1970 | 1958.89 | 140.06 | 15.01 | 12.01 | 6022297.55488 | 2090484.59656 |
| 1971 | 1983.30 | 112.07 | 34.02 | 12.01 | 6022299.51353 | 2090484.60892 |
| 1972 | 1999.51 | 123.03 | 17.00 | 7.00 | 6022301.04344 | 2090484.42181 |
| 1973 | 2054.63 | 145.04 | 21.01 | 10.00 | 6022303.07356 | 2090484.00967 |
| 1974 | 1993.51 | 118.03 | 31.01 | 11.00 | 6022304.56969 | 2090483.45542 |
| 1975 | 2074.05 | 150.08 | 12.01 | 8.00 | 6022304.98412 | 2090483.23742 |
| 1976 | 2012.61 | 125.04 | 26.01 | 13.00 | 6022305.58047 | 2090482.95497 |
| 1977 | 1918.30 | 116.02 | 23.00 | 15.00 | 6022307.08096 | 2090482.25636 |
| 1978 | 1898.77 | 114.05 | 19.01 | 8.00 | 6022308.80485 | 2090481.49018 |
| 1979 | 1907.68 | 111.04 | 16.01 | 10.00 | 6022309.69177 | 2090481.06417 |
| 1980 | 1902.34 | 108.08 | 33.02 | 20.01 | 6022310.27934 | 2090480.72628 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 1981 | 1860.94 | 112.06 | 29.01 | 15.01 | 6022310.95918 | 2090480.33190 |
| 1982 | 1829.38 | 106.02 | 27.01 | 5.00 | 6022312.32336 | 2090479.56734 |
| 1983 | 1837.38 | 130.03 | 16.00 | 9.00 | 6022313.72993 | 2090478.57343 |
| 1984 | 1771.99 | 116.06 | 17.01 | 10.01 | 6022314.39129 | 2090478.15713 |
| 1985 | 1784.28 | 104.02 | 23.00 | 7.00 | 6022314.36974 | 2090478.18808 |
| 1986 | 1844.75 | 124.05 | 15.01 | 12.00 | 6022315.11828 | 2090477.74269 |
| 1987 | 1831.65 | 123.04 | 17.01 | 7.00 | 6022316.75257 | 2090476.74254 |
| 1988 | 1754.89 | 108.05 | 22.01 | 11.01 | 6022317.70090 | 2090475.98308 |
| 1989 | 1678.68 | 111.04 | 12.00 | 8.00 | 6022318.75128 | 2090475.15859 |
| 1990 | 1678.68 | 117.05 | 19.01 | 12.00 | 6022319.95937 | 2090474.25082 |
| 1991 | 1721.53 | 102.03 | 19.01 | 13.00 | 6022320.60989 | 2090473.74660 |
| 1992 | 1800.91 | 112.06 | 26.01 | 13.01 | 6022321.35084 | 2090473.11381 |
| 1993 | 1672.43 | 102.03 | 17.00 | 13.00 | 6022322.57662 | 2090472.19051 |
| 1994 | 1685.69 | 107.04 | 20.01 | 13.01 | 6022324.16913 | 2090470.71939 |
| 1995 | 1707.35 | 99.02 | 11.00 | 9.00 | 6022325.52977 | 2090469.77862 |
| 1996 | 1647.26 | 99.02 | 16.00 | 16.00 | 6022326.64971 | 2090468.89143 |
| 1997 | 1654.34 | 113.02 | 17.00 | 5.00 | 6022327.48522 | 2090468.25600 |
| 1998 | 1666.76 | 85.04 | 13.01 | 16.01 | 6022327.94745 | 2090467.84765 |
| 1999 | 1709.35 | 107.02 | 14.00 | 8.00 | 6022328.95722 | 2090467.02475 |
| 2000 | 1672.84 | 105.05 | 13.01 | 8.00 | 6022330.67822 | 2090465.62021 |
| 2001 | 1720.44 | 115.03 | 20.01 | 10.00 | 6022332.23400 | 2090464.43359 |
| 2002 | 1661.51 | 109.03 | 22.01 | 6.00 | 6022333.41492 | 2090463.55670 |
| 2003 | 1739.36 | 111.02 | 12.00 | 15.00 | 6022334.45824 | 2090462.72987 |
| 2004 | 1738.05 | 108.07 | 26.02 | 9.01 | 6022335.68310 | 2090461.81865 |
| 2005 | 1693.52 | 112.03 | 21.01 | 12.00 | 6022336.57870 | 2090461.09893 |
| 2006 | 1741.97 | 117.07 | 17.01 | 9.01 | 6022337.60529 | 2090460.33557 |
| 2007 | 1754.36 | 120.02 | 25.01 | 7.00 | 6022338.75355 | 2090459.40360 |
| 2008 | 1820.92 | 124.06 | 16.01 | 8.00 | 6022339.94904 | 2090458.44606 |
| 2009 | 1821.37 | 108.02 | 25.01 | 15.00 | 6022340.85445 | 2090457.68400 |
| 2010 | 1854.66 | 104.04 | 19.01 | 5.00 | 6022341.25452 | 2090457.31160 |
| 2011 | 1881.76 | 109.04 | 30.01 | 10.00 | 6022341.52236 | 2090457.12863 |
| 2012 | 1758.71 | 90.04 | 22.01 | 9.00 | 6022342.77683 | 2090456.19641 |
| 2013 | 1855.75 | 121.05 | 21.01 | 16.01 | 6022344.20972 | 2090455.08415 |
| 2014 | 1780.54 | 94.03 | 16.00 | 8.00 | 6022345.30126 | 2090454.35706 |
| 2015 | 1861.75 | 124.05 | 22.01 | 15.01 | 6022346.04006 | 2090453.80967 |
| 2016 | 1873.57 | 132.04 | 16.00 | 16.00 | 6022347.22390 | 2090452.72347 |
| 2017 | 1962.09 | 128.07 | 23.01 | 11.01 | 6022348.44326 | 2090451.37898 |
| 2018 | 1933.59 | 132.04 | 6.00 | 12.00 | 6022349.54128 | 2090449.35830 |
| 2019 | 1769.72 | 116.05 | 19.01 | 10.00 | 6022350.34725 | 2090447.22602 |
| 2020 | 1874.76 | 119.05 | 21.01 | 7.00 | 6022350.80895 | 2090444.97432 |
| 2021 | 1794.00 | 112.06 | 21.01 | 9.00 | 6022350.70775 | 2090442.54882 |
| 2022 | 1787.37 | 124.03 | 16.00 | 15.00 | 6022350.09399 | 2090440.24999 |
| 2023 | 1824.19 | 110.01 | 26.00 | 11.00 | 6022348.85665 | 2090438.12373 |
| 2024 | 1751.54 | 114.03 | 18.01 | 11.00 | 6022347.57565 | 2090436.78392 |
| 2025 | 1800.09 | 126.08 | 18.01 | 11.01 | 6022346.32599 | 2090435.78037 |
| 2026 | 1902.39 | 125.03 | 20.00 | 13.00 | 6022344.60498 | 2090434.85627 |
| 2027 | 1875.57 | 116.04 | 16.00 | 11.00 | 6022343.00455 | 2090434.39641 |
| 2028 | 1902.49 | 111.03 | 24.01 | 12.00 | 6022341.53824 | 2090434.04859 |
| 2029 | 1911.39 | 136.03 | 19.00 | 12.00 | 6022340.59743 | 2090433.95445 |
| 2030 | 1983.61 | 128.04 | 17.01 | 9.00 | 6022339.49385 | 2090433.90150 |
| 2031 | 1790.37 | 135.03 | 13.00 | 8.00 | 6022337.86912 | 2090434.15980 |
| 2032 | 1934.49 | 132.03 | 22.01 | 12.00 | 6022336.32604 | 2090434.58657 |
| 2033 | 1824.92 | 100.05 | 9.00 | 10.01 | 6022335.29633 | 2090435.15585 |
| 2034 | 1890.48 | 124.03 | 21.01 | 11.00 | 6022334.34828 | 2090435.62395 |
| 2035 | 1794.46 | 112.03 | 24.01 | 13.00 | 6022332.95046 | 2090436.49670 |
| 2036 | 1895.39 | 125.03 | 17.00 | 8.00 | 6022331.65403 | 2090437.27354 |
| 2037 | 1849.75 | 110.04 | 14.01 | 12.00 | 6022331.41166 | 2090437.41184 |
| 2038 | 1769.34 | 105.08 | 19.01 | 12.01 | 6022331.45913 | 2090437.36320 |
| 2039 | 1796.91 | 104.05 | 22.01 | 12.01 | 6022331.21995 | 2090437.50540 |
| 2040 | 1745.45 | 104.03 | 14.00 | 6.00 | 6022330.90951 | 2090437.68858 |
| 2041 | 1898.86 | 125.06 | 13.01 | 16.01 | 6022330.08797 | 2090438.35778 |
| 2042 | 1860.76 | 88.04 | 14.01 | 9.00 | 6022328.25881 | 2090439.63830 |
| 2043 | 1989.10 | 124.07 | 18.01 | 12.01 | 6022326.67188 | 2090440.80615 |
| 2044 | 1858.57 | 113.03 | 17.01 | 8.00 | 6022325.26898 | 2090441.68947 |
| 2045 | 1920.87 | 111.05 | 15.01 | 12.01 | 6022324.01561 | 2090442.52490 |
| 2046 | 1846.75 | 111.05 | 16.01 | 17.01 | 6022323.06897 | 2090443.19248 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 2047 | 1828.47 | 114.03 | 23.01 | 10.00 | 6022322.16791 | 2090443.79200 |
| 2048 | 1813.74 | 125.05 | 28.01 | 9.00 | 6022321.99483 | 2090443.86660 |
| 2049 | 1829.65 | 105.04 | 21.01 | 21.01 | 6022322.03358 | 2090443.83523 |
| 2050 | 1761.72 | 102.04 | 18.01 | 8.00 | 6022322.04573 | 2090443.79019 |
| 2051 | 1779.54 | 106.03 | 19.01 | 11.00 | 6022322.05736 | 2090443.78403 |
| 2052 | 1725.70 | 95.04 | 22.01 | 11.00 | 6022321.74742 | 2090444.01119 |
| 2053 | 1760.15 | 108.07 | 22.01 | 12.01 | 6022321.12174 | 2090444.57003 |
| 2054 | 1778.45 | 114.03 | 25.01 | 13.00 | 6022319.57674 | 2090445.60184 |
| 2055 | 1984.51 | 116.03 | 20.01 | 14.00 | 6022317.52785 | 2090447.13518 |
| 2056 | 1962.70 | 110.04 | 24.01 | 10.00 | 6022315.35582 | 2090448.72930 |
| 2057 | 1973.50 | 108.03 | 28.01 | 14.00 | 6022313.70990 | 2090449.96026 |
| 2058 | 2000.01 | 115.06 | 19.01 | 8.00 | 6022312.46909 | 2090450.99386 |
| 2059 | 1924.68 | 130.05 | 22.01 | 14.00 | 6022311.09097 | 2090451.98621 |
| 2060 | 1886.86 | 117.05 | 19.01 | 16.01 | 6022309.53320 | 2090453.26864 |
| 2061 | 1833.56 | 114.03 | 21.01 | 9.00 | 6022308.16713 | 2090454.20897 |
| 2062 | 1892.67 | 132.05 | 21.01 | 9.00 | 6022306.59609 | 2090455.33357 |
| 2063 | 1908.68 | 120.04 | 22.01 | 13.00 | 6022305.01195 | 2090456.58739 |
| 2064 | 1838.65 | 106.04 | 21.01 | 15.01 | 6022303.42238 | 2090457.74434 |
| 2065 | 1740.44 | 95.02 | 18.00 | 9.00 | 6022301.54261 | 2090459.01832 |
| 2066 | 1820.65 | 113.04 | 20.01 | 13.00 | 6022299.76310 | 2090460.22450 |
| 2067 | 1763.45 | 110.03 | 26.01 | 11.00 | 6022298.54865 | 2090461.07797 |
| 2068 | 1775.54 | 112.03 | 15.00 | 13.00 | 6022298.43738 | 2090461.11465 |
| 2069 | 1733.27 | 103.02 | 19.00 | 8.00 | 6022298.44099 | 2090461.09478 |
| 2070 | 1826.56 | 102.03 | 17.01 | 11.00 | 6022298.45405 | 2090461.05792 |
| 2071 | 1754.33 | 107.08 | 17.01 | 11.01 | 6022298.44470 | 2090461.05383 |
| 2072 | 1740.44 | 122.03 | 14.00 | 9.00 | 6022298.44511 | 2090461.04878 |
| 2073 | 1816.55 | 108.03 | 14.00 | 9.00 | 6022298.44078 | 2090461.03822 |
| 2074 | 1779.54 | 100.03 | 25.01 | 8.00 | 6022298.22406 | 2090461.12997 |
| 2075 | 1764.16 | 102.07 | 21.01 | 9.01 | 6022297.13432 | 2090461.91217 |
| 2076 | 1911.49 | 114.03 | 26.01 | 14.00 | 6022295.39167 | 2090463.33463 |
| 2077 | 1882.76 | 116.05 | 20.01 | 8.00 | 6022293.58063 | 2090464.94214 |
| 2078 | 1827.47 | 98.03 | 16.00 | 13.00 | 6022291.57796 | 2090466.97732 |
| 2079 | 1799.46 | 107.03 | 25.01 | 13.00 | 6022289.91070 | 2090469.06982 |
| 2080 | 1833.65 | 123.04 | 21.01 | 14.00 | 6022288.87997 | 2090471.20389 |
| 2081 | 1769.36 | 117.02 | 15.00 | 15.00 | 6022288.13563 | 2090473.35220 |
| 2082 | 1865.66 | 112.04 | 27.01 | 14.00 | 6022287.93851 | 2090475.60347 |
| 2083 | 1816.37 | 133.03 | 18.00 | 6.00 | 6022288.16980 | 2090477.67279 |
| 2084 | 1828.47 | 115.03 | 16.00 | 12.00 | 6022288.70470 | 2090479.56461 |
| 2085 | 1850.57 | 110.03 | 17.01 | 11.00 | 6022289.24121 | 2090480.72323 |
| 2086 | 1771.54 | 109.03 | 15.00 | 10.00 | 6022289.39074 | 2090481.03467 |
| 2087 | 1821.28 | 120.02 | 23.00 | 13.00 | 6022289.52624 | 2090481.19374 |
| 2088 | 1735.70 | 123.05 | 15.01 | 12.00 | 6022290.36557 | 2090482.33039 |
| 2089 | 1822.46 | 121.03 | 24.01 | 11.00 | 6022292.33749 | 2090483.92652 |
| 2090 | 1741.71 | 107.04 | 23.01 | 12.00 | 6022295.09101 | 2090484.75194 |
| 2091 | 1945.40 | 104.02 | 25.01 | 11.00 | 6022298.04724 | 2090484.62213 |
| 2092 | 2017.41 | 122.03 | 21.00 | 15.00 | 6022299.99547 | 2090484.18895 |
| 2093 | 1956.40 | 99.02 | 18.00 | 8.00 | 6022301.03048 | 2090483.85017 |
| 2094 | 2039.93 | 118.05 | 20.01 | 14.01 | 6022300.98579 | 2090483.84729 |
| 2095 | 1984.00 | 130.07 | 20.01 | 12.01 | 6022300.97824 | 2090483.85269 |
| 2096 | 1958.60 | 105.03 | 15.00 | 12.00 | 6022301.98037 | 2090483.50547 |
| 2097 | 2050.32 | 138.02 | 12.00 | 17.00 | 6022304.30801 | 2090482.28374 |
| 2098 | 2087.26 | 116.07 | 26.02 | 8.00 | 6022306.33374 | 2090481.11854 |
| 2099 | 2037.52 | 126.03 | 22.01 | 15.00 | 6022306.24024 | 2090481.15761 |
| 2100 | 2043.14 | 131.07 | 22.01 | 15.01 | 6022305.68482 | 2090481.42639 |
| 2101 | 1965.89 | 120.05 | 21.01 | 11.01 | 6022306.14628 | 2090481.17331 |
| 2102 | 1980.71 | 144.05 | 29.01 | 17.01 | 6022306.54616 | 2090481.02292 |
| 2103 | 1987.51 | 108.03 | 17.00 | 17.00 | 6022307.75792 | 2090480.19017 |
| 2104 | 1907.35 | 92.06 | 20.01 | 6.00 | 6022309.53161 | 2090479.00212 |
| 2105 | 1868.94 | 116.06 | 13.01 | 15.01 | 6022310.39926 | 2090478.49366 |
| 2106 | 1856.03 | 105.06 | 13.01 | 6.00 | 6022311.58518 | 2090477.74496 |
| 2107 | 1892.77 | 125.05 | 29.01 | 13.01 | 6022313.58131 | 2090476.34728 |
| 2108 | 1824.02 | 109.06 | 15.01 | 11.01 | 6022315.33582 | 2090475.31133 |
| 2109 | 1765.71 | 104.04 | 19.01 | 6.00 | 6022316.53082 | 2090474.51630 |
| 2110 | 1705.61 | 99.04 | 22.01 | 15.01 | 6022317.80430 | 2090473.34784 |
| 2111 | 1734.62 | 108.04 | 18.01 | 10.00 | 6022319.11879 | 2090472.50787 |
| 2112 | 1803.73 | 98.04 | 17.01 | 10.00 | 6022319.90942 | 2090471.78926 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 2113 | 1693.60 | 104.04 | 20.01 | 7.00 | 6022321.27861 | 2090470.62352 |
| 2114 | 1714.04 | 94.06 | 11.01 | 7.00 | 6022322.83871 | 2090469.23386 |
| 2115 | 1737.27 | 94.01 | 8.00 | 16.00 | 6022324.00552 | 2090468.35814 |
| 2116 | 1606.33 | 103.02 | 16.00 | 10.00 | 6022324.78179 | 2090467.79061 |
| 2117 | 1675.18 | 104.01 | 25.00 | 8.00 | 6022325.98072 | 2090466.82640 |
| 2118 | 1590.64 | 97.04 | 26.01 | 6.00 | 6022327.44259 | 2090465.63731 |
| 2119 | 1644.17 | 120.01 | 15.00 | 9.00 | 6022328.94299 | 2090464.39359 |
| 2120 | 1651.50 | 120.04 | 20.01 | 9.00 | 6022329.91297 | 2090463.59479 |
| 2121 | 1790.73 | 112.05 | 13.01 | 18.01 | 6022330.21991 | 2090463.35666 |
| 2122 | 1703.78 | 102.05 | 14.01 | 8.00 | 6022330.19843 | 2090463.42991 |
| 2123 | 1674.34 | 111.02 | 14.00 | 10.00 | 6022330.19866 | 2090463.46348 |
| 2124 | 1712.52 | 104.03 | 21.01 | 11.00 | 6022330.19941 | 2090463.48307 |
| 2125 | 1674.43 | 112.03 | 21.01 | 10.00 | 6022330.19700 | 2090463.52760 |
| 2126 | 1655.42 | 123.03 | 17.00 | 4.00 | 6022330.18848 | 2090463.57055 |
| 2127 | 1674.76 | 94.04 | 19.01 | 13.01 | 6022330.15753 | 2090463.63288 |
| 2128 | 1568.24 | 92.01 | 20.00 | 8.00 | 6022330.15063 | 2090463.66378 |
| 2129 | 1702.69 | 117.05 | 17.01 | 11.00 | 6022329.64258 | 2090464.10626 |
| 2130 | 1653.51 | 107.03 | 19.01 | 10.00 | 6022327.94921 | 2090465.42214 |
| 2131 | 1649.75 | 96.04 | 12.01 | 12.01 | 6022325.89109 | 2090467.22084 |
| 2132 | 1758.54 | 131.04 | 10.00 | 8.00 | 6022324.85679 | 2090468.08264 |
| 2133 | 1697.26 | 119.02 | 9.00 | 12.00 | 6022324.96524 | 2090468.03698 |
| 2134 | 1700.86 | 107.05 | 17.01 | 5.00 | 6022325.25893 | 2090467.82054 |
| 2135 | 1703.44 | 97.02 | 25.01 | 9.00 | 6022325.66571 | 2090467.51381 |
| 2136 | 1714.27 | 105.02 | 25.00 | 9.00 | 6022325.76147 | 2090467.44537 |
| 2137 | 1592.57 | 99.04 | 23.01 | 4.00 | 6022326.29661 | 2090467.05122 |
| 2138 | 1715.69 | 98.04 | 15.01 | 6.00 | 6022327.82860 | 2090465.85454 |
| 2139 | 1640.83 | 91.05 | 14.01 | 8.00 | 6022329.57258 | 2090464.29694 |
| 2140 | 1661.34 | 113.02 | 18.00 | 15.00 | 6022330.71857 | 2090462.71874 |
| 2141 | 1827.56 | 110.03 | 22.01 | 9.00 | 6022331.41796 | 2090461.22227 |
| 2142 | 1861.66 | 132.05 | 8.00 | 14.00 | 6022331.61524 | 2090460.08626 |
| 2143 | 1852.57 | 114.03 | 18.01 | 7.00 | 6022331.65791 | 2090458.85917 |
| 2144 | 1827.01 | 94.05 | 10.01 | 9.00 | 6022331.65403 | 2090458.03506 |
| 2145 | 1845.75 | 117.05 | 18.01 | 8.00 | 6022331.63668 | 2090457.24535 |
| 2146 | 1842.56 | 131.04 | 20.01 | 8.00 | 6022331.26332 | 2090456.10563 |
| 2147 | 1787.64 | 110.04 | 16.01 | 10.00 | 6022330.31943 | 2090454.31559 |
| 2148 | 1721.87 | 109.06 | 15.01 | 12.01 | 6022328.98553 | 2090452.87287 |
| 2149 | 1636.17 | 95.01 | 21.00 | 5.00 | 6022327.32266 | 2090451.88672 |
| 2150 | 1712.35 | 115.02 | 23.00 | 10.00 | 6022325.82054 | 2090451.41876 |
| 2151 | 1705.18 | 111.01 | 26.00 | 15.00 | 6022325.43643 | 2090451.38433 |
| 2152 | 1766.27 | 110.02 | 11.00 | 17.00 | 6022324.83141 | 2090451.30590 |
| 2153 | 1711.44 | 113.03 | 18.00 | 16.00 | 6022322.96014 | 2090451.11683 |
| 2154 | 1645.67 | 90.04 | 12.00 | 12.00 | 6022320.79380 | 2090451.59304 |
| 2155 | 1760.24 | 115.08 | 16.01 | 11.01 | 6022319.58513 | 2090452.36892 |
| 2156 | 1862.66 | 115.04 | 24.01 | 8.00 | 6022318.66204 | 2090452.98662 |
| 2157 | 1845.02 | 99.06 | 16.01 | 14.01 | 6022318.03361 | 2090453.73926 |
| 2158 | 1856.66 | 119.04 | 8.00 | 16.01 | 6022317.44539 | 2090454.63356 |
| 2159 | 1769.72 | 98.04 | 24.01 | 16.01 | 6022316.88326 | 2090455.47263 |
| 2160 | 1762.98 | 105.06 | 17.01 | 10.01 | 6022316.49675 | 2090456.52454 |
| 2161 | 1842.56 | 117.04 | 24.01 | 10.00 | 6022316.27763 | 2090457.55305 |
| 2162 | 1828.56 | 121.04 | 13.00 | 13.00 | 6022315.88922 | 2090459.25035 |
| 2163 | 1977.80 | 109.04 | 25.01 | 15.01 | 6022315.40707 | 2090461.33731 |
| 2164 | 2036.93 | 140.06 | 26.01 | 7.00 | 6022315.04375 | 2090462.78164 |
| 2165 | 2041.83 | 111.04 | 22.01 | 17.01 | 6022314.53134 | 2090464.32607 |
| 2166 | 1981.90 | 146.07 | 20.01 | 13.01 | 6022313.46940 | 2090465.97119 |
| 2167 | 2040.62 | 131.04 | 23.01 | 11.00 | 6022312.74676 | 2090467.11911 |
| 2168 | 2028.62 | 124.04 | 24.01 | 12.00 | 6022312.05734 | 2090467.95002 |
| 2169 | 1928.46 | 135.10 | 19.01 | 7.01 | 6022311.44187 | 2090468.50828 |
| 2170 | 2007.71 | 114.04 | 16.01 | 15.01 | 6022310.91884 | 2090469.05914 |
| 2171 | 2025.82 | 131.05 | 19.01 | 15.01 | 6022309.85563 | 2090470.00496 |
| 2172 | 1842.75 | 100.04 | 17.01 | 6.00 | 6022308.87026 | 2090470.85493 |
| 2173 | 1957.60 | 104.03 | 24.01 | 11.00 | 6022307.74485 | 2090471.94820 |
| 2174 | 1980.81 | 136.06 | 22.01 | 18.01 | 6022306.66079 | 2090472.93671 |
| 2175 | 1912.87 | 118.05 | 23.01 | 13.01 | 6022305.63777 | 2090473.85399 |
| 2176 | 2002.91 | 116.05 | 25.01 | 15.01 | 6022304.77932 | 2090474.69175 |
| 2177 | 1988.41 | 132.03 | 12.00 | 11.00 | 6022304.02163 | 2090475.40392 |
| 2178 | 2009.82 | 148.06 | 12.00 | 16.01 | 6022303.98612 | 2090475.45485 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 2179 | 2009.81 | 110.04 | 18.01 | 6.00 | 6022304.02218 | 2090475.43456 |
| 2180 | 1991.51 | 143.04 | 27.01 | 16.00 | 6022304.02598 | 2090475.42081 |
| 2181 | 2062.04 | 128.06 | 23.01 | 4.00 | 6022304.13848 | 2090475.33491 |
| 2182 | 1889.58 | 140.04 | 20.01 | 15.00 | 6022304.71487 | 2090474.78505 |
| 2183 | 2041.54 | 125.09 | 23.02 | 20.02 | 6022305.47300 | 2090474.10878 |
| 2184 | 1926.59 | 119.04 | 31.01 | 12.00 | 6022307.05968 | 2090472.78373 |
| 2185 | 1974.80 | 123.05 | 15.01 | 9.00 | 6022308.66245 | 2090471.50383 |
| 2186 | 2013.82 | 97.04 | 17.01 | 12.00 | 6022309.15703 | 2090471.02403 |
| 2187 | 2035.52 | 114.03 | 17.00 | 17.00 | 6022309.93942 | 2090470.29453 |
| 2188 | 2048.63 | 121.04 | 24.01 | 16.00 | 6022311.94563 | 2090468.56881 |
| 2189 | 2058.32 | 118.02 | 22.00 | 16.00 | 6022313.06947 | 2090467.64056 |
| 2190 | 2041.03 | 128.06 | 19.01 | 13.01 | 6022313.62962 | 2090467.16162 |
| 2191 | 2100.85 | 137.06 | 23.01 | 16.01 | 6022313.76898 | 2090467.00973 |
| 2192 | 1981.31 | 116.02 | 20.00 | 7.00 | 6022313.76935 | 2090466.99618 |
| 2193 | 2104.64 | 133.04 | 21.01 | 16.00 | 6022313.89413 | 2090466.87774 |
| 2194 | 2104.75 | 123.04 | 15.01 | 14.00 | 6022314.48013 | 2090466.43697 |
| 2195 | 2031.21 | 145.02 | 22.00 | 16.00 | 6022315.91757 | 2090465.43552 |
| 2196 | 2026.72 | 140.05 | 31.01 | 8.00 | 6022316.65846 | 2090465.02269 |
| 2197 | 1894.05 | 123.07 | 22.01 | 6.00 | 6022317.57366 | 2090464.58135 |
| 2198 | 1798.64 | 97.03 | 19.01 | 17.01 | 6022319.12025 | 2090463.86720 |
| 2199 | 1817.28 | 135.02 | 21.00 | 8.00 | 6022319.25156 | 2090463.81227 |
| 2200 | 1840.65 | 111.04 | 21.01 | 9.00 | 6022319.25697 | 2090463.79029 |
| 2201 | 1744.36 | 96.02 | 14.00 | 20.00 | 6022319.23469 | 2090463.80296 |
| 2202 | 1820.83 | 117.05 | 22.01 | 7.00 | 6022319.08812 | 2090463.88466 |
| 2203 | 1866.66 | 110.04 | 22.01 | 7.00 | 6022319.04910 | 2090463.93299 |
| 2204 | 1870.57 | 122.04 | 15.00 | 10.00 | 6022318.97489 | 2090464.00151 |
| 2205 | 2062.25 | 134.08 | 20.01 | 9.01 | 6022318.00089 | 2090464.51297 |
| 2206 | 2079.95 | 134.06 | 19.01 | 16.01 | 6022315.54380 | 2090465.75141 |
| 2207 | 2033.93 | 127.06 | 18.01 | 16.01 | 6022312.89460 | 2090466.55496 |
| 2208 | 1826.83 | 124.06 | 17.01 | 10.00 | 6022310.37718 | 2090466.85146 |
| 2209 | 1619.25 | 85.01 | 17.00 | 13.00 | 6022307.75815 | 2090466.56973 |
| 2210 | 1567.64 | 103.04 | 6.00 | 10.00 | 6022304.77368 | 2090466.65219 |
| 2211 | 1603.57 | 89.03 | 18.01 | 9.00 | 6022301.99606 | 2090466.50928 |
| 2212 | 1550.78 | 97.05 | 15.01 | 7.00 | 6022299.80832 | 2090466.59354 |
| 2213 | 1723.44 | 114.03 | 20.01 | 14.00 | 6022297.55669 | 2090466.89822 |
| 2214 | 1756.36 | 119.02 | 20.00 | 5.00 | 6022295.58078 | 2090467.50613 |
| 2215 | 1735.62 | 101.04 | 16.01 | 7.00 | 6022293.80257 | 2090468.35809 |
| 2216 | 1688.77 | 121.06 | 29.01 | 5.00 | 6022292.17694 | 2090469.57618 |
| 2217 | 1754.54 | 95.03 | 23.01 | 12.00 | 6022291.10073 | 2090471.14999 |
| 2218 | 1796.73 | 117.05 | 18.01 | 5.00 | 6022290.49415 | 2090472.48607 |
| 2219 | 1870.04 | 108.06 | 22.01 | 6.00 | 6022290.04426 | 2090474.01933 |
| 2220 | 1805.64 | 104.04 | 20.01 | 18.01 | 6022289.89392 | 2090475.57687 |
| 2221 | 1781.63 | 120.04 | 15.01 | 3.00 | 6022289.68596 | 2090475.14110 |
| 2222 | 1782.46 | 103.03 | 13.00 | 15.00 | 6022289.90661 | 2090476.29519 |
| 2223 | 1811.37 | 101.02 | 16.00 | 8.00 | 6022290.21799 | 2090477.26315 |
| 2224 | 1761.63 | 105.04 | 22.01 | 9.00 | 6022290.46255 | 2090477.65038 |
| 2225 | 1723.53 | 122.04 | 19.01 | 11.00 | 6022290.90030 | 2090478.48278 |
| 2226 | 1743.45 | 94.02 | 20.01 | 12.00 | 6022291.90919 | 2090479.67619 |
| 2227 | 1724.53 | 113.03 | 22.01 | 15.00 | 6022294.31910 | 2090482.25313 |
| 2228 | 1795.46 | 125.03 | 23.01 | 8.00 | 6022295.96568 | 2090483.03271 |
| 2229 | 1862.38 | 118.02 | 18.00 | 13.00 | 6022296.96908 | 2090482.06828 |
| 2230 | 2052.53 | 151.04 | 14.00 | 15.00 | 6022299.06067 | 2090481.92049 |
| 2231 | 1949.40 | 107.02 | 27.01 | 15.00 | 6022300.50144 | 2090481.64691 |
| 2232 | 2016.72 | 120.04 | 21.01 | 19.01 | 6022302.15992 | 2090480.80982 |
| 2233 | 1994.81 | 135.05 | 23.01 | 9.00 | 6022303.81112 | 2090479.81843 |
| 2234 | 2039.93 | 127.06 | 28.01 | 11.01 | 6022304.97366 | 2090479.09812 |
| 2235 | 1996.71 | 136.05 | 12.00 | 5.00 | 6022306.01279 | 2090478.31969 |
| 2236 | 1998.01 | 112.06 | 24.01 | 18.01 | 6022306.62022 | 2090477.96657 |
| 2237 | 2000.61 | 112.03 | 21.01 | 15.00 | 6022307.41828 | 2090477.35765 |
| 2238 | 1898.87 | 115.05 | 23.01 | 12.01 | 6022308.87454 | 2090476.21175 |
| 2239 | 1949.59 | 106.03 | 16.00 | 14.00 | 6022310.48161 | 2090475.16294 |
| 2240 | 1891.77 | 121.05 | 18.01 | 7.00 | 6022311.92230 | 2090473.83203 |
| 2241 | 1770.72 | 116.05 | 15.01 | 6.00 | 6022313.34448 | 2090472.57420 |
| 2242 | 1790.46 | 118.03 | 10.00 | 6.00 | 6022314.68361 | 2090471.61822 |
| 2243 | 1780.45 | 101.03 | 21.01 | 8.00 | 6022315.63733 | 2090470.94865 |
| 2244 | 1863.38 | 114.02 | 19.00 | 11.00 | 6022316.62561 | 2090470.13081 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 2245 | 1745.18 | 112.01 | 25.00 | 8.00 | 6022317.73155 | 2090469.17789 |
| 2246 | 1802.28 | 107.02 | 15.00 | 9.00 | 6022319.96949 | 2090469.86614 |
| 2247 | 1832.02 | 107.06 | 17.01 | 13.01 | 6022321.88281 | 2090468.73527 |
| 2248 | 1759.63 | 118.04 | 5.00 | 3.00 | 6022322.84606 | 2090465.71185 |
| 2249 | 1674.68 | 110.04 | 13.01 | 11.00 | 6022324.54068 | 2090464.78178 |
| 2250 | 1613.25 | 104.02 | 13.00 | 13.00 | 6022326.98834 | 2090463.58971 |
| 2251 | 1784.81 | 101.05 | 18.01 | 10.00 | 6022329.52512 | 2090462.36314 |
| 2252 | 1789.46 | 115.03 | 22.01 | 10.00 | 6022332.09503 | 2090461.24150 |
| 2253 | 1826.74 | 127.05 | 26.01 | 8.00 | 6022334.55259 | 2090460.17748 |
| 2254 | 1695.52 | 109.03 | 20.01 | 14.00 | 6022336.88816 | 2090458.83043 |
| 2255 | 1782.63 | 112.04 | 13.00 | 12.00 | 6022339.04809 | 2090457.05690 |
| 2256 | 1757.06 | 102.06 | 15.01 | 11.01 | 6022340.57458 | 2090454.96843 |
| 2257 | 1866.57 | 107.03 | 14.00 | 9.00 | 6022341.83533 | 2090452.78482 |
| 2258 | 1846.57 | 113.03 | 16.00 | 12.00 | 6022342.20051 | 2090449.84738 |
| 2259 | 1662.26 | 120.02 | 18.00 | 11.00 | 6022341.38669 | 2090446.90561 |
| 2260 | 1678.51 | 103.03 | 15.00 | 12.00 | 6022339.44459 | 2090444.28319 |
| 2261 | 1877.38 | 119.02 | 17.00 | 9.00 | 6022336.72220 | 2090442.74708 |
| 2262 | 1995.71 | 118.04 | 16.01 | 9.00 | 6022333.58306 | 2090442.42412 |
| 2263 | 1866.57 | 127.04 | 13.00 | 14.00 | 6022330.87130 | 2090443.29362 |
| 2264 | 1858.47 | 101.03 | 21.01 | 9.00 | 6022328.74119 | 2090444.63806 |
| 2265 | 1753.54 | 103.03 | 14.00 | 11.00 | 6022327.17327 | 2090446.26105 |
| 2266 | 1722.70 | 101.04 | 24.01 | 6.00 | 6022325.81746 | 2090448.16253 |
| 2267 | 1709.35 | 118.02 | 11.00 | 17.00 | 6022324.91845 | 2090450.15199 |
| 2268 | 1703.09 | 85.00 | 12.00 | 7.00 | 6022324.23453 | 2090452.21420 |
| 2269 | 1696.60 | 104.04 | 17.01 | 11.00 | 6022323.77513 | 2090453.72770 |
| 2270 | 1697.26 | 97.01 | 16.00 | 10.00 | 6022323.43139 | 2090454.98936 |
| 2271 | 1761.89 | 126.06 | 15.01 | 10.01 | 6022323.15822 | 2090456.59752 |
| 2272 | 1792.82 | 91.04 | 22.01 | 15.01 | 6022322.52105 | 2090458.47680 |
| 2273 | 1737.27 | 116.02 | 18.00 | 7.00 | 6022322.44038 | 2090458.66275 |
| 2274 | 1805.91 | 94.05 | 13.01 | 9.00 | 6022322.42662 | 2090458.68546 |
| 2275 | 1780.63 | 121.04 | 22.01 | 6.00 | 6022322.42118 | 2090458.70039 |
| 2276 | 1762.71 | 117.05 | 21.01 | 7.00 | 6022322.36002 | 2090458.85396 |
| 2277 | 1667.51 | 106.03 | 15.00 | 6.00 | 6022322.13277 | 2090459.42760 |
| 2278 | 1724.53 | 99.03 | 15.00 | 11.00 | 6022321.36003 | 2090461.08921 |
| 2279 | 1754.71 | 116.05 | 15.01 | 12.00 | 6022320.07619 | 2090463.36579 |
| 2280 | 1875.86 | 116.05 | 19.01 | 12.01 | 6022318.61793 | 2090465.32815 |
| 2281 | 1819.65 | 129.05 | 24.01 | 11.00 | 6022317.11825 | 2090467.12082 |
| 2282 | 1859.03 | 103.06 | 17.01 | 15.01 | 6022315.36738 | 2090468.69416 |
| 2283 | 1865.38 | 113.02 | 27.01 | 10.00 | 6022313.57440 | 2090470.41600 |
| 2284 | 1876.29 | 110.02 | 16.00 | 11.00 | 6022312.09569 | 2090471.67239 |
| 2285 | 1864.76 | 121.05 | 23.01 | 9.00 | 6022311.39965 | 2090472.35778 |
| 2286 | 1914.39 | 109.02 | 23.00 | 7.00 | 6022310.61874 | 2090472.98114 |
| 2287 | 1829.65 | 107.04 | 14.00 | 11.00 | 6022309.50449 | 2090473.90927 |
| 2288 | 1873.48 | 110.03 | 32.01 | 17.00 | 6022308.28134 | 2090474.87455 |
| 2289 | 1843.56 | 119.04 | 13.00 | 15.00 | 6022307.25768 | 2090475.55374 |
| 2290 | 1874.04 | 128.07 | 21.01 | 11.01 | 6022305.86825 | 2090476.57196 |
| 2291 | 1954.30 | 133.02 | 17.00 | 12.00 | 6022304.65828 | 2090477.15963 |
| 2292 | 1966.70 | 137.05 | 27.01 | 6.00 | 6022304.41293 | 2090477.31969 |
| 2293 | 1914.58 | 118.04 | 15.00 | 14.00 | 6022304.43322 | 2090477.31818 |
| 2294 | 1986.31 | 110.02 | 21.00 | 10.00 | 6022304.46390 | 2090477.31298 |
| 2295 | 1899.67 | 125.04 | 18.01 | 17.01 | 6022304.46265 | 2090477.33257 |
| 2296 | 1921.39 | 127.03 | 14.00 | 15.00 | 6022304.62165 | 2090477.25293 |
| 2297 | 1922.68 | 111.04 | 21.01 | 13.00 | 6022305.58401 | 2090476.72730 |
| 2298 | 1905.68 | 132.05 | 26.01 | 8.00 | 6022307.11491 | 2090475.79785 |
| 2299 | 1958.70 | 122.04 | 17.01 | 9.00 | 6022307.56587 | 2090475.39620 |
| 2300 | 1919.68 | 126.04 | 17.01 | 13.00 | 6022308.48125 | 2090474.93222 |
| 2301 | 1938.40 | 116.02 | 24.00 | 11.00 | 6022309.99768 | 2090473.89394 |
| 2302 | 1873.48 | 111.03 | 15.00 | 12.00 | 6022310.50586 | 2090473.58106 |
| 2303 | 1753.27 | 119.02 | 27.00 | 8.00 | 6022310.53667 | 2090473.54165 |
| 2304 | 1833.83 | 114.05 | 20.01 | 10.00 | 6022311.07557 | 2090473.20710 |
| 2305 | 1769.81 | 89.04 | 24.01 | 10.00 | 6022312.19612 | 2090472.31433 |
| 2306 | 1825.65 | 110.04 | 17.01 | 10.00 | 6022314.02879 | 2090470.95784 |
| 2307 | 1820.56 | 117.04 | 16.00 | 7.00 | 6022315.11551 | 2090470.06677 |
| 2308 | 1852.38 | 136.03 | 33.01 | 6.00 | 6022315.07795 | 2090470.06952 |
| 2309 | 1795.37 | 105.02 | 30.01 | 11.00 | 6022315.43094 | 2090469.72546 |
| 2310 | 1841.66 | 106.04 | 25.01 | 8.00 | 6022316.14855 | 2090469.13518 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 2311 | 1811.01 | 133.07 | 20.01 | 14.01 | 6022317.16791 | 2090468.41669 |
| 2312 | 1872.66 | 125.04 | 19.01 | 13.00 | 6022318.26082 | 2090467.62877 |
| 2313 | 1733.44 | 108.03 | 18.00 | 9.00 | 6022318.58568 | 2090467.31997 |
| 2314 | 1785.54 | 98.03 | 26.01 | 14.00 | 6022318.61996 | 2090467.28676 |
| 2315 | 1752.97 | 104.06 | 24.01 | 9.01 | 6022318.86933 | 2090467.02862 |
| 2316 | 1782.72 | 123.05 | 21.01 | 12.00 | 6022319.36593 | 2090466.58016 |
| 2317 | 1817.92 | 106.05 | 10.01 | 14.01 | 6022319.34421 | 2090466.59416 |
| 2318 | 1853.66 | 123.04 | 20.01 | 9.00 | 6022319.29385 | 2090466.65502 |
| 2319 | 1766.80 | 86.04 | 16.01 | 15.01 | 6022319.17085 | 2090466.77367 |
| 2320 | 1830.74 | 118.05 | 11.00 | 10.00 | 6022319.13695 | 2090466.80258 |
| 2321 | 1792.91 | 134.07 | 27.01 | 12.01 | 6022319.10347 | 2090466.82272 |
| 2322 | 1865.48 | 110.03 | 19.00 | 11.00 | 6022318.80131 | 2090467.08510 |
| 2323 | 1838.75 | 129.05 | 21.01 | 13.01 | 6022317.43293 | 2090468.15213 |
| 2324 | 1821.83 | 113.05 | 22.01 | 15.01 | 6022315.64671 | 2090469.77780 |
| 2325 | 1827.10 | 114.01 | 22.00 | 10.00 | 6022314.40184 | 2090471.97555 |
| 2326 | 1811.64 | 117.04 | 22.01 | 10.00 | 6022313.76917 | 2090474.29875 |
| 2327 | 1809.46 | 117.03 | 18.00 | 14.00 | 6022313.46462 | 2090476.81285 |
| 2328 | 1765.63 | 106.04 | 15.01 | 9.00 | 6022313.34414 | 2090478.54544 |
| 2329 | 1782.54 | 112.03 | 12.00 | 10.00 | 6022313.29589 | 2090480.47184 |
| 2330 | 1806.01 | 97.05 | 18.01 | 12.01 | 6022313.09744 | 2090483.03545 |
| 2331 | 1901.96 | 130.07 | 24.01 | 15.01 | 6022312.55616 | 2090485.75665 |
| 2332 | 1938.79 | 111.05 | 25.01 | 10.00 | 6022311.45751 | 2090488.29477 |
| 2333 | 1867.57 | 112.03 | 22.01 | 7.00 | 6022310.23041 | 2090490.34061 |
| 2334 | 1975.80 | 121.05 | 26.01 | 8.00 | 6022308.55985 | 2090492.02910 |
| 2335 | 1840.30 | 134.09 | 17.01 | 10.01 | 6022306.59596 | 2090493.10785 |
| 2336 | 1893.96 | 113.06 | 26.01 | 16.01 | 6022304.73012 | 2090493.53358 |
| 2337 | 1913.68 | 128.05 | 18.01 | 13.00 | 6022303.33951 | 2090493.65517 |
| 2338 | 1845.56 | 113.03 | 14.00 | 12.00 | 6022301.55980 | 2090493.60450 |
| 2339 | 1812.64 | 110.04 | 13.00 | 9.00 | 6022300.53533 | 2090494.90715 |
| 2340 | 1901.39 | 125.03 | 15.00 | 11.00 | 6022299.18727 | 2090494.29309 |
| 2341 | 1881.48 | 123.03 | 15.00 | 15.00 | 6022297.33397 | 2090492.77967 |
| 2342 | 1913.97 | 114.06 | 14.01 | 14.01 | 6022296.07988 | 2090491.59826 |
| 2343 | 1766.45 | 128.03 | 18.00 | 9.00 | 6022295.63239 | 2090491.05849 |
| 2344 | 1850.75 | 113.05 | 10.00 | 9.00 | 6022295.14631 | 2090490.45927 |
| 2345 | 1787.46 | 95.02 | 12.00 | 14.00 | 6022293.75538 | 2090487.16996 |
| 2346 | 1770.45 | 98.02 | 18.00 | 7.00 | 6022292.69505 | 2090485.34395 |
| 2347 | 1846.75 | 102.04 | 21.01 | 13.01 | 6022292.09262 | 2090484.12518 |
| 2348 | 1769.54 | 107.03 | 13.00 | 8.00 | 6022291.64367 | 2090483.00288 |
| 2349 | 1740.62 | 109.04 | 19.01 | 9.00 | 6022291.10030 | 2090481.36898 |
| 2350 | 1747.53 | 107.03 | 16.00 | 9.00 | 6022290.83217 | 2090479.63899 |
| 2351 | 1752.45 | 110.03 | 15.00 | 7.00 | 6022290.72177 | 2090478.13862 |
| 2352 | 1744.45 | 110.03 | 18.00 | 8.00 | 6022290.80774 | 2090476.79569 |
| 2353 | 1760.71 | 93.04 | 10.00 | 13.01 | 6022291.05845 | 2090474.91076 |
| 2354 | 1786.37 | 120.02 | 22.00 | 12.00 | 6022291.45779 | 2090473.01069 |
| 2355 | 1809.82 | 94.04 | 16.01 | 8.00 | 6022291.94142 | 2090471.67874 |
| 2356 | 1854.85 | 113.05 | 24.01 | 10.00 | 6022292.73177 | 2090470.14513 |
| 2357 | 1828.74 | 133.05 | 17.01 | 12.00 | 6022293.51253 | 2090468.51104 |
| 2358 | 1766.54 | 106.03 | 14.00 | 15.00 | 6022294.33647 | 2090467.06202 |
| 2359 | 1757.80 | 130.06 | 22.01 | 5.00 | 6022295.29828 | 2090465.45866 |
| 2360 | 1823.46 | 122.03 | 21.01 | 12.00 | 6022296.26240 | 2090464.01189 |
| 2361 | 1814.65 | 118.04 | 16.01 | 14.00 | 6022297.10538 | 2090462.83466 |
| 2362 | 1725.44 | 103.03 | 19.00 | 13.00 | 6022298.12438 | 2090461.67977 |
| 2363 | 1740.53 | 110.03 | 16.00 | 7.00 | 6022299.59589 | 2090460.13012 |
| 2364 | 1737.71 | 105.04 | 13.01 | 12.00 | 6022301.28373 | 2090458.67885 |
| 2365 | 1819.28 | 116.02 | 19.00 | 13.00 | 6022302.74217 | 2090457.54455 |
| 2366 | 1788.19 | 94.01 | 19.00 | 18.00 | 6022303.99766 | 2090456.61825 |
| 2367 | 1955.50 | 131.03 | 24.01 | 8.00 | 6022304.80887 | 2090456.17694 |
| 2368 | 1895.77 | 137.06 | 12.00 | 11.00 | 6022305.63969 | 2090455.64909 |
| 2369 | 1896.58 | 128.04 | 28.01 | 8.00 | 6022306.54660 | 2090455.10434 |
| 2370 | 1915.49 | 115.03 | 26.01 | 9.00 | 6022307.53503 | 2090454.73452 |
| 2371 | 1910.35 | 118.08 | 23.02 | 12.01 | 6022308.65428 | 2090454.37236 |
| 2372 | 1951.69 | 106.04 | 28.01 | 9.00 | 6022310.11576 | 2090453.94282 |
| 2373 | 1840.56 | 108.03 | 18.01 | 11.00 | 6022311.73940 | 2090453.70846 |
| 2374 | 1829.56 | 123.04 | 17.01 | 14.00 | 6022313.27988 | 2090453.59936 |
| 2375 | 1787.46 | 101.03 | 20.01 | 13.00 | 6022314.63982 | 2090453.82742 |
| 2376 | 1878.39 | 113.02 | 24.00 | 6.00 | 6022317.33234 | 2090455.86908 |

# Pile 108, Pad C09

| Sample ID | Gamma Total (0 - 3069 keV) cps | Radium-226 (186 keV) cps | Bismuth-214 (609 keV) cps | Cesium-137 (662 keV) cps | Easting (feet) | Northing (feet) |
|---|---|---|---|---|---|---|
| 2377 | 1816.92 | 105.05 | 20.01 | 7.00 | 6022318.25547 | 2090456.28227 |
| 2378 | 1857.57 | 130.04 | 22.01 | 17.01 | 6022319.02166 | 2090456.61741 |
| 2379 | 1806.82 | 107.05 | 15.01 | 10.00 | 6022318.36549 | 2090455.25894 |
| 2380 | 1910.78 | 93.04 | 23.01 | 9.00 | 6022318.77267 | 2090455.50694 |
| 2381 | 1869.76 | 100.04 | 25.01 | 7.00 | 6022319.35829 | 2090455.94375 |
| 2382 | 1898.67 | 125.04 | 19.01 | 10.00 | 6022320.62174 | 2090456.97350 |
| 2383 | 1795.46 | 92.02 | 18.00 | 13.00 | 6022322.28058 | 2090458.22144 |
| 2384 | 1698.35 | 109.02 | 9.00 | 9.00 | 6022323.67130 | 2090458.95068 |
| 2385 | 1669.51 | 118.04 | 22.01 | 9.00 | 6022324.22558 | 2090459.20928 |
| 2386 | 1643.58 | 102.04 | 20.01 | 11.00 | 6022324.26884 | 2090459.22495 |
| 2387 | 1672.76 | 91.04 | 18.01 | 9.00 | 6022324.46542 | 2090459.34886 |
| 2388 | 1652.59 | 98.03 | 16.01 | 7.00 | 6022325.51348 | 2090459.63781 |
| 2389 | 1729.27 | 109.02 | 11.00 | 6.00 | 6022327.90109 | 2090459.48246 |
| 2390 | 1731.36 | 126.03 | 15.00 | 10.00 | 6022330.75969 | 2090458.60680 |
| 2391 | 1778.99 | 88.05 | 18.01 | 12.01 | 6022332.97572 | 2090456.45519 |
| 2392 | 1930.88 | 119.05 | 23.01 | 9.00 | 6022334.42658 | 2090453.85750 |
| 2393 | 1819.65 | 111.04 | 14.00 | 12.00 | 6022334.75177 | 2090451.14218 |
| 2394 | 1785.55 | 101.03 | 27.01 | 11.00 | 6022334.32577 | 2090448.83808 |
| 2395 | 1813.55 | 110.03 | 13.00 | 11.00 | 6022333.81087 | 2090448.88884 |
| 2396 | 1819.28 | 113.02 | 13.00 | 12.00 | 6022332.85553 | 2090447.67657 |
| 2397 | 1801.73 | 107.04 | 16.01 | 7.00 | 6022332.49504 | 2090447.40831 |
| 2398 | 1749.18 | 98.01 | 21.00 | 6.00 | 6022332.55568 | 2090447.46276 |
| 2399 | 1849.29 | 117.02 | 22.00 | 14.00 | 6022332.54839 | 2090447.48052 |
| | 2178.55 | 154.06 | 36.01 | 24.01 | **Maximum** | |
| | 103.81 | 12.26 | 4.57 | 3.44 | **Std Dev** | |
| | 1826.13 | 112.91 | 18.87 | 11.24 | **Average** | |
| | 3020.45 | 192.92 | 44.60 | 27.52 | **3 σ Investigation Level** | |

Investigation Level Exceeded

Biased samples were collected at locations identified by **BOLD**

# ATTACHMENT 4

# EXCAVATED SOIL UNIT
# GAMMA SPECTROSCOPY REPORTS

# (on CD only)

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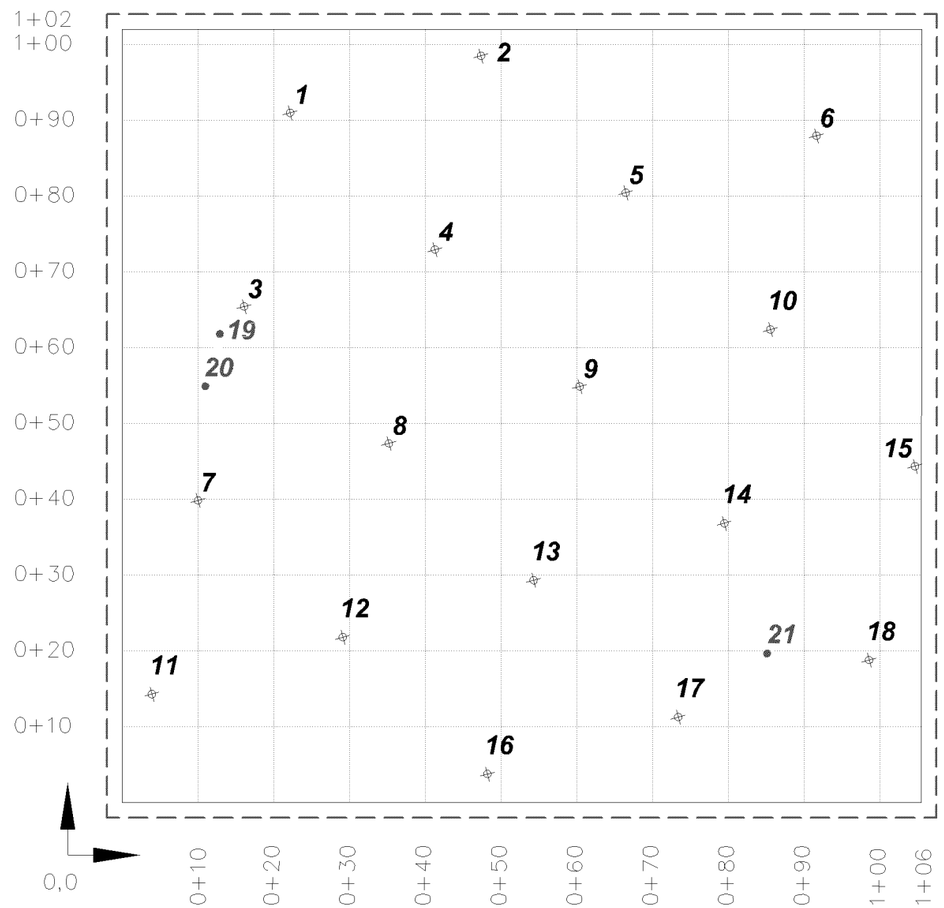
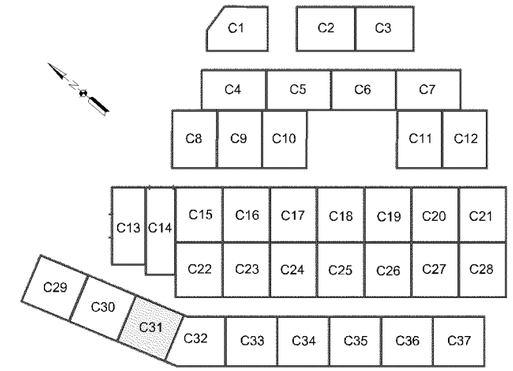
# EXCAVATED SOIL UNIT 33

# C31-033

## PROCEED WITH SAMPLING




KEY PLAN

LEGEND:

1 SYSTEMATIC

19 BIASED

10 0 10 20

(feet)

SYSTEMATIC SAMPLES 1–18
BIASED SAMPLES 19–21

DRAFT

RADIOLOGICAL SCREENING YARD 2 (RSY2)
SOIL SAMPLING LOCATIONS AREA C31

HUNTERS POINT SHIPYARD-SAN FRANCISCO, CA

TETRA TECH EC, INC.

DRAWING NO: 70-PD-C31-033.DWG

DCN: TASK: TO 70

APPROVED BY: BMH

CHECKED BY: TYL

REV:

DRAWN BY: AEC

DATE: 08-30-07

\\HUNTERSPOINT\PROJECTS\CTO 006\CAD\TO 70 PARCEL D\PARCEL D WORKING FILES_RSY PAD SURVEYS\DWG FILES\70-PD-C31-033.DWG
PLOT/UPDATE: AUG 30 2007 12:28:27

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 13:13:22 Page 1
New World Technology Spectrum name: 3N000259.An1

Sample description
Parcel D 70-PD-C0033-01 331g
9/17/07 08:52

Acquisition information
Start time: 17-Sep-2007 12:28:12
Live time: 2700
Real time: 2703

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Activity pCi/g | Time of Count Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | #F | 2.3686E-01 | 1.2721E-01 | 1.2751E-01 | 0.123E+00 |
| AM-241 | #B | -1.3353E-02 | -1.0658E-01 | -1.0658E-01 | 0.635E-01 |
| Bi-212 | B | -2.1613E-01 | -1.2560E+00 | -1.2560E+00 | 0.270E+00 |
| BI-214 | F | 3.3093E-01 | 1.1246E-01 | 1.1312E-01 | 0.407E-01 |
| CO-60 | #B | -1.9822E-02 | -9.2040E-02 | -9.2043E-02 | 0.309E-01 |
| CS-137 | B | 3.5930E-02 | 5.0859E-02 | 5.0877E-02 | 0.380E-01 |
| EU-152 | F | 1.3353E-01 | 6.6720E-02 | 6.6904E-02 | 0.504E-01 |
| EU-154 | F | 5.4674E-02 | 5.1370E-02 | 5.1410E-02 | 0.419E-01 |
| K-40 | # | 6.8111E+00 | 1.3613E+00 | 1.3845E+00 | 0.806E+00 |
| Pa-234 | #B | -5.4001E-02 | 1.1743E+02 | 1.1743E+02 | 0.444E-01 |
| Pb-210 | #B | 4.9251E-01 | 1.2247E+00 | 1.2248E+00 | 0.911E+00 |
| Pb-212 | | 2.4636E-01 | 8.1362E-02 | 8.1873E-02 | 0.738E-01 |
| PB-214 | F | 2.5502E-01 | 1.3219E-01 | 1.3253E-01 | 0.901E-01 |
| RA-226 | #B | -4.0984E-01 | -1.3851E+00 | -1.3851E+00 | 0.850E+00 |
| Th-230 | #B | -5.9749E+00 | -5.5575E+01 | -5.5575E+01 | 0.562E+01 |
| Th-234 | #B | 3.6950E-01 | 5.3784E-01 | 5.3801E-01 | 0.690E+00 |
| Tl-208 | #F | 1.4451E-01 | 5.9239E-02 | 5.9481E-02 | 0.253E-01 |
| U-235 | F | 8.1767E-02 | 8.0692E-02 | 8.0749E-02 | 0.460E-01 |

# - All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 40.9 to 2607.5 keV) 7.7879081E+00 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 13:18:19 Page 1
New World Technology Spectrum name: 4N001672.An1

Sample description
Parcel D 70-PD-C0033-02 363g
9/17/07 09:51

Acquisition information
Start time: 17-Sep-2007 12:33:07
Live time: 2700
Real time: 2704

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Activity pCi/g | Time of Count Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 5.0253E-01 | 2.7350E-01 | 2.7414E-01 | 0.162E+00 |
| AM-241 | #A | -6.7038E-02 | -9.3208E-01 | -9.3208E-01 | 0.122E+00 |
| Bi-212 | B | -4.6028E-01 | -3.1756E+00 | -3.1756E+00 | 0.424E+00 |
| BI-214 | | 3.1613E-01 | 1.3253E-01 | 1.3305E-01 | 0.716E-01 |
| CO-60 | #F | 3.0201E-02 | 3.7946E-02 | 3.7963E-02 | 0.236E-01 |
| CS-137 | #B | -2.9724E-02 | -5.3948E-01 | -5.3948E-01 | 0.399E-01 |
| EU-152 | F | 2.1013E-01 | 1.6561E-01 | 1.6579E-01 | 0.104E+00 |
| EU-154 | B | 5.9776E-02 | 6.6249E-02 | 6.6286E-02 | 0.751E-01 |
| K-40 | | 9.2594E+00 | 1.6072E+00 | 1.6435E+00 | 0.761E+00 |
| Pa-234 | #F | 1.9292E-01 | 1.4270E-01 | 1.4287E-01 | 0.128E+00 |
| Pb-210 | #B | 1.7078E-01 | 1.1738E+00 | 1.1739E+00 | 0.922E+00 |
| Pb-212 | F | 2.4703E-01 | 1.0896E-01 | 1.0935E-01 | 0.803E-01 |
| PB-214 | F | 2.7928E-01 | 1.2163E-01 | 1.2207E-01 | 0.776E-01 |
| RA-226 | #B | -1.6176E-01 | -1.3663E+00 | -1.3663E+00 | 0.106E+01 |
| Th-230 | #B | -1.4562E+01 | -9.4185E+01 | -9.4186E+01 | 0.605E+01 |
| Th-234 | B | 4.8615E-01 | 6.4762E-01 | 6.4787E-01 | 0.104E+01 |
| Tl-208 | F | 2.7506E-01 | 9.7944E-02 | 9.8474E-02 | 0.397E-01 |
| U-235 | #B | -1.0093E+00 | -2.6136E+00 | -2.6138E+00 | 0.120E+00 |

# - All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 42.7 to 3400.4 keV) 1.0879389E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 13:25:25 Page 1
New World Technology Spectrum name: 6N001909.An1

Sample description
Parcel D 70-PD-C0033-03 352g
9/17/07 09:46

Acquisition information
Start time: 17-Sep-2007 12:40:16
Live time: 2700
Real time: 2702

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Activity pCi/g | Time of Count Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | B | 1.9329E-01 | 1.1054E-01 | 1.1077E-01 | 0.202E+00 |
| AM-241 | A | 8.0080E-03 | 1.3300E-01 | 1.3300E-01 | 0.113E+00 |
| Bi-212 | #B | -3.6863E-02 | -8.0087E-02 | -8.0099E-02 | 0.335E+00 |
| BI-214 | F | 3.3094E-01 | 1.5097E-01 | 1.5146E-01 | 0.111E+00 |
| CO-60 | #B | -9.8426E-02 | -2.4151E-01 | -2.4154E-01 | 0.497E-01 |
| CS-137 | #B | -5.8596E-02 | -1.0546E+00 | -1.0546E+00 | 0.435E-01 |
| EU-152 | B | 4.9869E-02 | 8.6909E-02 | 8.6928E-02 | 0.831E-01 |
| EU-154 | #B | 5.6716E-02 | 6.5432E-02 | 6.5465E-02 | 0.740E-01 |
| K-40 | | 9.9436E+00 | 1.4139E+00 | 1.4612E+00 | 0.704E+00 |
| Pa-234 | #F | 1.5112E-01 | 2.0783E-01 | 2.0791E-01 | 0.124E+00 |
| Pb-210 | B | 6.8542E-01 | 1.2642E+00 | 1.2644E+00 | 0.961E+00 |
| Pb-212 | F | 1.3395E-01 | 9.8583E-02 | 9.8709E-02 | 0.840E-01 |
| PB-214 | F | 2.5267E-01 | 1.4250E-01 | 1.4281E-01 | 0.968E-01 |
| RA-226 | #B | -5.9946E-01 | -2.0980E+00 | -2.0982E+00 | 0.112E+01 |
| Th-230 | #B | -3.2501E+01 | -1.9921E+02 | -1.9922E+02 | 0.902E+01 |
| Th-234 | B | 8.5921E-01 | 1.0093E+00 | 1.0098E+00 | 0.100E+01 |
| Tl-208 | F | 8.8726E-02 | 9.7148E-02 | 9.7204E-02 | 0.534E-01 |
| U-235 | #B | -4.7420E-01 | -7.4118E-01 | -7.4139E-01 | 0.937E-01 |

# - All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 40.9 to 2602.8 keV) 1.0330262E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 13:11:17 Page 1
New World Technology Spectrum name: 1N001740.An1

Sample description
Parcel D 70-PD-C0033-04 341g
9/17/07 08:45

Acquisition information
Start time: 17-Sep-2007 12:21:15
Live time: 2700
Real time: 2702

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Activity pCi/ g | Time of Count Uncertainty Counting pCi/ g | 2 Sigma Total pCi/ g | MDA pCi/ g |
|---|---|---|---|---|---|
| Ac-228 | F | 3.0183E-01 | 1.5200E-01 | 1.5241E-01 | 0.158E+00 |
| AM-241 | #A | -5.5715E-01 | -2.2810E+00 | -2.2811E+00 | 0.670E+00 |
| Bi-212 | B | 1.3547E-01 | 3.8489E-01 | 3.8492E-01 | 0.299E+00 |
| BI-214 | F | 4.0208E-01 | 1.3864E-01 | 1.3944E-01 | 0.674E-01 |
| CO-60 | #B | -1.4015E-01 | 1.6607E+02 | 1.6607E+02 | 0.628E-01 |
| CS-137 | B | 1.8571E-02 | 3.4427E-02 | 3.4434E-02 | 0.246E-01 |
| EU-152 | C | 1.9681E-01 | 1.7325E-01 | 1.7340E-01 | 0.100E+00 |
| EU-154 | A | 6.1118E-02 | 9.4823E-02 | 9.4850E-02 | 0.685E-01 |
| K-40 | | 1.0268E+01 | 1.4558E+00 | 1.5048E+00 | 0.120E+00 |
| Pa-234 | F | 2.3935E-01 | 1.0446E-01 | 1.0483E-01 | 0.141E+00 |
| Pb-210 | #F | 0.0000E+00 | 0.0000E+00 | 0.0000E+00 | 0.000E+00 |
| Pb-212 | F | 2.2594E-01 | 1.1090E-01 | 1.1122E-01 | 0.903E-01 |
| Pb-214 | F | 3.6026E-01 | 1.7060E-01 | 1.7112E-01 | 0.971E-01 |
| RA-226 | #B | -8.7612E-01 | -3.6821E+00 | -3.6822E+00 | 0.114E+01 |
| Th-230 | #B | -1.8448E+01 | -9.2680E+01 | -9.2683E+01 | 0.277E+02 |
| Th-234 | #B | -6.7690E+00 | -1.7456E+01 | -1.7458E+01 | 0.384E+01 |
| Tl-208 | #B | 2.5284E-02 | 1.6559E-02 | 1.6585E-02 | 0.350E-01 |
| U-235 | B | -6.1426E-02 | -1.8303E-01 | -1.8304E-01 | 0.700E-01 |

# - All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.2 to 2627.2 keV) 1.1558074E+01 pCi/ g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 14:00:18 Page 1
New World Technology Spectrum name: 1N001741.An1

Sample description
Parcel D 70-PD-C0033-05 358g
9/17/07 09:56

Acquisition information
Start time: 17-Sep-2007 13:15:09
Live time: 2700
Real time: 2702

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Activity pCi/ g | Time of Count Uncertainty Counting pCi/ g | 2 Sigma Total pCi/ g | MDA pCi/ g |
|---|---|---|---|---|---|
| Ac-228 | F | 4.9082E-01 | 1.5025E-01 | 1.5135E-01 | 0.788E-01 |
| AM-241 | #A | -9.0639E-01 | -1.1082E+01 | -1.1082E+01 | 0.699E+00 |
| Bi-212 | #F | 2.5620E-01 | 3.5554E-01 | 3.5567E-01 | 0.210E+00 |
| BI-214 | F | 4.6997E-01 | 1.2401E-01 | 1.2523E-01 | 0.444E-01 |
| CO-60 | #B | -1.3350E-01 | 1.5818E+02 | 1.5818E+02 | 0.599E-01 |
| CS-137 | #B | -8.5174E-02 | -5.1431E-01 | -5.1432E-01 | 0.576E-01 |
| EU-152 | C | 1.1432E-01 | 1.1145E-01 | 1.1153E-01 | 0.104E+00 |
| EU-154 | A | 5.5052E-02 | 9.3229E-02 | 9.3251E-02 | 0.739E-01 |
| K-40 | | 1.0223E+01 | 1.4176E+00 | 1.4675E+00 | 0.115E+00 |
| Pa-234 | B | 3.1995E-02 | 6.8953E-02 | 6.8963E-02 | 0.142E+00 |
| Pb-210 | #F | 0.0000E+00 | 0.0000E+00 | 0.0000E+00 | 0.000E+00 |
| Pb-212 | F | 1.6323E-01 | 1.1106E-01 | 1.1123E-01 | 0.933E-01 |
| Pb-214 | | 2.5209E-01 | 1.2440E-01 | 1.2475E-01 | 0.943E-01 |
| RA-226 | #B | -5.2069E-01 | -2.2618E+00 | -2.2618E+00 | 0.109E+01 |
| Th-230 | B | -1.2973E+01 | -1.8102E+01 | -1.8109E+01 | 0.279E+02 |
| Th-234 | #B | -1.8399E+00 | -8.0562E+00 | -8.0565E+00 | 0.431E+01 |
| Tl-208 | F | 5.2759E-02 | 5.1263E-02 | 5.1300E-02 | 0.371E-01 |
| U-235 | B | -8.1833E-02 | -2.7097E-01 | -2.7099E-01 | 0.657E-01 |

# - All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.2 to 2627.2 keV) 1.1651587E+01 pCi/ g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 14:09:03 Page 1
New World Technology Spectrum name: 2N000460.An1

Sample description
Parcel D 70-PD-C0033-06 346g
9/17/07 10:04

Acquisition information
Start time: 17-Sep-2007 13:23:53
Live time: 2700
Real time: 2702

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Activity pCi/g | Time of Count Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | #F | 4.5387E-01 | 2.1888E-01 | 2.1952E-01 | 0.112E+00 |
| AM-241 | #B | -2.8942E-03 | -1.2606E-01 | -1.2606E-01 | 0.996E-01 |
| Bi-212 | F | 2.4171E-01 | 3.0522E-01 | 3.0535E-01 | 0.236E+00 |
| BI-214 | F | 2.1972E-01 | 1.4697E-01 | 1.4720E-01 | 0.799E-01 |
| CO-60 | #B | -1.4232E-01 | -4.6964E-01 | -4.6967E-01 | 0.709E-01 |
| CS-137 | #B | -8.1066E-03 | -4.9502E-02 | -4.9503E-02 | 0.399E-01 |
| EU-152 | F | 1.2254E-01 | 7.0751E-02 | 7.0897E-02 | 0.613E-01 |
| EU-154 | #B | 3.5259E-02 | 3.1537E-02 | 3.1564E-02 | 0.433E-01 |
| K-40 | # | 9.3748E+00 | 1.8072E+00 | 1.8403E+00 | 0.873E+00 |
| Pa-234 | F | 1.6484E-01 | 1.2167E-01 | 1.2182E-01 | 0.722E-01 |
| Pb-210 | F | 7.4306E-01 | 8.6570E-01 | 8.6613E-01 | 0.730E+00 |
| Pb-212 | F | 2.9320E-01 | 9.0003E-02 | 9.0656E-02 | 0.619E-01 |
| Pb-214 | F | 3.3156E-01 | 1.6324E-01 | 1.6370E-01 | 0.779E-01 |
| RA-226 | #B | -3.2737E-02 | -8.9700E-01 | -8.9700E-01 | 0.779E+00 |
| Th-230 | #B | 9.1396E+00 | 1.5620E+01 | 1.5623E+01 | 0.948E+01 |
| Th-234 | B | 6.6234E-01 | 1.7957E+00 | 1.7959E+00 | 0.149E+01 |
| Tl-208 | #F | 5.7453E-01 | 1.8467E-01 | 1.8590E-01 | 0.122E+00 |
| U-235 | B | -1.1995E-02 | -1.1337E-01 | -1.1337E-01 | 0.470E-01 |

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< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.8 to 2661.0 keV) 1.1247687E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 14:30:15 Page 1
New World Technology Spectrum name: 3N000260.An1

Sample description
Parcel D 70-PD-C0033-07 342g
9/17/07 10:09

Acquisition information
Start time: 17-Sep-2007 13:29:41
Live time: 2700
Real time: 2704

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | #F | 4.9076E-01 | 1.4525E-01 | 1.4639E-01 | 0.821E-01 |
| AM-241 | #B | -5.3509E-02 | -5.1702E-01 | -5.1703E-01 | 0.545E-01 |
| Bi-212 | F | 5.0439E-01 | 3.4178E-01 | 3.4229E-01 | 0.254E+00 |
| BI-214 | F | 3.4017E-01 | 1.2056E-01 | 1.2122E-01 | 0.490E-01 |
| CO-60 | #B | 2.2307E-02 | 3.0910E-02 | 3.0921E-02 | 0.275E-01 |
| CS-137 | F | 2.5038E-02 | 3.2164E-02 | 3.2178E-02 | 0.224E-01 |
| EU-152 | F | 1.3215E-01 | 7.4626E-02 | 7.4787E-02 | 0.566E-01 |
| EU-154 | F | 1.2703E-01 | 1.1049E-01 | 1.1059E-01 | 0.381E-01 |
| K-40 | # | 5.5275E+00 | 1.1719E+00 | 1.1897E+00 | 0.631E+00 |
| Pa-234 | #F | 6.5164E-02 | 4.9259E-02 | 4.9319E-02 | 0.615E-01 |
| Pb-210 | #B | 6.4382E-01 | 1.2790E+00 | 1.2793E+00 | 0.898E+00 |
| Pb-212 | | 2.2004E-01 | 8.9817E-02 | 9.0187E-02 | 0.796E-01 |
| PB-214 | F | 2.8827E-01 | 1.2666E-01 | 1.2711E-01 | 0.945E-01 |
| RA-226 | #B | -2.6434E-01 | -1.2137E+00 | -1.2137E+00 | 0.852E+00 |
| Th-230 | #B | -3.7325E+00 | -2.7796E+01 | -2.7796E+01 | 0.677E+01 |
| Th-234 | B | 5.6269E-01 | 8.2711E-01 | 8.2738E-01 | 0.701E+00 |
| Tl-208 | #F | 1.3787E-01 | 6.7369E-02 | 6.7563E-02 | 0.297E-01 |
| U-235 | B | 4.1730E-02 | 5.6114E-02 | 5.6135E-02 | 0.435E-01 |

# - All peaks for activity calculation had bad shape.
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< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 40.9 to 2607.5 keV) 7.5090518E+00 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 14:17:06 Page 1
New World Technology Spectrum name: 4N001673.An1

Sample description
Parcel D 70-PD-C0033-08 356g
9/17/07 09:26

Acquisition information
Start time: 17-Sep-2007 13:31:55
Live time: 2700
Real time: 2704

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Activity pCi/g | Time of Count Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 4.8489E-01 | 2.5504E-01 | 2.5567E-01 | 0.123E+00 |
| AM-241 | #A | -9.2882E-02 | 2.5737E+02 | 2.5737E+02 | 0.974E-01 |
| Bi-212 | #B | -8.5109E-02 | -4.7972E-01 | -4.7973E-01 | 0.368E+00 |
| BI-214 | | 4.4216E-01 | 1.6534E-01 | 1.6615E-01 | 0.813E-01 |
| CO-60 | #F | 3.7588E-02 | 3.0039E-02 | 3.0072E-02 | 0.173E-01 |
| CS-137 | #B | -8.7151E-03 | -8.4125E-02 | -8.4126E-02 | 0.461E-01 |
| EU-152 | B | 7.5285E-02 | 9.6449E-02 | 9.6489E-02 | 0.957E-01 |
| EU-154 | B | 1.8276E-02 | 3.6759E-02 | 3.6765E-02 | 0.783E-01 |
| K-40 | | 9.4910E+00 | 1.4287E+00 | 1.4714E+00 | 0.669E+00 |
| Pa-234 | #B | -1.5810E-01 | 5.2486E+02 | 5.2486E+02 | 0.135E+00 |
| Pb-210 | | 1.7185E+00 | 1.6063E+00 | 1.6075E+00 | 0.107E+01 |
| Pb-212 | F | 2.0465E-01 | 1.4310E-01 | 1.4330E-01 | 0.833E-01 |
| PB-214 | F | 4.3832E-01 | 1.5417E-01 | 1.5502E-01 | 0.814E-01 |
| RA-226 | #B | -4.6274E-01 | -1.8978E+00 | -1.8978E+00 | 0.112E+01 |
| Th-230 | #B | -1.0756E+01 | -4.6564E+01 | -4.6566E+01 | 0.867E+01 |
| Th-234 | | 1.7431E+00 | 1.1305E+00 | 1.1323E+00 | 0.100E+01 |
| Tl-208 | F | 1.6318E-01 | 8.6775E-02 | 8.6986E-02 | 0.478E-01 |
| U-235 | #B | -1.0397E+00 | -3.5877E+00 | -3.5879E+00 | 0.125E+00 |

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C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 42.7 to 3400.4 keV) 1.4723355E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 13:17:51 Page 1
New World Technology Spectrum name: 2N000459.An1

Sample description
Parcel D 70-PD-C0033-09 363g
9/17/07 10:16

Acquisition information
Start time: 17-Sep-2007 12:23:17
Live time: 2700
Real time: 2702

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | #F | 3.7519E-01 | 1.5621E-01 | 1.5682E-01 | 0.859E-01 |
| AM-241 | #B | -5.9069E-02 | -7.4183E-01 | -7.4184E-01 | 0.650E-01 |
| Bi-212 | B | -1.2173E-02 | -2.1338E-01 | -2.1338E-01 | 0.171E+00 |
| BI-214 | F | 2.1840E-01 | 1.1674E-01 | 1.1702E-01 | 0.936E-01 |
| CO-60 | #B | -1.2760E-01 | -5.2280E-01 | -5.2282E-01 | 0.671E-01 |
| CS-137 | | 4.2657E-02 | 3.6662E-02 | 3.6696E-02 | 0.236E-01 |
| EU-152 | B | -3.3492E-03 | 1.2095E+02 | 1.2095E+02 | 0.458E-01 |
| EU-154 | F | 5.2405E-02 | 4.5845E-02 | 4.5886E-02 | 0.337E-01 |
| K-40 | | 8.0422E+00 | 1.6497E+00 | 1.6764E+00 | 0.832E+00 |
| Pa-234 | #F | 1.9322E-01 | 1.4457E-01 | 1.4475E-01 | 0.507E-01 |
| Pb-210 | F | 6.5455E-01 | 8.5742E-01 | 8.5776E-01 | 0.640E+00 |
| Pb-212 | F | 3.1532E-01 | 1.0403E-01 | 1.0468E-01 | 0.626E-01 |
| Pb-214 | | 3.0862E-01 | 1.1384E-01 | 1.1441E-01 | 0.729E-01 |
| RA-226 | #B | -3.8646E-01 | -1.8140E+00 | -1.8141E+00 | 0.827E+00 |
| Th-230 | #B | 2.7477E+00 | 7.1388E+00 | 7.1396E+00 | 0.550E+01 |
| Th-234 | B | 2.0493E-01 | 6.3169E-01 | 6.3174E-01 | 0.675E+00 |
| Tl-208 | F | 4.6611E-01 | 2.1407E-01 | 2.1477E-01 | 0.117E+00 |
| U-235 | B | 4.8282E-03 | 5.4225E-02 | 5.4225E-02 | 0.463E-01 |

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C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.8 to 2661.0 keV) 9.5501022E+00 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 14:49:26 Page 1
New World Technology Spectrum name: 1N001742.An1

Sample description
Parcel D 70-PD-C0033-10 360g
9/17/07 10:24

Acquisition information
Start time: 17-Sep-2007 14:04:17
Live time: 2700
Real time: 2702

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | Time of Count Activity pCi/ g | Uncertainty Counting pCi/ g | 2 Sigma Total pCi/ g | MDA pCi/ g |
|---|---|---|---|---|
| Ac-228 #F | 5.6917E-01 | 2.2197E-01 | 2.2297E-01 | 0.999E-01 |
| AM-241 #A | -5.8569E-01 | -2.6049E+00 | -2.6049E+00 | 0.686E+00 |
| Bi-212 #B | 0.0000E+00 | 9.9583E+02 | 9.9583E+02 | 0.266E+00 |
| BI-214 F | 4.3896E-01 | 1.4902E-01 | 1.4991E-01 | 0.656E-01 |
| CO-60 #B | -7.8670E-02 | -1.2749E-01 | -1.2753E-01 | 0.595E-01 |
| CS-137 #B | -8.1880E-02 | -3.1576E-01 | -3.1577E-01 | 0.510E-01 |
| EU-152 A | 6.1780E-02 | 1.0410E-01 | 1.0412E-01 | 0.978E-01 |
| EU-154 #A | -5.2125E-03 | 1.7769E+02 | 1.7769E+02 | 0.767E-01 |
| K-40 | 1.0166E+01 | 1.4098E+00 | 1.4593E+00 | 0.114E+00 |
| Pa-234 #B | 4.0128E-02 | 3.5892E-02 | 3.5922E-02 | 0.985E-01 |
| Pb-210 #F | 0.0000E+00 | 0.0000E+00 | 0.0000E+00 | 0.000E+00 |
| Pb-212 F | 1.5222E-01 | 1.1423E-01 | 1.1437E-01 | 0.963E-01 |
| Pb-214 F | 3.3701E-01 | 1.4223E-01 | 1.4278E-01 | 0.835E-01 |
| RA-226 #B | -1.2732E-01 | -1.4089E+00 | -1.4089E+00 | 0.109E+01 |
| Th-230 #B | 8.0561E+00 | 5.1473E+01 | 5.1474E+01 | 0.354E+02 |
| Th-234 #B | -6.2929E+00 | -1.9279E+01 | -1.9280E+01 | 0.417E+01 |
| Tl-208 B | -8.2230E-03 | 5.0629E+01 | 5.0629E+01 | 0.192E-01 |
| U-235 #B | -8.8068E-02 | -3.1262E-01 | -3.1263E-01 | 0.648E-01 |

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B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.2 to 2627.2 keV) 1.1663279E+01 pCi/ g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 14:58:12 Page 1
New World Technology Spectrum name: 2N000461.An1

Sample description
Parcel D 70-PD-C0033-11 368g
9/17/07 09:52

Acquisition information
Start time: 17-Sep-2007 14:13:03
Live time: 2700
Real time: 2702

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 3.8419E-01 | 1.7161E-01 | 1.7220E-01 | 0.962E-01 |
| AM-241 | #B | 4.0083E-03 | 8.6442E-02 | 8.6442E-02 | 0.688E-01 |
| Bi-212 | #B | 8.6930E-02 | 1.9438E-01 | 1.9441E-01 | 0.204E+00 |
| BI-214 | F | 2.4369E-01 | 1.1044E-01 | 1.1081E-01 | 0.739E-01 |
| CO-60 | #B | -1.1976E-01 | -3.5601E-01 | -3.5604E-01 | 0.662E-01 |
| CS-137 | #B | -1.1535E-02 | -5.5880E-02 | -5.5882E-02 | 0.390E-01 |
| EU-152 | F | 1.2563E-01 | 7.4914E-02 | 7.5058E-02 | 0.536E-01 |
| EU-154 | F | 8.9226E-02 | 4.9096E-02 | 4.9207E-02 | 0.515E-01 |
| K-40 | | 9.2212E+00 | 1.7313E+00 | 1.7647E+00 | 0.821E+00 |
| Pa-234 | F | 2.0967E-01 | 1.3623E-01 | 1.3645E-01 | 0.730E-01 |
| Pb-210 | B | 5.3665E-01 | 8.1093E-01 | 8.1118E-01 | 0.621E+00 |
| Pb-212 | F | 3.7429E-01 | 9.4032E-02 | 9.5050E-02 | 0.587E-01 |
| Pb-214 | F | 2.3044E-01 | 1.3360E-01 | 1.3387E-01 | 0.809E-01 |
| RA-226 | #B | -5.1160E-01 | -1.7635E+00 | -1.7636E+00 | 0.657E+00 |
| Th-230 | #B | 4.9896E+00 | 9.4198E+00 | 9.4216E+00 | 0.661E+01 |
| Th-234 | B | 5.5445E-01 | 7.4487E-01 | 7.4515E-01 | 0.730E+00 |
| Tl-208 | | 5.1212E-01 | 1.8560E-01 | 1.8657E-01 | 0.115E+00 |
| U-235 | #B | -3.1295E-02 | 1.2049E+02 | 1.2049E+02 | 0.425E-01 |

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C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.8 to 2661.0 keV) 1.1091549E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 15:30:29 Page 1
New World Technology Spectrum name: 6N001911.An1

Sample description
Parcel D 70-PD-C0033-12 344g
9/17/07 09:32

Acquisition information
Start time: 17-Sep-2007 14:29:21
Live time: 2700
Real time: 2702

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | B | 1.0174E-01 | 9.2657E-02 | 9.2734E-02 | 0.196E+00 |
| AM-241 | #A | -4.5425E-02 | -3.1567E-01 | -3.1567E-01 | 0.103E+00 |
| Bi-212 | #B | -4.5460E-01 | -1.5983E+00 | -1.5984E+00 | 0.334E+00 |
| BI-214 | F | 4.0738E-01 | 1.7794E-01 | 1.7858E-01 | 0.112E+00 |
| CO-60 | #B | -1.1330E-01 | 1.3426E+02 | 1.3426E+02 | 0.508E-01 |
| CS-137 | #B | 8.8120E-04 | 9.1932E-03 | 9.1933E-03 | 0.234E-01 |
| EU-152 | #B | 3.5787E-02 | 7.2383E-02 | 7.2395E-02 | 0.693E-01 |
| EU-154 | F | 8.1710E-02 | 7.2768E-02 | 7.2831E-02 | 0.621E-01 |
| K-40 | | 8.6224E+00 | 1.3538E+00 | 1.3911E+00 | 0.720E+00 |
| Pa-234 | #B | 6.0436E-04 | 4.8349E-03 | 4.8349E-03 | 0.115E+00 |
| Pb-210 | B | 9.9311E-01 | 1.7630E+00 | 1.7634E+00 | 0.117E+01 |
| Pb-212 | F | 1.3993E-01 | 1.0073E-01 | 1.0086E-01 | 0.863E-01 |
| PB-214 | F | 3.3641E-01 | 1.6099E-01 | 1.6148E-01 | 0.102E+00 |
| RA-226 | B | 3.8571E-02 | 1.2359E+00 | 1.2359E+00 | 0.109E+01 |
| Th-230 | #B | -3.5462E+01 | -1.5752E+03 | -1.5752E+03 | 0.102E+02 |
| Th-234 | #B | -1.1043E-01 | -1.2638E+00 | -1.2638E+00 | 0.105E+01 |
| Tl-208 | #B | -5.3449E-03 | -6.0228E-03 | -6.0261E-03 | 0.456E-01 |
| U-235 | B | -4.5730E-01 | -5.6339E-01 | -5.6364E-01 | 0.937E-01 |

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C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 40.9 to 2602.8 keV) 9.0987396E+00 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 15:15:36 Page 1
New World Technology Spectrum name: 4N001674.An1

Sample description
Parcel D 70-PD-C0033-13 364g
9/17/07 10:11

Acquisition information
Start time: 17-Sep-2007 14:30:27
Live time: 2700
Real time: 2703

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 7.4289E-01 | 3.0008E-01 | 3.0135E-01 | 0.126E+00 |
| AM-241 | #A | -8.6393E-02 | -4.3895E+00 | -4.3895E+00 | 0.988E-01 |
| Bi-212 | #B | -5.6325E-01 | -1.1004E+01 | -1.1004E+01 | 0.359E+00 |
| BI-214 | | 3.6531E-01 | 1.6368E-01 | 1.6424E-01 | 0.814E-01 |
| CO-60 | #B | -1.0187E-02 | -8.0214E-02 | -8.0215E-02 | 0.214E-01 |
| CS-137 | #B | -1.4717E-02 | -1.4260E-01 | -1.4260E-01 | 0.512E-01 |
| EU-152 | B | 7.9834E-02 | 9.7390E-02 | 9.7435E-02 | 0.967E-01 |
| EU-154 | B | -5.6166E-02 | 1.3887E+02 | 1.3887E+02 | 0.599E-01 |
| K-40 | | 1.0235E+01 | 1.5928E+00 | 1.6375E+00 | 0.726E+00 |
| Pa-234 | F | 1.4057E-01 | 1.2528E-01 | 1.2539E-01 | 0.133E+00 |
| Pb-210 | F | 1.3017E+00 | 1.4759E+00 | 1.4767E+00 | 0.104E+01 |
| Pb-212 | F | 1.7783E-01 | 9.6802E-02 | 9.7026E-02 | 0.746E-01 |
| PB-214 | F | 2.7618E-01 | 1.1977E-01 | 1.2021E-01 | 0.658E-01 |
| RA-226 | #B | -5.4808E-01 | -2.2625E+00 | -2.2626E+00 | 0.120E+01 |
| Th-230 | #B | -8.7379E+00 | -3.0150E+01 | -3.0151E+01 | 0.822E+01 |
| Th-234 | F | 1.2605E+00 | 1.2155E+00 | 1.2164E+00 | 0.101E+01 |
| Tl-208 | F | 1.9698E-01 | 8.2596E-02 | 8.2919E-02 | 0.396E-01 |
| U-235 | #B | -9.3430E-01 | -1.2373E+00 | -1.2378E+00 | 0.122E+00 |

# - All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 42.7 to 3400.4 keV) 1.1994110E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 16:52:56 Page 1
New World Technology Spectrum name: 4N001676.An1

Sample description
Parcel D 70-PD-C0033-13DUP 364g
9/17/07 10:11

Acquisition information
Start time: 17-Sep-2007 16:07:47
Live time: 2700
Real time: 2703

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Activity pCi/g | Time of Count Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 5.3778E-01 | 2.1930E-01 | 2.2021E-01 | 0.915E-01 |
| AM-241 | #A | -5.2268E-02 | -5.2635E-01 | -5.2636E-01 | 0.122E+00 |
| Bi-212 | #B | -3.1176E-01 | -1.3495E+00 | -1.3496E+00 | 0.423E+00 |
| BI-214 | # | 3.6457E-01 | 1.6156E-01 | 1.6212E-01 | 0.858E-01 |
| CO-60 | #B | 1.3616E-02 | 1.9493E-02 | 1.9500E-02 | 0.170E-01 |
| CS-137 | #B | -1.8505E-02 | -1.2461E-01 | -1.2461E-01 | 0.373E-01 |
| EU-152 | F | 2.3264E-01 | 1.1632E-01 | 1.1664E-01 | 0.938E-01 |
| EU-154 | #F | 8.0729E-02 | 9.9424E-02 | 9.9469E-02 | 0.656E-01 |
| K-40 | | 8.3564E+00 | 1.3375E+00 | 1.3730E+00 | 0.654E+00 |
| Pa-234 | F | 3.2229E-01 | 2.1912E-01 | 2.1944E-01 | 0.147E+00 |
| Pb-210 | | 2.0253E+00 | 1.5464E+00 | 1.5482E+00 | 0.102E+01 |
| Pb-212 | F | 8.8634E-02 | 9.3973E-02 | 9.4031E-02 | 0.799E-01 |
| PB-214 | F | 2.2593E-01 | 1.3729E-01 | 1.3754E-01 | 0.828E-01 |
| RA-226 | #B | -7.1506E-01 | -2.5185E+00 | -2.5186E+00 | 0.114E+01 |
| Th-230 | #B | -1.5816E+01 | 2.4791E+04 | 2.4791E+04 | 0.107E+02 |
| Th-234 | B | 8.8267E-01 | 9.7978E-01 | 9.8033E-01 | 0.103E+01 |
| Tl-208 | F | 2.0851E-01 | 6.4035E-02 | 6.4501E-02 | 0.396E-01 |
| U-235 | #B | -1.0058E+00 | -2.7694E+00 | -2.7697E+00 | 0.122E+00 |

# - All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 42.7 to 3400.4 keV) 1.1718451E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 15:20:12 Page 1
New World Technology Spectrum name: 3N000261.An1

Sample description
Parcel D 70-PD-C0033-14 384g
9/17/07 10:22

Acquisition information
Start time: 17-Sep-2007 14:35:03
Live time: 2700
Real time: 2704

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Activity pCi/g | Time of Count Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 6.4229E-01 | 2.1199E-01 | 2.1333E-01 | 0.755E-01 |
| AM-241 | B | 1.5986E-02 | 9.0098E-02 | 9.0100E-02 | 0.765E-01 |
| Bi-212 | B | 1.8780E-01 | 2.7374E-01 | 2.7383E-01 | 0.237E+00 |
| BI-214 | F | 5.0782E-01 | 1.5328E-01 | 1.5443E-01 | 0.546E-01 |
| CO-60 | #B | -2.7814E-02 | 6.4727E+01 | 6.4727E+01 | 0.245E-01 |
| CS-137 | # | 3.1948E-02 | 2.8474E-02 | 2.8499E-02 | 0.154E-01 |
| EU-152 | B | 7.3632E-03 | 1.5997E-02 | 1.5999E-02 | 0.593E-01 |
| EU-154 | F | 8.6553E-02 | 7.3473E-02 | 7.3543E-02 | 0.431E-01 |
| K-40 | # | 7.0539E+00 | 1.2083E+00 | 1.2363E+00 | 0.562E+00 |
| Pa-234 | B | 5.8324E-02 | 8.6510E-02 | 8.6537E-02 | 0.818E-01 |
| Pb-210 | B | 2.0252E-01 | 7.7787E-01 | 7.7791E-01 | 0.729E+00 |
| Pb-212 | F | 3.0500E-01 | 8.7151E-02 | 8.7882E-02 | 0.692E-01 |
| PB-214 | F | 2.3393E-01 | 9.7921E-02 | 9.8304E-02 | 0.886E-01 |
| RA-226 | B | 2.4836E-01 | 9.0526E-01 | 9.0531E-01 | 0.816E+00 |
| Th-230 | #B | -7.3977E+00 | -2.9751E+01 | -2.9752E+01 | 0.356E+01 |
| Th-234 | F | 6.8852E-01 | 5.2024E-01 | 5.2087E-01 | 0.626E+00 |
| Tl-208 | F | 2.2037E-01 | 7.4286E-02 | 7.4735E-02 | 0.275E-01 |
| U-235 | F | 1.0490E-01 | 7.7823E-02 | 7.7920E-02 | 0.476E-01 |

# - All peaks for activity calculation had bad shape.
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& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 40.9 to 2607.5 keV) 9.1001749E+00 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 14:20:31 Page 1
New World Technology Spectrum name: 6N001910.An1

Sample description
Parcel D 70-PD-C0033-15 391g
9/17/07 09:46

Acquisition information
Start time: 17-Sep-2007 13:32:59
Live time: 2700
Real time: 2702

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Activity pCi/g | Time of Count Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | B | 1.3891E-01 | 6.1249E-02 | 6.1465E-02 | 0.200E+00 |
| AM-241 | #A | -8.3384E-02 | -5.3333E+00 | -5.3333E+00 | 0.111E+00 |
| Bi-212 | #B | -5.5903E-01 | 1.1370E+03 | 1.1370E+03 | 0.339E+00 |
| BI-214 | F | 3.1477E-01 | 1.8034E-01 | 1.8072E-01 | 0.104E+00 |
| CO-60 | #B | -8.8609E-02 | -2.1742E-01 | -2.1745E-01 | 0.447E-01 |
| CS-137 | #B | -4.4417E-02 | -2.5362E-01 | -2.5363E-01 | 0.367E-01 |
| EU-152 | B | 4.0123E-02 | 1.0465E-01 | 1.0466E-01 | 0.830E-01 |
| EU-154 | B | 6.2176E-02 | 9.3713E-02 | 9.3742E-02 | 0.627E-01 |
| K-40 | | 7.6760E+00 | 1.2786E+00 | 1.3099E+00 | 0.666E+00 |
| Pa-234 | F | 1.4162E-01 | 1.9183E-01 | 1.9190E-01 | 0.122E+00 |
| Pb-210 | F | 1.5089E+00 | 1.7346E+00 | 1.7355E+00 | 0.107E+01 |
| Pb-212 | F | 2.5054E-01 | 9.8538E-02 | 9.8975E-02 | 0.750E-01 |
| PB-214 | | 3.2311E-01 | 1.0900E-01 | 1.0966E-01 | 0.829E-01 |
| RA-226 | #B | -3.2165E-01 | -1.5989E+00 | -1.5990E+00 | 0.957E+00 |
| Th-230 | #B | -3.1040E+01 | -4.7183E+02 | -4.7183E+02 | 0.704E+01 |
| Th-234 | B | -5.4173E-01 | -1.6216E+00 | -1.6217E+00 | 0.958E+00 |
| Tl-208 | F | 1.2943E-01 | 6.9257E-02 | 6.9423E-02 | 0.445E-01 |
| U-235 | B | -4.4783E-01 | -8.5275E-01 | -8.5291E-01 | 0.838E-01 |

# - All peaks for activity calculation had bad shape.
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& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 40.9 to 2602.8 keV) 8.6938190E+00 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 18-SEP-2007 06:48:32 Page 1
New World Technology Spectrum name: 1N001743.An1

Sample description
Parcel D 70-PD-C0033-16 371g
9/17/07 09:38

Acquisition information
Start time: 17-Sep-2007 15:03:06
Live time: 2700
Real time: 2702

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/ g | Uncertainty Counting pCi/ g | 2 Sigma Total pCi/ g | MDA pCi/ g |
|---|---|---|---|---|---|
| Ac-228 | F | 4.8204E-01 | 2.3690E-01 | 2.3757E-01 | 0.113E+00 |
| AM-241 | #A | -3.3359E-01 | -1.3804E+00 | -1.3805E+00 | 0.596E+00 |
| Bi-212 | #B | 0.0000E+00 | 1.2465E+03 | 1.2465E+03 | 0.292E+00 |
| BI-214 | #F | 3.9114E-01 | 2.0492E-01 | 2.0543E-01 | 0.842E-01 |
| CO-60 | #B | -1.1403E-01 | -5.4432E-01 | -5.4434E-01 | 0.618E-01 |
| CS-137 | #B | -9.1034E-02 | -1.1293E+00 | -1.1293E+00 | 0.539E-01 |
| EU-152 | C | 1.1730E-01 | 1.3622E-01 | 1.3629E-01 | 0.805E-01 |
| EU-154 | A | 2.5790E-03 | 8.8604E-02 | 8.8604E-02 | 0.731E-01 |
| K-40 | | 7.7038E+00 | 1.3509E+00 | 1.3808E+00 | 0.703E+00 |
| Pa-234 | #B | -6.0115E-03 | -1.2637E-02 | -1.2639E-02 | 0.605E-01 |
| Pb-210 | #F | 0.0000E+00 | 0.0000E+00 | 0.0000E+00 | 0.000E+00 |
| Pb-212 | F | 1.9427E-01 | 1.0747E-01 | 1.0771E-01 | 0.883E-01 |
| Pb-214 | F | 3.1875E-01 | 1.6041E-01 | 1.6085E-01 | 0.903E-01 |
| RA-226 | B | 1.4707E-01 | 1.1894E+00 | 1.1895E+00 | 0.106E+01 |
| Th-230 | #B | 1.6203E+01 | 4.4232E+01 | 4.4236E+01 | 0.313E+02 |
| Th-234 | #B | -6.0827E+00 | -1.8424E+01 | -1.8426E+01 | 0.381E+01 |
| Tl-208 | #F | 2.7628E-02 | 2.8496E-02 | 2.8514E-02 | 0.276E-01 |
| U-235 | #B | -7.3830E-02 | -2.6709E-01 | -2.6710E-01 | 0.699E-01 |

# - All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.2 to 2627.2 keV) 9.0899992E+00 pCi/ g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 15:49:41 Page 1
New World Technology Spectrum name: 2N000462.An1

Sample description
Parcel D 70-PD-C0033-17 385g
9/17/07 10:04

Acquisition information
Start time: 17-Sep-2007 15:04:31
Live time: 2700
Real time: 2702

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | #B | 6.0005E-02 | 3.6475E-02 | 3.6543E-02 | 0.127E+00 |
| AM-241 | #B | 7.3678E-03 | 8.4204E-02 | 8.4204E-02 | 0.657E-01 |
| Bi-212 | F | 3.0512E-01 | 2.6717E-01 | 2.6741E-01 | 0.192E+00 |
| BI-214 | F | 3.0251E-01 | 1.1866E-01 | 1.1918E-01 | 0.741E-01 |
| CO-60 | #B | -1.0279E-01 | -2.2894E-01 | -2.2897E-01 | 0.632E-01 |
| CS-137 | #B | -2.6036E-03 | -3.9815E-02 | -3.9815E-02 | 0.367E-01 |
| EU-152 | F | 9.6607E-02 | 6.1099E-02 | 6.1204E-02 | 0.509E-01 |
| EU-154 | F | 1.2714E-01 | 7.8917E-02 | 7.9057E-02 | 0.455E-01 |
| K-40 | | 8.9436E+00 | 1.6650E+00 | 1.6976E+00 | 0.785E+00 |
| Pa-234 | #F | 1.1980E-01 | 9.6046E-02 | 9.6149E-02 | 0.790E-01 |
| Pb-210 | F | 7.6409E-01 | 8.5104E-01 | 8.5151E-01 | 0.605E+00 |
| Pb-212 | F | 2.2546E-01 | 8.7524E-02 | 8.7922E-02 | 0.610E-01 |
| Pb-214 | F | 3.5663E-01 | 1.4196E-01 | 1.4258E-01 | 0.793E-01 |
| RA-226 | #B | -1.7748E-01 | -1.2116E+00 | -1.2116E+00 | 0.787E+00 |
| Th-230 | #B | 3.4739E+00 | 6.7402E+00 | 6.7414E+00 | 0.532E+01 |
| Th-234 | B | 4.9526E-01 | 7.1278E-01 | 7.1302E-01 | 0.631E+00 |
| Tl-208 | B | 1.0753E-01 | 3.6053E-02 | 3.6272E-02 | 0.156E+00 |
| U-235 | B | 9.0140E-03 | 5.2645E-02 | 5.2646E-02 | 0.460E-01 |

# - All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.8 to 2661.0 keV) 1.0253148E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 16:05:24 Page 1
New World Technology Spectrum name: 4N001675.An1

Sample description
Parcel D 70-PD-C0033-18 388g
9/17/07 09:58

Acquisition information
Start time: 17-Sep-2007 15:20:13
Live time: 2700
Real time: 2704

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Activity pCi/g | Time of Count Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 7.3049E-01 | 2.1953E-01 | 2.2120E-01 | 0.100E+00 |
| AM-241 | #A | -4.6448E-02 | -4.3129E-01 | -4.3129E-01 | 0.110E+00 |
| Bi-212 | F | 3.6395E-01 | 2.4487E-01 | 2.4525E-01 | 0.327E+00 |
| BI-214 | | 4.2436E-01 | 1.2162E-01 | 1.2263E-01 | 0.575E-01 |
| CO-60 | #B | -1.4958E-02 | -7.5325E-02 | -7.5327E-02 | 0.184E-01 |
| CS-137 | #B | -8.5345E-03 | -6.2725E-02 | -6.2726E-02 | 0.329E-01 |
| EU-152 | F | 1.2243E-01 | 9.3360E-02 | 9.3470E-02 | 0.928E-01 |
| EU-154 | F | 9.8977E-02 | 1.2244E-01 | 1.2249E-01 | 0.683E-01 |
| K-40 | | 8.7496E+00 | 1.3134E+00 | 1.3530E+00 | 0.613E+00 |
| Pa-234 | B | 1.1966E-01 | 7.6687E-02 | 7.6814E-02 | 0.121E+00 |
| Pb-210 | | 2.3202E+00 | 1.5973E+00 | 1.5996E+00 | 0.102E+01 |
| Pb-212 | F | 3.4559E-01 | 9.5637E-02 | 9.6493E-02 | 0.729E-01 |
| PB-214 | F | 3.7979E-01 | 1.9107E-01 | 1.9159E-01 | 0.105E+00 |
| RA-226 | B | 4.1560E-01 | 1.2936E+00 | 1.2937E+00 | 0.112E+01 |
| Th-230 | #B | -4.3277E+00 | -2.2130E+01 | -2.2131E+01 | 0.936E+01 |
| Th-234 | F | 1.1755E+00 | 1.0021E+00 | 1.0031E+00 | 0.949E+00 |
| Tl-208 | F | 2.2526E-01 | 8.4238E-02 | 8.4651E-02 | 0.372E-01 |
| U-235 | #B | -8.6133E-01 | -1.0731E+00 | -1.0736E+00 | 0.116E+00 |

# - All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 42.7 to 3400.4 keV) 1.3175351E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 16:12:16 Page 1
New World Technology Spectrum name: 3N000262.An1

Sample description
Parcel D 70-PD-C0033-19 371g
9/17/07 09:33

Acquisition information
Start time: 17-Sep-2007 15:27:06
Live time: 2700
Real time: 2704

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Activity pCi/g | Time of Count Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | | 5.3055E-01 | 1.4304E-01 | 1.4439E-01 | 0.742E-01 |
| AM-241 | | 2.8269E-01 | 1.7193E-01 | 1.7225E-01 | 0.135E+00 |
| Bi-212 | F | 3.7213E-01 | 3.0600E-01 | 3.0631E-01 | 0.252E+00 |
| BI-214 | #F | 4.4039E-01 | 1.3331E-01 | 1.3431E-01 | 0.471E-01 |
| CO-60 | #B | -1.2338E-02 | -4.1127E-02 | -4.1130E-02 | 0.254E-01 |
| CS-137 | # | 3.5929E-02 | 3.4144E-02 | 3.4170E-02 | 0.192E-01 |
| EU-152 | #F | 1.0245E-01 | 6.4793E-02 | 6.4905E-02 | 0.675E-01 |
| EU-154 | F | 1.2736E-01 | 8.1011E-02 | 8.1149E-02 | 0.471E-01 |
| K-40 | | 7.3461E+00 | 1.2539E+00 | 1.2832E+00 | 0.582E+00 |
| Pa-234 | F | 1.5629E-01 | 1.3391E-01 | 1.3403E-01 | 0.792E-01 |
| Pb-210 | F | 8.8453E-01 | 1.2397E+00 | 1.2402E+00 | 0.882E+00 |
| Pb-212 | F | 2.8475E-01 | 9.5569E-02 | 9.6151E-02 | 0.740E-01 |
| PB-214 | F | 2.3808E-01 | 1.2300E-01 | 1.2332E-01 | 0.857E-01 |
| RA-226 | F | 8.8169E-01 | 9.7850E-01 | 9.7905E-01 | 0.843E+00 |
| Th-230 | #B | 5.6457E+00 | 9.1471E+00 | 9.1495E+00 | 0.633E+01 |
| Th-234 | F | 5.6836E-01 | 4.4827E-01 | 4.4876E-01 | 0.565E+00 |
| Tl-208 | F | 2.0511E-01 | 6.2090E-02 | 6.2554E-02 | 0.216E-01 |
| U-235 | F | 5.6923E-02 | 5.8036E-02 | 5.8074E-02 | 0.445E-01 |

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& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 40.9 to 2607.5 keV) 9.7357244E+00 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 16:23:30 Page 1
New World Technology Spectrum name: 6N001912.An1

Sample description
Parcel D 70-PD-C0033-20 376g
9/17/07 09:40

Acquisition information
Start time: 17-Sep-2007 15:34:38
Live time: 2700
Real time: 2702

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Activity pCi/g | Time of Count Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | B | 1.8464E-02 | 1.2168E-02 | 1.2187E-02 | 0.253E+00 |
| AM-241 | A | 5.1559E-02 | 1.3341E-01 | 1.3343E-01 | 0.111E+00 |
| Bi-212 | #B | -5.8134E-01 | 1.7034E+03 | 1.7034E+03 | 0.439E+00 |
| BI-214 | F | 3.8547E-01 | 1.6408E-01 | 1.6470E-01 | 0.110E+00 |
| CO-60 | #B | -9.0224E-02 | -2.9832E-01 | -2.9834E-01 | 0.478E-01 |
| CS-137 | #B | -3.7202E-02 | -1.7783E-01 | -1.7783E-01 | 0.423E-01 |
| EU-152 | #B | 5.3158E-02 | 6.3789E-02 | 6.3820E-02 | 0.813E-01 |
| EU-154 | F | 8.1093E-02 | 1.0633E-01 | 1.0637E-01 | 0.642E-01 |
| K-40 | | 1.1701E+01 | 1.3422E+00 | 1.4107E+00 | 0.897E-01 |
| Pa-234 | #F | 8.1429E-02 | 7.1388E-02 | 7.1452E-02 | 0.731E-01 |
| Pb-210 | B | 3.0152E-01 | 1.1912E+00 | 1.1913E+00 | 0.103E+01 |
| Pb-212 | B | 2.0772E-02 | 1.5771E-02 | 1.5790E-02 | 0.104E+00 |
| PB-214 | | 2.9876E-01 | 1.5092E-01 | 1.5133E-01 | 0.938E-01 |
| RA-226 | B | 9.0985E-01 | 1.1008E+00 | 1.1013E+00 | 0.939E+00 |
| Th-230 | #B | -2.3909E+01 | -6.0808E+01 | -6.0814E+01 | 0.939E+01 |
| Th-234 | #B | 5.6364E-02 | 2.5889E-01 | 2.5890E-01 | 0.938E+00 |
| Tl-208 | B | 3.1705E-03 | 9.7846E-03 | 9.7853E-03 | 0.596E-01 |
| U-235 | B | -4.9879E-01 | -1.5930E+00 | -1.5932E+00 | 0.869E-01 |

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< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 40.9 to 2602.8 keV) 1.2385485E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 17-SEP-2007 16:48:34 Page 1
New World Technology Spectrum name: 2N000463.An1

Sample description
Parcel D 70-PD-C0033-21 382g
9/17/07 10:16

Acquisition information
Start time: 17-Sep-2007 16:03:25
Live time: 2700
Real time: 2702

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Activity pCi/g | Time of Count Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 3.9708E-01 | 1.6350E-01 | 1.6416E-01 | 0.903E-01 |
| AM-241 | #B | -5.5991E-02 | -1.1860E+00 | -1.1860E+00 | 0.959E-01 |
| Bi-212 | #B | 2.0278E-02 | 1.6461E-01 | 1.6461E-01 | 0.159E+00 |
| BI-214 | F | 3.6120E-01 | 1.3903E-01 | 1.3967E-01 | 0.816E-01 |
| CO-60 | #B | -1.1537E-01 | -3.4296E-01 | -3.4299E-01 | 0.637E-01 |
| CS-137 | #B | -5.0265E-02 | -5.7619E-01 | -5.7620E-01 | 0.391E-01 |
| EU-152 | F | 7.9166E-02 | 6.4638E-02 | 6.4705E-02 | 0.447E-01 |
| EU-154 | #F | 4.6099E-02 | 4.5676E-02 | 4.5708E-02 | 0.425E-01 |
| K-40 | | 9.5364E+00 | 1.7182E+00 | 1.7542E+00 | 0.791E+00 |
| Pa-234 | #F | 9.6882E-02 | 8.7165E-02 | 8.7239E-02 | 0.657E-01 |
| Pb-210 | F | 9.3434E-01 | 1.0792E+00 | 1.0797E+00 | 0.840E+00 |
| Pb-212 | F | 3.1688E-01 | 8.9520E-02 | 9.0287E-02 | 0.559E-01 |
| Pb-214 | F | 2.5524E-01 | 9.6335E-02 | 9.6799E-02 | 0.646E-01 |
| RA-226 | B | 7.0168E-01 | 9.3814E-01 | 9.3851E-01 | 0.702E+00 |
| Th-230 | #B | -2.6704E+00 | -3.6581E+01 | -3.6581E+01 | 0.409E+01 |
| Th-234 | #B | -1.2135E-01 | -1.5021E+00 | -1.5021E+00 | 0.980E+00 |
| Tl-208 | #F | 1.3924E-01 | 5.4504E-02 | 5.4748E-02 | 0.126E+00 |
| U-235 | #B | -3.0148E-02 | 1.1065E+02 | 1.1065E+02 | 0.419E-01 |

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C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

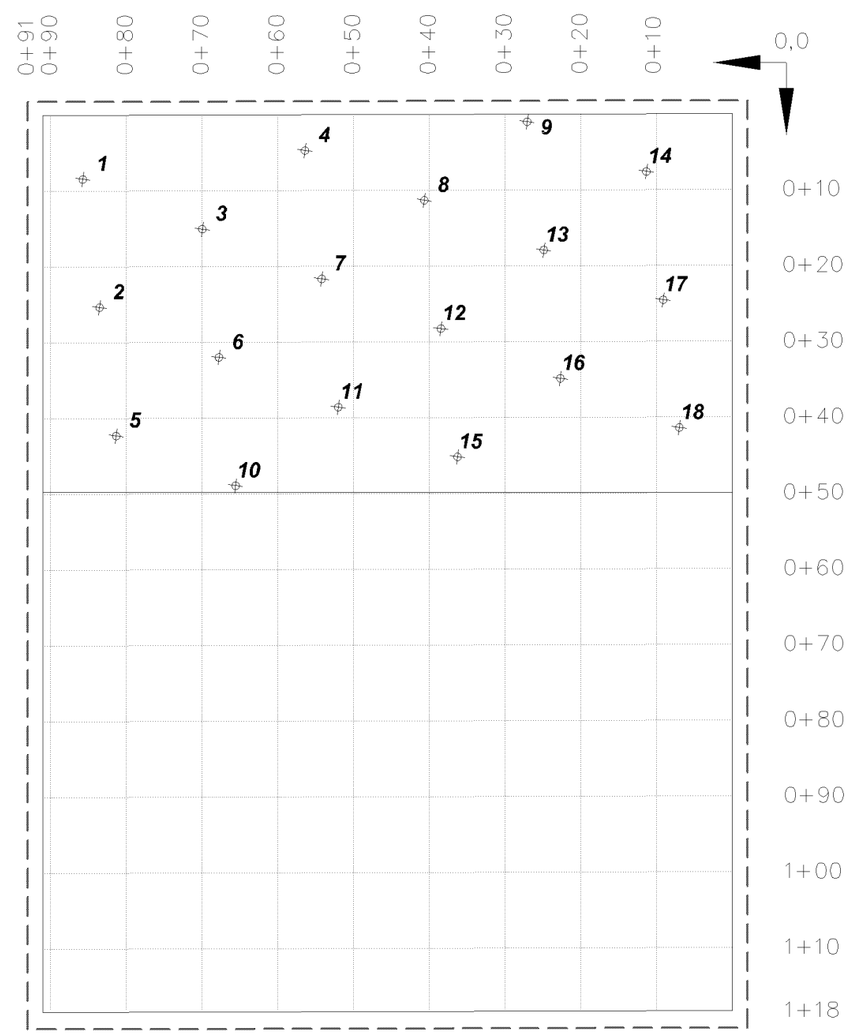
---------- S U M M A R Y ----------

Total Activity ( 41.8 to 2661.0 keV) 1.0866821E+01 pCi/g

Laboratory: New World Technology

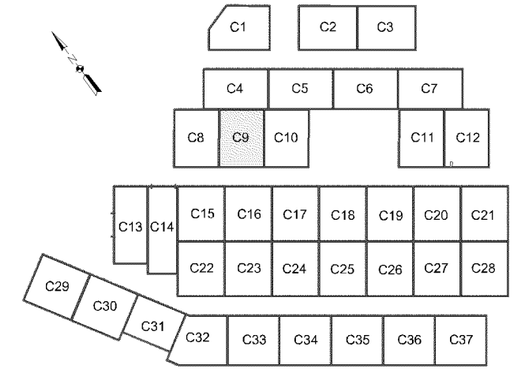
# EXCAVATED SOIL UNIT 108

# C09-108




10 0 10 20
(feet)

SYSTEMATIC SAMPLES 1–18




KEY PLAN

## LEGEND:

1 SYSTEMATIC

DRAFT

# RECORD DRAWING

RADIOLOGICAL SCREENING YARD 2 (RSY2)
SOIL SAMPLING LOCATIONS AREA C09

HUNTERS POINT SHIPYARD-SAN FRANCISCO, CA

**TETRA TECH** EC, INC.

DRAWING NO: 70-PD-C09-108.DWG
DCN: TASK: TO 70
APPROVED BY: BMH
CHECKED BY: TYL
REV:
DRAWN BY: AEC
DATE: 07-09-08

\\ECISFOFILE1\PROJECTS\CTO 006\CAD\TO 70 PARCEL D\PARCEL D WORKING FILES_RSY PAD SURVEYS\DWG FILES\70-PD-C09-108.DWG
PLOT/UPDATE: JUL 09 2008 11:36:12

ORTEC g v - i (3263) Wan32 G53W2.10 10-JUL-2008 22:10:26
New World Technology Spectrum name: 3N000650.An1

Sample description
Parcel D 70-PD-C0108-01 394g
7/10/08 14:05

Acquisition information
Start time: 10-Jul-2008 21:15:18
Live time: 2700
Real time: 2706

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 5.4738E-01 | 2.0205E-01 | 2.0488E-01 | 0.148E+00 |
| AM-241 | B | 2.8872E-02 | 1.0205E-01 | 1.0208E-01 | 0.852E-01 |
| Bi-212 | B | 8.0950E-02 | 3.4688E-01 | 3.4692E-01 | 0.301E+00 |
| BI-214 | F | 4.1260E-01 | 1.1821E-01 | 1.2084E-01 | 0.463E-01 |
| CO-60 | #B | 9.1146E-03 | 1.1565E-02 | 1.1579E-02 | 0.576E-01 |
| CS-137 | | 5.0669E-02 | 3.7950E-02 | 3.8076E-02 | 0.246E-01 |
| EU-152 | B | 2.8853E-02 | 6.4510E-02 | 6.4542E-02 | 0.701E-01 |
| EU-154 | F | 4.7630E-02 | 7.4832E-02 | 7.4907E-02 | 0.433E-01 |
| K-40 | | 1.2814E+01 | 2.3290E+00 | 2.4616E+00 | 0.120E+01 |
| Pa-234 | #B | 6.7007E-03 | 1.8879E-02 | 1.8886E-02 | 0.453E-01 |
| Pb-210 | | 1.2563E+00 | 8.2544E-01 | 8.3097E-01 | 0.628E+00 |
| Pb-212 | | 3.8923E-01 | 1.1542E-01 | 1.1814E-01 | 0.785E-01 |
| PB-214 | F | 4.5760E-01 | 1.4850E-01 | 1.5128E-01 | 0.933E-01 |
| RA-226 | B | 6.9807E-01 | 9.6961E-01 | 9.7065E-01 | 0.804E+00 |
| Th-230 | #B | -2.2051E+02 | 1.0221E+03 | 1.0225E+03 | 0.197E+02 |
| Th-234 | #B | -1.1708E+01 | 1.2639E+01 | 1.2701E+01 | 0.148E+01 |
| Tl-208 | F | 2.6056E-01 | 7.5435E-02 | 7.7069E-02 | 0.356E-01 |
| U-235 | B | 4.2864E-02 | 5.8273E-02 | 5.8339E-02 | 0.458E-01 |

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F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 39.3 to 2495.1 keV) 1.619E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 10-JUL-2008 22:59:37
New World Technology Spectrum name: 1N000738.An1

Sample description
Parcel D 70-PD-C0108-02 394g
7/10/08 14:01

Acquisition information
Start time: 10-Jul-2008 22:13:52
Live time: 2700
Real time: 2703

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty 2 Sigma Counting pCi/g | Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 5.7325E-01 | 2.1951E-01 | 2.2054E-01 | 0.108E+00 |
| AM-241 | #A | -9.3336E-01 | 2.8509E+03 | 2.8509E+03 | 0.688E+00 |
| Bi-212 | F | 7.3212E-01 | 5.0830E-01 | 5.0903E-01 | 0.248E+00 |
| BI-214 | F | 6.3965E-01 | 1.3568E-01 | 1.3774E-01 | 0.353E-01 |
| CO-60 | #F | 8.4467E-02 | 3.7344E-02 | 3.7476E-02 | 0.949E-02 |
| CS-137 | #B | -7.1998E-03 | -5.7729E-02 | -5.7730E-02 | 0.402E-01 |
| EU-152 | A | 7.4662E-02 | 1.2478E-01 | 1.2481E-01 | 0.781E-01 |
| EU-154 | A | 5.6788E-03 | 8.2803E-02 | 8.2803E-02 | 0.682E-01 |
| K-40 | # | 1.0711E+01 | 1.3785E+00 | 1.4347E+00 | 0.103E+00 |
| Pa-234 | #F | 1.3519E-01 | 7.8054E-02 | 7.8214E-02 | 0.924E-01 |
| Pb-210 | #F | 0.0000E+00 | 0.0000E+00 | 0.0000E+00 | 0.000E+00 |
| Pb-212 | F | 2.7326E-01 | 1.0392E-01 | 1.0441E-01 | 0.804E-01 |
| Pb-214 | | 4.3505E-01 | 1.4719E-01 | 1.4807E-01 | 0.868E-01 |
| RA-226 | B | 2.0890E-01 | 9.8989E-01 | 9.8992E-01 | 0.859E+00 |
| Th-230 | #B | -1.0608E+01 | -8.0035E+00 | -8.0131E+00 | 0.203E+02 |
| Th-234 | #B | -1.4755E+00 | -7.6793E+00 | -7.6795E+00 | 0.406E+01 |
| Tl-208 | | 3.0314E-01 | 9.7053E-02 | 9.7703E-02 | 0.177E-01 |
| U-235 | #B | -1.1265E+00 | -3.1542E+00 | -3.1545E+00 | 0.127E+00 |

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A - Activity printed, but activity < MDA.
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C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.2 to 2630.1 keV) 1.3751490E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 10-JUL-2008 23:03:02
New World Technology Spectrum name: 2N000718.An1

Sample description
Parcel D 70-PD-C0108-03 394g
7/10/08 13:38

Acquisition information
Start time: 10-Jul-2008 22:15:41
Live time: 2700
Real time: 2706

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Activity pCi/g | Time of Count Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 4.8446E-01 | 1.7912E-01 | 1.8002E-01 | 0.959E-01 |
| AM-241 | #B | -5.6851E-02 | 1.8347E+02 | 1.8347E+02 | 0.646E-01 |
| Bi-212 | #B | -9.6313E-02 | -6.2651E-01 | -6.2652E-01 | 0.120E+00 |
| BI-214 | F | 3.9546E-01 | 1.2294E-01 | 1.2381E-01 | 0.701E-01 |
| CO-60 | # | 1.2107E-01 | 4.0663E-02 | 4.0910E-02 | 0.790E-02 |
| CS-137 | B | 3.2545E-02 | 4.5735E-02 | 4.5751E-02 | 0.346E-01 |
| EU-152 | F | 1.1968E-01 | 6.6389E-02 | 6.6538E-02 | 0.604E-01 |
| EU-154 | F | 6.3648E-02 | 6.7358E-02 | 6.7400E-02 | 0.414E-01 |
| K-40 | | 7.8071E+00 | 1.1410E+00 | 1.1772E+00 | 0.183E+00 |
| Pa-234 | F | 1.3361E-01 | 9.8089E-02 | 9.8214E-02 | 0.788E-01 |
| Pb-210 | B | 5.2068E-01 | 7.0908E-01 | 7.0935E-01 | 0.592E+00 |
| Pb-212 | F | 5.1423E-01 | 9.7818E-02 | 9.9664E-02 | 0.592E-01 |
| Pb-214 | F | 3.9231E-01 | 9.3246E-02 | 9.4377E-02 | 0.504E-01 |
| RA-226 | B | 4.0676E-01 | 8.4641E-01 | 8.4654E-01 | 0.711E+00 |
| Th-230 | #B | -6.5234E+00 | -4.4974E+01 | -4.4975E+01 | 0.445E+01 |
| Th-234 | F | 1.1896E+00 | 6.1189E-01 | 6.1349E-01 | 0.630E+00 |
| Tl-208 | F | 1.5609E-01 | 4.3379E-02 | 4.3764E-02 | 0.315E-01 |
| U-235 | #B | -3.5567E-02 | -8.2807E-02 | -8.2818E-02 | 0.507E-01 |

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A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 43.0 to 2746.8 keV) 1.1037844E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 10-JUL-2008 23:03:20
New World Technology Spectrum name: 7N000764.An1

Sample description
Parcel D 70-PD-C0108-04 384g
7/10/08 13:32

Acquisition information
Start time: 10-Jul-2008 22:17:02
Live time: 2700
Real time: 2702

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| AC-228 | F | 8.1121E-01 | 2.2311E-01 | 2.2512E-01 | 0.761E-01 |
| AM-241 | #B | 9.1815E-02 | 1.6570E-01 | 1.6573E-01 | 0.107E+00 |
| BI-212 | B | 6.6965E-02 | 2.2392E-01 | 2.2394E-01 | 0.204E+00 |
| BI-214 | F | 5.7011E-01 | 1.6914E-01 | 1.7045E-01 | 0.730E-01 |
| CO-60 | #F | 3.5319E-02 | 1.9250E-02 | 1.9294E-02 | 0.146E-01 |
| CS-137 | | 6.7334E-02 | 4.2737E-02 | 4.2810E-02 | 0.268E-01 |
| EU-152 | #B | -2.3525E-03 | -1.5661E-03 | -1.5685E-03 | 0.749E-01 |
| EU-154 | F | 1.3503E-01 | 1.1087E-01 | 1.1098E-01 | 0.514E-01 |
| K-40 | | 9.9018E+00 | 1.4714E+00 | 1.5164E+00 | 0.812E+00 |
| PA-234 | #F | 1.5881E-01 | 6.9343E-02 | 6.9591E-02 | 0.102E+00 |
| PB-210 | | 1.6486E+00 | 1.0821E+00 | 1.0838E+00 | 0.866E+00 |
| PB-212 | F | 4.5774E-01 | 9.5458E-02 | 9.6950E-02 | 0.569E-01 |
| PB-214 | F | 3.1895E-01 | 1.3491E-01 | 1.3542E-01 | 0.858E-01 |
| RA-226 | #B | -6.4502E-02 | -1.1606E+00 | -1.1606E+00 | 0.903E+00 |
| Th-230 | #B | -8.5070E+00 | -2.7131E+01 | -2.7133E+01 | 0.875E+01 |
| TH-234 | #F | 1.7239E+00 | 1.2972E+00 | 1.2988E+00 | 0.808E+00 |
| TL-208 | F | 3.1507E-01 | 1.0195E-01 | 1.0261E-01 | 0.310E-01 |
| U-235 | #B | -8.1050E-01 | -2.2743E+00 | -2.2745E+00 | 0.103E+00 |

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& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
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C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.9 to 2668.2 keV) 1.5814738E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 11-JUL-2008 09:24:29
New World Technology Spectrum name: 6N000657.An1

Sample description
Parcel D 70-PD-C0108-05 371g
7/10/08 13:54

Acquisition information
Start time: 10-Jul-2008 15:47:44
Live time: 2700
Real time: 2702

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 5.8966E-01 | 1.7602E-01 | 1.7737E-01 | 0.211E+00 |
| AM-241 | #A | 1.3164E-02 | 1.6140E-01 | 1.6140E-01 | 0.111E+00 |
| Bi-212 | #B | -9.8988E-02 | -8.0823E-02 | -8.0906E-02 | 0.369E+00 |
| BI-214 | F | 4.6644E-01 | 1.2719E-01 | 1.2836E-01 | 0.698E-01 |
| CO-60 | #B | -1.8914E-02 | -1.2294E-02 | -1.2314E-02 | 0.395E-01 |
| CS-137 | B | 1.8985E-03 | 3.6955E-02 | 3.6956E-02 | 0.303E-01 |
| EU-152 | B | 4.1507E-02 | 9.7675E-02 | 9.7687E-02 | 0.685E-01 |
| EU-154 | F | 6.5848E-02 | 6.0834E-02 | 6.0883E-02 | 0.587E-01 |
| K-40 | | 9.7436E+00 | 1.4706E+00 | 1.5143E+00 | 0.703E+00 |
| Pa-234 | F | 2.4433E-01 | 1.7243E-01 | 1.7266E-01 | 0.105E+00 |
| Pb-210 | | 1.6097E+00 | 1.1637E+00 | 1.1652E+00 | 0.938E+00 |
| Pb-212 | F | 4.1281E-01 | 1.1125E-01 | 1.1230E-01 | 0.810E-01 |
| PB-214 | | 5.4222E-01 | 1.5628E-01 | 1.5757E-01 | 0.939E-01 |
| RA-226 | B | 7.5742E-01 | 1.1184E+00 | 1.1188E+00 | 0.948E+00 |
| Th-230 | #B | -2.5229E+01 | -7.3779E+01 | -7.3785E+01 | 0.121E+02 |
| Th-234 | #B | -3.5532E-01 | -1.5001E+00 | -1.5001E+00 | 0.908E+00 |
| Tl-208 | F | 2.1632E-01 | 8.0911E-02 | 8.1307E-02 | 0.484E-01 |
| U-235 | #B | -4.6164E-01 | -7.6931E-01 | -7.6950E-01 | 0.884E-01 |

# - All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.1 to 2612.6 keV) 1.2991145E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) Wan32 G53W2.10 10-JUL-2008 23:04:08
New World Technology Spectrum name: 3N000651.An1

Sample description
Parcel D 70-PD-C0108-06 390g
7/10/08 13:40

Acquisition information
Start time: 10-Jul-2008 22:18:24
Live time: 2700
Real time: 2706

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 5.4174E-01 | 2.2080E-01 | 2.2333E-01 | 0.154E+00 |
| AM-241 | B | 3.6476E-02 | 9.7609E-02 | 9.7656E-02 | 0.812E-01 |
| Bi-212 | F | 4.9649E-01 | 3.4807E-01 | 3.4940E-01 | 0.258E+00 |
| BI-214 | F | 6.3647E-01 | 1.3464E-01 | 1.4008E-01 | 0.468E-01 |
| CO-60 | #B | 7.6470E-03 | 5.2431E-02 | 5.2433E-02 | 0.564E-01 |
| CS-137 | B | 2.2516E-02 | 4.2301E-02 | 4.2324E-02 | 0.324E-01 |
| EU-152 | F | 9.7873E-02 | 5.8898E-02 | 5.9302E-02 | 0.705E-01 |
| EU-154 | F | 7.4276E-02 | 6.7385E-02 | 6.7588E-02 | 0.464E-01 |
| K-40 | | 1.6441E+01 | 2.3094E+00 | 2.5256E+00 | 0.801E+00 |
| Pa-234 | B | -1.8754E-02 | 1.2654E-01 | 1.2655E-01 | 0.458E-01 |
| Pb-210 | | 1.2704E+00 | 8.1014E-01 | 8.1590E-01 | 0.613E+00 |
| Pb-212 | F | 4.8012E-01 | 1.1213E-01 | 1.1636E-01 | 0.797E-01 |
| PB-214 | F | 4.2486E-01 | 1.1555E-01 | 1.1862E-01 | 0.825E-01 |
| RA-226 | B | 6.4383E-01 | 1.0595E+00 | 1.0603E+00 | 0.880E+00 |
| Th-230 | #B | -2.1775E+02 | 5.1501E+02 | 5.1583E+02 | 0.196E+02 |
| Th-234 | #B | -1.2670E+01 | 2.3875E+01 | 2.3913E+01 | 0.152E+01 |
| Tl-208 | F | 2.3884E-01 | 5.9421E-02 | 6.1157E-02 | 0.199E-01 |
| U-235 | B | 3.1890E-02 | 6.0212E-02 | 6.0247E-02 | 0.480E-01 |

# - All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 39.3 to 2495.1 keV) 2.053E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 11-JUL-2008 09:05:55
New World Technology Spectrum name: 4N000619.An1

Sample description
Parcel D 70-PD-C0108-07 393g
7/10/08 13:28

Acquisition information
Start time: 11-Jul-2008 07:14:26
Live time: 5400
Real time: 5407

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty 2 Sigma Counting pCi/g | Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 7.3002E-01 | 1.8235E-01 | 1.8435E-01 | 0.833E-01 |
| AM-241 | #A | -6.5334E-02 | -7.7054E-01 | -7.7054E-01 | 0.913E-01 |
| Bi-212 | #F | 4.0078E-01 | 2.1566E-01 | 2.1617E-01 | 0.282E+00 |
| BI-214 | | 5.7187E-01 | 1.2299E-01 | 1.2480E-01 | 0.563E-01 |
| CO-60 | #F | 2.4250E-02 | 3.6332E-02 | 3.6343E-02 | 0.218E-01 |
| CS-137 | F | 2.5218E-02 | 3.1545E-02 | 3.1558E-02 | 0.241E-01 |
| EU-152 | F | 1.2102E-01 | 1.0839E-01 | 1.0849E-01 | 0.721E-01 |
| EU-154 | #B | 6.9855E-04 | 1.1921E-03 | 1.1924E-03 | 0.488E-01 |
| K-40 | | 1.0284E+01 | 1.0059E+00 | 1.0759E+00 | 0.432E+00 |
| Pa-234 | F | 1.1240E-01 | 9.1541E-02 | 9.1635E-02 | 0.839E-01 |
| Pb-210 | | 1.5854E+00 | 8.9448E-01 | 8.9640E-01 | 0.724E+00 |
| Pb-212 | F | 5.0593E-01 | 8.2729E-02 | 8.4832E-02 | 0.577E-01 |
| PB-214 | F | 5.5333E-01 | 1.2019E-01 | 1.2193E-01 | 0.653E-01 |
| RA-226 | | 1.0576E+00 | 9.3806E-01 | 9.3888E-01 | 0.780E+00 |
| Th-230 | #B | -7.4581E+00 | -2.3463E+01 | -2.3465E+01 | 0.730E+01 |
| Th-234 | | 1.5161E+00 | 8.1970E-01 | 8.2161E-01 | 0.736E+00 |
| Tl-208 | #F | 3.2882E-01 | 7.1421E-02 | 7.2455E-02 | 0.270E-01 |
| U-235 | #B | -9.5612E-01 | -1.9716E+00 | -1.9719E+00 | 0.853E-01 |

# - All peaks for activity calculation had bad shape.
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& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 42.7 to 3401.6 keV) 1.7133091E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 11-JUL-2008 09:01:45
New World Technology Spectrum name: 7N000766.An1

Sample description
Parcel D 70-PD-C0108-08 380g
7/10/08 12:41

Acquisition information
Start time: 11-Jul-2008 08:03:13
Live time: 2700
Real time: 2701

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| AC-228 | F | 8.5368E-01 | 3.2514E-01 | 3.2667E-01 | 0.130E+00 |
| AM-241 | #B | -1.4613E-02 | -1.1740E-01 | -1.1740E-01 | 0.678E-01 |
| BI-212 | B | 2.0139E-01 | 3.7425E-01 | 3.7432E-01 | 0.307E+00 |
| BI-214 | F | 6.2005E-01 | 1.4120E-01 | 1.4305E-01 | 0.707E-01 |
| CO-60 | #F | 9.7536E-03 | 9.2218E-03 | 9.2289E-03 | 0.973E-02 |
| CS-137 | #B | -2.6271E-04 | -7.3721E-02 | -7.3721E-02 | 0.306E-01 |
| EU-152 | #F | 2.0080E-01 | 8.1958E-02 | 8.2295E-02 | 0.955E-01 |
| EU-154 | F | 6.5610E-02 | 6.2613E-02 | 6.2660E-02 | 0.589E-01 |
| K-40 | | 9.7917E+00 | 1.4745E+00 | 1.5184E+00 | 0.820E+00 |
| PA-234 | B | 9.7446E-02 | 8.6873E-02 | 8.6947E-02 | 0.102E+00 |
| PB-210 | | 2.1058E+00 | 1.4835E+00 | 1.4855E+00 | 0.937E+00 |
| PB-212 | F | 5.1805E-01 | 1.0650E-01 | 1.0821E-01 | 0.656E-01 |
| PB-214 | F | 3.9007E-01 | 1.4817E-01 | 1.4887E-01 | 0.858E-01 |
| RA-226 | B | 6.5549E-01 | 1.0938E+00 | 1.0941E+00 | 0.921E+00 |
| Th-230 | #B | -1.9920E+01 | -1.3400E+03 | -1.3401E+03 | 0.994E+01 |
| TH-234 | F | 1.1466E+00 | 9.8436E-01 | 9.8527E-01 | 0.788E+00 |
| TL-208 | F | 2.8732E-01 | 9.8227E-02 | 9.8801E-02 | 0.313E-01 |
| U-235 | #B | -8.1789E-01 | -2.3778E+00 | -2.3780E+00 | 0.106E+00 |

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& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.9 to 2668.2 keV) 1.5713322E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 11-JUL-2008 10:45:32
New World Technology Spectrum name: 7N000768.An1

Sample description
Parcel D 70-PD-C0108-08DUP 380g
7/10/08 12:41

Acquisition information
Start time: 11-Jul-2008 09:58:40
Live time: 2700
Real time: 2702

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| AC-228 | F | 6.2308E-01 | 2.2378E-01 | 2.2496E-01 | 0.964E-01 |
| AM-241 | #B | 5.0626E-03 | 1.0427E-01 | 1.0427E-01 | 0.833E-01 |
| BI-212 | B | 4.4298E-02 | 3.8752E-01 | 3.8753E-01 | 0.333E+00 |
| BI-214 | F | 5.7110E-01 | 1.5388E-01 | 1.5532E-01 | 0.796E-01 |
| CO-60 | #F | 3.4533E-02 | 1.8822E-02 | 1.8865E-02 | 0.900E-02 |
| CS-137 | #F | 2.4956E-02 | 2.6661E-02 | 2.6677E-02 | 0.159E-01 |
| EU-152 | B | 6.2279E-02 | 6.3669E-02 | 6.3711E-02 | 0.974E-01 |
| EU-154 | F | 1.6063E-01 | 8.5629E-02 | 8.5835E-02 | 0.594E-01 |
| K-40 | | 8.6476E+00 | 1.4511E+00 | 1.4860E+00 | 0.842E+00 |
| PA-234 | F | 1.9507E-01 | 1.1356E-01 | 1.1378E-01 | 0.820E-01 |
| PB-210 | | 2.7367E+00 | 1.7139E+00 | 1.7169E+00 | 0.103E+01 |
| PB-212 | F | 5.6551E-01 | 1.0671E-01 | 1.0875E-01 | 0.632E-01 |
| PB-214 | | 4.0534E-01 | 1.4178E-01 | 1.4257E-01 | 0.883E-01 |
| RA-226 | B | 4.2593E-01 | 9.2566E-01 | 9.2580E-01 | 0.798E+00 |
| Th-230 | #B | -1.9721E+01 | -4.1417E+02 | -4.1417E+02 | 0.678E+01 |
| TH-234 | B | 7.5541E-01 | 1.1613E+00 | 1.1617E+00 | 0.774E+00 |
| TL-208 | F | 3.7540E-01 | 1.1170E-01 | 1.1256E-01 | 0.313E-01 |
| U-235 | #B | -8.4171E-01 | -4.0839E+00 | -4.0840E+00 | 0.102E+00 |

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& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.9 to 2668.2 keV) 1.4119864E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 11-JUL-2008 09:22:42
New World Technology Spectrum name: 6N000662.An1

Sample description
Parcel D 70-PD-C0108-09 363g
7/10/08 13:00

Acquisition information
Start time: 10-Jul-2008 23:01:01
Live time: 2700
Real time: 2702

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Activity pCi/g | Time of Count Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 2.6750E-01 | 1.9557E-01 | 1.9582E-01 | 0.199E+00 |
| AM-241 | #A | -3.8484E-02 | -2.8413E-01 | -2.8413E-01 | 0.952E-01 |
| Bi-212 | B | 1.1128E-01 | 2.2256E-01 | 2.2260E-01 | 0.337E+00 |
| BI-214 | F | 3.1832E-01 | 1.2689E-01 | 1.2744E-01 | 0.821E-01 |
| CO-60 | #B | -7.7676E-02 | -3.4070E-01 | -3.4071E-01 | 0.402E-01 |
| CS-137 | | 5.8668E-02 | 4.3970E-02 | 4.4024E-02 | 0.295E-01 |
| EU-152 | F | 1.8839E-01 | 9.8573E-02 | 9.8820E-02 | 0.850E-01 |
| EU-154 | #F | 1.6242E-01 | 8.8498E-02 | 8.8702E-02 | 0.637E-01 |
| K-40 | | 9.5797E+00 | 1.4729E+00 | 1.5151E+00 | 0.702E+00 |
| Pa-234 | #B | 5.5847E-02 | 7.4612E-02 | 7.4640E-02 | 0.974E-01 |
| Pb-210 | #F | 1.0246E+00 | 1.0583E+00 | 1.0590E+00 | 0.830E+00 |
| Pb-212 | | 2.1060E-01 | 1.0355E-01 | 1.0384E-01 | 0.847E-01 |
| PB-214 | | 5.1099E-01 | 1.5771E-01 | 1.5885E-01 | 0.922E-01 |
| RA-226 | B | 7.0789E-01 | 1.0524E+00 | 1.0527E+00 | 0.899E+00 |
| Th-230 | #B | -3.7348E+01 | -2.6364E+02 | -2.6364E+02 | 0.776E+01 |
| Th-234 | B | 6.9275E-01 | 1.2506E+00 | 1.2509E+00 | 0.113E+01 |
| Tl-208 | #F | 1.2606E-01 | 7.6123E-02 | 7.6266E-02 | 0.515E-01 |
| U-235 | B | -5.2803E-01 | -2.2507E+00 | -2.2508E+00 | 0.923E-01 |

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* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.1 to 2612.6 keV) 1.0804372E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 11-JUL-2008 07:06:17
New World Technology Spectrum name: 1N000739.An1

Sample description
Parcel D 70-PD-C0108-10 393g
7/10/08 13:49

Acquisition information
Start time: 10-Jul-2008 23:02:52
Live time: 2700
Real time: 2703

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty 2 Sigma Counting pCi/g | Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 6.7475E-01 | 1.9817E-01 | 1.9975E-01 | 0.109E+00 |
| AM-241 | #A | -5.2169E-01 | -1.7489E+00 | -1.7490E+00 | 0.526E+00 |
| Bi-212 | #F | 1.1529E+00 | 5.7616E-01 | 5.7775E-01 | 0.252E+00 |
| BI-214 | #F | 6.0811E-01 | 1.7047E-01 | 1.7195E-01 | 0.647E-01 |
| CO-60 | #B | 2.1650E-03 | 1.0041E-02 | 1.0041E-02 | 0.115E-01 |
| CS-137 | #B | -1.4360E-02 | -9.5080E-02 | -9.5082E-02 | 0.458E-01 |
| EU-152 | A | 8.9104E-02 | 9.9859E-02 | 9.9914E-02 | 0.102E+00 |
| EU-154 | #A | -4.8015E-03 | 1.5877E+02 | 1.5877E+02 | 0.685E-01 |
| K-40 | # | 1.1031E+01 | 1.4662E+00 | 1.5222E+00 | 0.224E+00 |
| Pa-234 | #F | 2.8326E-01 | 1.4386E-01 | 1.4424E-01 | 0.125E+00 |
| Pb-210 | #F | 0.0000E+00 | 0.0000E+00 | 0.0000E+00 | 0.000E+00 |
| Pb-212 | F | 6.0884E-01 | 1.2863E-01 | 1.3060E-01 | 0.855E-01 |
| Pb-214 | | 6.1850E-01 | 1.6791E-01 | 1.6948E-01 | 0.981E-01 |
| RA-226 | B | 7.2605E-01 | 1.1230E+00 | 1.1233E+00 | 0.938E+00 |
| Th-230 | #B | -3.3444E+01 | -1.1498E+02 | -1.1499E+02 | 0.164E+02 |
| Th-234 | #B | -4.3531E+00 | -1.2863E+01 | -1.2864E+01 | 0.371E+01 |
| Tl-208 | #F | 3.8550E-01 | 1.1126E-01 | 1.1218E-01 | 0.177E-01 |
| U-235 | #B | -1.1117E+00 | -2.6337E+00 | -2.6340E+00 | 0.131E+00 |

# - All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.2 to 2630.1 keV) 1.5079553E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 10-JUL-2008 16:50:39
New World Technology Spectrum name: 7N000760.An1

Sample description
Parcel D 70-PD-C0108-11 385g
7/10/08 13:21

Acquisition information
Start time: 10-Jul-2008 15:53:46
Live time: 2700
Real time: 2701

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | Time of Count Activity pCi/g | Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|
| AC-228 | 8.8780E-01 | 2.7063E-01 | 2.7262E-01 | 0.988E-01 |
| AM-241 #B | 6.8920E-02 | 1.4412E-01 | 1.4415E-01 | 0.970E-01 |
| BI-212 #B | -3.4574E-02 | -4.4281E-01 | -4.4281E-01 | 0.278E+00 |
| BI-214 F | 6.5766E-01 | 1.6289E-01 | 1.6470E-01 | 0.640E-01 |
| CO-60 #F | 5.9961E-02 | 4.8217E-02 | 4.8268E-02 | 0.222E-01 |
| CS-137 B | 1.2392E-02 | 3.8065E-02 | 3.8068E-02 | 0.299E-01 |
| EU-152 B | 5.5858E-02 | 2.9839E-02 | 2.9911E-02 | 0.778E-01 |
| EU-154 B | 5.6059E-02 | 9.7427E-02 | 9.7449E-02 | 0.621E-01 |
| K-40 # | 8.0150E+00 | 1.3561E+00 | 1.3882E+00 | 0.810E+00 |
| PA-234 #F | 5.4388E-02 | 6.3193E-02 | 6.3225E-02 | 0.363E-01 |
| PB-210 | 2.3331E+00 | 1.5773E+00 | 1.5796E+00 | 0.967E+00 |
| PB-212 F | 5.7182E-01 | 1.0566E-01 | 1.0776E-01 | 0.620E-01 |
| PB-214 | 3.7980E-01 | 1.5280E-01 | 1.5344E-01 | 0.896E-01 |
| RA-226 #B | -4.9699E-02 | -9.9669E-01 | -9.9670E-01 | 0.808E+00 |
| Th-230 #B | -1.9973E+01 | 1.7330E+04 | 1.7330E+04 | 0.748E+01 |
| TH-234 #F | 9.5277E-01 | 1.2659E+00 | 1.2664E+00 | 0.803E+00 |
| TL-208 F | 3.2191E-01 | 1.0283E-01 | 1.0352E-01 | 0.309E-01 |
| U-235 #B | -7.9794E-01 | -1.9310E+00 | -1.9312E+00 | 0.104E+00 |

# - All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.9 to 2668.2 keV) 1.3227058E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 11-JUL-2008 07:01:36
New World Technology Spectrum name: 2N000719.An1

Sample description
Parcel D 70-PD-C0108-12 380g
7/10/08 12:37

Acquisition information
Start time: 10-Jul-2008 23:06:31
Live time: 2700
Real time: 2706

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty 2 Sigma Counting pCi/g | Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 4.9198E-01 | 1.8296E-01 | 1.8387E-01 | 0.881E-01 |
| AM-241 | #B | -3.1939E-02 | -2.2305E-01 | -2.2305E-01 | 0.591E-01 |
| Bi-212 | F | 3.7639E-01 | 3.0035E-01 | 3.0068E-01 | 0.215E+00 |
| BI-214 | F | 4.7018E-01 | 1.3316E-01 | 1.3430E-01 | 0.540E-01 |
| CO-60 | #F | 3.4185E-02 | 2.2221E-02 | 2.2257E-02 | 0.819E-02 |
| CS-137 | | 6.2846E-02 | 3.6477E-02 | 3.6551E-02 | 0.214E-01 |
| EU-152 | F | 7.2055E-02 | 5.4469E-02 | 5.4534E-02 | 0.475E-01 |
| EU-154 | B | 3.7690E-02 | 4.1435E-02 | 4.1459E-02 | 0.523E-01 |
| K-40 | | 8.4882E+00 | 1.2343E+00 | 1.2739E+00 | 0.210E+00 |
| Pa-234 | #B | -7.1785E-03 | 1.5670E+02 | 1.5670E+02 | 0.593E-01 |
| Pb-210 | #B | 3.7788E-01 | 8.1690E-01 | 8.1702E-01 | 0.611E+00 |
| Pb-212 | F | 4.2973E-01 | 8.4331E-02 | 8.5827E-02 | 0.510E-01 |
| Pb-214 | | 5.3730E-01 | 1.3488E-01 | 1.3635E-01 | 0.577E-01 |
| RA-226 | B | 5.9712E-01 | 8.9886E-01 | 8.9913E-01 | 0.746E+00 |
| Th-230 | #B | -4.5271E+00 | -2.6071E+01 | -2.6071E+01 | 0.658E+01 |
| Th-234 | | 2.0802E+00 | 7.8243E-01 | 7.8623E-01 | 0.621E+00 |
| Tl-208 | F | 1.5954E-01 | 5.3841E-02 | 5.4166E-02 | 0.302E-01 |
| U-235 | #B | -1.0966E-01 | -5.7791E-01 | -5.7792E-01 | 0.571E-01 |

# - All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 43.0 to 2746.8 keV) 1.2971006E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 11-JUL-2008 07:58:56
New World Technology Spectrum name: 7N000765.An1

Sample description
Parcel D 70-PD-C0108-13 384g
7/10/08 12:52

Acquisition information
Start time: 10-Jul-2008 23:06:56
Live time: 2700
Real time: 2702

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Activity pCi/g | Time of Count Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| AC-228 | F | 5.0240E-01 | 1.9996E-01 | 2.0082E-01 | 0.117E+00 |
| AM-241 | #B | -3.4849E-02 | -3.6086E-01 | -3.6086E-01 | 0.949E-01 |
| BI-212 | F | 4.4898E-01 | 3.5524E-01 | 3.5563E-01 | 0.254E+00 |
| BI-214 | F | 5.8810E-01 | 1.4363E-01 | 1.4527E-01 | 0.527E-01 |
| CO-60 | #F | 5.6296E-02 | 4.7735E-02 | 4.7780E-02 | 0.223E-01 |
| CS-137 | | 4.9934E-02 | 3.1258E-02 | 3.1313E-02 | 0.166E-01 |
| EU-152 | #B | -1.0158E-03 | -8.2693E-04 | -8.2778E-04 | 0.977E-01 |
| EU-154 | F | 6.7410E-02 | 7.5362E-02 | 7.5403E-02 | 0.539E-01 |
| K-40 | | 6.9758E+00 | 1.2918E+00 | 1.3174E+00 | 0.812E+00 |
| PA-234 | F | 2.2876E-01 | 9.9888E-02 | 1.0025E-01 | 0.860E-01 |
| PB-210 | | 2.0200E+00 | 1.3730E+00 | 1.3751E+00 | 0.892E+00 |
| PB-212 | F | 5.1234E-01 | 9.6009E-02 | 9.7864E-02 | 0.541E-01 |
| PB-214 | | 5.3781E-01 | 1.6076E-01 | 1.6198E-01 | 0.104E+00 |
| RA-226 | #B | -1.2599E-01 | -1.3115E+00 | -1.3116E+00 | 0.913E+00 |
| Th-230 | #B | -1.5307E+01 | -7.7728E+01 | -7.7730E+01 | 0.879E+01 |
| TH-234 | B | 3.5908E-01 | 8.8488E-01 | 8.8498E-01 | 0.733E+00 |
| TL-208 | #F | 3.1462E-01 | 1.0180E-01 | 1.0247E-01 | 0.310E-01 |
| U-235 | #B | -8.1189E-01 | -2.3282E+00 | -2.3284E+00 | 0.103E+00 |

# - All peaks for activity calculation had bad shape.
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& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.9 to 2668.2 keV) 1.2006295E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) Wan32 G53W2.10 11-JUL-2008 07:04:12
New World Technology Spectrum name: 3N000652.An1

Sample description
Parcel D 70-PD-C0108-14 365g
7/10/08 13:04

Acquisition information
Start time: 10-Jul-2008 23:09:43
Live time: 2700
Real time: 2706

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 4.9423E-01 | 2.1128E-01 | 2.1349E-01 | 0.139E+00 |
| AM-241 | B | 6.7592E-03 | 1.0660E-01 | 1.0661E-01 | 0.901E-01 |
| Bi-212 | F | 7.7074E-01 | 4.1607E-01 | 4.1876E-01 | 0.234E+00 |
| BI-214 | #F | 3.4377E-01 | 1.9087E-01 | 1.9201E-01 | 0.653E-01 |
| CO-60 | #B | -2.5423E-03 | 1.8318E-01 | 1.8318E-01 | 0.580E-01 |
| CS-137 | #B | -8.0365E-04 | 3.2146E-02 | 3.2146E-02 | 0.296E-01 |
| EU-152 | F | 1.1433E-01 | 7.2308E-02 | 7.2757E-02 | 0.515E-01 |
| EU-154 | F | 1.9374E-01 | 7.9402E-02 | 8.0569E-02 | 0.345E-01 |
| K-40 | | 1.3854E+01 | 2.2173E+00 | 2.3787E+00 | 0.855E+00 |
| Pa-234 | #B | 1.3943E-02 | 7.5885E-02 | 7.5893E-02 | 0.375E-01 |
| Pb-210 | | 1.6550E+00 | 1.2586E+00 | 1.2649E+00 | 0.705E+00 |
| Pb-212 | F | 2.9438E-01 | 1.1747E-01 | 1.1901E-01 | 0.901E-01 |
| PB-214 | F | 3.9771E-01 | 2.0579E-01 | 2.0731E-01 | 0.919E-01 |
| RA-226 | B | 3.1404E-01 | 8.9217E-01 | 8.9240E-01 | 0.766E+00 |
| Th-230 | #B | -2.3609E+02 | 9.4144E+02 | 9.4196E+02 | 0.213E+02 |
| Th-234 | B | -1.3135E+01 | 1.8272E+01 | 1.8326E+01 | 0.161E+01 |
| Tl-208 | F | 1.4741E-01 | 5.6020E-02 | 5.6728E-02 | 0.344E-01 |
| U-235 | B | 3.9873E-02 | 5.2305E-02 | 5.2369E-02 | 0.406E-01 |

# - All peaks for activity calculation had bad shape.
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& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 39.3 to 2495.1 keV) 1.796E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 11-JUL-2008 09:57:20
New World Technology Spectrum name: 7N000767.An1

Sample description
Parcel D 70-PD-C0108-15 380g
7/10/08 12:33

Acquisition information
Start time: 11-Jul-2008 09:04:35
Live time: 2700
Real time: 2702

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty Counting pCi/g | 2 Sigma Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| AC-228 | F | 8.7666E-01 | 2.4003E-01 | 2.4222E-01 | 0.802E-01 |
| AM-241 | B | 6.9728E-02 | 1.0979E-01 | 1.0982E-01 | 0.903E-01 |
| BI-212 | | 7.3288E-01 | 3.8460E-01 | 3.8555E-01 | 0.261E+00 |
| BI-214 | F | 6.9168E-01 | 2.0590E-01 | 2.0749E-01 | 0.817E-01 |
| CO-60 | #B | 6.0697E-03 | 7.7018E-03 | 7.7051E-03 | 0.900E-02 |
| CS-137 | #B | 2.1358E-03 | 1.5481E-02 | 1.5482E-02 | 0.141E-01 |
| EU-152 | B | -4.2571E-02 | -1.4679E-01 | -1.4680E-01 | 0.102E+00 |
| EU-154 | F | 1.9123E-01 | 1.5968E-01 | 1.5984E-01 | 0.607E-01 |
| K-40 | | 1.0177E+01 | 1.4968E+00 | 1.5435E+00 | 0.820E+00 |
| PA-234 | #F | 3.1279E-01 | 1.6248E-01 | 1.6289E-01 | 0.106E+00 |
| PB-210 | # | 1.8675E+00 | 1.5384E+00 | 1.5399E+00 | 0.976E+00 |
| PB-212 | F | 5.8098E-01 | 1.0581E-01 | 1.0798E-01 | 0.659E-01 |
| PB-214 | | 4.1638E-01 | 1.2801E-01 | 1.2893E-01 | 0.970E-01 |
| RA-226 | F | 9.9839E-01 | 1.0688E+00 | 1.0694E+00 | 0.886E+00 |
| Th-230 | #B | -1.3407E+01 | -4.6294E+01 | -4.6296E+01 | 0.838E+01 |
| TH-234 | #F | 1.8107E+00 | 1.7310E+00 | 1.7323E+00 | 0.969E+00 |
| TL-208 | F | 3.7274E-01 | 1.1091E-01 | 1.1177E-01 | 0.313E-01 |
| U-235 | B | -8.4869E-01 | -6.9897E+00 | -6.9898E+00 | 0.107E+00 |

# - All peaks for activity calculation had bad shape.
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& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.9 to 2668.2 keV) 1.8030952E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 11-JUL-2008 09:10:24
New World Technology Spectrum name: 1N000740.An1

Sample description
Parcel D 70-PD-C0108-16 382g
7/10/08 12:47

Acquisition information
Start time: 11-Jul-2008 08:09:28
Live time: 2700
Real time: 2703

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty 2 Sigma Counting pCi/g | Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 7.5266E-01 | 1.8475E-01 | 1.8685E-01 | 0.105E+00 |
| AM-241 | #A | -6.3327E-01 | -3.1681E+00 | -3.1682E+00 | 0.608E+00 |
| Bi-212 | F | 5.2854E-01 | 3.2709E-01 | 3.2767E-01 | 0.186E+00 |
| BI-214 | F | 4.9162E-01 | 1.3071E-01 | 1.3197E-01 | 0.570E-01 |
| CO-60 | #F | 4.2572E-02 | 3.7363E-02 | 3.7396E-02 | 0.166E-01 |
| CS-137 | | 4.9396E-02 | 4.4683E-02 | 4.4720E-02 | 0.363E-01 |
| EU-152 | C | 8.9301E-02 | 1.3068E-01 | 1.3072E-01 | 0.815E-01 |
| EU-154 | | 1.1335E-01 | 7.9665E-02 | 7.9775E-02 | 0.583E-01 |
| K-40 | | 9.8497E+00 | 1.4395E+00 | 1.4852E+00 | 0.249E+00 |
| Pa-234 | B | 1.2025E-01 | 1.1836E-01 | 1.1844E-01 | 0.145E+00 |
| Pb-210 | #F | 0.0000E+00 | 0.0000E+00 | 0.0000E+00 | 0.000E+00 |
| Pb-212 | F | 2.6527E-01 | 1.1167E-01 | 1.1210E-01 | 0.854E-01 |
| Pb-214 | F | 5.9889E-01 | 1.6073E-01 | 1.6225E-01 | 0.782E-01 |
| RA-226 | B | 5.9638E-01 | 1.1881E+00 | 1.1883E+00 | 0.999E+00 |
| Th-230 | #B | -1.5876E+01 | -1.2228E+02 | -1.2228E+02 | 0.312E+02 |
| Th-234 | #B | -5.1736E+00 | -1.6020E+01 | -1.6021E+01 | 0.408E+01 |
| Tl-208 | #B | 1.5633E-02 | 7.6268E-02 | 7.6270E-02 | 0.546E-01 |
| U-235 | #B | -1.1537E+00 | -3.0781E+00 | -3.0784E+00 | 0.133E+00 |

# - All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 41.2 to 2630.1 keV) 1.2691965E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) wan32 G53W2.06 11-JUL-2008 09:08:53
New World Technology Spectrum name: 2N000720.An1

Sample description
Parcel D 70-PD-C0108-17 384g
7/10/08 13:09

Acquisition information
Start time: 11-Jul-2008 08:11:08
Live time: 2700
Real time: 2705

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty 2 Sigma Counting pCi/g | Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 4.9651E-01 | 1.7934E-01 | 1.8028E-01 | 0.140E+00 |
| AM-241 | #B | -1.9786E-02 | -1.5912E-01 | -1.5913E-01 | 0.638E-01 |
| Bi-212 | B | 1.0279E-01 | 3.2184E-01 | 3.2186E-01 | 0.265E+00 |
| BI-214 | F | 3.3026E-01 | 1.1545E-01 | 1.1610E-01 | 0.716E-01 |
| CO-60 | #F | 5.9905E-02 | 4.0096E-02 | 4.0158E-02 | 0.157E-01 |
| CS-137 | F | 3.4014E-02 | 4.4474E-02 | 4.4492E-02 | 0.333E-01 |
| EU-152 | F | 2.5142E-01 | 9.5026E-02 | 9.5484E-02 | 0.672E-01 |
| EU-154 | F | 1.2746E-01 | 4.5633E-02 | 4.5878E-02 | 0.462E-01 |
| K-40 | | 8.1234E+00 | 1.2064E+00 | 1.2436E+00 | 0.210E+00 |
| Pa-234 | F | 1.7719E-01 | 1.1510E-01 | 1.1529E-01 | 0.722E-01 |
| Pb-210 | | 9.1280E-01 | 7.9894E-01 | 7.9966E-01 | 0.569E+00 |
| Pb-212 | F | 4.2006E-01 | 9.1355E-02 | 9.2677E-02 | 0.562E-01 |
| Pb-214 | | 4.7331E-01 | 1.1952E-01 | 1.2081E-01 | 0.496E-01 |
| RA-226 | B | 4.8339E-01 | 8.4179E-01 | 8.4198E-01 | 0.705E+00 |
| Th-230 | #B | -1.4313E+00 | -1.3200E+01 | -1.3200E+01 | 0.668E+01 |
| Th-234 | | 1.0221E+00 | 7.0755E-01 | 7.0857E-01 | 0.629E+00 |
| Tl-208 | B | -1.4830E-02 | 6.4566E+01 | 6.4566E+01 | 0.244E-01 |
| U-235 | B | -9.1228E-04 | -8.1065E-04 | -8.1135E-04 | 0.560E-01 |

# - All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 43.0 to 2746.8 keV) 1.2266946E+01 pCi/g

Laboratory: New World Technology

ORTEC g v - i (3263) Wan32 G53W2.10 11-JUL-2008 09:08:29
New World Technology Spectrum name: 3N000653.An1

Sample description
Parcel D 70-PD-C0108-18 376g
7/10/08 13:13

Acquisition information
Start time: 11-Jul-2008 08:13:42
Live time: 2700
Real time: 2706

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***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

| Nuclide | | Time of Count Activity pCi/g | Uncertainty 2 Sigma Counting pCi/g | Total pCi/g | MDA pCi/g |
|---|---|---|---|---|---|
| Ac-228 | F | 6.1209E-01 | 1.6157E-01 | 1.6595E-01 | 0.163E+00 |
| AM-241 | B | 2.5177E-02 | 1.1067E-01 | 1.1069E-01 | 0.925E-01 |
| Bi-212 | B | 1.7917E-01 | 3.6310E-01 | 3.6326E-01 | 0.306E+00 |
| BI-214 | F | 4.8824E-01 | 1.2221E-01 | 1.2576E-01 | 0.456E-01 |
| CO-60 | #B | 5.8623E-02 | 3.1951E-02 | 3.2152E-02 | 0.588E-01 |
| CS-137 | | 8.5349E-02 | 3.8416E-02 | 3.8768E-02 | 0.184E-01 |
| EU-152 | F | 5.5613E-02 | 8.4219E-02 | 8.4311E-02 | 0.457E-01 |
| EU-154 | F | 1.2180E-01 | 7.7609E-02 | 7.8083E-02 | 0.316E-01 |
| K-40 | | 1.7359E+01 | 2.4150E+00 | 2.6453E+00 | 0.830E+00 |
| Pa-234 | #B | -1.2805E-02 | 2.7017E-02 | 2.7035E-02 | 0.109E+00 |
| Pb-210 | #F | 1.0011E+00 | 2.0385E+00 | 2.0399E+00 | 0.827E+00 |
| Pb-212 | | 4.7403E-01 | 1.0663E-01 | 1.1097E-01 | 0.767E-01 |
| PB-214 | F | 3.8467E-01 | 1.2262E-01 | 1.2499E-01 | 0.783E-01 |
| RA-226 | | 1.3818E+00 | 1.0436E+00 | 1.0474E+00 | 0.833E+00 |
| Th-230 | #B | -2.3548E+02 | 9.4193E+03 | 9.4193E+03 | 0.207E+02 |
| Th-234 | #B | -1.2858E+01 | 2.1256E+01 | 2.1300E+01 | 0.161E+01 |
| Tl-208 | F | 2.2472E-01 | 1.1790E-01 | 1.1869E-01 | 0.377E-01 |
| U-235 | B | 3.1414E-02 | 5.6589E-02 | 5.6625E-02 | 0.467E-01 |

# - All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity ( 39.3 to 2495.1 keV) 2.101E+01 pCi/g

Laboratory: New World Technology

# ATTACHMENT 5

# EXCAVATED SOIL UNIT $^{90}$SR RESULTS

# (on CD only)

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# EXCAVATED SOIL UNIT 33

STRONTIUM-90 ANALYSIS REPORT

| | | | | | |
|---|---|---|---|---|---|
| Count Date: | 9/29/2007 | Instrument ID: | Protean IPC 9025 | Count Time: | 30 min |
| Batch ID: | NWTLAB092907-067 | Detector ID: | 906057 | $^{90}$Y Eff.: | 31.1% |
| Performed By: | R. Fluty | Cal Due Date: | 8/22/2008 | $^{90}$Sr Eff.: | 26.9% |
| | | | | $^{90}$Sr Added: | 10 mg |

| Sample ID | Collected m/dd/yy hh:mm | $^{90}$Y in-growth m/dd/yy hh:mm | Counted m/dd/yy hh:mm | Aliquot Mass grams | Initial Mass grams | Final Mass grams | $^{90}$Sr Yield percent | Total CPM | Total Counts | $^{90}$Sr Activity pCi/g | MDC pCi/g | 2 σ Uncert. pCi/g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 70-PD-C0033-04 | 9/17/07 8:45 | 9/29/07 8:59 | 9/29/07 16:31 | 10 | 9.3728 | 9.3849 | 109.0% | 0.100 | 3 | -0.016 | 0.045 | 0.071 |
| 70-PD-C0033-09 | 9/17/07 10:16 | 9/29/07 8:58 | 9/29/07 17:02 | 10 | 9.2239 | 9.2355 | 104.0% | 0.100 | 3 | -0.017 | 0.047 | 0.075 |
| Method Spike 3.49 | 9/27/07 7:00 | 9/29/07 8:57 | 9/29/07 20:05 | 10 | 9.5329 | 9.5435 | 94.0% | 24.933 | 748 | 3.346 | 0.077 | 1.348 |
| Blank | 9/27/07 7:00 | 9/29/07 8:57 | 9/29/07 20:35 | 10 | 9.1965 | 9.1977 | | 0.300 | 9 | | | |

# EXCAVATED SOIL UNIT 108

STRONTIUM-90 ANALYSIS REPORT

| | | | | | |
|---|---|---|---|---|---|
| Count Date: | 7/25/2008 | Instrument ID: | Protean IPC 9025 | Count Time: | 30 min |
| Batch ID: | NWTLAB072508-024 | Detector ID: | 906057 | $^{90}$Y Eff.: | 27.81% |
| Performed By: | R. Fluty | Cal Due Date: | 8/22/2008 | $^{90}$Sr Eff.: | 21.20% |
| | | | | $^{90}$Sr Added: | 10 mg |

| Sample ID | Collected m/dd/yy hh:mm | $^{90}$Y in-growth m/dd/yy hh:mm | Counted m/dd/yy hh:mm | Aliquot Mass grams | Initial Mass grams | Final Mass grams | $^{90}$Sr Yield percent | Total CPM | Total Counts | $^{90}$Sr Activity pCi/g | MDC pCi/g | 2 σ Uncert. pCi/g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 70-PD-C0108-05 | 7/10/08 13:54 | 7/25/08 9:07 | 7/26/08 13:58 | 10 | 9.5495 | 9.5607 | 103.0% | 0.233 | 7 | 0.005 | 0.073 | 0.037 |
| 70-PD-C0108-11 | 7/10/08 13:21 | 7/25/08 9:06 | 7/26/08 14:29 | 10 | 9.5663 | 9.5776 | 104.0% | 0.133 | 4 | -0.010 | 0.072 | 0.032 |
| Method Spike 3.49 | 7/22/08 7:00 | 7/25/08 9:06 | 7/26/08 19:34 | 10 | 9.5719 | 9.5837 | 109.0% | 28.800 | 864 | 4.143 | 0.069 | 0.285 |
| Blank | 7/22/08 7:00 | 7/25/08 9:06 | 7/26/08 20:04 | 10 | 9.5418 | 9.5427 | | 0.200 | 6 | | | |

# ATTACHMENT 6

# QUALITY ASSURANCE SAMPLE RESULTS

# (on CD only)

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# Tetra Tech EC, Inc.

## Client Sample ID: 70-PDT-115-19

### Radiochemistry

Lab Sample ID: F8L040294-016
Work Order: K330K
Matrix: SOLID

Date Collected: 10/16/08 1431
Date Received: 12/04/08 0950

| Parameter | Result | Qual | Total Uncert. (2 σ+/-) | RL | MDL | Count Time | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Gamma Ra-226 & hits by EPA 901.1 MOD** | | | | **pCi/g** | | **Batch # 8340289** | | **Yld %** |
| **Actinium 228** | **0.436** | | **0.098** | | **0.063** | 90 | **12/05/08** | **12/17/08** |
| Americium 241 | -0.021 | U | 0.058 | | 0.047 | 90 | 12/05/08 | 12/17/08 |
| **Bismuth 212** | **0.24** | | **0.20** | | **0.14** | 90 | **12/05/08** | **12/17/08** |
| **Bismuth 214** | **0.393** | | **0.092** | | **0.045** | 90 | **12/05/08** | **12/17/08** |
| Cesium 137 | 0.01 | U | 0.025 | 0.070 | 0.020 | 90 | 12/05/08 | 12/17/08 |
| Cobalt 60 | -0.0007 | U | 0.028 | | 0.023 | 90 | 12/05/08 | 12/17/08 |
| Europium 152 | -0.028 | U | 0.074 | | 0.060 | 90 | 12/05/08 | 12/17/08 |
| Europium 154 | 0.0 | U | 0.22 | | 0.18 | 90 | 12/05/08 | 12/17/08 |
| Lead 210 | 0.40 | U | 0.74 | 1.50 | 0.53 | 90 | 12/05/08 | 12/17/08 |
| **Lead 212** | **0.465** | | **0.075** | | **0.037** | 90 | **12/05/08** | **12/17/08** |
| **Lead 214** | **0.414** | | **0.084** | | **0.042** | 90 | **12/05/08** | **12/17/08** |
| **Potassium 40** | **6.66** | | **0.86** | | **0.29** | 90 | **12/05/08** | **12/17/08** |
| Protactinium 234 | 0.053 | U | 0.089 | | 0.071 | 90 | 12/05/08 | 12/17/08 |
| **Radium (226)** | **0.393** | **J** | **0.092** | 0.700 | **0.045** | 90 | **12/05/08** | **12/17/08** |
| **Thallium 208** | **0.145** | | **0.040** | | **0.021** | 90 | **12/05/08** | **12/17/08** |
| **Thorium 232** | **0.436** | | **0.098** | | **0.063** | 90 | **12/05/08** | **12/17/08** |
| Thorium 234 | 0.20 | U | 0.68 | | 0.53 | 90 | 12/05/08 | 12/17/08 |
| Uranium 235 | -0.02 | U | 0.24 | | 0.14 | 90 | 12/05/08 | 12/17/08 |

**NOTE(S)**

**Data are incomplete without the case narrative.**
**Bold results are greater than the MDL.**

**J Result is greater than sample detection limit but less than stated reporting limit.**
**U Result is less than the sample detection limit.**

**The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".**

**Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.**

# Tetra Tech EC, Inc.

## Client Sample ID: 70-PDT-115-25

### Radiochemistry

Lab Sample ID: F8L040294-017
Work Order: K330N
Matrix: SOLID

Date Collected: 10/16/08 1352
Date Received: 12/04/08 0950

| Parameter | Result | Qual | Total Uncert. (2 σ+/-) | RL | MDL | Count Time | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Gamma Ra-226 & hits by EPA 901.1 MOD** | | | | **pCi/g** | | **Batch # 8340289** | | **Yld %** |
| **Actinium 228** | **1.33** | | **0.20** | | **0.03** | 90 | **12/05/08** | **12/17/08** |
| Americium 241 | 0.017 | U | 0.074 | | 0.061 | 90 | 12/05/08 | 12/17/08 |
| **Bismuth 212** | **0.81** | | **0.36** | | **0.15** | 90 | **12/05/08** | **12/17/08** |
| **Bismuth 214** | **0.87** | | **0.13** | | **0.04** | 90 | **12/05/08** | **12/17/08** |
| Cesium 137 | 0.015 | U | 0.029 | 0.070 | 0.023 | 90 | 12/05/08 | 12/17/08 |
| Cobalt 60 | 0.005 | U | 0.030 | | 0.024 | 90 | 12/05/08 | 12/17/08 |
| Europium 152 | 0.010 | U | 0.082 | | 0.067 | 90 | 12/05/08 | 12/17/08 |
| Europium 154 | 0.06 | U | 0.22 | | 0.17 | 90 | 12/05/08 | 12/17/08 |
| **Lead 210** | **1.11** | **J** | **0.75** | 1.50 | **0.49** | 90 | **12/05/08** | **12/17/08** |
| **Lead 212** | **1.16** | | **0.19** | | **0.05** | 90 | **12/05/08** | **12/17/08** |
| **Lead 214** | **1.02** | | **0.12** | | **0.04** | 90 | **12/05/08** | **12/17/08** |
| **Potassium 40** | **6.58** | | **0.95** | | **0.36** | 90 | **12/05/08** | **12/17/08** |
| Protactinium 234 | -0.031 | U | 0.092 | | 0.075 | 90 | 12/05/08 | 12/17/08 |
| **Radium (226)** | **0.87** | | **0.13** | 0.70 | **0.04** | 90 | **12/05/08** | **12/17/08** |
| **Thallium 208** | **0.473** | | **0.074** | | **0.023** | 90 | **12/05/08** | **12/17/08** |
| **Thorium 232** | **1.33** | | **0.20** | | **0.03** | 90 | **12/05/08** | **12/17/08** |
| **Thorium 234** | **1.39** | | **0.78** | | **0.51** | 90 | **12/05/08** | **12/17/08** |
| Uranium 235 | 0.09 | U | 0.17 | | 0.13 | 90 | 12/05/08 | 12/17/08 |

**NOTE(S)**

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**U Result is less than the sample detection limit.**

**The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".**

**Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.**

# Tetra Tech EC, Inc.

## Client Sample ID: 70-PDT-115-62

### Radiochemistry

Lab Sample ID: F8L040294-018
Work Order: K330Q
Matrix: SOLID

Date Collected: 11/12/08 0917
Date Received: 12/04/08 0950

| Parameter | Result | Qual | Total Uncert. (2 σ+/-) | RL | MDL | Count Time | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Gamma Ra-226 & hits by EPA 901.1 MOD** | | | | pCi/g | | Batch # 8340289 | | Yld % |
| **Actinium 228** | **0.49** | | **0.14** | | **0.07** | 90 | **12/05/08** | **12/18/08** |
| Americium 241 | 0.0006 | U | 0.059 | | 0.049 | 90 | 12/05/08 | 12/18/08 |
| **Bismuth 212** | **0.36** | | **0.25** | | **0.18** | 90 | **12/05/08** | **12/18/08** |
| **Bismuth 214** | **0.48** | | **0.11** | | **0.05** | 90 | **12/05/08** | **12/18/08** |
| Cesium 137 | 0.016 | U | 0.029 | 0.070 | 0.022 | 90 | 12/05/08 | 12/18/08 |
| Cobalt 60 | 0.007 | U | 0.028 | | 0.022 | 90 | 12/05/08 | 12/18/08 |
| Europium 152 | 0.054 | U | 0.078 | | 0.060 | 90 | 12/05/08 | 12/18/08 |
| Europium 154 | -0.09 | U | 0.21 | | 0.17 | 90 | 12/05/08 | 12/18/08 |
| **Lead 210** | **0.91** | **J** | **0.89** | 1.50 | **0.60** | 90 | **12/05/08** | **12/18/08** |
| **Lead 212** | **0.580** | | **0.088** | | **0.042** | 90 | **12/05/08** | **12/18/08** |
| **Lead 214** | **0.52** | | **0.10** | | **0.05** | 90 | **12/05/08** | **12/18/08** |
| **Potassium 40** | **8.01** | | **0.96** | | **0.30** | 90 | **12/05/08** | **12/18/08** |
| Protactinium 234 | -0.0004 | U | 0.099 | | 0.081 | 90 | 12/05/08 | 12/18/08 |
| **Radium (226)** | **0.48** | **J** | **0.11** | 0.70 | **0.05** | 90 | **12/05/08** | **12/18/08** |
| **Thallium 208** | **0.180** | | **0.046** | | **0.023** | 90 | **12/05/08** | **12/18/08** |
| **Thorium 232** | **0.49** | | **0.14** | | **0.07** | 90 | **12/05/08** | **12/18/08** |
| Thorium 234 | 0.24 | U | 0.93 | | 0.65 | 90 | 12/05/08 | 12/18/08 |
| Uranium 235 | 0.02 | U | 0.17 | | 0.14 | 90 | 12/05/08 | 12/18/08 |

**NOTE(S)**

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**U Result is less than the sample detection limit.**

**The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".**

**Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.**

# Tetra Tech EC, Inc.

## Client Sample ID: 70-PDT-115-73

### Radiochemistry

Lab Sample ID: F8L040294-019
Work Order: K330R
Matrix: SOLID

Date Collected: 11/12/08 1033
Date Received: 12/04/08 0950

| Parameter | Result | Qual | Total Uncert. (2 σ+/-) | RL | MDL | Count Time | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Gamma Ra-226 & hits by EPA 901.1 MOD** | | | | **pCi/g** | | **Batch # 8340289** | | **Yld %** |
| **Actinium 228** | **1.57** | | **0.27** | | **0.09** | 90 | **12/05/08** | **12/18/08** |
| Americium 241 | 0.01 | U | 0.11 | | 0.09 | 90 | 12/05/08 | 12/18/08 |
| **Bismuth 212** | **1.33** | | **0.50** | | **0.20** | 90 | **12/05/08** | **12/18/08** |
| **Bismuth 214** | **1.08** | | **0.16** | | **0.06** | 90 | **12/05/08** | **12/18/08** |
| Cesium 137 | 0.020 | U | 0.039 | 0.070 | 0.031 | 90 | 12/05/08 | 12/18/08 |
| Cobalt 60 | -0.007 | U | 0.043 | | 0.035 | 90 | 12/05/08 | 12/18/08 |
| Europium 152 | 0.004 | U | 0.11 | | 0.09 | 90 | 12/05/08 | 12/18/08 |
| Europium 154 | -0.09 | U | 0.31 | | 0.25 | 90 | 12/05/08 | 12/18/08 |
| **Lead 210** | **1.24** | J | **0.86** | 1.50 | **0.58** | 90 | **12/05/08** | **12/18/08** |
| **Lead 212** | **1.43** | | **0.16** | | **0.06** | 90 | **12/05/08** | **12/18/08** |
| **Lead 214** | **1.25** | | **0.14** | | **0.04** | 90 | **12/05/08** | **12/18/08** |
| **Potassium 40** | **7.8** | | **1.1** | | **0.3** | 90 | **12/05/08** | **12/18/08** |
| Protactinium 234 | -0.03 | U | 0.15 | | 0.13 | 90 | 12/05/08 | 12/18/08 |
| **Radium (226)** | **1.08** | | **0.16** | 0.70 | **0.06** | 90 | **12/05/08** | **12/18/08** |
| **Thallium 208** | **0.538** | | **0.089** | | **0.030** | 90 | **12/05/08** | **12/18/08** |
| **Thorium 232** | **1.57** | | **0.27** | | **0.09** | 90 | **12/05/08** | **12/18/08** |
| **Thorium 234** | **0.98** | | **0.54** | | **0.93** | 90 | **12/05/08** | **12/18/08** |
| Uranium 235 | -0.04 | U | 15 | | 0.2 | 90 | 12/05/08 | 12/18/08 |

**NOTE(S)**

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**U Result is less than the sample detection limit.**

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**Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.**

# Tetra Tech EC, Inc.

## Client Sample ID: 70-PDT-115-81

### Radiochemistry

Lab Sample ID: F9A090144-041
Work Order: K5LVA
Matrix: SOLID

Date Collected: 11/20/08 0720
Date Received: 01/09/09 0930

| Parameter | Result | Qual | Total Uncert. (2 σ+/-) | RL | MDL | Count Time | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| Gamma Ra-226 & hits by EPA 901.1 MOD | | | | pCi/g | | Batch # 9014112 | | Yld % |
| **Actinium 228** | **1.57** | | **0.22** | | **0.07** | 90 | **01/14/09** | **01/16/09** |
| Americium 241 | 0.0 | U | 0.099 | | 0.081 | 90 | 01/14/09 | 01/16/09 |
| **Bismuth 212** | **1.77** | | **0.54** | | **0.19** | 90 | **01/14/09** | **01/16/09** |
| **Bismuth 214** | **1.12** | | **0.17** | | **0.06** | 90 | **01/14/09** | **01/16/09** |
| Cesium 137 | -0.02 | U | 0.12 | 0.07 | 0.04 | 90 | 01/14/09 | 01/16/09 |
| Cobalt 60 | 0.005 | U | 0.028 | | 0.022 | 90 | 01/14/09 | 01/16/09 |
| Europium 152 | 0.003 | U | 0.073 | | 0.060 | 90 | 01/14/09 | 01/16/09 |
| Europium 154 | -0.08 | U | 0.32 | | 0.26 | 90 | 01/14/09 | 01/16/09 |
| **Lead 210** | **1.13** | **J** | **0.97** | 1.50 | **0.65** | 90 | **01/14/09** | **01/16/09** |
| **Lead 212** | **1.73** | | **0.27** | | **0.05** | 90 | **01/14/09** | **01/16/09** |
| **Lead 214** | **1.25** | | **0.17** | | **0.06** | 90 | **01/14/09** | **01/16/09** |
| **Potassium 40** | **8.8** | | **1.2** | | **0.2** | 90 | **01/14/09** | **01/16/09** |
| Protactinium 234 | -0.11 | U | 0.16 | | 0.12 | 90 | 01/14/09 | 01/16/09 |
| **Radium (226)** | **1.12** | | **0.17** | 0.70 | **0.06** | 90 | **01/14/09** | **01/16/09** |
| **Thallium 208** | **0.584** | | **0.086** | | **0.025** | 90 | **01/14/09** | **01/16/09** |
| **Thorium 232** | **1.57** | | **0.22** | | **0.07** | 90 | **01/14/09** | **01/16/09** |
| **Thorium 234** | **2.1** | | **1.0** | | **0.7** | 90 | **01/14/09** | **01/16/09** |
| Uranium 235 | 0.09 | U | 0.23 | | 0.19 | 90 | 01/14/09 | 01/16/09 |

**NOTE(S)**

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Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

# Tetra Tech EC, Inc.

## Client Sample ID: 70-PDT-115-93

### Radiochemistry

Lab Sample ID: F9A090144-040
Work Order: K5LT9
Matrix: SOLID

Date Collected: 11/20/08 0820
Date Received: 01/09/09 0930

| Parameter | Result | Qual | Total Uncert. (2 σ+/-) | RL | MDL | Count Time | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Gamma Ra-226 & hits by EPA 901.1 MOD** | | | | pCi/g | | Batch # 9014112 | | Yld % |
| **Actinium 228** | **1.76** | | **0.23** | | **0.07** | 90 | **01/14/09** | **01/16/09** |
| Americium 241 | 0.040 | U | 0.089 | | 0.072 | 90 | 01/14/09 | 01/16/09 |
| **Bismuth 212** | **1.25** | | **0.41** | | **0.17** | 90 | **01/14/09** | **01/16/09** |
| **Bismuth 214** | **1.05** | | **0.15** | | **0.06** | 90 | **01/14/09** | **01/16/09** |
| Cesium 137 | 0.0002 | U | 0.028 | 0.070 | 0.023 | 90 | 01/14/09 | 01/16/09 |
| Cobalt 60 | -0.003 | U | 0.030 | | 0.024 | 90 | 01/14/09 | 01/16/09 |
| Europium 152 | -0.004 | U | 0.095 | | 0.078 | 90 | 01/14/09 | 01/16/09 |
| Europium 154 | 0.132 | U | 0.071 | | 0.19 | 90 | 01/14/09 | 01/16/09 |
| **Lead 210** | **1.25** | J | **0.89** | 1.50 | **0.60** | 90 | **01/14/09** | **01/16/09** |
| **Lead 212** | **1.86** | | **0.17** | | **0.05** | 90 | **01/14/09** | **01/16/09** |
| **Lead 214** | **1.29** | | **0.15** | | **0.06** | 90 | **01/14/09** | **01/16/09** |
| **Potassium 40** | **8.02** | | **0.95** | | **0.29** | 90 | **01/14/09** | **01/16/09** |
| Protactinium 234 | -0.09 | U | 0.13 | | 0.11 | 90 | 01/14/09 | 01/16/09 |
| **Radium (226)** | **1.05** | | **0.15** | 0.70 | **0.06** | 90 | **01/14/09** | **01/16/09** |
| **Thallium 208** | **0.633** | | **0.078** | | **0.026** | 90 | **01/14/09** | **01/16/09** |
| **Thorium 232** | **1.76** | | **0.23** | | **0.07** | 90 | **01/14/09** | **01/16/09** |
| **Thorium 234** | **1.5** | | **1.0** | | **0.7** | 90 | **01/14/09** | **01/16/09** |
| Uranium 235 | 0.09 | U | 0.23 | | 0.19 | 90 | 01/14/09 | 01/16/09 |

**NOTE(S)**

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U Result is less than the sample detection limit.

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Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

# Tetra Tech EC, Inc.

## Client Sample ID: 72-PDT-115-98

### Radiochemistry

Lab Sample ID: F9A310139-001
Work Order: K6JHK
Matrix: SOLID

Date Collected: 12/09/08 1320
Date Received: 01/31/09 0845

| Parameter | Result | Qual | Total Uncert. (2 σ+/-) | RL | MDL | Count Time | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Gamma Ra-226 & hits by EPA 901.1 MOD** | | | | **pCi/g** | | **Batch # 9033371** | | **Yld %** |
| **Actinium 228** | **1.33** | | **0.18** | | **0.06** | 90 | **02/02/09** | **03/31/09** |
| Americium 241 | -0.04 | U | 0.10 | | 0.08 | 90 | 02/02/09 | 03/31/09 |
| **Bismuth 212** | **0.85** | | **0.38** | | **0.16** | 90 | **02/02/09** | **03/31/09** |
| **Bismuth 214** | **0.73** | | **0.12** | | **0.04** | 90 | **02/02/09** | **03/31/09** |
| Cesium 137 | 0.011 | U | 0.040 | 0.070 | 0.032 | 90 | 02/02/09 | 03/31/09 |
| Cobalt 60 | -0.007 | U | 0.042 | | 0.034 | 90 | 02/02/09 | 03/31/09 |
| Europium 152 | -0.012 | U | 0.097 | | 0.079 | 90 | 02/02/09 | 03/31/09 |
| Europium 154 | 0.06 | U | 0.21 | | 0.17 | 90 | 02/02/09 | 03/31/09 |
| Lead 210 | 0.1 | U | 0.90 | 1.50 | 0.77 | 90 | 02/02/09 | 03/31/09 |
| **Lead 212** | **1.24** | | **0.15** | | **0.06** | 90 | **02/02/09** | **03/31/09** |
| **Lead 214** | **0.79** | | **0.12** | | **0.05** | 90 | **02/02/09** | **03/31/09** |
| **Potassium 40** | **8.0** | | **1.1** | | **0.2** | 90 | **02/02/09** | **03/31/09** |
| Protactinium 234 | -0.12 | U | 0.16 | | 0.13 | 90 | 02/02/09 | 03/31/09 |
| **Radium (226)** | **0.73** | | **0.12** | 0.70 | **0.04** | 90 | **02/02/09** | **03/31/09** |
| **Thallium 208** | **0.423** | | **0.067** | | **0.022** | 90 | **02/02/09** | **03/31/09** |
| **Thorium 232** | **1.33** | | **0.18** | | **0.06** | 90 | **02/02/09** | **03/31/09** |
| **Thorium 234** | **2.0** | | **1.0** | | **0.6** | 90 | **02/02/09** | **03/31/09** |
| Uranium 235 | -0.04 | U | 1.7 | | 0.2 | 90 | 02/02/09 | 03/31/09 |

**NOTE(S)**

**Data are incomplete without the case narrative.**
**Bold results are greater than the MDL.**

**U Result is less than the sample detection limit.**

**The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".**

**Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.**

# Tetra Tech EC, Inc.

## Client Sample ID: 72-PDT-115-98 DUP

### Radiochemistry

Lab Sample ID: F9A310139-001X
Work Order: K6JHK
Matrix: SOLID

Date Collected: 12/09/08 1320
Date Received: 01/31/09 0845

| Parameter | Result | Qual | Total Uncert. (2 σ+/-) | RL | MDL | Count Time | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Gamma Ra-226 & hits by EPA 901.1 MOD** | | | | **pCi/g** | | **Batch # 9033371** | | **Yld %** |
| **Actinium 228** | **1.47** | | **0.20** | | **0.07** | 90 | **02/02/09** | **03/31/09** |
| Americium 241 | -0.014 | U | 0.086 | | 0.070 | 90 | 02/02/09 | 03/31/09 |
| **Bismuth 212** | **0.96** | | **0.35** | | **0.15** | 90 | **02/02/09** | **03/31/09** |
| **Bismuth 214** | **0.87** | | **0.15** | | **0.06** | 90 | **02/02/09** | **03/31/09** |
| Cesium 137 | -0.002 | U | 0.042 | 0.070 | 0.032 | 90 | 02/02/09 | 03/31/09 |
| Cobalt 60 | 0.009 | U | 0.034 | | 0.027 | 90 | 02/02/09 | 03/31/09 |
| Europium 152 | -0.06 | U | 0.10 | | 0.08 | 90 | 02/02/09 | 03/31/09 |
| Europium 154 | -0.04 | U | 0.28 | | 0.23 | 90 | 02/02/09 | 03/31/09 |
| Lead 210 | 0.46 | U | 0.73 | 1.50 | 0.61 | 90 | 02/02/09 | 03/31/09 |
| **Lead 212** | **1.20** | | **0.20** | | **0.05** | 90 | **02/02/09** | **03/31/09** |
| **Lead 214** | **0.96** | | **0.15** | | **0.06** | 90 | **02/02/09** | **03/31/09** |
| **Potassium 40** | **6.43** | | **0.98** | | **0.34** | 90 | **02/02/09** | **03/31/09** |
| Protactinium 234 | -0.09 | U | 0.13 | | 0.10 | 90 | 02/02/09 | 03/31/09 |
| **Radium (226)** | **0.87** | | **0.15** | 0.70 | **0.06** | 90 | **02/02/09** | **03/31/09** |
| **Thallium 208** | **0.414** | | **0.072** | | **0.025** | 90 | **02/02/09** | **03/31/09** |
| **Thorium 232** | **1.47** | | **0.20** | | **0.07** | 90 | **02/02/09** | **03/31/09** |
| Thorium 234 | 0.74 | U | 0.33 | | 0.76 | 90 | 02/02/09 | 03/31/09 |
| Uranium 235 | 0.05 | U | 0.20 | | 0.16 | 90 | 02/02/09 | 03/31/09 |

**NOTE(S)**

**Data are incomplete without the case narrative.**
**Bold results are greater than the MDL.**

**U Result is less than the sample detection limit.**

**The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".**

**Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.**

# Tetra Tech EC, Inc.

## Client Sample ID: 72-PDT-115-114

### Radiochemistry

Lab Sample ID: F9A310139-006
Work Order: K6JH1
Matrix: SOLID

Date Collected: 12/16/08 0946
Date Received: 01/31/09 0845

| Parameter | Result | Qual | Total Uncert. (2 σ+/-) | RL | MDL | Count Time | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Gamma Ra-226 & hits by EPA 901.1 MOD** | | | | **pCi/g** | | **Batch # 9033371** | | **Yld %** |
| **Actinium 228** | **1.50** | | **0.22** | | **0.06** | 90 | **02/02/09** | **02/07/09** |
| Americium 241 | 0.03 | U | 0.10 | | 0.08 | 90 | 02/02/09 | 02/07/09 |
| **Bismuth 212** | **1.30** | | **0.44** | | **0.17** | 90 | **02/02/09** | **02/07/09** |
| **Bismuth 214** | **0.83** | | **0.14** | | **0.05** | 90 | **02/02/09** | **02/07/09** |
| Cesium 137 | 0.012 | U | 0.029 | 0.070 | 0.023 | 90 | 02/02/09 | 02/07/09 |
| Cobalt 60 | 0.001 | U | 0.041 | | 0.033 | 90 | 02/02/09 | 02/07/09 |
| Europium 152 | 0.04 | U | 0.10 | | 0.08 | 90 | 02/02/09 | 02/07/09 |
| Europium 154 | -0.08 | U | 0.25 | | 0.20 | 90 | 02/02/09 | 02/07/09 |
| **Lead 210** | **1.6** | | **1.2** | 1.5 | **0.7** | 90 | **02/02/09** | **02/07/09** |
| **Lead 212** | **1.42** | | **0.15** | | **0.05** | 90 | **02/02/09** | **02/07/09** |
| **Lead 214** | **0.89** | | **0.14** | | **0.06** | 90 | **02/02/09** | **02/07/09** |
| **Potassium 40** | **6.9** | | **1.1** | | **0.4** | 90 | **02/02/09** | **02/07/09** |
| Protactinium 234 | -0.05 | U | 0.15 | | 0.12 | 90 | 02/02/09 | 02/07/09 |
| **Radium (226)** | **0.83** | | **0.14** | 0.70 | **0.05** | 90 | **02/02/09** | **02/07/09** |
| **Thallium 208** | **0.455** | | **0.069** | | **0.023** | 90 | **02/02/09** | **02/07/09** |
| **Thorium 232** | **1.50** | | **0.22** | | **0.06** | 90 | **02/02/09** | **02/07/09** |
| **Thorium 234** | **1.6** | | **1.2** | | **0.7** | 90 | **02/02/09** | **02/07/09** |
| Uranium 235 | 0.05 | U | 0.24 | | 0.20 | 90 | 02/02/09 | 02/07/09 |

**NOTE(S)**

**Data are incomplete without the case narrative.**
**Bold results are greater than the MDL.**

**U Result is less than the sample detection limit.**

**The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".**

**Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.**

# Tetra Tech EC, Inc.

## Client Sample ID: 72-PDT-115-120

### Radiochemistry

Lab Sample ID: F9A310139-005
Work Order: K6JHX
Matrix: SOLID

Date Collected: 12/16/08 1052
Date Received: 01/31/09 0845

| Parameter | Result | Qual | Total Uncert. (2 σ+/-) | RL | MDL | Count Time | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Gamma Ra-226 & hits by EPA 901.1 MOD** | | | | **pCi/g** | | **Batch # 9033371** | | **Yld %** |
| **Actinium 228** | **1.96** | | **0.21** | | **0.07** | 90 | **02/02/09** | **02/07/09** |
| Americium 241 | -0.019 | U | 0.098 | | 0.080 | 90 | 02/02/09 | 02/07/09 |
| **Bismuth 212** | **1.41** | | **0.45** | | **0.19** | 90 | **02/02/09** | **02/07/09** |
| **Bismuth 214** | **1.27** | | **0.17** | | **0.06** | 90 | **02/02/09** | **02/07/09** |
| Cesium 137 | -0.018 | U | 0.040 | 0.070 | 0.032 | 90 | 02/02/09 | 02/07/09 |
| Cobalt 60 | -0.007 | U | 0.036 | | 0.029 | 90 | 02/02/09 | 02/07/09 |
| Europium 152 | -0.03 | U | 0.10 | | 0.08 | 90 | 02/02/09 | 02/07/09 |
| Europium 154 | 0.10 | U | 0.20 | | 0.16 | 90 | 02/02/09 | 02/07/09 |
| **Lead 210** | **1.2** | **J** | **1.1** | 1.5 | **0.7** | 90 | **02/02/09** | **02/07/09** |
| **Lead 212** | **1.97** | | **0.18** | | **0.05** | 90 | **02/02/09** | **02/07/09** |
| **Lead 214** | **1.37** | | **0.16** | | **0.06** | 90 | **02/02/09** | **02/07/09** |
| **Potassium 40** | **8.5** | | **1.0** | | **0.3** | 90 | **02/02/09** | **02/07/09** |
| Protactinium 234 | -0.12 | U | 0.14 | | 0.11 | 90 | 02/02/09 | 02/07/09 |
| **Radium (226)** | **1.27** | | **0.17** | 0.70 | **0.06** | 90 | **02/02/09** | **02/07/09** |
| **Thallium 208** | **0.661** | | **0.085** | | **0.028** | 90 | **02/02/09** | **02/07/09** |
| **Thorium 232** | **1.96** | | **0.21** | | **0.07** | 90 | **02/02/09** | **02/07/09** |
| **Thorium 234** | **1.7** | | **1.1** | | **0.8** | 90 | **02/02/09** | **02/07/09** |
| Uranium 235 | 0.17 | U | 0.23 | | 0.19 | 90 | 02/02/09 | 02/07/09 |

**NOTE(S)**

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**U Result is less than the sample detection limit.**

**The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".**

**Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.**

# Tetra Tech EC, Inc.

## Client Sample ID: 72-PDT-115-143

### Radiochemistry

Lab Sample ID: F9A310139-002
Work Order: K6JHQ
Matrix: SOLID

Date Collected: 01/13/09 1020
Date Received: 01/31/09 0845

| Parameter | Result | Qual | Total Uncert. (2 σ+/-) | RL | MDL | Count Time | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Gamma Ra-226 & hits by EPA 901.1 MOD** | | | | **pCi/g** | | **Batch # 9033371** | | **Yld %** |
| **Actinium 228** | **0.269** | | **0.082** | | **0.020** | 90 | **02/02/09** | **02/07/09** |
| Americium 241 | -0.005 | U | 0.053 | | 0.044 | 90 | 02/02/09 | 02/07/09 |
| **Bismuth 212** | **0.12** | | **0.17** | | **0.12** | 90 | **02/02/09** | **02/07/09** |
| **Bismuth 214** | **0.122** | | **0.061** | | **0.042** | 90 | **02/02/09** | **02/07/09** |
| Cesium 137 | -0.008 | U | 0.024 | 0.070 | 0.019 | 90 | 02/02/09 | 02/07/09 |
| Cobalt 60 | 0.0005 | U | 0.026 | | 0.021 | 90 | 02/02/09 | 02/07/09 |
| Europium 152 | -0.033 | U | 0.067 | | 0.053 | 90 | 02/02/09 | 02/07/09 |
| Europium 154 | -0.01 | U | 0.18 | | 0.14 | 90 | 02/02/09 | 02/07/09 |
| Lead 210 | -0.16 | U | 0.72 | 1.50 | 0.48 | 90 | 02/02/09 | 02/07/09 |
| **Lead 212** | **0.137** | | **0.058** | | **0.036** | 90 | **02/02/09** | **02/07/09** |
| **Lead 214** | **0.137** | | **0.069** | | **0.040** | 90 | **02/02/09** | **02/07/09** |
| **Potassium 40** | **4.88** | | **0.72** | | **0.28** | 90 | **02/02/09** | **02/07/09** |
| Protactinium 234 | 0.001 | U | 0.080 | | 0.066 | 90 | 02/02/09 | 02/07/09 |
| **Radium (226)** | **0.122** | **J** | **0.061** | 0.700 | **0.042** | 90 | **02/02/09** | **02/07/09** |
| **Thallium 208** | **0.085** | | **0.039** | | **0.020** | 90 | **02/02/09** | **02/07/09** |
| **Thorium 232** | **0.269** | | **0.082** | | **0.020** | 90 | **02/02/09** | **02/07/09** |
| Thorium 234 | 0.24 | U | 0.60 | | 0.46 | 90 | 02/02/09 | 02/07/09 |
| Uranium 235 | -0.003 | U | 0.14 | | 0.11 | 90 | 02/02/09 | 02/07/09 |

**NOTE(S)**

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**U Result is less than the sample detection limit.**

**The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".**

**Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.**

# Tetra Tech EC, Inc.

## Client Sample ID: 72-PDT-115-148

### Radiochemistry

Lab Sample ID: F9A310139-003
Work Order: K6JHT
Matrix: SOLID

Date Collected: 01/13/09 0950
Date Received: 01/31/09 0845

| Parameter | Result | Qual | Total Uncert. (2 σ+/-) | RL | MDL | Count Time | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Gamma Ra-226 & hits by EPA 901.1 MOD** | | | | **pCi/g** | | **Batch # 9033371** | | **Yld %** |
| **Actinium 228** | **1.28** | | **0.22** | | **0.04** | 90 | **02/02/09** | **02/07/09** |
| Americium 241 | -0.04 | U | 1.1 | | 0.06 | 90 | 02/02/09 | 02/07/09 |
| **Bismuth 212** | **0.93** | | **0.33** | | **0.14** | 90 | **02/02/09** | **02/07/09** |
| **Bismuth 214** | **0.99** | | **0.14** | | **0.05** | 90 | **02/02/09** | **02/07/09** |
| Cesium 137 | -0.02 | U | 0.11 | 0.07 | 0.03 | 90 | 02/02/09 | 02/07/09 |
| Cobalt 60 | -0.018 | U | 0.092 | | 0.040 | 90 | 02/02/09 | 02/07/09 |
| Europium 152 | 0.020 | U | 0.093 | | 0.076 | 90 | 02/02/09 | 02/07/09 |
| Europium 154 | 0.06 | U | 0.24 | | 0.19 | 90 | 02/02/09 | 02/07/09 |
| **Lead 210** | **0.66** | **J** | **0.89** | 1.50 | **0.62** | 90 | **02/02/09** | **02/07/09** |
| **Lead 212** | **1.39** | | **0.22** | | **0.05** | 90 | **02/02/09** | **02/07/09** |
| **Lead 214** | **1.04** | | **0.16** | | **0.07** | 90 | **02/02/09** | **02/07/09** |
| **Potassium 40** | **8.9** | | **1.1** | | **0.2** | 90 | **02/02/09** | **02/07/09** |
| Protactinium 234 | -0.06 | U | 0.14 | | 0.11 | 90 | 02/02/09 | 02/07/09 |
| **Radium (226)** | **0.99** | | **0.14** | 0.70 | **0.05** | 90 | **02/02/09** | **02/07/09** |
| **Thallium 208** | **0.469** | | **0.072** | | **0.030** | 90 | **02/02/09** | **02/07/09** |
| **Thorium 232** | **1.28** | | **0.22** | | **0.04** | 90 | **02/02/09** | **02/07/09** |
| **Thorium 234** | **1.11** | | **0.95** | | **0.64** | 90 | **02/02/09** | **02/07/09** |
| Uranium 235 | 0.02 | U | 0.22 | | 0.18 | 90 | 02/02/09 | 02/07/09 |

**NOTE(S)**

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**U Result is less than the sample detection limit.**

**The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".**

**Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.**

# EXCAVATED SOIL UNIT 33

# Tetra Tech EC, Inc.

## Client Sample ID: 70-PD-C0033-09

### Radiochemistry

Lab Sample ID: F9A310146-022
Work Order: K6JLF
Matrix: SOLID

Date Collected: 09/17/07 1016
Date Received: 01/31/09 0845

| Parameter | Result | Qual | Total Uncert. (2 σ+/-) | RL | MDL | Count Time | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Gamma Ra-226 & hits by EPA 901.1 MOD** | | | | **pCi/g** | | **Batch # 9033372** | | **Yld %** |
| **Actinium 228** | **0.312** | | **0.083** | | **0.062** | 90 | **02/02/09** | **02/11/09** |
| Americium 241 | 0.0 | U | 0.072 | | 0.059 | 90 | 02/02/09 | 02/11/09 |
| Bismuth 212 | 0.12 | U | 0.21 | | 0.16 | 90 | 02/02/09 | 02/11/09 |
| **Bismuth 214** | **0.292** | | **0.090** | | **0.043** | 90 | **02/02/09** | **02/11/09** |
| Cesium 137 | -0.0005 | U | 0.030 | 0.070 | 0.025 | 90 | 02/02/09 | 02/11/09 |
| Cobalt 60 | -0.013 | U | 0.037 | | 0.028 | 90 | 02/02/09 | 02/11/09 |
| Europium 152 | -0.023 | U | 0.072 | | 0.058 | 90 | 02/02/09 | 02/11/09 |
| Europium 154 | -0.02 | U | 0.20 | | 0.16 | 90 | 02/02/09 | 02/11/09 |
| Lead 210 | 0.50 | U | 0.63 | 1.50 | 0.53 | 90 | 02/02/09 | 02/11/09 |
| **Lead 212** | **0.296** | | **0.067** | | **0.032** | 90 | **02/02/09** | **02/11/09** |
| **Lead 214** | **0.199** | | **0.079** | | **0.046** | 90 | **02/02/09** | **02/11/09** |
| **Potassium 40** | **5.96** | | **0.96** | | **0.23** | 90 | **02/02/09** | **02/11/09** |
| Protactinium 234 | -0.005 | U | 0.091 | | 0.074 | 90 | 02/02/09 | 02/11/09 |
| **Radium (226)** | **0.292** | **J** | **0.090** | 0.700 | **0.043** | 90 | **02/02/09** | **02/11/09** |
| **Thallium 208** | **0.081** | | **0.036** | | **0.021** | 90 | **02/02/09** | **02/11/09** |
| **Thorium 232** | **0.312** | | **0.083** | | **0.062** | 90 | **02/02/09** | **02/11/09** |
| Thorium 234 | 0.12 | U | 0.63 | | 0.54 | 90 | 02/02/09 | 02/11/09 |
| Uranium 235 | -0.04 | U | 0.90 | | 0.13 | 90 | 02/02/09 | 02/11/09 |

**NOTE(S)**

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**U Result is less than the sample detection limit.**

**The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".**

**Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.**

# Tetra Tech EC, Inc.

## Client Sample ID: 70-PD-C0033-14

### Radiochemistry

Lab Sample ID: F9A310146-020
Work Order: K6JLD
Matrix: SOLID

Date Collected: 09/17/07 1022
Date Received: 01/31/09 0845

| Parameter | Result | Qual | Total Uncert. (2 σ+/-) | RL | MDL | Count Time | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Gamma Ra-226 & hits by EPA 901.1 MOD** | | | | **pCi/g** | | **Batch # 9033372** | | **Yld %** |
| **Actinium 228** | **0.49** | | **0.14** | | **0.03** | 90 | **02/02/09** | **02/11/09** |
| Americium 241 | 0.002 | U | 0.066 | | 0.054 | 90 | 02/02/09 | 02/11/09 |
| **Bismuth 212** | **0.30** | | **0.25** | | **0.17** | 90 | **02/02/09** | **02/11/09** |
| **Bismuth 214** | **0.318** | | **0.092** | | **0.043** | 90 | **02/02/09** | **02/11/09** |
| Cesium 137 | 0.011 | U | 0.028 | 0.070 | 0.022 | 90 | 02/02/09 | 02/11/09 |
| Cobalt 60 | 0.012 | U | 0.027 | | 0.020 | 90 | 02/02/09 | 02/11/09 |
| Europium 152 | -0.005 | U | 0.069 | | 0.057 | 90 | 02/02/09 | 02/11/09 |
| Europium 154 | -0.09 | U | 0.25 | | 0.20 | 90 | 02/02/09 | 02/11/09 |
| **Lead 210** | **0.46** | **J** | **0.64** | 1.50 | **0.45** | 90 | **02/02/09** | **02/11/09** |
| **Lead 212** | **0.371** | | **0.079** | | **0.038** | 90 | **02/02/09** | **02/11/09** |
| **Lead 214** | **0.329** | | **0.089** | | **0.048** | 90 | **02/02/09** | **02/11/09** |
| **Potassium 40** | **7.3** | | **1.1** | | **0.3** | 90 | **02/02/09** | **02/11/09** |
| Protactinium 234 | -0.02 | U | 0.10 | | 0.08 | 90 | 02/02/09 | 02/11/09 |
| **Radium (226)** | **0.318** | **J** | **0.092** | 0.700 | **0.043** | 90 | **02/02/09** | **02/11/09** |
| **Thallium 208** | **0.165** | | **0.050** | | **0.022** | 90 | **02/02/09** | **02/11/09** |
| **Thorium 232** | **0.49** | | **0.14** | | **0.03** | 90 | **02/02/09** | **02/11/09** |
| **Thorium 234** | **0.76** | | **0.64** | | **0.45** | 90 | **02/02/09** | **02/11/09** |
| Uranium 235 | -0.007 | U | 0.20 | | 0.13 | 90 | 02/02/09 | 02/11/09 |

**NOTE(S)**

**Data are incomplete without the case narrative.**
**Bold results are greater than the MDL.**

**J Result is greater than sample detection limit but less than stated reporting limit.**
**U Result is less than the sample detection limit.**

**The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".**

**Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.**

# EXCAVATED SOIL UNIT 108

# Tetra Tech EC, Inc.

## Client Sample ID: 70-PD-C0108-07

### Radiochemistry

Lab Sample ID: F8J240255-008
Work Order: K1J4L
Matrix: SOLID

Date Collected: 07/10/08 1328
Date Received: 10/24/08 0900

| Parameter | Result | Qual | Total Uncert. (2 σ+/-) | RL | MDL | Count Time | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Gamma Ra-226 & hits by EPA 901.1 MOD** | | | | **pCi/g** | | **Batch # 8301208** | | **Yld %** |
| **Actinium 228** | **0.68** | | **0.13** | | **0.02** | 90 | **10/27/08** | **11/13/08** |
| Americium 241 | -0.005 | U | 0.075 | | 0.061 | 90 | 10/27/08 | 11/13/08 |
| **Bismuth 212** | **0.33** | | **0.24** | | **0.16** | 90 | **10/27/08** | **11/13/08** |
| **Bismuth 214** | **0.434** | | **0.092** | | **0.034** | 90 | **10/27/08** | **11/13/08** |
| Cesium 137 | 0.004 | U | 0.032 | 0.070 | 0.026 | 90 | 10/27/08 | 11/13/08 |
| Cobalt 60 | 0.010 | U | 0.027 | | 0.020 | 90 | 10/27/08 | 11/13/08 |
| Europium 152 | -0.015 | U | 0.058 | | 0.046 | 90 | 10/27/08 | 11/13/08 |
| Europium 154 | -0.12 | U | 0.28 | | 0.22 | 90 | 10/27/08 | 11/13/08 |
| Lead 210 | 0.43 | U | 0.69 | 3.00 | 0.58 | 90 | 10/27/08 | 11/13/08 |
| **Lead 212** | **0.53** | | **0.10** | | **0.05** | 90 | **10/27/08** | **11/13/08** |
| **Lead 214** | **0.508** | | **0.097** | | **0.036** | 90 | **10/27/08** | **11/13/08** |
| **Potassium 40** | **7.6** | | **1.1** | | **0.3** | 90 | **10/27/08** | **11/13/08** |
| Protactinium 234 | -0.01 | U | 0.11 | | 0.09 | 90 | 10/27/08 | 11/13/08 |
| **Radium (226)** | **0.434** | **J** | **0.092** | 0.700 | **0.034** | 90 | **10/27/08** | **11/13/08** |
| **Thallium 208** | **0.132** | | **0.042** | | **0.024** | 90 | **10/27/08** | **11/13/08** |
| **Thorium 232** | **0.68** | | **0.13** | | **0.02** | 90 | **10/27/08** | **11/13/08** |
| **Thorium 234** | **0.95** | | **0.74** | | **0.59** | 90 | **10/27/08** | **11/13/08** |
| Uranium 235 | -0.09 | U | 0.19 | | 0.15 | 90 | 10/27/08 | 11/13/08 |

**NOTE(S)**

**Data are incomplete without the case narrative.**
**Bold results are greater than the MDL.**

**J Result is greater than sample detection limit but less than stated reporting limit.**
**U Result is less than the sample detection limit.**

**The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".**

**Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.**

# Tetra Tech EC, Inc.

## Client Sample ID: 70-PD-C0108-18

### Radiochemistry

Lab Sample ID: F8J240247-001
Work Order: K1J07
Matrix: SOLID

Date Collected: 07/10/08 1313
Date Received: 10/24/08 0900

| Parameter | Result | Qual | Total Uncert. (2 σ+/-) | RL | MDL | Count Time | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Gamma Ra-226 & hits by EPA 901.1 MOD** | | | | **pCi/g** | | **Batch # 8301206** | | **Yld %** |
| **Actinium 228** | **0.71** | | **0.15** | | **0.04** | 90 | **10/27/08** | **11/12/08** |
| Americium 241 | 0.0008 | U | 0.052 | | 0.043 | 90 | 10/27/08 | 11/12/08 |
| **Bismuth 212** | **0.79** | | **0.26** | | **0.09** | 90 | **10/27/08** | **11/12/08** |
| **Bismuth 214** | **0.512** | | **0.098** | | **0.033** | 90 | **10/27/08** | **11/12/08** |
| Cesium 137 | 0.006 | U | 0.025 | 0.070 | 0.020 | 90 | 10/27/08 | 11/12/08 |
| Cobalt 60 | -0.007 | U | 0.031 | | 0.025 | 90 | 10/27/08 | 11/12/08 |
| Europium 152 | 0.0 | U | 0.079 | | 0.065 | 90 | 10/27/08 | 11/12/08 |
| Europium 154 | -0.03 | U | 0.18 | | 0.15 | 90 | 10/27/08 | 11/12/08 |
| **Lead 210** | **0.79** | **J** | **0.76** | 3.00 | **0.49** | 90 | **10/27/08** | **11/12/08** |
| **Lead 212** | **0.66** | | **0.12** | | **0.04** | 90 | **10/27/08** | **11/12/08** |
| **Lead 214** | **0.57** | | **0.10** | | **0.03** | 90 | **10/27/08** | **11/12/08** |
| **Potassium 40** | **8.2** | | **1.1** | | **0.3** | 90 | **10/27/08** | **11/12/08** |
| Protactinium 234 | 0.021 | U | 0.085 | | 0.070 | 90 | 10/27/08 | 11/12/08 |
| **Radium (226)** | **0.512** | **J** | **0.098** | 0.700 | **0.033** | 90 | **10/27/08** | **11/12/08** |
| **Thallium 208** | **0.227** | | **0.048** | | **0.017** | 90 | **10/27/08** | **11/12/08** |
| **Thorium 232** | **0.71** | | **0.15** | | **0.04** | 90 | **10/27/08** | **11/12/08** |
| **Thorium 234** | **0.67** | | **0.70** | | **0.48** | 90 | **10/27/08** | **11/12/08** |
| Uranium 235 | -0.02 | U | 0.14 | | 0.12 | 90 | 10/27/08 | 11/12/08 |

**NOTE(S)**

**Data are incomplete without the case narrative.**
**Bold results are greater than the MDL.**

**J Result is greater than sample detection limit but less than stated reporting limit.**
**U Result is less than the sample detection limit.**

**The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".**

**Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.**

# ATTACHMENT 7

# BACKFILL MATERIAL RESRAD REPORT

# (on CD only)

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Summary : RESRAD Default Parameters
File : C:\RESRAD_FAMILY\RESRAD\6.5\USERFILES\PARCEL G SURVEY UNIT 115 BACKFILL MDA.RAD

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Dose Conversion Factor (and Related) Parameter Summary
Dose Library: FGR 12 & FGR 11

| Menu | Parameter | Current Value# | Base Case* | Parameter Name |
|---|---|---|---|---|
| A-1 | DCF's for external ground radiation, (mrem/yr)/(pCi/g) | | | |
| A-1 | Ac-228 (Source: FGR 12) | 5.978E+00 | 5.978E+00 | DCF1( 1) |
| A-1 | At-218 (Source: FGR 12) | 5.847E-03 | 5.847E-03 | DCF1( 2) |
| A-1 | Ba-137m (Source: FGR 12) | 3.606E+00 | 3.606E+00 | DCF1( 3) |
| A-1 | Bi-210 (Source: FGR 12) | 3.606E-03 | 3.606E-03 | DCF1( 4) |
| A-1 | Bi-212 (Source: FGR 12) | 1.171E+00 | 1.171E+00 | DCF1( 5) |
| A-1 | Bi-214 (Source: FGR 12) | 9.808E+00 | 9.808E+00 | DCF1( 6) |
| A-1 | Cs-137 (Source: FGR 12) | 7.510E-04 | 7.510E-04 | DCF1( 7) |
| A-1 | Pb-210 (Source: FGR 12) | 2.447E-03 | 2.447E-03 | DCF1( 8) |
| A-1 | Pb-212 (Source: FGR 12) | 7.043E-01 | 7.043E-01 | DCF1( 9) |
| A-1 | Pb-214 (Source: FGR 12) | 1.341E+00 | 1.341E+00 | DCF1( 10) |
| A-1 | Po-210 (Source: FGR 12) | 5.231E-05 | 5.231E-05 | DCF1( 11) |
| A-1 | Po-212 (Source: FGR 12) | 0.000E+00 | 0.000E+00 | DCF1( 12) |
| A-1 | Po-214 (Source: FGR 12) | 5.138E-04 | 5.138E-04 | DCF1( 13) |
| A-1 | Po-216 (Source: FGR 12) | 1.042E-04 | 1.042E-04 | DCF1( 14) |
| A-1 | Po-218 (Source: FGR 12) | 5.642E-05 | 5.642E-05 | DCF1( 15) |
| A-1 | Ra-224 (Source: FGR 12) | 5.119E-02 | 5.119E-02 | DCF1( 16) |
| A-1 | Ra-226 (Source: FGR 12) | 3.176E-02 | 3.176E-02 | DCF1( 17) |
| A-1 | Ra-228 (Source: FGR 12) | 0.000E+00 | 0.000E+00 | DCF1( 18) |
| A-1 | Rn-220 (Source: FGR 12) | 2.298E-03 | 2.298E-03 | DCF1( 19) |
| A-1 | Rn-222 (Source: FGR 12) | 2.354E-03 | 2.354E-03 | DCF1( 20) |
| A-1 | Sr-90 (Source: FGR 12) | 7.043E-04 | 7.043E-04 | DCF1( 21) |
| A-1 | Th-228 (Source: FGR 12) | 7.940E-03 | 7.940E-03 | DCF1( 22) |
| A-1 | Th-232 (Source: FGR 12) | 5.212E-04 | 5.212E-04 | DCF1( 23) |
| A-1 | Tl-208 (Source: FGR 12) | 2.298E+01 | 2.298E+01 | DCF1( 24) |
| A-1 | Tl-210 (Source: no data) | 0.000E+00 | -2.000E+00 | DCF1( 25) |
| A-1 | Y-90 (Source: FGR 12) | 2.391E-02 | 2.391E-02 | DCF1( 26) |
| | | | | |
| B-1 | Dose conversion factors for inhalation, mrem/pCi: | | | |
| B-1 | Cs-137+D | 3.190E-05 | 3.190E-05 | DCF2( 1) |
| B-1 | Pb-210+D | 2.320E-02 | 1.360E-02 | DCF2( 2) |
| B-1 | Ra-226+D | 8.594E-03 | 8.580E-03 | DCF2( 3) |
| B-1 | Ra-228+D | 5.078E-03 | 4.770E-03 | DCF2( 4) |
| B-1 | Sr-90+D | 1.308E-03 | 1.300E-03 | DCF2( 5) |
| B-1 | Th-228+D | 3.454E-01 | 3.420E-01 | DCF2( 6) |
| B-1 | Th-232 | 1.640E+00 | 1.640E+00 | DCF2( 7) |
| | | | | |
| D-1 | Dose conversion factors for ingestion, mrem/pCi: | | | |
| D-1 | Cs-137+D | 5.000E-05 | 5.000E-05 | DCF3( 1) |
| D-1 | Pb-210+D | 7.276E-03 | 5.370E-03 | DCF3( 2) |
| D-1 | Ra-226+D | 1.321E-03 | 1.320E-03 | DCF3( 3) |
| D-1 | Ra-228+D | 1.442E-03 | 1.440E-03 | DCF3( 4) |
| D-1 | Sr-90+D | 1.528E-04 | 1.420E-04 | DCF3( 5) |
| D-1 | Th-228+D | 8.086E-04 | 3.960E-04 | DCF3( 6) |
| D-1 | Th-232 | 2.730E-03 | 2.730E-03 | DCF3( 7) |
| | | | | |
| D-34 | Food transfer factors: | | | |
| D-34 | Cs-137+D , plant/soil concentration ratio, dimensionless | 4.000E-02 | 4.000E-02 | RTF( 1,1) |
| D-34 | Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 3.000E-02 | 3.000E-02 | RTF( 1,2) |
| D-34 | Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 8.000E-03 | 8.000E-03 | RTF( 1,3) |

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: FGR 12 & FGR 11

| Menu | Parameter | Current Value# | Base Case* | Parameter Name |
|---|---|---|---|---|
| D-34 | Pb-210+D , plant/soil concentration ratio, dimensionless | 1.000E-02 | 1.000E-02 | RTF( 2,1) |
| D-34 | Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 8.000E-04 | 8.000E-04 | RTF( 2,2) |
| D-34 | Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 3.000E-04 | 3.000E-04 | RTF( 2,3) |
| D-34 | | | | |
| D-34 | Ra-226+D , plant/soil concentration ratio, dimensionless | 4.000E-02 | 4.000E-02 | RTF( 3,1) |
| D-34 | Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-03 | 1.000E-03 | RTF( 3,2) |
| D-34 | Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 1.000E-03 | 1.000E-03 | RTF( 3,3) |
| D-34 | | | | |
| D-34 | Ra-228+D , plant/soil concentration ratio, dimensionless | 4.000E-02 | 4.000E-02 | RTF( 4,1) |
| D-34 | Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-03 | 1.000E-03 | RTF( 4,2) |
| D-34 | Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 1.000E-03 | 1.000E-03 | RTF( 4,3) |
| D-34 | | | | |
| D-34 | Sr-90+D , plant/soil concentration ratio, dimensionless | 3.000E-01 | 3.000E-01 | RTF( 5,1) |
| D-34 | Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 8.000E-03 | 8.000E-03 | RTF( 5,2) |
| D-34 | Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 2.000E-03 | 2.000E-03 | RTF( 5,3) |
| D-34 | | | | |
| D-34 | Th-228+D , plant/soil concentration ratio, dimensionless | 1.000E-03 | 1.000E-03 | RTF( 6,1) |
| D-34 | Th-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-04 | 1.000E-04 | RTF( 6,2) |
| D-34 | Th-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 5.000E-06 | 5.000E-06 | RTF( 6,3) |
| D-34 | | | | |
| D-34 | Th-232 , plant/soil concentration ratio, dimensionless | 1.000E-03 | 1.000E-03 | RTF( 7,1) |
| D-34 | Th-232 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-04 | 1.000E-04 | RTF( 7,2) |
| D-34 | Th-232 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 5.000E-06 | 5.000E-06 | RTF( 7,3) |
| | | | | |
| D-5 | Bioaccumulation factors, fresh water, L/kg: | | | |
| D-5 | Cs-137+D , fish | 2.000E+03 | 2.000E+03 | BIOFAC( 1,1) |
| D-5 | Cs-137+D , crustacea and mollusks | 1.000E+02 | 1.000E+02 | BIOFAC( 1,2) |
| D-5 | | | | |
| D-5 | Pb-210+D , fish | 3.000E+02 | 3.000E+02 | BIOFAC( 2,1) |
| D-5 | Pb-210+D , crustacea and mollusks | 1.000E+02 | 1.000E+02 | BIOFAC( 2,2) |
| D-5 | | | | |
| D-5 | Ra-226+D , fish | 5.000E+01 | 5.000E+01 | BIOFAC( 3,1) |
| D-5 | Ra-226+D , crustacea and mollusks | 2.500E+02 | 2.500E+02 | BIOFAC( 3,2) |
| D-5 | | | | |
| D-5 | Ra-228+D , fish | 5.000E+01 | 5.000E+01 | BIOFAC( 4,1) |
| D-5 | Ra-228+D , crustacea and mollusks | 2.500E+02 | 2.500E+02 | BIOFAC( 4,2) |
| D-5 | | | | |
| D-5 | Sr-90+D , fish | 6.000E+01 | 6.000E+01 | BIOFAC( 5,1) |
| D-5 | Sr-90+D , crustacea and mollusks | 1.000E+02 | 1.000E+02 | BIOFAC( 5,2) |
| D-5 | | | | |
| D-5 | Th-228+D , fish | 1.000E+02 | 1.000E+02 | BIOFAC( 6,1) |
| D-5 | Th-228+D , crustacea and mollusks | 5.000E+02 | 5.000E+02 | BIOFAC( 6,2) |
| D-5 | | | | |
| D-5 | Th-232 , fish | 1.000E+02 | 1.000E+02 | BIOFAC( 7,1) |
| D-5 | Th-232 , crustacea and mollusks | 5.000E+02 | 5.000E+02 | BIOFAC( 7,2) |

#For DCF1(xxx) only, factors are for infinite depth & area. See ETFG table in Ground Pathway of Detailed Report.

*Base Case means Default.Lib w/o Associate Nuclide contributions.

Summary : RESRAD Default Parameters
File : C:\RESRAD_FAMILY\RESRAD\6.5\USERFILES\PARCEL G SURVEY UNIT 115 BACKFILL MDA.RAD

Site-Specific Parameter Summary

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|---|---|---|---|---|---|
| R011 | Area of contaminated zone (m**2) | 2.900E+02 | 1.000E+04 | --- | AREA |
| R011 | Thickness of contaminated zone (m) | 2.000E+00 | 2.000E+00 | --- | THICK0 |
| R011 | Fraction of contamination that is submerged | 0.000E+00 | 0.000E+00 | --- | SUBMFRACT |
| R011 | Length parallel to aquifer flow (m) | 1.703E+01 | 1.000E+02 | --- | LCZPAQ |
| R011 | Basic radiation dose limit (mrem/yr) | 2.500E+01 | 3.000E+01 | --- | BRDL |
| R011 | Time since placement of material (yr) | 0.000E+00 | 0.000E+00 | --- | TI |
| R011 | Times for calculations (yr) | 1.000E+00 | 1.000E+00 | --- | T( 2) |
| R011 | Times for calculations (yr) | 3.000E+00 | 3.000E+00 | --- | T( 3) |
| R011 | Times for calculations (yr) | 1.000E+01 | 1.000E+01 | --- | T( 4) |
| R011 | Times for calculations (yr) | 3.000E+01 | 3.000E+01 | --- | T( 5) |
| R011 | Times for calculations (yr) | 1.000E+02 | 1.000E+02 | --- | T( 6) |
| R011 | Times for calculations (yr) | 3.000E+02 | 3.000E+02 | --- | T( 7) |
| R011 | Times for calculations (yr) | 1.000E+03 | 1.000E+03 | --- | T( 8) |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- | T( 9) |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- | T(10) |
| | | | | | |
| R012 | Initial principal radionuclide (pCi/g): Cs-137 | 4.200E-02 | 0.000E+00 | --- | S1(1) |
| R012 | Initial principal radionuclide (pCi/g): Pb-210 | 2.240E-01 | 0.000E+00 | --- | S1(2) |
| R012 | Initial principal radionuclide (pCi/g): Ra-226 | 2.240E-01 | 0.000E+00 | --- | S1(3) |
| R012 | Initial principal radionuclide (pCi/g): Sr-90 | 6.000E-02 | 0.000E+00 | --- | S1(5) |
| R012 | Initial principal radionuclide (pCi/g): Th-232 | 5.370E-01 | 0.000E+00 | --- | S1(7) |
| R012 | Concentration in groundwater (pCi/L): Cs-137 | not used | 0.000E+00 | --- | W1( 1) |
| R012 | Concentration in groundwater (pCi/L): Pb-210 | not used | 0.000E+00 | --- | W1( 2) |
| R012 | Concentration in groundwater (pCi/L): Ra-226 | not used | 0.000E+00 | --- | W1( 3) |
| R012 | Concentration in groundwater (pCi/L): Sr-90 | not used | 0.000E+00 | --- | W1( 5) |
| R012 | Concentration in groundwater (pCi/L): Th-232 | not used | 0.000E+00 | --- | W1( 7) |
| | | | | | |
| R013 | Cover depth (m) | 0.000E+00 | 0.000E+00 | --- | COVER0 |
| R013 | Density of cover material (g/cm**3) | not used | 1.500E+00 | --- | DENSCV |
| R013 | Cover depth erosion rate (m/yr) | not used | 1.000E-03 | --- | VCV |
| R013 | Density of contaminated zone (g/cm**3) | 1.500E+00 | 1.500E+00 | --- | DENSCZ |
| R013 | Contaminated zone erosion rate (m/yr) | 1.000E-03 | 1.000E-03 | --- | VCZ |
| R013 | Contaminated zone total porosity | 4.000E-01 | 4.000E-01 | --- | TPCZ |
| R013 | Contaminated zone field capacity | 2.000E-01 | 2.000E-01 | --- | FCCZ |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 1.000E+01 | 1.000E+01 | --- | HCCZ |
| R013 | Contaminated zone b parameter | 5.300E+00 | 5.300E+00 | --- | BCZ |
| R013 | Average annual wind speed (m/sec) | 2.000E+00 | 2.000E+00 | --- | WIND |
| R013 | Humidity in air (g/m**3) | not used | 8.000E+00 | --- | HUMID |
| R013 | Evapotranspiration coefficient | 5.000E-01 | 5.000E-01 | --- | EVAPTR |
| R013 | Precipitation (m/yr) | 1.000E+00 | 1.000E+00 | --- | PRECIP |
| R013 | Irrigation (m/yr) | 2.000E-01 | 2.000E-01 | --- | RI |
| R013 | Irrigation mode | overhead | overhead | --- | IDITCH |
| R013 | Runoff coefficient | 2.000E-01 | 2.000E-01 | --- | RUNOFF |
| R013 | Watershed area for nearby stream or pond (m**2) | 1.000E+06 | 1.000E+06 | --- | WAREA |
| R013 | Accuracy for water/soil computations | 1.000E-03 | 1.000E-03 | --- | EPS |
| | | | | | |
| R014 | Density of saturated zone (g/cm**3) | 1.500E+00 | 1.500E+00 | --- | DENSAQ |
| R014 | Saturated zone total porosity | 4.000E-01 | 4.000E-01 | --- | TPSZ |
| R014 | Saturated zone effective porosity | 2.000E-01 | 2.000E-01 | --- | EPSZ |
| R014 | Saturated zone field capacity | 2.000E-01 | 2.000E-01 | --- | FCSZ |

Site-Specific Parameter Summary (continued)

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|---|---|---|---|---|---|
| R014 | Saturated zone hydraulic conductivity (m/yr) | 1.000E+02 | 1.000E+02 | --- | HCSZ |
| R014 | Saturated zone hydraulic gradient | 2.000E-02 | 2.000E-02 | --- | HGWT |
| R014 | Saturated zone b parameter | 5.300E+00 | 5.300E+00 | --- | BSZ |
| R014 | Water table drop rate (m/yr) | 1.000E-03 | 1.000E-03 | --- | VWT |
| R014 | Well pump intake depth (m below water table) | 1.000E+01 | 1.000E+01 | --- | DWIBWT |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | ND | ND | --- | MODEL |
| R014 | Well pumping rate (m**3/yr) | 2.500E+02 | 2.500E+02 | --- | UW |
| | | | | | |
| R015 | Number of unsaturated zone strata | 1 | 1 | --- | NS |
| R015 | Unsat. zone 1, thickness (m) | 4.000E+00 | 4.000E+00 | --- | H(1) |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 1.500E+00 | 1.500E+00 | --- | DENSUZ(1) |
| R015 | Unsat. zone 1, total porosity | 4.000E-01 | 4.000E-01 | --- | TPUZ(1) |
| R015 | Unsat. zone 1, effective porosity | 2.000E-01 | 2.000E-01 | --- | EPUZ(1) |
| R015 | Unsat. zone 1, field capacity | 2.000E-01 | 2.000E-01 | --- | FCUZ(1) |
| R015 | Unsat. zone 1, soil-specific b parameter | 5.300E+00 | 5.300E+00 | --- | BUZ(1) |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 1.000E+01 | 1.000E+01 | --- | HCUZ(1) |
| | | | | | |
| R016 | Distribution coefficients for Cs-137 | | | | |
| R016 | Contaminated zone (cm**3/g) | 4.600E+03 | 4.600E+03 | --- | DCNUCC( 1) |
| R016 | Unsaturated zone 1 (cm**3/g) | 4.600E+03 | 4.600E+03 | --- | DCNUCU( 1,1) |
| R016 | Saturated zone (cm**3/g) | 4.600E+03 | 4.600E+03 | --- | DCNUCS( 1) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 3.623E-05 | ALEACH( 1) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK( 1) |
| | | | | | |
| R016 | Distribution coefficients for Pb-210 | | | | |
| R016 | Contaminated zone (cm**3/g) | 1.000E+02 | 1.000E+02 | --- | DCNUCC( 2) |
| R016 | Unsaturated zone 1 (cm**3/g) | 1.000E+02 | 1.000E+02 | --- | DCNUCU( 2,1) |
| R016 | Saturated zone (cm**3/g) | 1.000E+02 | 1.000E+02 | --- | DCNUCS( 2) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 1.663E-03 | ALEACH( 2) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK( 2) |
| | | | | | |
| R016 | Distribution coefficients for Ra-226 | | | | |
| R016 | Contaminated zone (cm**3/g) | 7.000E+01 | 7.000E+01 | --- | DCNUCC( 3) |
| R016 | Unsaturated zone 1 (cm**3/g) | 7.000E+01 | 7.000E+01 | --- | DCNUCU( 3,1) |
| R016 | Saturated zone (cm**3/g) | 7.000E+01 | 7.000E+01 | --- | DCNUCS( 3) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 2.374E-03 | ALEACH( 3) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK( 3) |
| | | | | | |
| R016 | Distribution coefficients for Sr-90 | | | | |
| R016 | Contaminated zone (cm**3/g) | 3.000E+01 | 3.000E+01 | --- | DCNUCC( 5) |
| R016 | Unsaturated zone 1 (cm**3/g) | 3.000E+01 | 3.000E+01 | --- | DCNUCU( 5,1) |
| R016 | Saturated zone (cm**3/g) | 3.000E+01 | 3.000E+01 | --- | DCNUCS( 5) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 5.516E-03 | ALEACH( 5) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK( 5) |
| | | | | | |
| R016 | Distribution coefficients for Th-232 | | | | |
| R016 | Contaminated zone (cm**3/g) | 6.000E+04 | 6.000E+04 | --- | DCNUCC( 7) |
| R016 | Unsaturated zone 1 (cm**3/g) | 6.000E+04 | 6.000E+04 | --- | DCNUCU( 7,1) |
| R016 | Saturated zone (cm**3/g) | 6.000E+04 | 6.000E+04 | --- | DCNUCS( 7) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 2.778E-06 | ALEACH( 7) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK( 7) |

Site-Specific Parameter Summary (continued)

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|---|---|---|---|---|---|
| R016 | Distribution coefficients for daughter Ra-228 | | | | |
| R016 | Contaminated zone (cm**3/g) | 7.000E+01 | 7.000E+01 | --- | DCNUCC( 4) |
| R016 | Unsaturated zone 1 (cm**3/g) | 7.000E+01 | 7.000E+01 | --- | DCNUCU( 4,1) |
| R016 | Saturated zone (cm**3/g) | 7.000E+01 | 7.000E+01 | --- | DCNUCS( 4) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 2.374E-03 | ALEACH( 4) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK( 4) |
| | | | | | |
| R016 | Distribution coefficients for daughter Th-228 | | | | |
| R016 | Contaminated zone (cm**3/g) | 6.000E+04 | 6.000E+04 | --- | DCNUCC( 6) |
| R016 | Unsaturated zone 1 (cm**3/g) | 6.000E+04 | 6.000E+04 | --- | DCNUCU( 6,1) |
| R016 | Saturated zone (cm**3/g) | 6.000E+04 | 6.000E+04 | --- | DCNUCS( 6) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 2.778E-06 | ALEACH( 6) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK( 6) |
| | | | | | |
| R017 | Inhalation rate (m**3/yr) | 8.400E+03 | 8.400E+03 | --- | INHALR |
| R017 | Mass loading for inhalation (g/m**3) | 1.000E-04 | 1.000E-04 | --- | MLINH |
| R017 | Exposure duration | 3.000E+01 | 3.000E+01 | --- | ED |
| R017 | Shielding factor, inhalation | 4.000E-01 | 4.000E-01 | --- | SHF3 |
| R017 | Shielding factor, external gamma | 7.000E-01 | 7.000E-01 | --- | SHF1 |
| R017 | Fraction of time spent indoors | 5.000E-01 | 5.000E-01 | --- | FIND |
| R017 | Fraction of time spent outdoors (on site) | 2.500E-01 | 2.500E-01 | --- | FOTD |
| R017 | Shape factor flag, external gamma | 1.000E+00 | 1.000E+00 | >0 shows circular AREA. | FS |
| R017 | Radii of shape factor array (used if FS = -1): | | | | |
| R017 | Outer annular radius (m), ring 1: | not used | 5.000E+01 | --- | RAD_SHAPE(1) |
| R017 | Outer annular radius (m), ring 2: | not used | 7.071E+01 | --- | RAD_SHAPE(2) |
| R017 | Outer annular radius (m), ring 3: | not used | 0.000E+00 | --- | RAD_SHAPE(3) |
| R017 | Outer annular radius (m), ring 4: | not used | 0.000E+00 | --- | RAD_SHAPE(4) |
| R017 | Outer annular radius (m), ring 5: | not used | 0.000E+00 | --- | RAD_SHAPE(5) |
| R017 | Outer annular radius (m), ring 6: | not used | 0.000E+00 | --- | RAD_SHAPE(6) |
| R017 | Outer annular radius (m), ring 7: | not used | 0.000E+00 | --- | RAD_SHAPE(7) |
| R017 | Outer annular radius (m), ring 8: | not used | 0.000E+00 | --- | RAD_SHAPE(8) |
| R017 | Outer annular radius (m), ring 9: | not used | 0.000E+00 | --- | RAD_SHAPE(9) |
| R017 | Outer annular radius (m), ring 10: | not used | 0.000E+00 | --- | RAD_SHAPE(10) |
| R017 | Outer annular radius (m), ring 11: | not used | 0.000E+00 | --- | RAD_SHAPE(11) |
| R017 | Outer annular radius (m), ring 12: | not used | 0.000E+00 | --- | RAD_SHAPE(12) |
| | | | | | |
| R017 | Fractions of annular areas within AREA: | | | | |
| R017 | Ring 1 | not used | 1.000E+00 | --- | FRACA( 1) |
| R017 | Ring 2 | not used | 2.732E-01 | --- | FRACA( 2) |
| R017 | Ring 3 | not used | 0.000E+00 | --- | FRACA( 3) |
| R017 | Ring 4 | not used | 0.000E+00 | --- | FRACA( 4) |
| R017 | Ring 5 | not used | 0.000E+00 | --- | FRACA( 5) |
| R017 | Ring 6 | not used | 0.000E+00 | --- | FRACA( 6) |
| R017 | Ring 7 | not used | 0.000E+00 | --- | FRACA( 7) |
| R017 | Ring 8 | not used | 0.000E+00 | --- | FRACA( 8) |
| R017 | Ring 9 | not used | 0.000E+00 | --- | FRACA( 9) |
| R017 | Ring 10 | not used | 0.000E+00 | --- | FRACA(10) |
| R017 | Ring 11 | not used | 0.000E+00 | --- | FRACA(11) |
| R017 | Ring 12 | not used | 0.000E+00 | --- | FRACA(12) |

Site-Specific Parameter Summary (continued)

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|---|---|---|---|---|---|
| R018 | Fruits, vegetables and grain consumption (kg/yr) | 1.600E+02 | 1.600E+02 | --- | DIET(1) |
| R018 | Leafy vegetable consumption (kg/yr) | 1.400E+01 | 1.400E+01 | --- | DIET(2) |
| R018 | Milk consumption (L/yr) | 9.200E+01 | 9.200E+01 | --- | DIET(3) |
| R018 | Meat and poultry consumption (kg/yr) | 6.300E+01 | 6.300E+01 | --- | DIET(4) |
| R018 | Fish consumption (kg/yr) | 5.400E+00 | 5.400E+00 | --- | DIET(5) |
| R018 | Other seafood consumption (kg/yr) | 9.000E-01 | 9.000E-01 | --- | DIET(6) |
| R018 | Soil ingestion rate (g/yr) | 3.650E+01 | 3.650E+01 | --- | SOIL |
| R018 | Drinking water intake (L/yr) | 5.100E+02 | 5.100E+02 | --- | DWI |
| R018 | Contamination fraction of drinking water | 1.000E+00 | 1.000E+00 | --- | FDW |
| R018 | Contamination fraction of household water | not used | 1.000E+00 | --- | FHHW |
| R018 | Contamination fraction of livestock water | 1.000E+00 | 1.000E+00 | --- | FLW |
| R018 | Contamination fraction of irrigation water | 1.000E+00 | 1.000E+00 | --- | FIRW |
| R018 | Contamination fraction of aquatic food | 5.000E-01 | 5.000E-01 | --- | FR9 |
| R018 | Contamination fraction of plant food | -1 | -1 | 0.145E+00 | FPLANT |
| R018 | Contamination fraction of meat | -1 | -1 | 0.145E-01 | FMEAT |
| R018 | Contamination fraction of milk | -1 | -1 | 0.145E-01 | FMILK |
| | | | | | |
| R019 | Livestock fodder intake for meat (kg/day) | 6.800E+01 | 6.800E+01 | --- | LFI5 |
| R019 | Livestock fodder intake for milk (kg/day) | 5.500E+01 | 5.500E+01 | --- | LFI6 |
| R019 | Livestock water intake for meat (L/day) | 5.000E+01 | 5.000E+01 | --- | LWI5 |
| R019 | Livestock water intake for milk (L/day) | 1.600E+02 | 1.600E+02 | --- | LWI6 |
| R019 | Livestock soil intake (kg/day) | 5.000E-01 | 5.000E-01 | --- | LSI |
| R019 | Mass loading for foliar deposition (g/m**3) | 1.000E-04 | 1.000E-04 | --- | MLFD |
| R019 | Depth of soil mixing layer (m) | 1.500E-01 | 1.500E-01 | --- | DM |
| R019 | Depth of roots (m) | 9.000E-01 | 9.000E-01 | --- | DROOT |
| R019 | Drinking water fraction from ground water | 1.000E+00 | 1.000E+00 | --- | FGWDW |
| R019 | Household water fraction from ground water | not used | 1.000E+00 | --- | FGWHH |
| R019 | Livestock water fraction from ground water | 1.000E+00 | 1.000E+00 | --- | FGWLW |
| R019 | Irrigation fraction from ground water | 1.000E+00 | 1.000E+00 | --- | FGWIR |
| | | | | | |
| R19B | Wet weight crop yield for Non-Leafy (kg/m**2) | 7.000E-01 | 7.000E-01 | --- | YV(1) |
| R19B | Wet weight crop yield for Leafy (kg/m**2) | 1.500E+00 | 1.500E+00 | --- | YV(2) |
| R19B | Wet weight crop yield for Fodder (kg/m**2) | 1.100E+00 | 1.100E+00 | --- | YV(3) |
| R19B | Growing Season for Non-Leafy (years) | 1.700E-01 | 1.700E-01 | --- | TE(1) |
| R19B | Growing Season for Leafy (years) | 2.500E-01 | 2.500E-01 | --- | TE(2) |
| R19B | Growing Season for Fodder (years) | 8.000E-02 | 8.000E-02 | --- | TE(3) |
| R19B | Translocation Factor for Non-Leafy | 1.000E-01 | 1.000E-01 | --- | TIV(1) |
| R19B | Translocation Factor for Leafy | 1.000E+00 | 1.000E+00 | --- | TIV(2) |
| R19B | Translocation Factor for Fodder | 1.000E+00 | 1.000E+00 | --- | TIV(3) |
| R19B | Dry Foliar Interception Fraction for Non-Leafy | 2.500E-01 | 2.500E-01 | --- | RDRY(1) |
| R19B | Dry Foliar Interception Fraction for Leafy | 2.500E-01 | 2.500E-01 | --- | RDRY(2) |
| R19B | Dry Foliar Interception Fraction for Fodder | 2.500E-01 | 2.500E-01 | --- | RDRY(3) |
| R19B | Wet Foliar Interception Fraction for Non-Leafy | 2.500E-01 | 2.500E-01 | --- | RWET(1) |
| R19B | Wet Foliar Interception Fraction for Leafy | 2.500E-01 | 2.500E-01 | --- | RWET(2) |
| R19B | Wet Foliar Interception Fraction for Fodder | 2.500E-01 | 2.500E-01 | --- | RWET(3) |
| R19B | Weathering Removal Constant for Vegetation | 2.000E+01 | 2.000E+01 | --- | WLAM |
| | | | | | |
| C14 | C-12 concentration in water (g/cm**3) | not used | 2.000E-05 | --- | C12WTR |
| C14 | C-12 concentration in contaminated soil (g/g) | not used | 3.000E-02 | --- | C12CZ |
| C14 | Fraction of vegetation carbon from soil | not used | 2.000E-02 | --- | CSOIL |

Site-Specific Parameter Summary (continued)

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|---|---|---|---|---|---|
| C14 | Fraction of vegetation carbon from air | not used | 9.800E-01 | --- | CAIR |
| C14 | C-14 evasion layer thickness in soil (m) | not used | 3.000E-01 | --- | DMC |
| C14 | C-14 evasion flux rate from soil (1/sec) | not used | 7.000E-07 | --- | EVSN |
| C14 | C-12 evasion flux rate from soil (1/sec) | not used | 1.000E-10 | --- | REVSN |
| C14 | Fraction of grain in beef cattle feed | not used | 8.000E-01 | --- | AVFG4 |
| C14 | Fraction of grain in milk cow feed | not used | 2.000E-01 | --- | AVFG5 |
| | | | | | |
| STOR | Storage times of contaminated foodstuffs (days): | | | | |
| STOR | Fruits, non-leafy vegetables, and grain | 1.400E+01 | 1.400E+01 | --- | STOR_T(1) |
| STOR | Leafy vegetables | 1.000E+00 | 1.000E+00 | --- | STOR_T(2) |
| STOR | Milk | 1.000E+00 | 1.000E+00 | --- | STOR_T(3) |
| STOR | Meat and poultry | 2.000E+01 | 2.000E+01 | --- | STOR_T(4) |
| STOR | Fish | 7.000E+00 | 7.000E+00 | --- | STOR_T(5) |
| STOR | Crustacea and mollusks | 7.000E+00 | 7.000E+00 | --- | STOR_T(6) |
| STOR | Well water | 1.000E+00 | 1.000E+00 | --- | STOR_T(7) |
| STOR | Surface water | 1.000E+00 | 1.000E+00 | --- | STOR_T(8) |
| STOR | Livestock fodder | 4.500E+01 | 4.500E+01 | --- | STOR_T(9) |
| | | | | | |
| R021 | Thickness of building foundation (m) | not used | 1.500E-01 | --- | FLOOR1 |
| R021 | Bulk density of building foundation (g/cm**3) | not used | 2.400E+00 | --- | DENSFL |
| R021 | Total porosity of the cover material | not used | 4.000E-01 | --- | TPCV |
| R021 | Total porosity of the building foundation | not used | 1.000E-01 | --- | TPFL |
| R021 | Volumetric water content of the cover material | not used | 5.000E-02 | --- | PH2OCV |
| R021 | Volumetric water content of the foundation | not used | 3.000E-02 | --- | PH2OFL |
| R021 | Diffusion coefficient for radon gas (m/sec): | | | | |
| R021 | in cover material | not used | 2.000E-06 | --- | DIFCV |
| R021 | in foundation material | not used | 3.000E-07 | --- | DIFFL |
| R021 | in contaminated zone soil | not used | 2.000E-06 | --- | DIFCZ |
| R021 | Radon vertical dimension of mixing (m) | not used | 2.000E+00 | --- | HMIX |
| R021 | Average building air exchange rate (1/hr) | not used | 5.000E-01 | --- | REXG |
| R021 | Height of the building (room) (m) | not used | 2.500E+00 | --- | HRM |
| R021 | Building interior area factor | not used | 0.000E+00 | --- | FAI |
| R021 | Building depth below ground surface (m) | not used | -1.000E+00 | --- | DMFL |
| R021 | Emanating power of Rn-222 gas | not used | 2.500E-01 | --- | EMANA(1) |
| R021 | Emanating power of Rn-220 gas | not used | 1.500E-01 | --- | EMANA(2) |
| | | | | | |
| TITL | Number of graphical time points | 32 | --- | --- | NPTS |
| TITL | Maximum number of integration points for dose | 17 | --- | --- | LYMAX |
| TITL | Maximum number of integration points for risk | 257 | --- | --- | KYMAX |

Summary of Pathway Selections

| Pathway | User Selection |
|---|---|
| 1 -- external gamma | active |
| 2 -- inhalation (w/o radon) | active |
| 3 -- plant ingestion | active |
| 4 -- meat ingestion | active |
| 5 -- milk ingestion | active |
| 6 -- aquatic foods | active |
| 7 -- drinking water | active |
| 8 -- soil ingestion | active |
| 9 -- radon | suppressed |
| Find peak pathway doses | suppressed |

Summary : RESRAD Default Parameters
File : C:\RESRAD_FAMILY\RESRAD\6.5\USERFILES\PARCEL G SURVEY UNIT 115 BACKFILL MDA.RAD

| Contaminated Zone Dimensions | | Initial Soil Concentrations, pCi/g | |
|---|---|---|---|
| Area: | 290.00 square meters | Cs-137 | 4.200E-02 |
| Thickness: | 2.00 meters | Pb-210 | 2.240E-01 |
| Cover Depth: | 0.00 meters | Ra-226 | 2.240E-01 |
| | | Sr-90 | 6.000E-02 |
| | | Th-232 | 5.370E-01 |

Total Dose TDOSE(t), mrem/yr
Basic Radiation Dose Limit = 2.500E+01 mrem/yr
Total Mixture Sum M(t) = Fraction of Basic Dose Limit Received at Time (t)

| t (years): | 0.000E+00 | 1.000E+00 | 3.000E+00 | 1.000E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
|---|---|---|---|---|---|---|---|---|
| TDOSE(t): | 2.402E+00 | 2.746E+00 | 3.495E+00 | 5.538E+00 | 7.015E+00 | 6.786E+00 | 6.115E+00 | 6.971E+00 |
| M(t): | 9.606E-02 | 1.099E-01 | 1.398E-01 | 2.215E-01 | 2.806E-01 | 2.715E-01 | 2.446E-01 | 2.788E-01 |

Maximum TDOSE(t): 7.060E+00 mrem/yr at t = 38.98 ± 0.08 years

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.898E+01 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Nuclide | | | | | | | | | | | | | | |
| Cs-137 | 2.921E-02 | 0.0041 | 2.377E-08 | 0.0000 | 0.000E+00 | 0.0000 | 8.500E-04 | 0.0001 | 7.433E-05 | 0.0000 | 2.427E-05 | 0.0000 | 6.686E-06 | 0.0000 |
| Pb-210 | 1.968E-04 | 0.0000 | 6.309E-05 | 0.0000 | 0.000E+00 | 0.0000 | 1.129E-01 | 0.0160 | 3.860E-04 | 0.0001 | 1.881E-04 | 0.0000 | 3.552E-03 | 0.0005 |
| Ra-226 | 1.149E+00 | 0.1627 | 2.243E-04 | 0.0000 | 0.000E+00 | 0.0000 | 5.335E-01 | 0.0756 | 1.699E-03 | 0.0002 | 1.400E-03 | 0.0002 | 1.044E-02 | 0.0015 |
| Sr-90 | 2.369E-04 | 0.0000 | 1.091E-06 | 0.0000 | 0.000E+00 | 0.0000 | 2.181E-02 | 0.0031 | 4.405E-04 | 0.0001 | 1.308E-04 | 0.0000 | 2.287E-05 | 0.0000 |
| Th-232 | 4.311E+00 | 0.6106 | 4.702E-02 | 0.0067 | 0.000E+00 | 0.0000 | 8.102E-01 | 0.1148 | 2.301E-03 | 0.0003 | 2.690E-03 | 0.0004 | 2.096E-02 | 0.0030 |
| Total | 5.489E+00 | 0.7775 | 4.731E-02 | 0.0067 | 0.000E+00 | 0.0000 | 1.479E+00 | 0.2095 | 4.901E-03 | 0.0007 | 4.433E-03 | 0.0006 | 3.498E-02 | 0.0050 |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.898E+01 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All Pathways* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Nuclide | | | | | | | | | | | | | | |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.016E-02 | 0.0043 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.173E-01 | 0.0166 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.696E+00 | 0.2402 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.264E-02 | 0.0032 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.194E+00 | 0.7357 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 7.060E+00 | 1.0000 |

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 7.199E-02 | 0.0300 | 5.859E-08 | 0.0000 | 0.000E+00 | 0.0000 | 2.095E-03 | 0.0009 | 1.832E-04 | 0.0001 | 5.982E-05 | 0.0000 | 1.648E-05 | 0.0000 |
| Pb-210 | 7.055E-04 | 0.0003 | 2.261E-04 | 0.0001 | 0.000E+00 | 0.0000 | 4.046E-01 | 0.1685 | 1.383E-03 | 0.0006 | 6.740E-04 | 0.0003 | 1.273E-02 | 0.0053 |
| Ra-226 | 1.281E+00 | 0.5334 | 8.857E-05 | 0.0000 | 0.000E+00 | 0.0000 | 3.057E-01 | 0.1273 | 9.039E-04 | 0.0004 | 1.079E-03 | 0.0004 | 2.544E-03 | 0.0011 |
| Sr-90 | 7.428E-04 | 0.0003 | 3.422E-06 | 0.0000 | 0.000E+00 | 0.0000 | 6.840E-02 | 0.0285 | 1.381E-03 | 0.0006 | 4.100E-04 | 0.0002 | 7.173E-05 | 0.0000 |
| Th-232 | 1.133E-01 | 0.0472 | 3.902E-02 | 0.0162 | 0.000E+00 | 0.0000 | 7.984E-02 | 0.0332 | 1.733E-04 | 0.0001 | 1.383E-04 | 0.0001 | 1.202E-02 | 0.0050 |
| Total | 1.468E+00 | 0.6112 | 3.934E-02 | 0.0164 | 0.000E+00 | 0.0000 | 8.606E-01 | 0.3584 | 4.025E-03 | 0.0017 | 2.361E-03 | 0.0010 | 2.738E-02 | 0.0114 |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All Pathways* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 7.435E-02 | 0.0310 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.203E-01 | 0.1750 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.591E+00 | 0.6627 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 7.101E-02 | 0.0296 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.444E-01 | 0.1018 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.402E+00 | 1.0000 |

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 7.034E-02 | 0.0256 | 5.725E-08 | 0.0000 | 0.000E+00 | 0.0000 | 2.047E-03 | 0.0007 | 1.790E-04 | 0.0001 | 5.845E-05 | 0.0000 | 1.610E-05 | 0.0000 |
| Pb-210 | 6.828E-04 | 0.0002 | 2.188E-04 | 0.0001 | 0.000E+00 | 0.0000 | 3.916E-01 | 0.1426 | 1.339E-03 | 0.0005 | 6.523E-04 | 0.0002 | 1.232E-02 | 0.0045 |
| Ra-226 | 1.277E+00 | 0.4652 | 9.523E-05 | 0.0000 | 0.000E+00 | 0.0000 | 3.174E-01 | 0.1156 | 9.458E-04 | 0.0003 | 1.097E-03 | 0.0004 | 2.926E-03 | 0.0011 |
| Sr-90 | 7.214E-04 | 0.0003 | 3.323E-06 | 0.0000 | 0.000E+00 | 0.0000 | 6.642E-02 | 0.0242 | 1.341E-03 | 0.0005 | 3.982E-04 | 0.0001 | 6.965E-05 | 0.0000 |
| Th-232 | 3.813E-01 | 0.1389 | 3.930E-02 | 0.0143 | 0.000E+00 | 0.0000 | 1.637E-01 | 0.0596 | 4.142E-04 | 0.0002 | 4.315E-04 | 0.0002 | 1.279E-02 | 0.0047 |
| Total | 1.731E+00 | 0.6301 | 3.962E-02 | 0.0144 | 0.000E+00 | 0.0000 | 9.412E-01 | 0.3427 | 4.219E-03 | 0.0015 | 2.638E-03 | 0.0010 | 2.812E-02 | 0.0102 |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All Pathways* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 7.265E-02 | 0.0265 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.068E-01 | 0.1481 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.600E+00 | 0.5826 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.896E-02 | 0.0251 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.980E-01 | 0.2177 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.746E+00 | 1.0000 |

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 6.716E-02 | 0.0192 | 5.466E-08 | 0.0000 | 0.000E+00 | 0.0000 | 1.955E-03 | 0.0006 | 1.709E-04 | 0.0000 | 5.581E-05 | 0.0000 | 1.537E-05 | 0.0000 |
| Pb-210 | 6.395E-04 | 0.0002 | 2.050E-04 | 0.0001 | 0.000E+00 | 0.0000 | 3.668E-01 | 0.1049 | 1.254E-03 | 0.0004 | 6.109E-04 | 0.0002 | 1.154E-02 | 0.0033 |
| Ra-226 | 1.270E+00 | 0.3635 | 1.078E-04 | 0.0000 | 0.000E+00 | 0.0000 | 3.391E-01 | 0.0970 | 1.021E-03 | 0.0003 | 1.130E-03 | 0.0003 | 3.649E-03 | 0.0010 |
| Sr-90 | 6.803E-04 | 0.0002 | 3.134E-06 | 0.0000 | 0.000E+00 | 0.0000 | 6.264E-02 | 0.0179 | 1.265E-03 | 0.0004 | 3.755E-04 | 0.0001 | 6.569E-05 | 0.0000 |
| Th-232 | 1.003E+00 | 0.2869 | 4.029E-02 | 0.0115 | 0.000E+00 | 0.0000 | 3.050E-01 | 0.0873 | 8.274E-04 | 0.0002 | 9.283E-04 | 0.0003 | 1.429E-02 | 0.0041 |
| Total | 2.342E+00 | 0.6700 | 4.060E-02 | 0.0116 | 0.000E+00 | 0.0000 | 1.076E+00 | 0.3077 | 4.538E-03 | 0.0013 | 3.101E-03 | 0.0009 | 2.955E-02 | 0.0085 |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+00 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All Pathways* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.936E-02 | 0.0198 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.810E-01 | 0.1090 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.615E+00 | 0.4622 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.503E-02 | 0.0186 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.364E+00 | 0.3903 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.495E+00 | 1.0000 |

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 5.712E-02 | 0.0103 | 4.648E-08 | 0.0000 | 0.000E+00 | 0.0000 | 1.662E-03 | 0.0003 | 1.454E-04 | 0.0000 | 4.746E-05 | 0.0000 | 1.308E-05 | 0.0000 |
| Pb-210 | 5.085E-04 | 0.0001 | 1.630E-04 | 0.0000 | 0.000E+00 | 0.0000 | 2.916E-01 | 0.0527 | 9.970E-04 | 0.0002 | 4.858E-04 | 0.0001 | 9.175E-03 | 0.0017 |
| Ra-226 | 1.246E+00 | 0.2250 | 1.452E-04 | 0.0000 | 0.000E+00 | 0.0000 | 4.031E-01 | 0.0728 | 1.242E-03 | 0.0002 | 1.226E-03 | 0.0002 | 5.799E-03 | 0.0010 |
| Sr-90 | 5.541E-04 | 0.0001 | 2.553E-06 | 0.0000 | 0.000E+00 | 0.0000 | 5.102E-02 | 0.0092 | 1.030E-03 | 0.0002 | 3.059E-04 | 0.0001 | 5.350E-05 | 0.0000 |
| Th-232 | 2.800E+00 | 0.5057 | 4.383E-02 | 0.0079 | 0.000E+00 | 0.0000 | 5.996E-01 | 0.1083 | 1.687E-03 | 0.0003 | 1.957E-03 | 0.0004 | 1.802E-02 | 0.0033 |
| Total | 4.104E+00 | 0.7412 | 4.414E-02 | 0.0080 | 0.000E+00 | 0.0000 | 1.347E+00 | 0.2432 | 5.102E-03 | 0.0009 | 4.022E-03 | 0.0007 | 3.306E-02 | 0.0060 |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+01 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All Pathways* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.899E-02 | 0.0107 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.030E-01 | 0.0547 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.657E+00 | 0.2993 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.296E-02 | 0.0096 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.466E+00 | 0.6258 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.538E+00 | 1.0000 |

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 3.596E-02 | 0.0051 | 2.926E-08 | 0.0000 | 0.000E+00 | 0.0000 | 1.046E-03 | 0.0001 | 9.150E-05 | 0.0000 | 2.988E-05 | 0.0000 | 8.231E-06 | 0.0000 |
| Pb-210 | 2.642E-04 | 0.0000 | 8.466E-05 | 0.0000 | 0.000E+00 | 0.0000 | 1.515E-01 | 0.0216 | 5.179E-04 | 0.0001 | 2.524E-04 | 0.0000 | 4.766E-03 | 0.0007 |
| Ra-226 | 1.178E+00 | 0.1679 | 2.093E-04 | 0.0000 | 0.000E+00 | 0.0000 | 5.101E-01 | 0.0727 | 1.615E-03 | 0.0002 | 1.374E-03 | 0.0002 | 9.539E-03 | 0.0014 |
| Sr-90 | 3.082E-04 | 0.0000 | 1.420E-06 | 0.0000 | 0.000E+00 | 0.0000 | 2.838E-02 | 0.0040 | 5.732E-04 | 0.0001 | 1.702E-04 | 0.0000 | 2.976E-05 | 0.0000 |
| Th-232 | 4.220E+00 | 0.6016 | 4.683E-02 | 0.0067 | 0.000E+00 | 0.0000 | 7.978E-01 | 0.1137 | 2.265E-03 | 0.0003 | 2.647E-03 | 0.0004 | 2.078E-02 | 0.0030 |
| Total | 5.435E+00 | 0.7747 | 4.712E-02 | 0.0067 | 0.000E+00 | 0.0000 | 1.489E+00 | 0.2122 | 5.063E-03 | 0.0007 | 4.473E-03 | 0.0006 | 3.513E-02 | 0.0050 |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All Pathways* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.713E-02 | 0.0053 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.574E-01 | 0.0224 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.701E+00 | 0.2424 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.947E-02 | 0.0042 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.090E+00 | 0.7256 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 7.015E+00 | 1.0000 |

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 7.117E-03 | 0.0010 | 5.791E-09 | 0.0000 | 0.000E+00 | 0.0000 | 2.071E-04 | 0.0000 | 1.811E-05 | 0.0000 | 5.913E-06 | 0.0000 | 1.629E-06 | 0.0000 |
| Pb-210 | 2.669E-05 | 0.0000 | 8.555E-06 | 0.0000 | 0.000E+00 | 0.0000 | 1.531E-02 | 0.0023 | 5.233E-05 | 0.0000 | 2.550E-05 | 0.0000 | 4.816E-04 | 0.0001 |
| Ra-226 | 9.681E-01 | 0.1426 | 2.353E-04 | 0.0000 | 0.000E+00 | 0.0000 | 5.324E-01 | 0.0785 | 1.715E-03 | 0.0003 | 1.317E-03 | 0.0002 | 1.140E-02 | 0.0017 |
| Sr-90 | 3.959E-05 | 0.0000 | 1.824E-07 | 0.0000 | 0.000E+00 | 0.0000 | 3.645E-03 | 0.0005 | 7.362E-05 | 0.0000 | 2.185E-05 | 0.0000 | 3.823E-06 | 0.0000 |
| Th-232 | 4.355E+00 | 0.6417 | 4.711E-02 | 0.0069 | 0.000E+00 | 0.0000 | 8.162E-01 | 0.1203 | 2.319E-03 | 0.0003 | 2.711E-03 | 0.0004 | 2.104E-02 | 0.0031 |
| Total | 5.330E+00 | 0.7854 | 4.735E-02 | 0.0070 | 0.000E+00 | 0.0000 | 1.368E+00 | 0.2015 | 4.177E-03 | 0.0006 | 4.082E-03 | 0.0006 | 3.293E-02 | 0.0049 |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All Pathways* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 7.349E-03 | 0.0011 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.590E-02 | 0.0023 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.515E+00 | 0.2233 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.784E-03 | 0.0006 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.244E+00 | 0.7728 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.786E+00 | 1.0000 |

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 6.954E-05 | 0.0000 | 5.659E-11 | 0.0000 | 0.000E+00 | 0.0000 | 2.024E-06 | 0.0000 | 1.770E-07 | 0.0000 | 5.779E-08 | 0.0000 | 1.592E-08 | 0.0000 |
| Pb-210 | 3.820E-08 | 0.0000 | 1.224E-08 | 0.0000 | 0.000E+00 | 0.0000 | 2.191E-05 | 0.0000 | 7.491E-08 | 0.0000 | 3.650E-08 | 0.0000 | 6.893E-07 | 0.0000 |
| Ra-226 | 5.522E-01 | 0.0903 | 1.393E-04 | 0.0000 | 0.000E+00 | 0.0000 | 3.127E-01 | 0.0511 | 1.009E-03 | 0.0002 | 7.665E-04 | 0.0001 | 6.789E-03 | 0.0011 |
| Sr-90 | 1.124E-07 | 0.0000 | 5.180E-10 | 0.0000 | 0.000E+00 | 0.0000 | 1.035E-05 | 0.0000 | 2.091E-07 | 0.0000 | 6.207E-08 | 0.0000 | 1.086E-08 | 0.0000 |
| Th-232 | 4.352E+00 | 0.7118 | 4.708E-02 | 0.0077 | 0.000E+00 | 0.0000 | 8.157E-01 | 0.1334 | 2.317E-03 | 0.0004 | 2.709E-03 | 0.0004 | 2.103E-02 | 0.0034 |
| Total | 4.905E+00 | 0.8021 | 4.722E-02 | 0.0077 | 0.000E+00 | 0.0000 | 1.129E+00 | 0.1845 | 3.327E-03 | 0.0005 | 3.476E-03 | 0.0006 | 2.782E-02 | 0.0045 |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+02 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All Pathways* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 7.182E-05 | 0.0000 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.276E-05 | 0.0000 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.737E-01 | 0.1429 |
| Sr-90 | 2.084E-05 | 0.0000 | 5.762E-09 | 0.0000 | 0.000E+00 | 0.0000 | 5.010E-07 | 0.0000 | 5.205E-08 | 0.0000 | 2.841E-08 | 0.0000 | 3.218E-05 | 0.0000 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.241E+00 | 0.8571 |
| Total | 2.084E-05 | 0.0000 | 5.762E-09 | 0.0000 | 0.000E+00 | 0.0000 | 5.010E-07 | 0.0000 | 5.205E-08 | 0.0000 | 2.841E-08 | 0.0000 | 6.115E+00 | 1.0000 |

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 6.415E-12 | 0.0000 | 5.221E-18 | 0.0000 | 0.000E+00 | 0.0000 | 1.867E-13 | 0.0000 | 1.633E-14 | 0.0000 | 5.331E-15 | 0.0000 | 1.469E-15 | 0.0000 |
| Pb-210 | 4.238E-18 | 0.0000 | 1.358E-18 | 0.0000 | 0.000E+00 | 0.0000 | 2.430E-15 | 0.0000 | 8.309E-18 | 0.0000 | 4.048E-18 | 0.0000 | 7.646E-17 | 0.0000 |
| Ra-226 | 7.741E-02 | 0.0111 | 1.953E-05 | 0.0000 | 0.000E+00 | 0.0000 | 4.384E-02 | 0.0063 | 1.415E-04 | 0.0000 | 1.075E-04 | 0.0000 | 9.518E-04 | 0.0001 |
| Sr-90 | 1.373E-16 | 0.0000 | 6.325E-19 | 0.0000 | 0.000E+00 | 0.0000 | 1.264E-14 | 0.0000 | 2.553E-16 | 0.0000 | 7.579E-17 | 0.0000 | 1.326E-17 | 0.0000 |
| Th-232 | 4.344E+00 | 0.6231 | 4.699E-02 | 0.0067 | 0.000E+00 | 0.0000 | 8.142E-01 | 0.1168 | 2.313E-03 | 0.0003 | 2.704E-03 | 0.0004 | 2.099E-02 | 0.0030 |
| Total | 4.421E+00 | 0.6342 | 4.701E-02 | 0.0067 | 0.000E+00 | 0.0000 | 8.580E-01 | 0.1231 | 2.454E-03 | 0.0004 | 2.812E-03 | 0.0004 | 2.194E-02 | 0.0031 |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All Pathways* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.625E-12 | 0.0000 |
| Pb-210 | 3.304E-14 | 0.0000 | 3.772E-17 | 0.0000 | 0.000E+00 | 0.0000 | 7.384E-16 | 0.0000 | 8.204E-18 | 0.0000 | 6.734E-18 | 0.0000 | 3.635E-14 | 0.0000 |
| Ra-226 | 1.580E+00 | 0.2266 | 1.554E-03 | 0.0002 | 0.000E+00 | 0.0000 | 3.537E-02 | 0.0051 | 4.123E-04 | 0.0001 | 4.687E-04 | 0.0001 | 1.740E+00 | 0.2496 |
| Sr-90 | 5.011E-14 | 0.0000 | 1.385E-17 | 0.0000 | 0.000E+00 | 0.0000 | 1.205E-15 | 0.0000 | 1.254E-16 | 0.0000 | 6.834E-17 | 0.0000 | 6.464E-14 | 0.0000 |
| Th-232 | 6.488E-31 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.231E+00 | 0.7504 |
| Total | 1.580E+00 | 0.2266 | 1.554E-03 | 0.0002 | 0.000E+00 | 0.0000 | 3.537E-02 | 0.0051 | 4.123E-04 | 0.0001 | 4.687E-04 | 0.0001 | 6.971E+00 | 1.0000 |

*Sum of all water independent and dependent pathways.

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

| Parent (i) | Product (j) | Thread Fraction | DSR(j,t) At Time in Years (mrem/yr)/(pCi/g) 0.000E+00 | 1.000E+00 | 3.000E+00 | 1.000E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
|---|---|---|---|---|---|---|---|---|---|---|
| Cs-137+D | Cs-137+D | 1.000E+00 | 1.770E+00 | 1.730E+00 | 1.651E+00 | 1.404E+00 | 8.841E-01 | 1.750E-01 | 1.710E-03 | 1.577E-10 |
| Pb-210+D | Pb-210+D | 1.000E+00 | 1.877E+00 | 1.816E+00 | 1.701E+00 | 1.353E+00 | 7.026E-01 | 7.099E-02 | 1.016E-04 | 1.623E-13 |
| Ra-226+D | Ra-226+D | 1.000E+00 | 7.070E+00 | 7.050E+00 | 7.011E+00 | 6.874E+00 | 6.499E+00 | 5.340E+00 | 3.046E+00 | 1.833E+00 |
| Ra-226+D | Pb-210+D | 1.000E+00 | 3.455E-02 | 9.265E-02 | 2.011E-01 | 5.246E-01 | 1.094E+00 | 1.424E+00 | 8.545E-01 | 5.935E+00 |
| Ra-226+D | ∑DSR(j) | | 7.104E+00 | 7.143E+00 | 7.212E+00 | 7.399E+00 | 7.593E+00 | 6.764E+00 | 3.900E+00 | 7.768E+00 |
| Sr-90+D | Sr-90+D | 1.000E+00 | 1.183E+00 | 1.149E+00 | 1.084E+00 | 8.827E-01 | 4.911E-01 | 6.307E-02 | 5.363E-04 | 1.077E-12 |
| Th-232 | Th-232 | 1.000E+00 | 1.636E-01 | 1.636E-01 | 1.636E-01 | 1.636E-01 | 1.636E-01 | 1.635E-01 | 1.634E-01 | 1.631E-01 |
| Th-232 | Ra-228+D | 1.000E+00 | 2.571E-01 | 7.402E-01 | 1.547E+00 | 3.216E+00 | 4.335E+00 | 4.439E+00 | 4.437E+00 | 4.428E+00 |
| Th-232 | Th-228+D | 1.000E+00 | 3.450E-02 | 2.099E-01 | 8.300E-01 | 3.074E+00 | 4.980E+00 | 5.163E+00 | 5.160E+00 | 5.150E+00 |
| Th-232 | ∑DSR(j) | | 4.552E-01 | 1.114E+00 | 2.540E+00 | 6.453E+00 | 9.479E+00 | 9.766E+00 | 9.760E+00 | 9.741E+00 |

The DSR includes contributions from associated (half-life ≤ 180 days) daughters.

Single Radionuclide Soil Guidelines G(i,t) in pCi/g
Basic Radiation Dose Limit = 2.500E+01 mrem/yr

| Nuclide (i) | t= 0.000E+00 | 1.000E+00 | 3.000E+00 | 1.000E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
|---|---|---|---|---|---|---|---|---|
| Cs-137 | 1.412E+01 | 1.445E+01 | 1.514E+01 | 1.780E+01 | 2.828E+01 | 1.429E+02 | 1.462E+04 | 1.585E+11 |
| Pb-210 | 1.332E+01 | 1.377E+01 | 1.470E+01 | 1.848E+01 | 3.558E+01 | 3.521E+02 | 2.460E+05 | *7.634E+13 |
| Ra-226 | 3.519E+00 | 3.500E+00 | 3.467E+00 | 3.379E+00 | 3.293E+00 | 3.696E+00 | 6.410E+00 | 3.218E+00 |
| Sr-90 | 2.113E+01 | 2.175E+01 | 2.307E+01 | 2.832E+01 | 5.091E+01 | 3.964E+02 | 4.661E+04 | 2.320E+13 |
| Th-232 | 5.492E+01 | 2.245E+01 | 9.842E+00 | 3.874E+00 | 2.637E+00 | 2.560E+00 | 2.561E+00 | 2.566E+00 |

*At specific activity limit

Summed Dose/Source Ratios DSR(i,t) in (mrem/yr)/(pCi/g)
and Single Radionuclide Soil Guidelines G(i,t) in pCi/g
at tmin = time of minimum single radionuclide soil guideline
and at tmax = time of maximum total dose = 38.98 ± 0.08 years

| Nuclide (i) | Initial (pCi/g) | tmin (years) | DSR(i,tmin) | G(i,tmin) (pCi/g) | DSR(i,tmax) | G(i,tmax) (pCi/g) |
|---|---|---|---|---|---|---|
| Cs-137 | 4.200E-02 | 0.000E+00 | 1.770E+00 | 1.412E+01 | 7.182E-01 | 3.481E+01 |
| Pb-210 | 2.240E-01 | 0.000E+00 | 1.877E+00 | 1.332E+01 | 5.236E-01 | 4.775E+01 |
| Ra-226 | 2.240E-01 | 1.000E+03 | 7.768E+00 | 3.218E+00 | 7.572E+00 | 3.302E+00 |
| Sr-90 | 6.000E-02 | 0.000E+00 | 1.183E+00 | 2.113E+01 | 3.774E-01 | 6.625E+01 |
| Th-232 | 5.370E-01 | 88.3 ± 0.2 | 9.766E+00 | 2.560E+00 | 9.672E+00 | 2.585E+00 |

Individual Nuclide Dose Summed Over All Pathways
Parent Nuclide and Branch Fraction Indicated

| Nuclide (j) | Parent (i) | THF(i) | DOSE(j,t), mrem/yr t= 0.000E+00 | 1.000E+00 | 3.000E+00 | 1.000E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
|---|---|---|---|---|---|---|---|---|---|---|
| Cs-137 | Cs-137 | 1.000E+00 | 7.435E-02 | 7.265E-02 | 6.936E-02 | 5.899E-02 | 3.713E-02 | 7.349E-03 | 7.182E-05 | 6.625E-12 |
| Pb-210 | Pb-210 | 1.000E+00 | 4.203E-01 | 4.068E-01 | 3.810E-01 | 3.030E-01 | 1.574E-01 | 1.590E-02 | 2.276E-05 | 3.635E-14 |
| Pb-210 | Ra-226 | 1.000E+00 | 7.738E-03 | 2.075E-02 | 4.505E-02 | 1.175E-01 | 2.451E-01 | 3.191E-01 | 1.914E-01 | 1.329E+00 |
| Pb-210 | ∑DOSE(j) | | 4.281E-01 | 4.276E-01 | 4.261E-01 | 4.205E-01 | 4.024E-01 | 3.350E-01 | 1.914E-01 | 1.329E+00 |
| Ra-226 | Ra-226 | 1.000E+00 | 1.584E+00 | 1.579E+00 | 1.570E+00 | 1.540E+00 | 1.456E+00 | 1.196E+00 | 6.823E-01 | 4.106E-01 |
| Sr-90 | Sr-90 | 1.000E+00 | 7.101E-02 | 6.896E-02 | 6.503E-02 | 5.296E-02 | 2.947E-02 | 3.784E-03 | 3.218E-05 | 6.464E-14 |
| Th-232 | Th-232 | 1.000E+00 | 8.784E-02 | 8.784E-02 | 8.784E-02 | 8.784E-02 | 8.784E-02 | 8.782E-02 | 8.777E-02 | 8.760E-02 |
| Ra-228 | Th-232 | 1.000E+00 | 1.381E-01 | 3.975E-01 | 8.305E-01 | 1.727E+00 | 2.328E+00 | 2.384E+00 | 2.382E+00 | 2.378E+00 |
| Th-228 | Th-232 | 1.000E+00 | 1.853E-02 | 1.127E-01 | 4.457E-01 | 1.651E+00 | 2.674E+00 | 2.773E+00 | 2.771E+00 | 2.766E+00 |

THF(i) is the thread fraction of the parent nuclide.

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

| Nuclide (j) | Parent (i) | THF(i) | S(j,t), pCi/g t= 0.000E+00 | 1.000E+00 | 3.000E+00 | 1.000E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
|---|---|---|---|---|---|---|---|---|---|---|
| Cs-137 | Cs-137 | 1.000E+00 | 4.200E-02 | 4.104E-02 | 3.918E-02 | 3.332E-02 | 2.098E-02 | 4.152E-03 | 4.057E-05 | 3.743E-12 |
| Pb-210 | Pb-210 | 1.000E+00 | 2.240E-01 | 2.168E-01 | 2.030E-01 | 1.614E-01 | 8.387E-02 | 8.474E-03 | 1.213E-05 | 1.345E-15 |
| Pb-210 | Ra-226 | 1.000E+00 | 0.000E+00 | 6.840E-03 | 1.981E-02 | 5.850E-02 | 1.267E-01 | 1.668E-01 | 1.002E-01 | 1.404E-02 |
| Pb-210 | ∑S(j): | | 2.240E-01 | 2.236E-01 | 2.229E-01 | 2.200E-01 | 2.106E-01 | 1.753E-01 | 1.002E-01 | 1.404E-02 |
| Ra-226 | Ra-226 | 1.000E+00 | 2.240E-01 | 2.234E-01 | 2.221E-01 | 2.178E-01 | 2.059E-01 | 1.692E-01 | 9.650E-02 | 1.353E-02 |
| Sr-90 | Sr-90 | 1.000E+00 | 6.000E-02 | 5.827E-02 | 5.495E-02 | 4.475E-02 | 2.490E-02 | 3.198E-03 | 9.082E-06 | 1.109E-14 |
| Th-232 | Th-232 | 1.000E+00 | 5.370E-01 | 5.370E-01 | 5.370E-01 | 5.370E-01 | 5.370E-01 | 5.369E-01 | 5.366E-01 | 5.355E-01 |
| Ra-228 | Th-232 | 1.000E+00 | 0.000E+00 | 6.091E-02 | 1.624E-01 | 3.726E-01 | 5.134E-01 | 5.265E-01 | 5.262E-01 | 5.252E-01 |
| Th-228 | Th-232 | 1.000E+00 | 0.000E+00 | 1.000E-02 | 6.660E-02 | 3.007E-01 | 5.067E-01 | 5.265E-01 | 5.262E-01 | 5.252E-01 |

THF(i) is the thread fraction of the parent nuclide.

RESCALC.EXE execution time = 3.03 seconds

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Time= 3.000E+00 ..... 11
Time= 1.000E+01 ..... 14
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Cancer Risk Slope Factors Summary Table

Risk Library: FGR 13 Morbidity

| Menu | Parameter | Current Value | Base Case* | Parameter Name |
|---|---|---|---|---|
| Sf-1 | Ground external radiation slope factors, 1/yr per (pCi/g): | | | |
| Sf-1 | Cs-137+D | 2.55E-06 | 5.32E-10 | SLPF( 1,1) |
| Sf-1 | Pb-210+D | 4.21E-09 | 1.41E-09 | SLPF( 2,1) |
| Sf-1 | Ra-226+D | 8.49E-06 | 2.29E-08 | SLPF( 3,1) |
| Sf-1 | Ra-228+D | 4.53E-06 | 0.00E+00 | SLPF( 4,1) |
| Sf-1 | Sr-90+D | 1.96E-08 | 4.82E-10 | SLPF( 5,1) |
| Sf-1 | Th-228+D | 7.76E-06 | 5.59E-09 | SLPF( 6,1) |
| Sf-1 | Th-232 | 3.42E-10 | 3.42E-10 | SLPF( 7,1) |
| | | | | |
| Sf-2 | Inhalation, slope factors, 1/(pCi): | | | |
| Sf-2 | Cs-137+D | 1.12E-10 | 1.12E-10 | SLPF( 1,2) |
| Sf-2 | Pb-210+D | 3.08E-08 | 1.58E-08 | SLPF( 2,2) |
| Sf-2 | Ra-226+D | 2.83E-08 | 2.82E-08 | SLPF( 3,2) |
| Sf-2 | Ra-228+D | 4.37E-08 | 4.37E-08 | SLPF( 4,2) |
| Sf-2 | Sr-90+D | 4.33E-10 | 4.25E-10 | SLPF( 5,2) |
| Sf-2 | Th-228+D | 1.44E-07 | 1.32E-07 | SLPF( 6,2) |
| Sf-2 | Th-232 | 4.33E-08 | 4.33E-08 | SLPF( 7,2) |
| | | | | |
| Sf-3 | Food ingestion, slope factors, 1/(pCi): | | | |
| Sf-3 | Cs-137+D | 3.74E-11 | 3.74E-11 | SLPF( 1,3) |
| Sf-3 | Pb-210+D | 3.44E-09 | 1.18E-09 | SLPF( 2,3) |
| Sf-3 | Ra-226+D | 5.15E-10 | 5.14E-10 | SLPF( 3,3) |
| Sf-3 | Ra-228+D | 1.43E-09 | 1.43E-09 | SLPF( 4,3) |
| Sf-3 | Sr-90+D | 9.53E-11 | 6.88E-11 | SLPF( 5,3) |
| Sf-3 | Th-228+D | 4.22E-10 | 1.48E-10 | SLPF( 6,3) |
| Sf-3 | Th-232 | 1.33E-10 | 1.33E-10 | SLPF( 7,3) |
| | | | | |
| Sf-3 | Water ingestion, slope factors, 1/(pCi): | | | |
| Sf-3 | Cs-137+D | 3.04E-11 | 3.04E-11 | SLPF( 1,4) |
| Sf-3 | Pb-210+D | 2.66E-09 | 8.81E-10 | SLPF( 2,4) |
| Sf-3 | Ra-226+D | 3.86E-10 | 3.85E-10 | SLPF( 3,4) |
| Sf-3 | Ra-228+D | 1.04E-09 | 1.04E-09 | SLPF( 4,4) |
| Sf-3 | Sr-90+D | 7.40E-11 | 5.59E-11 | SLPF( 5,4) |
| Sf-3 | Th-228+D | 2.99E-10 | 1.07E-10 | SLPF( 6,4) |
| Sf-3 | Th-232 | 1.01E-10 | 1.01E-10 | SLPF( 7,4) |
| | | | | |
| Sf-3 | Soil ingestion, slope factors, 1/(pCi): | | | |
| Sf-3 | Cs-137+D | 3.74E-11 | 3.74E-11 | SLPF( 1,5) |
| Sf-3 | Pb-210+D | 3.44E-09 | 1.18E-09 | SLPF( 2,5) |
| Sf-3 | Ra-226+D | 5.15E-10 | 5.14E-10 | SLPF( 3,5) |
| Sf-3 | Ra-228+D | 1.43E-09 | 1.43E-09 | SLPF( 4,5) |
| Sf-3 | Sr-90+D | 9.53E-11 | 6.88E-11 | SLPF( 5,5) |
| Sf-3 | Th-228+D | 4.22E-10 | 1.48E-10 | SLPF( 6,5) |
| Sf-3 | Th-232 | 1.33E-10 | 1.33E-10 | SLPF( 7,5) |
| | | | | |
| Sf-Rn | Radon Inhalation slope factors, 1/(pCi): | | | |
| Sf-Rn | Rn-222 | 1.80E-12 | 1.80E-12 | SLPFRN(1,1) |
| Sf-Rn | Po-218 | 3.70E-12 | 3.70E-12 | SLPFRN(1,2) |
| Sf-Rn | Pb-214 | 6.20E-12 | 6.20E-12 | SLPFRN(1,3) |
| Sf-Rn | Bi-214 | 1.50E-11 | 1.50E-11 | SLPFRN(1,4) |

Cancer Risk Slope Factors Summary Table (continued)

Risk Library: FGR 13 Morbidity

| Menu | Parameter | Current Value | Base Case* | Parameter Name |
|---|---|---|---|---|
| Sf-Rn | Rn-220 | 1.90E-13 | 1.90E-13 | SLPFRN(2,1) |
| Sf-Rn | Po-216 | 3.00E-15 | 3.00E-15 | SLPFRN(2,2) |
| Sf-Rn | Pb-212 | 3.90E-11 | 3.90E-11 | SLPFRN(2,3) |
| Sf-Rn | Bi-212 | 3.70E-11 | 3.70E-11 | SLPFRN(2,4) |
| Sf-Rn | Radon K factors, (mrem/WLM): | | | |
| Sf-Rn | Rn-222 Indoor | 7.60E+02 | 7.60E+02 | KFACTR(1,1) |
| Sf-Rn | Rn-222 Outdoor | 5.70E+02 | 5.70E+02 | KFACTR(1,2) |
| Sf-Rn | Rn-220 Indoor | 1.50E+02 | 1.50E+02 | KFACTR(2,1) |
| Sf-Rn | Rn-220 Outdoor | 2.50E+02 | 2.50E+02 | KFACTR(2,2) |

*Base Case means Default.Lib w/o Associate Nuclide contributions.

Intrisk : RESRAD Default Parameters
File : C:\RESRAD_FAMILY\RESRAD\6.5\USERFILES\PARCEL G SURVEY UNIT 115 BACKFILL MDA.RAD

Risk Slope and Environmental Transport Factors for the Ground Pathway

| Nuclide (i) | Slope(i)* t= 0.000E+00 | ETFG(i,t) At Time in Years (dimensionless) 1.000E+00 | 3.000E+00 | 1.000E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
|---|---|---|---|---|---|---|---|---|
| Ac-228 | 4.530E-06 | 5.114E-01 | 5.114E-01 | 5.114E-01 | 5.114E-01 | 5.114E-01 | 5.114E-01 | 5.114E-01 |
| At-218 | 3.570E-09 | 5.310E-01 | 5.310E-01 | 5.310E-01 | 5.310E-01 | 5.310E-01 | 5.310E-01 | 5.310E-01 |
| Ba-137m | 2.690E-06 | 5.082E-01 | 5.082E-01 | 5.082E-01 | 5.082E-01 | 5.082E-01 | 5.082E-01 | 5.082E-01 |
| Bi-210 | 2.760E-09 | 5.194E-01 | 5.194E-01 | 5.194E-01 | 5.194E-01 | 5.194E-01 | 5.194E-01 | 5.194E-01 |
| Bi-212 | 8.870E-07 | 5.094E-01 | 5.094E-01 | 5.094E-01 | 5.094E-01 | 5.094E-01 | 5.094E-01 | 5.094E-01 |
| Bi-214 | 7.480E-06 | 5.111E-01 | 5.111E-01 | 5.111E-01 | 5.111E-01 | 5.111E-01 | 5.111E-01 | 5.111E-01 |
| Cs-137 | 5.320E-10 | 5.273E-01 | 5.273E-01 | 5.273E-01 | 5.273E-01 | 5.273E-01 | 5.273E-01 | 5.273E-01 |
| Pb-210 | 1.410E-09 | 5.321E-01 | 5.321E-01 | 5.321E-01 | 5.321E-01 | 5.321E-01 | 5.321E-01 | 5.321E-01 |
| Pb-212 | 5.090E-07 | 5.269E-01 | 5.269E-01 | 5.269E-01 | 5.269E-01 | 5.269E-01 | 5.269E-01 | 5.269E-01 |
| Pb-214 | 9.820E-07 | 5.191E-01 | 5.191E-01 | 5.191E-01 | 5.191E-01 | 5.191E-01 | 5.191E-01 | 5.191E-01 |
| Po-210 | 3.950E-11 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 |
| Po-212 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Po-214 | 3.860E-10 | 5.082E-01 | 5.082E-01 | 5.082E-01 | 5.082E-01 | 5.082E-01 | 5.082E-01 | 5.082E-01 |
| Po-216 | 7.870E-11 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 |
| Po-218 | 4.260E-11 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 |
| Ra-224 | 3.720E-08 | 5.264E-01 | 5.264E-01 | 5.264E-01 | 5.264E-01 | 5.264E-01 | 5.264E-01 | 5.264E-01 |
| Ra-226 | 2.290E-08 | 5.300E-01 | 5.300E-01 | 5.300E-01 | 5.300E-01 | 5.300E-01 | 5.300E-01 | 5.300E-01 |
| Ra-228 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Rn-220 | 1.700E-09 | 5.090E-01 | 5.090E-01 | 5.090E-01 | 5.090E-01 | 5.090E-01 | 5.090E-01 | 5.090E-01 |
| Rn-222 | 1.740E-09 | 5.090E-01 | 5.090E-01 | 5.090E-01 | 5.090E-01 | 5.090E-01 | 5.090E-01 | 5.090E-01 |
| Sr-90 | 4.820E-10 | 5.298E-01 | 5.298E-01 | 5.298E-01 | 5.298E-01 | 5.298E-01 | 5.298E-01 | 5.298E-01 |
| Th-228 | 5.590E-09 | 5.306E-01 | 5.306E-01 | 5.306E-01 | 5.306E-01 | 5.306E-01 | 5.306E-01 | 5.306E-01 |
| Th-232 | 3.420E-10 | 5.353E-01 | 5.353E-01 | 5.353E-01 | 5.353E-01 | 5.353E-01 | 5.353E-01 | 5.353E-01 |
| Tl-208 | 1.760E-05 | 5.104E-01 | 5.104E-01 | 5.104E-01 | 5.104E-01 | 5.104E-01 | 5.104E-01 | 5.103E-01 |
| Tl-210 | 0.000E+00 | 6.000E-01 | 6.000E-01 | 6.000E-01 | 6.000E-01 | 6.000E-01 | 6.000E-01 | 6.000E-01 |
| Y-90 | 1.910E-08 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 |

* - Units are 1/yr per (pCi/g) at infinite depth and area. Multiplication by ETFG(i,t) converts to site conditions.

Amount of Intake Quantities QINT(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As pCi/yr at t= 0.000E+00 years

| Radio- | Water Independent Pathways (Inhalation w/o radon) | | | | | Water Dependent Pathways | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | Inhalation | Plant | Meat | Milk | Soil | Water | Fish | Plant | Meat | Milk | Ingestion* |
| Cs-137 | 1.858E-03 | 4.239E+01 | 3.707E+00 | 1.210E+00 | 3.334E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.764E+01 |
| Pb-210 | 9.909E-03 | 5.652E+01 | 1.932E-01 | 9.414E-02 | 1.778E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.859E+01 |
| Ra-226 | 9.909E-03 | 2.261E+02 | 6.589E-01 | 8.069E-01 | 1.778E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.293E+02 |
| Ra-228 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Sr-90 | 2.654E-03 | 4.541E+02 | 9.164E+00 | 2.721E+00 | 4.763E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.665E+02 |
| Th-228 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Th-232 | 2.375E-02 | 1.356E+01 | 2.787E-02 | 1.989E-03 | 4.263E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.785E+01 |

* Sum of all ingestion pathways, i.e. water independent plant, meat, milk, soil
and water-dependent water, fish, plant, meat, milk pathways

Amount of Intake Quantities QINT9(irn,i,t) and QINT9W(irn,i,t) for Inhalation of
Radon and its Decay Products as pCi/yr at t= 0.000E+00 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.175E-06 | 0.0094 | 4.501E-12 | 0.0000 | 3.429E-08 | 0.0003 | 2.998E-09 | 0.0000 | 9.791E-10 | 0.0000 | 2.697E-10 | 0.0000 |
| Pb-210 | 1.439E-08 | 0.0001 | 8.880E-09 | 0.0001 | 5.689E-06 | 0.0457 | 1.958E-08 | 0.0002 | 9.506E-09 | 0.0001 | 1.784E-07 | 0.0014 |
| Ra-226 | 2.801E-05 | 0.2252 | 8.060E-09 | 0.0001 | 3.348E-06 | 0.0269 | 9.762E-09 | 0.0001 | 1.195E-08 | 0.0001 | 2.634E-08 | 0.0002 |
| Ra-228 | 2.692E-05 | 0.2165 | 2.249E-08 | 0.0002 | 1.671E-05 | 0.1344 | 4.779E-08 | 0.0004 | 5.903E-08 | 0.0005 | 1.322E-07 | 0.0011 |
| Sr-90 | 1.196E-08 | 0.0001 | 2.295E-11 | 0.0000 | 8.638E-07 | 0.0069 | 1.744E-08 | 0.0001 | 5.178E-09 | 0.0000 | 9.058E-10 | 0.0000 |
| Th-228 | 4.063E-05 | 0.3268 | 6.519E-08 | 0.0005 | 1.706E-07 | 0.0014 | 5.472E-10 | 0.0000 | 3.627E-11 | 0.0000 | 3.431E-08 | 0.0003 |
| Th-232 | 2.949E-09 | 0.0000 | 3.086E-08 | 0.0002 | 5.410E-08 | 0.0004 | 1.112E-10 | 0.0000 | 7.934E-12 | 0.0000 | 1.701E-08 | 0.0001 |
| Total | 9.677E-05 | 0.7782 | 1.355E-07 | 0.0011 | 2.687E-05 | 0.2161 | 9.824E-08 | 0.0008 | 8.669E-08 | 0.0007 | 3.894E-07 | 0.0031 |

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 0.000E+00 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Plant | | Meat | | Milk | | All Pathways** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.214E-06 | 0.0098 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.920E-06 | 0.0476 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.141E-05 | 0.2526 |
| Ra-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.390E-05 | 0.3530 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.993E-07 | 0.0072 |
| Th-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.091E-05 | 0.3290 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.050E-07 | 0.0008 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.244E-04 | 1.0000 |

** Sum of water independent ground, inhalation, plant, meat, milk, soil
and water dependent water, fish, plant, meat, milk pathways

Excess Cancer Risks CNRS9(irn,i,t) and CNRS9W(irn,i,t) for Inhalation of
Radon and its Decay Products at t= 0.000E+00 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.175E-06 | 0.0094 | 4.501E-12 | 0.0000 | 0.000E+00 | 0.0000 | 3.429E-08 | 0.0003 | 2.998E-09 | 0.0000 | 9.791E-10 | 0.0000 | 2.697E-10 | 0.0000 |
| Pb-210 | 9.431E-09 | 0.0001 | 5.822E-09 | 0.0000 | 0.000E+00 | 0.0000 | 3.718E-06 | 0.0299 | 1.271E-08 | 0.0001 | 6.193E-09 | 0.0000 | 1.170E-07 | 0.0009 |
| Ra-226 | 2.801E-05 | 0.2253 | 1.112E-08 | 0.0001 | 0.000E+00 | 0.0000 | 5.319E-06 | 0.0428 | 1.664E-08 | 0.0001 | 1.527E-08 | 0.0001 | 8.779E-08 | 0.0007 |
| Sr-90 | 1.196E-08 | 0.0001 | 2.295E-11 | 0.0000 | 0.000E+00 | 0.0000 | 8.638E-07 | 0.0069 | 1.744E-08 | 0.0001 | 5.178E-09 | 0.0000 | 9.058E-10 | 0.0000 |
| Th-232 | 6.756E-05 | 0.5433 | 1.185E-07 | 0.0010 | 0.000E+00 | 0.0000 | 1.694E-05 | 0.1362 | 4.845E-08 | 0.0004 | 5.908E-08 | 0.0005 | 1.835E-07 | 0.0015 |
| Total | 9.677E-05 | 0.7782 | 1.355E-07 | 0.0011 | 0.000E+00 | 0.0000 | 2.687E-05 | 0.2161 | 9.824E-08 | 0.0008 | 8.669E-08 | 0.0007 | 3.894E-07 | 0.0031 |

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 0.000E+00 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All pathways | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.214E-06 | 0.0098 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.869E-06 | 0.0311 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.346E-05 | 0.2691 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.993E-07 | 0.0072 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.491E-05 | 0.6828 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.244E-04 | 1.0000 |

***CNRSI(i,p,t) includes contribution from decay daughter radionuclides

Amount of Intake Quantities QINT(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As pCi/yr at t= 1.000E+00 years

| Radio- | Water Independent Pathways (Inhalation w/o radon) | | | | | Water Dependent Pathways | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | Inhalation | Plant | Meat | Milk | Soil | Water | Fish | Plant | Meat | Milk | Ingestion* |
| Cs-137 | 1.815E-03 | 4.142E+01 | 3.622E+00 | 1.183E+00 | 3.258E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.655E+01 |
| Pb-210 | 9.892E-03 | 5.661E+01 | 1.950E-01 | 9.462E-02 | 1.775E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.868E+01 |
| Ra-226 | 9.881E-03 | 2.255E+02 | 6.573E-01 | 8.048E-01 | 1.773E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.287E+02 |
| Ra-228 | 2.695E-03 | 5.923E+01 | 1.500E-01 | 1.962E-01 | 4.836E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.006E+01 |
| Sr-90 | 2.577E-03 | 4.411E+02 | 8.908E+00 | 2.645E+00 | 4.626E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.531E+02 |
| Th-228 | 4.425E-04 | 9.884E-01 | 3.934E-03 | 2.646E-04 | 7.942E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.072E+00 |
| Th-232 | 2.375E-02 | 1.356E+01 | 2.787E-02 | 1.989E-03 | 4.263E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.785E+01 |

* Sum of all ingestion pathways, i.e. water independent plant, meat, milk, soil
and water-dependent water, fish, plant, meat, milk pathways

Amount of Intake Quantities QINT9(irn,i,t) and QINT9W(irn,i,t) for Inhalation of
Radon and its Decay Products as pCi/yr at t= 1.000E+00 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.148E-06 | 0.0090 | 4.398E-12 | 0.0000 | 3.351E-08 | 0.0003 | 2.930E-09 | 0.0000 | 9.567E-10 | 0.0000 | 2.636E-10 | 0.0000 |
| Pb-210 | 1.436E-08 | 0.0001 | 8.862E-09 | 0.0001 | 5.678E-06 | 0.0443 | 1.955E-08 | 0.0002 | 9.489E-09 | 0.0001 | 1.781E-07 | 0.0014 |
| Ra-226 | 2.793E-05 | 0.2182 | 8.037E-09 | 0.0001 | 3.339E-06 | 0.0261 | 9.735E-09 | 0.0001 | 1.192E-08 | 0.0001 | 2.626E-08 | 0.0002 |
| Ra-228 | 2.804E-05 | 0.2190 | 2.342E-08 | 0.0002 | 1.741E-05 | 0.1360 | 4.978E-08 | 0.0004 | 6.149E-08 | 0.0005 | 1.377E-07 | 0.0011 |
| Sr-90 | 1.162E-08 | 0.0001 | 2.229E-11 | 0.0000 | 8.388E-07 | 0.0066 | 1.694E-08 | 0.0001 | 5.029E-09 | 0.0000 | 8.796E-10 | 0.0000 |
| Th-228 | 4.262E-05 | 0.3329 | 6.839E-08 | 0.0005 | 1.784E-07 | 0.0014 | 5.716E-10 | 0.0000 | 3.790E-11 | 0.0000 | 3.599E-08 | 0.0003 |
| Th-232 | 2.949E-09 | 0.0000 | 3.086E-08 | 0.0002 | 5.410E-08 | 0.0004 | 1.112E-10 | 0.0000 | 7.934E-12 | 0.0000 | 1.701E-08 | 0.0001 |
| Total | 9.977E-05 | 0.7793 | 1.396E-07 | 0.0011 | 2.753E-05 | 0.2150 | 9.962E-08 | 0.0008 | 8.893E-08 | 0.0007 | 3.961E-07 | 0.0031 |

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+00 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Plant | | Meat | | Milk | | All Pathways** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.186E-06 | 0.0093 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.908E-06 | 0.0461 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.132E-05 | 0.2447 |
| Ra-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.572E-05 | 0.3571 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.733E-07 | 0.0068 |
| Th-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.291E-05 | 0.3352 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.050E-07 | 0.0008 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.280E-04 | 1.0000 |

** Sum of water independent ground, inhalation, plant, meat, milk, soil
and water dependent water, fish, plant, meat, milk pathways

Excess Cancer Risks CNRS9(irn,i,t) and CNRS9W(irn,i,t) for Inhalation of
Radon and its Decay Products at t= 1.000E+00 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.148E-06 | 0.0090 | 4.398E-12 | 0.0000 | 0.000E+00 | 0.0000 | 3.351E-08 | 0.0003 | 2.930E-09 | 0.0000 | 9.567E-10 | 0.0000 | 2.636E-10 | 0.0000 |
| Pb-210 | 9.127E-09 | 0.0001 | 5.634E-09 | 0.0000 | 0.000E+00 | 0.0000 | 3.598E-06 | 0.0281 | 1.230E-08 | 0.0001 | 5.994E-09 | 0.0000 | 1.132E-07 | 0.0009 |
| Ra-226 | 2.793E-05 | 0.2182 | 1.127E-08 | 0.0001 | 0.000E+00 | 0.0000 | 5.419E-06 | 0.0423 | 1.699E-08 | 0.0001 | 1.541E-08 | 0.0001 | 9.111E-08 | 0.0007 |
| Sr-90 | 1.162E-08 | 0.0001 | 2.229E-11 | 0.0000 | 0.000E+00 | 0.0000 | 8.388E-07 | 0.0066 | 1.694E-08 | 0.0001 | 5.029E-09 | 0.0000 | 8.796E-10 | 0.0000 |
| Th-232 | 7.067E-05 | 0.5520 | 1.227E-07 | 0.0010 | 0.000E+00 | 0.0000 | 1.764E-05 | 0.1378 | 5.046E-08 | 0.0004 | 6.153E-08 | 0.0005 | 1.907E-07 | 0.0015 |
| Total | 9.977E-05 | 0.7793 | 1.396E-07 | 0.0011 | 0.000E+00 | 0.0000 | 2.753E-05 | 0.2150 | 9.962E-08 | 0.0008 | 8.893E-08 | 0.0007 | 3.961E-07 | 0.0031 |

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+00 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All pathways | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.186E-06 | 0.0093 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.744E-06 | 0.0292 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.349E-05 | 0.2616 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.733E-07 | 0.0068 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.873E-05 | 0.6931 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.280E-04 | 1.0000 |

***CNRSI(i,p,t) includes contribution from decay daughter radionuclides

Amount of Intake Quantities QINT(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As pCi/yr at t= 3.000E+00 years

| Radio- | Water Independent Pathways (Inhalation w/o radon) | | | | | Water Dependent Pathways | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | Inhalation | Plant | Meat | Milk | Soil | Water | Fish | Plant | Meat | Milk | Ingestion* |
| Cs-137 | 1.733E-03 | 3.954E+01 | 3.458E+00 | 1.129E+00 | 3.111E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.444E+01 |
| Pb-210 | 9.858E-03 | 5.642E+01 | 1.943E-01 | 9.429E-02 | 1.769E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.848E+01 |
| Ra-226 | 9.826E-03 | 2.242E+02 | 6.537E-01 | 8.003E-01 | 1.763E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.274E+02 |
| Ra-228 | 7.185E-03 | 1.617E+02 | 4.487E-01 | 5.619E-01 | 1.289E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.640E+02 |
| Sr-90 | 2.431E-03 | 4.160E+02 | 8.401E+00 | 2.494E+00 | 4.362E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.273E+02 |
| Th-228 | 2.946E-03 | 3.695E+00 | 1.372E-02 | 9.003E-04 | 5.287E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.238E+00 |
| Th-232 | 2.375E-02 | 1.356E+01 | 2.787E-02 | 1.989E-03 | 4.263E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.785E+01 |

* Sum of all ingestion pathways, i.e. water independent plant, meat, milk, soil
and water-dependent water, fish, plant, meat, milk pathways

Amount of Intake Quantities QINT9(irn,i,t) and QINT9W(irn,i,t) for Inhalation of
Radon and its Decay Products as pCi/yr at t= 3.000E+00 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.096E-06 | 0.0081 | 4.199E-12 | 0.0000 | 3.199E-08 | 0.0002 | 2.797E-09 | 0.0000 | 9.134E-10 | 0.0000 | 2.516E-10 | 0.0000 |
| Pb-210 | 1.430E-08 | 0.0001 | 8.825E-09 | 0.0001 | 5.654E-06 | 0.0420 | 1.947E-08 | 0.0001 | 9.449E-09 | 0.0001 | 1.773E-07 | 0.0013 |
| Ra-226 | 2.777E-05 | 0.2063 | 7.992E-09 | 0.0001 | 3.320E-06 | 0.0247 | 9.681E-09 | 0.0001 | 1.185E-08 | 0.0001 | 2.612E-08 | 0.0002 |
| Ra-228 | 2.988E-05 | 0.2220 | 2.496E-08 | 0.0002 | 1.856E-05 | 0.1379 | 5.313E-08 | 0.0004 | 6.559E-08 | 0.0005 | 1.467E-07 | 0.0011 |
| Sr-90 | 1.096E-08 | 0.0001 | 2.102E-11 | 0.0000 | 7.911E-07 | 0.0059 | 1.598E-08 | 0.0001 | 4.743E-09 | 0.0000 | 8.295E-10 | 0.0000 |
| Th-228 | 4.646E-05 | 0.3452 | 7.455E-08 | 0.0006 | 1.930E-07 | 0.0014 | 6.155E-10 | 0.0000 | 4.082E-11 | 0.0000 | 3.924E-08 | 0.0003 |
| Th-232 | 2.949E-09 | 0.0000 | 3.086E-08 | 0.0002 | 5.410E-08 | 0.0004 | 1.112E-10 | 0.0000 | 7.934E-12 | 0.0000 | 1.701E-08 | 0.0001 |
| Total | 1.052E-04 | 0.7819 | 1.472E-07 | 0.0011 | 2.860E-05 | 0.2125 | 1.018E-07 | 0.0008 | 9.260E-08 | 0.0007 | 4.075E-07 | 0.0030 |

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+00 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Plant | | Meat | | Milk | | All Pathways** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.132E-06 | 0.0084 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.883E-06 | 0.0437 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.115E-05 | 0.2314 |
| Ra-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.873E-05 | 0.3621 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.236E-07 | 0.0061 |
| Th-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.677E-05 | 0.3475 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.050E-07 | 0.0008 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.346E-04 | 1.0000 |

** Sum of water independent ground, inhalation, plant, meat, milk, soil
and water dependent water, fish, plant, meat, milk pathways

Excess Cancer Risks CNRS9(irn,i,t) and CNRS9W(irn,i,t) for Inhalation of
Radon and its Decay Products at t= 3.000E+00 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.096E-06 | 0.0081 | 4.199E-12 | 0.0000 | 0.000E+00 | 0.0000 | 3.199E-08 | 0.0002 | 2.797E-09 | 0.0000 | 9.134E-10 | 0.0000 | 2.516E-10 | 0.0000 |
| Pb-210 | 8.549E-09 | 0.0001 | 5.277E-09 | 0.0000 | 0.000E+00 | 0.0000 | 3.370E-06 | 0.0250 | 1.152E-08 | 0.0001 | 5.614E-09 | 0.0000 | 1.060E-07 | 0.0008 |
| Ra-226 | 2.778E-05 | 0.2064 | 1.154E-08 | 0.0001 | 0.000E+00 | 0.0000 | 5.604E-06 | 0.0416 | 1.763E-08 | 0.0001 | 1.569E-08 | 0.0001 | 9.739E-08 | 0.0007 |
| Sr-90 | 1.096E-08 | 0.0001 | 2.102E-11 | 0.0000 | 0.000E+00 | 0.0000 | 7.911E-07 | 0.0059 | 1.598E-08 | 0.0001 | 4.743E-09 | 0.0000 | 8.295E-10 | 0.0000 |
| Th-232 | 7.635E-05 | 0.5673 | 1.304E-07 | 0.0010 | 0.000E+00 | 0.0000 | 1.881E-05 | 0.1397 | 5.386E-08 | 0.0004 | 6.564E-08 | 0.0005 | 2.030E-07 | 0.0015 |
| Total | 1.052E-04 | 0.7819 | 1.472E-07 | 0.0011 | 0.000E+00 | 0.0000 | 2.860E-05 | 0.2125 | 1.018E-07 | 0.0008 | 9.260E-08 | 0.0007 | 4.075E-07 | 0.0030 |

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+00 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All pathways | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.132E-06 | 0.0084 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.507E-06 | 0.0261 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.353E-05 | 0.2491 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.236E-07 | 0.0061 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 9.561E-05 | 0.7103 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.346E-04 | 1.0000 |

***CNRSI(i,p,t) includes contribution from decay daughter radionuclides

Amount of Intake Quantities QINT(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As pCi/yr at t= 1.000E+01 years

| Radio- | Water Independent Pathways (Inhalation w/o radon) | | | | | Water Dependent Pathways | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | Inhalation | Plant | Meat | Milk | Soil | Water | Fish | Plant | Meat | Milk | Ingestion* |
| Cs-137 | 1.474E-03 | 3.363E+01 | 2.941E+00 | 9.603E-01 | 2.645E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.780E+01 |
| Pb-210 | 9.730E-03 | 5.568E+01 | 1.918E-01 | 9.306E-02 | 1.746E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.771E+01 |
| Ra-226 | 9.634E-03 | 2.198E+02 | 6.409E-01 | 7.847E-01 | 1.729E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.230E+02 |
| Ra-228 | 1.648E-02 | 3.738E+02 | 1.067E+00 | 1.319E+00 | 2.958E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.791E+02 |
| Sr-90 | 1.980E-03 | 3.388E+02 | 6.842E+00 | 2.031E+00 | 3.553E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.480E+02 |
| Th-228 | 1.330E-02 | 1.225E+01 | 4.006E-02 | 2.649E-03 | 2.387E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.468E+01 |
| Th-232 | 2.375E-02 | 1.356E+01 | 2.787E-02 | 1.988E-03 | 4.263E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.785E+01 |

* Sum of all ingestion pathways, i.e. water independent plant, meat, milk, soil
and water-dependent water, fish, plant, meat, milk pathways

Amount of Intake Quantities QINT9(irn,i,t) and QINT9W(irn,i,t) for Inhalation of
Radon and its Decay Products as pCi/yr at t= 1.000E+01 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 9.323E-07 | 0.0063 | 3.571E-12 | 0.0000 | 2.721E-08 | 0.0002 | 2.379E-09 | 0.0000 | 7.768E-10 | 0.0000 | 2.140E-10 | 0.0000 |
| Pb-210 | 1.408E-08 | 0.0001 | 8.691E-09 | 0.0001 | 5.568E-06 | 0.0374 | 1.917E-08 | 0.0001 | 9.305E-09 | 0.0001 | 1.746E-07 | 0.0012 |
| Ra-226 | 2.723E-05 | 0.1828 | 7.837E-09 | 0.0001 | 3.256E-06 | 0.0219 | 9.492E-09 | 0.0001 | 1.162E-08 | 0.0001 | 2.561E-08 | 0.0002 |
| Ra-228 | 3.376E-05 | 0.2266 | 2.820E-08 | 0.0002 | 2.098E-05 | 0.1408 | 6.019E-08 | 0.0004 | 7.423E-08 | 0.0005 | 1.658E-07 | 0.0011 |
| Sr-90 | 8.924E-09 | 0.0001 | 1.712E-11 | 0.0000 | 6.443E-07 | 0.0043 | 1.301E-08 | 0.0001 | 3.863E-09 | 0.0000 | 6.756E-10 | 0.0000 |
| Th-228 | 5.545E-05 | 0.3723 | 8.897E-08 | 0.0006 | 2.260E-07 | 0.0015 | 7.128E-10 | 0.0000 | 4.733E-11 | 0.0000 | 4.683E-08 | 0.0003 |
| Th-232 | 2.949E-09 | 0.0000 | 3.085E-08 | 0.0002 | 5.410E-08 | 0.0004 | 1.112E-10 | 0.0000 | 7.934E-12 | 0.0000 | 1.701E-08 | 0.0001 |
| Total | 1.174E-04 | 0.7882 | 1.646E-07 | 0.0011 | 3.075E-05 | 0.2065 | 1.051E-07 | 0.0007 | 9.985E-08 | 0.0007 | 4.307E-07 | 0.0029 |

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+01 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Plant | | Meat | | Milk | | All Pathways** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 9.629E-07 | 0.0065 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.794E-06 | 0.0389 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.054E-05 | 0.2050 |
| Ra-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.506E-05 | 0.3697 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.708E-07 | 0.0045 |
| Th-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.582E-05 | 0.3747 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.050E-07 | 0.0007 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.490E-04 | 1.0000 |

** Sum of water independent ground, inhalation, plant, meat, milk, soil
and water dependent water, fish, plant, meat, milk pathways

Excess Cancer Risks CNRS9(irn,i,t) and CNRS9W(irn,i,t) for Inhalation of
Radon and its Decay Products at t= 1.000E+01 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 9.323E-07 | 0.0063 | 3.571E-12 | 0.0000 | 0.000E+00 | 0.0000 | 2.721E-08 | 0.0002 | 2.379E-09 | 0.0000 | 7.768E-10 | 0.0000 | 2.140E-10 | 0.0000 |
| Pb-210 | 6.798E-09 | 0.0000 | 4.196E-09 | 0.0000 | 0.000E+00 | 0.0000 | 2.680E-06 | 0.0180 | 9.161E-09 | 0.0001 | 4.464E-09 | 0.0000 | 8.431E-08 | 0.0006 |
| Ra-226 | 2.724E-05 | 0.1829 | 1.233E-08 | 0.0001 | 0.000E+00 | 0.0000 | 6.144E-06 | 0.0412 | 1.950E-08 | 0.0001 | 1.646E-08 | 0.0001 | 1.159E-07 | 0.0008 |
| Sr-90 | 8.924E-09 | 0.0001 | 1.712E-11 | 0.0000 | 0.000E+00 | 0.0000 | 6.443E-07 | 0.0043 | 1.301E-08 | 0.0001 | 3.863E-09 | 0.0000 | 6.756E-10 | 0.0000 |
| Th-232 | 8.922E-05 | 0.5989 | 1.480E-07 | 0.0010 | 0.000E+00 | 0.0000 | 2.126E-05 | 0.1427 | 6.101E-08 | 0.0004 | 7.428E-08 | 0.0005 | 2.296E-07 | 0.0015 |
| Total | 1.174E-04 | 0.7882 | 1.646E-07 | 0.0011 | 0.000E+00 | 0.0000 | 3.075E-05 | 0.2065 | 1.051E-07 | 0.0007 | 9.985E-08 | 0.0007 | 4.307E-07 | 0.0029 |

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Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+01 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All pathways | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 9.629E-07 | 0.0065 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.789E-06 | 0.0187 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.355E-05 | 0.2252 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.708E-07 | 0.0045 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.110E-04 | 0.7451 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.490E-04 | 1.0000 |

***CNRSI(i,p,t) includes contribution from decay daughter radionuclides

Amount of Intake Quantities QINT(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As pCi/yr at t= 3.000E+01 years

| Radio- | Water Independent Pathways (Inhalation w/o radon) | | | | | Water Dependent Pathways | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | Inhalation | Plant | Meat | Milk | Soil | Water | Fish | Plant | Meat | Milk | Ingestion* |
| Cs-137 | 9.279E-04 | 2.117E+01 | 1.851E+00 | 6.045E-01 | 1.665E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.379E+01 |
| Pb-210 | 9.315E-03 | 5.331E+01 | 1.836E-01 | 8.909E-02 | 1.672E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.525E+01 |
| Ra-226 | 9.108E-03 | 2.078E+02 | 6.059E-01 | 7.419E-01 | 1.635E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.108E+02 |
| Ra-228 | 2.271E-02 | 5.159E+02 | 1.482E+00 | 1.827E+00 | 4.076E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.233E+02 |
| Sr-90 | 1.101E-03 | 1.885E+02 | 3.806E+00 | 1.130E+00 | 1.977E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.936E+02 |
| Th-228 | 2.241E-02 | 1.922E+01 | 6.026E-02 | 4.003E-03 | 4.022E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.331E+01 |
| Th-232 | 2.375E-02 | 1.356E+01 | 2.787E-02 | 1.988E-03 | 4.263E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.785E+01 |

* Sum of all ingestion pathways, i.e. water independent plant, meat, milk, soil
and water-dependent water, fish, plant, meat, milk pathways

Amount of Intake Quantities QINT9(irn,i,t) and QINT9W(irn,i,t) for Inhalation of
Radon and its Decay Products as pCi/yr at t= 3.000E+01 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 5.869E-07 | 0.0037 | 2.248E-12 | 0.0000 | 1.713E-08 | 0.0001 | 1.498E-09 | 0.0000 | 4.890E-10 | 0.0000 | 1.347E-10 | 0.0000 |
| Pb-210 | 1.342E-08 | 0.0001 | 8.284E-09 | 0.0001 | 5.308E-06 | 0.0337 | 1.828E-08 | 0.0001 | 8.870E-09 | 0.0001 | 1.664E-07 | 0.0011 |
| Ra-226 | 2.575E-05 | 0.1637 | 7.409E-09 | 0.0000 | 3.078E-06 | 0.0196 | 8.974E-09 | 0.0001 | 1.099E-08 | 0.0001 | 2.421E-08 | 0.0002 |
| Ra-228 | 3.635E-05 | 0.2311 | 3.037E-08 | 0.0002 | 2.260E-05 | 0.1437 | 6.491E-08 | 0.0004 | 8.001E-08 | 0.0005 | 1.785E-07 | 0.0011 |
| Sr-90 | 4.965E-09 | 0.0000 | 9.525E-12 | 0.0000 | 3.584E-07 | 0.0023 | 7.239E-09 | 0.0000 | 2.149E-09 | 0.0000 | 3.759E-10 | 0.0000 |
| Th-228 | 6.210E-05 | 0.3948 | 9.963E-08 | 0.0006 | 2.498E-07 | 0.0016 | 7.814E-10 | 0.0000 | 5.193E-11 | 0.0000 | 5.244E-08 | 0.0003 |
| Th-232 | 2.949E-09 | 0.0000 | 3.085E-08 | 0.0002 | 5.410E-08 | 0.0003 | 1.112E-10 | 0.0000 | 7.933E-12 | 0.0000 | 1.701E-08 | 0.0001 |
| Total | 1.248E-04 | 0.7935 | 1.766E-07 | 0.0011 | 3.166E-05 | 0.2013 | 1.018E-07 | 0.0006 | 1.026E-07 | 0.0007 | 4.391E-07 | 0.0028 |

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+01 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Plant | | Meat | | Milk | | All Pathways** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.062E-07 | 0.0039 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.523E-06 | 0.0351 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.888E-05 | 0.1836 |
| Ra-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.931E-05 | 0.3770 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.732E-07 | 0.0024 |
| Th-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.250E-05 | 0.3974 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.050E-07 | 0.0007 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.573E-04 | 1.0000 |

** Sum of water independent ground, inhalation, plant, meat, milk, soil
and water dependent water, fish, plant, meat, milk pathways

Excess Cancer Risks CNRS9(irn,i,t) and CNRS9W(irn,i,t) for Inhalation of
Radon and its Decay Products at t= 3.000E+01 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 5.869E-07 | 0.0037 | 2.248E-12 | 0.0000 | 0.000E+00 | 0.0000 | 1.713E-08 | 0.0001 | 1.498E-09 | 0.0000 | 4.890E-10 | 0.0000 | 1.347E-10 | 0.0000 |
| Pb-210 | 3.531E-09 | 0.0000 | 2.180E-09 | 0.0000 | 0.000E+00 | 0.0000 | 1.392E-06 | 0.0089 | 4.759E-09 | 0.0000 | 2.319E-09 | 0.0000 | 4.380E-08 | 0.0003 |
| Ra-226 | 2.576E-05 | 0.1637 | 1.351E-08 | 0.0001 | 0.000E+00 | 0.0000 | 6.993E-06 | 0.0445 | 2.249E-08 | 0.0001 | 1.754E-08 | 0.0001 | 1.469E-07 | 0.0009 |
| Sr-90 | 4.965E-09 | 0.0000 | 9.525E-12 | 0.0000 | 0.000E+00 | 0.0000 | 3.584E-07 | 0.0023 | 7.239E-09 | 0.0000 | 2.149E-09 | 0.0000 | 3.759E-10 | 0.0000 |
| Th-232 | 9.846E-05 | 0.6260 | 1.609E-07 | 0.0010 | 0.000E+00 | 0.0000 | 2.290E-05 | 0.1456 | 6.580E-08 | 0.0004 | 8.007E-08 | 0.0005 | 2.480E-07 | 0.0016 |
| Total | 1.248E-04 | 0.7935 | 1.766E-07 | 0.0011 | 0.000E+00 | 0.0000 | 3.166E-05 | 0.2013 | 1.018E-07 | 0.0006 | 1.026E-07 | 0.0007 | 4.391E-07 | 0.0028 |

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+01 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All pathways | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.062E-07 | 0.0039 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.449E-06 | 0.0092 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.295E-05 | 0.2095 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.732E-07 | 0.0024 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.219E-04 | 0.7751 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.573E-04 | 1.0000 |

***CNRSI(i,p,t) includes contribution from decay daughter radionuclides

Amount of Intake Quantities QINT(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As pCi/yr at t= 1.000E+02 years

| Radio- | Water Independent Pathways (Inhalation w/o radon) | | | | | Water Dependent Pathways | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | Inhalation | Plant | Meat | Milk | Soil | Water | Fish | Plant | Meat | Milk | Ingestion* |
| Cs-137 | 1.837E-04 | 4.190E+00 | 3.664E-01 | 1.196E-01 | 3.296E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.709E+00 |
| Pb-210 | 7.755E-03 | 4.438E+01 | 1.528E-01 | 7.416E-02 | 1.392E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.600E+01 |
| Ra-226 | 7.484E-03 | 1.708E+02 | 4.979E-01 | 6.095E-01 | 1.343E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.732E+02 |
| Ra-228 | 2.329E-02 | 5.291E+02 | 1.520E+00 | 1.874E+00 | 4.180E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.367E+02 |
| Sr-90 | 1.414E-04 | 2.421E+01 | 4.889E-01 | 1.451E-01 | 2.539E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.487E+01 |
| Th-228 | 2.329E-02 | 1.989E+01 | 6.217E-02 | 4.132E-03 | 4.180E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.414E+01 |
| Th-232 | 2.375E-02 | 1.356E+01 | 2.787E-02 | 1.988E-03 | 4.262E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.785E+01 |

* Sum of all ingestion pathways, i.e. water independent plant, meat, milk, soil
and water-dependent water, fish, plant, meat, milk pathways

Amount of Intake Quantities QINT9(irn,i,t) and QINT9W(irn,i,t) for Inhalation of
Radon and its Decay Products as pCi/yr at t= 1.000E+02 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.162E-07 | 0.0008 | 4.449E-13 | 0.0000 | 3.390E-09 | 0.0000 | 2.964E-10 | 0.0000 | 9.679E-11 | 0.0000 | 2.666E-11 | 0.0000 |
| Pb-210 | 1.112E-08 | 0.0001 | 6.867E-09 | 0.0000 | 4.399E-06 | 0.0291 | 1.515E-08 | 0.0001 | 7.351E-09 | 0.0000 | 1.380E-07 | 0.0009 |
| Ra-226 | 2.115E-05 | 0.1397 | 6.087E-09 | 0.0000 | 2.529E-06 | 0.0167 | 7.373E-09 | 0.0000 | 9.027E-09 | 0.0001 | 1.989E-08 | 0.0001 |
| Ra-228 | 3.659E-05 | 0.2417 | 3.057E-08 | 0.0002 | 2.275E-05 | 0.1502 | 6.534E-08 | 0.0004 | 8.054E-08 | 0.0005 | 1.797E-07 | 0.0012 |
| Sr-90 | 6.376E-10 | 0.0000 | 1.223E-12 | 0.0000 | 4.603E-08 | 0.0003 | 9.297E-10 | 0.0000 | 2.760E-10 | 0.0000 | 4.827E-11 | 0.0000 |
| Th-228 | 6.272E-05 | 0.4143 | 1.006E-07 | 0.0007 | 2.520E-07 | 0.0017 | 7.878E-10 | 0.0000 | 5.236E-11 | 0.0000 | 5.296E-08 | 0.0003 |
| Th-232 | 2.948E-09 | 0.0000 | 3.085E-08 | 0.0002 | 5.409E-08 | 0.0004 | 1.112E-10 | 0.0000 | 7.932E-12 | 0.0000 | 1.700E-08 | 0.0001 |
| Total | 1.206E-04 | 0.7966 | 1.750E-07 | 0.0012 | 3.003E-05 | 0.1984 | 8.999E-08 | 0.0006 | 9.735E-08 | 0.0006 | 4.076E-07 | 0.0027 |

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+02 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Plant | | Meat | | Milk | | All Pathways** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.200E-07 | 0.0008 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.577E-06 | 0.0302 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.372E-05 | 0.1567 |
| Ra-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.969E-05 | 0.3943 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.793E-08 | 0.0003 |
| Th-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.312E-05 | 0.4170 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.050E-07 | 0.0007 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.514E-04 | 1.0000 |

** Sum of water independent ground, inhalation, plant, meat, milk, soil
and water dependent water, fish, plant, meat, milk pathways

Excess Cancer Risks CNRS9(irn,i,t) and CNRS9W(irn,i,t) for Inhalation of
Radon and its Decay Products at t= 1.000E+02 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.162E-07 | 0.0008 | 4.449E-13 | 0.0000 | 0.000E+00 | 0.0000 | 3.390E-09 | 0.0000 | 2.964E-10 | 0.0000 | 9.679E-11 | 0.0000 | 2.666E-11 | 0.0000 |
| Pb-210 | 3.568E-10 | 0.0000 | 2.203E-10 | 0.0000 | 0.000E+00 | 0.0000 | 1.407E-07 | 0.0009 | 4.809E-10 | 0.0000 | 2.343E-10 | 0.0000 | 4.425E-09 | 0.0000 |
| Ra-226 | 2.116E-05 | 0.1398 | 1.273E-08 | 0.0001 | 0.000E+00 | 0.0000 | 6.787E-06 | 0.0448 | 2.204E-08 | 0.0001 | 1.614E-08 | 0.0001 | 1.534E-07 | 0.0010 |
| Sr-90 | 6.376E-10 | 0.0000 | 1.223E-12 | 0.0000 | 0.000E+00 | 0.0000 | 4.603E-08 | 0.0003 | 9.297E-10 | 0.0000 | 2.760E-10 | 0.0000 | 4.827E-11 | 0.0000 |
| Th-232 | 9.931E-05 | 0.6560 | 1.620E-07 | 0.0011 | 0.000E+00 | 0.0000 | 2.305E-05 | 0.1523 | 6.624E-08 | 0.0004 | 8.060E-08 | 0.0005 | 2.496E-07 | 0.0016 |
| Total | 1.206E-04 | 0.7966 | 1.750E-07 | 0.0012 | 0.000E+00 | 0.0000 | 3.003E-05 | 0.1984 | 8.999E-08 | 0.0006 | 9.735E-08 | 0.0006 | 4.076E-07 | 0.0027 |

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+02 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All pathways | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.200E-07 | 0.0008 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.464E-07 | 0.0010 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.816E-05 | 0.1860 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.793E-08 | 0.0003 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.229E-04 | 0.8119 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.514E-04 | 1.0000 |

***CNRSI(i,p,t) includes contribution from decay daughter radionuclides

Amount of Intake Quantities QINT(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As pCi/yr at t= 3.000E+02 years

| Radio- | Water Independent Pathways (Inhalation w/o radon) | | | | | Water Dependent Pathways | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | Inhalation | Plant | Meat | Milk | Soil | Water | Fish | Plant | Meat | Milk | Ingestion* |
| Cs-137 | 1.795E-06 | 4.095E-02 | 3.581E-03 | 1.169E-03 | 3.221E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.602E-02 |
| Pb-210 | 4.432E-03 | 2.536E+01 | 8.732E-02 | 4.238E-02 | 7.954E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.629E+01 |
| Ra-226 | 4.269E-03 | 9.740E+01 | 2.840E-01 | 3.477E-01 | 7.661E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 9.880E+01 |
| Ra-228 | 2.328E-02 | 5.288E+02 | 1.519E+00 | 1.873E+00 | 4.177E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.364E+02 |
| Sr-90 | 4.017E-07 | 6.876E-02 | 1.389E-03 | 4.122E-04 | 7.210E-05 | 1.376E-01 | 3.804E-05 | 3.307E-03 | 3.436E-04 | 1.876E-04 | 2.121E-01 |
| Th-228 | 2.328E-02 | 1.988E+01 | 6.213E-02 | 4.129E-03 | 4.177E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.412E+01 |
| Th-232 | 2.373E-02 | 1.355E+01 | 2.785E-02 | 1.987E-03 | 4.260E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.784E+01 |

* Sum of all ingestion pathways, i.e. water independent plant, meat, milk, soil
and water-dependent water, fish, plant, meat, milk pathways

Amount of Intake Quantities QINT9(irn,i,t) and QINT9W(irn,i,t) for Inhalation of
Radon and its Decay Products as pCi/yr at t= 3.000E+02 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.135E-09 | 0.0000 | 4.348E-15 | 0.0000 | 3.312E-11 | 0.0000 | 2.897E-12 | 0.0000 | 9.458E-13 | 0.0000 | 2.606E-13 | 0.0000 |
| Pb-210 | 6.353E-09 | 0.0000 | 3.922E-09 | 0.0000 | 2.512E-06 | 0.0181 | 8.650E-09 | 0.0001 | 4.198E-09 | 0.0000 | 7.879E-08 | 0.0006 |
| Ra-226 | 1.207E-05 | 0.0868 | 3.472E-09 | 0.0000 | 1.443E-06 | 0.0104 | 4.206E-09 | 0.0000 | 5.149E-09 | 0.0000 | 1.135E-08 | 0.0001 |
| Ra-228 | 3.657E-05 | 0.2631 | 3.055E-08 | 0.0002 | 2.273E-05 | 0.1635 | 6.531E-08 | 0.0005 | 8.049E-08 | 0.0006 | 1.796E-07 | 0.0013 |
| Sr-90 | 1.811E-12 | 0.0000 | 3.474E-15 | 0.0000 | 1.307E-10 | 0.0000 | 2.640E-12 | 0.0000 | 7.839E-13 | 0.0000 | 1.371E-13 | 0.0000 |
| Th-228 | 6.268E-05 | 0.4510 | 1.006E-07 | 0.0007 | 2.519E-07 | 0.0018 | 7.873E-10 | 0.0000 | 5.233E-11 | 0.0000 | 5.293E-08 | 0.0004 |
| Th-232 | 2.947E-09 | 0.0000 | 3.083E-08 | 0.0002 | 5.406E-08 | 0.0004 | 1.111E-10 | 0.0000 | 7.927E-12 | 0.0000 | 1.699E-08 | 0.0001 |
| Total | 1.113E-04 | 0.8009 | 1.693E-07 | 0.0012 | 2.699E-05 | 0.1942 | 7.907E-08 | 0.0006 | 8.990E-08 | 0.0006 | 3.396E-07 | 0.0024 |

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+02 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Plant | | Meat | | Milk | | All Pathways** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.172E-09 | 0.0000 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.614E-06 | 0.0188 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.353E-05 | 0.0974 |
| Ra-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.966E-05 | 0.4292 |
| Sr-90 | 2.361E-10 | 0.0000 | 8.407E-14 | 0.0000 | 7.309E-12 | 0.0000 | 7.595E-13 | 0.0000 | 4.145E-13 | 0.0000 | 3.808E-10 | 0.0000 |
| Th-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.309E-05 | 0.4539 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.049E-07 | 0.0008 |
| Total | 2.361E-10 | 0.0000 | 8.407E-14 | 0.0000 | 7.309E-12 | 0.0000 | 7.595E-13 | 0.0000 | 4.145E-13 | 0.0000 | 1.390E-04 | 1.0000 |

** Sum of water independent ground, inhalation, plant, meat, milk, soil
and water dependent water, fish, plant, meat, milk pathways

Excess Cancer Risks CNRS9(irn,i,t) and CNRS9W(irn,i,t) for Inhalation of
Radon and its Decay Products at t= 3.000E+02 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.135E-09 | 0.0000 | 4.348E-15 | 0.0000 | 0.000E+00 | 0.0000 | 3.312E-11 | 0.0000 | 2.897E-12 | 0.0000 | 9.458E-13 | 0.0000 | 2.606E-13 | 0.0000 |
| Pb-210 | 5.107E-13 | 0.0000 | 3.152E-13 | 0.0000 | 0.000E+00 | 0.0000 | 2.013E-10 | 0.0000 | 6.883E-13 | 0.0000 | 3.353E-13 | 0.0000 | 6.334E-12 | 0.0000 |
| Ra-226 | 1.207E-05 | 0.0869 | 7.394E-09 | 0.0001 | 0.000E+00 | 0.0000 | 3.955E-06 | 0.0285 | 1.286E-08 | 0.0001 | 9.347E-09 | 0.0001 | 9.013E-08 | 0.0006 |
| Sr-90 | 1.811E-12 | 0.0000 | 3.474E-15 | 0.0000 | 0.000E+00 | 0.0000 | 1.307E-10 | 0.0000 | 2.640E-12 | 0.0000 | 7.839E-13 | 0.0000 | 1.371E-13 | 0.0000 |
| Th-232 | 9.926E-05 | 0.7141 | 1.619E-07 | 0.0012 | 0.000E+00 | 0.0000 | 2.304E-05 | 0.1657 | 6.620E-08 | 0.0005 | 8.055E-08 | 0.0006 | 2.495E-07 | 0.0018 |
| Total | 1.113E-04 | 0.8009 | 1.693E-07 | 0.0012 | 0.000E+00 | 0.0000 | 2.699E-05 | 0.1942 | 7.907E-08 | 0.0006 | 8.990E-08 | 0.0006 | 3.396E-07 | 0.0024 |

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+02 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All pathways | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.172E-09 | 0.0000 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.095E-10 | 0.0000 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.615E-05 | 0.1162 |
| Sr-90 | 2.361E-10 | 0.0000 | 8.407E-14 | 0.0000 | 0.000E+00 | 0.0000 | 7.309E-12 | 0.0000 | 7.595E-13 | 0.0000 | 4.145E-13 | 0.0000 | 3.808E-10 | 0.0000 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.229E-04 | 0.8838 |
| Total | 2.361E-10 | 0.0000 | 8.407E-14 | 0.0000 | 0.000E+00 | 0.0000 | 7.309E-12 | 0.0000 | 7.595E-13 | 0.0000 | 4.145E-13 | 0.0000 | 1.390E-04 | 1.0000 |

***CNRSI(i,p,t) includes contribution from decay daughter radionuclides

Amount of Intake Quantities QINT(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As pCi/yr at t= 1.000E+03 years

| Radio- | Water Independent Pathways (Inhalation w/o radon) | | | | | Water Dependent Pathways | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | Inhalation | Plant | Meat | Milk | Soil | Water | Fish | Plant | Meat | Milk | Ingestion* |
| Cs-137 | 1.656E-13 | 3.777E-09 | 3.303E-10 | 1.079E-10 | 2.971E-11 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.245E-09 |
| Pb-210 | 6.213E-04 | 3.555E+00 | 1.224E-02 | 5.941E-03 | 1.115E-01 | 1.748E+02 | 1.995E-01 | 3.908E+00 | 4.352E-02 | 3.566E-02 | 1.827E+02 |
| Ra-226 | 5.984E-04 | 1.365E+01 | 3.981E-02 | 4.874E-02 | 1.074E-01 | 2.333E+02 | 7.711E-02 | 5.255E+00 | 7.251E-02 | 1.586E-01 | 2.527E+02 |
| Ra-228 | 2.323E-02 | 5.278E+02 | 1.516E+00 | 1.869E+00 | 4.169E+00 | 4.524E-28 | 0.000E+00 | 1.005E-29 | 0.000E+00 | 0.000E+00 | 5.354E+02 |
| Sr-90 | 4.906E-16 | 8.395E-11 | 1.695E-12 | 5.033E-13 | 8.804E-14 | 3.328E-10 | 9.202E-14 | 8.002E-12 | 8.326E-13 | 4.540E-13 | 4.284E-10 |
| Th-228 | 2.323E-02 | 1.984E+01 | 6.201E-02 | 4.121E-03 | 4.169E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.408E+01 |
| Th-232 | 2.369E-02 | 1.352E+01 | 2.780E-02 | 1.983E-03 | 4.251E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.780E+01 |

* Sum of all ingestion pathways, i.e. water independent plant, meat, milk, soil
and water-dependent water, fish, plant, meat, milk pathways

Amount of Intake Quantities QINT9(irn,i,t) and QINT9W(irn,i,t) for Inhalation of
Radon and its Decay Products as pCi/yr at t= 1.000E+03 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+03 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.047E-16 | 0.0000 | 4.011E-22 | 0.0000 | 3.056E-18 | 0.0000 | 2.672E-19 | 0.0000 | 8.725E-20 | 0.0000 | 2.404E-20 | 0.0000 |
| Pb-210 | 8.905E-10 | 0.0000 | 5.497E-10 | 0.0000 | 3.522E-07 | 0.0025 | 1.213E-09 | 0.0000 | 5.885E-10 | 0.0000 | 1.104E-08 | 0.0001 |
| Ra-226 | 1.691E-06 | 0.0120 | 4.867E-10 | 0.0000 | 2.022E-07 | 0.0014 | 5.896E-10 | 0.0000 | 7.218E-10 | 0.0000 | 1.590E-09 | 0.0000 |
| Ra-228 | 3.650E-05 | 0.2591 | 3.049E-08 | 0.0002 | 2.269E-05 | 0.1610 | 6.518E-08 | 0.0005 | 8.034E-08 | 0.0006 | 1.792E-07 | 0.0013 |
| Sr-90 | 2.211E-21 | 0.0000 | 4.242E-24 | 0.0000 | 1.597E-19 | 0.0000 | 3.224E-21 | 0.0000 | 9.572E-22 | 0.0000 | 1.674E-22 | 0.0000 |
| Th-228 | 6.256E-05 | 0.4441 | 1.004E-07 | 0.0007 | 2.514E-07 | 0.0018 | 7.858E-10 | 0.0000 | 5.222E-11 | 0.0000 | 5.283E-08 | 0.0004 |
| Th-232 | 2.941E-09 | 0.0000 | 3.077E-08 | 0.0002 | 5.395E-08 | 0.0004 | 1.109E-10 | 0.0000 | 7.912E-12 | 0.0000 | 1.696E-08 | 0.0001 |
| Total | 1.008E-04 | 0.7152 | 1.627E-07 | 0.0012 | 2.355E-05 | 0.1672 | 6.788E-08 | 0.0005 | 8.171E-08 | 0.0006 | 2.616E-07 | 0.0019 |

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+03 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Plant | | Meat | | Milk | | All Pathways** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.081E-16 | 0.0000 |
| Pb-210 | 1.294E-05 | 0.0919 | 1.913E-08 | 0.0001 | 3.747E-07 | 0.0027 | 4.176E-09 | 0.0000 | 3.420E-09 | 0.0000 | 1.371E-05 | 0.0973 |
| Ra-226 | 2.578E-06 | 0.0183 | 1.138E-09 | 0.0000 | 7.754E-08 | 0.0006 | 1.070E-09 | 0.0000 | 2.340E-09 | 0.0000 | 4.557E-06 | 0.0323 |
| Ra-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.954E-05 | 0.4227 |
| Sr-90 | 4.885E-19 | 0.0000 | 1.740E-22 | 0.0000 | 1.513E-20 | 0.0000 | 1.574E-21 | 0.0000 | 8.581E-22 | 0.0000 | 6.725E-19 | 0.0000 |
| Th-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.296E-05 | 0.4469 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.047E-07 | 0.0007 |
| Total | 1.552E-05 | 0.1102 | 2.026E-08 | 0.0001 | 4.522E-07 | 0.0032 | 5.246E-09 | 0.0000 | 5.760E-09 | 0.0000 | 1.409E-04 | 1.0000 |

** Sum of water independent ground, inhalation, plant, meat, milk, soil
and water dependent water, fish, plant, meat, milk pathways

Excess Cancer Risks CNRS9(irn,i,t) and CNRS9W(irn,i,t) for Inhalation of
Radon and its Decay Products at t= 1.000E+03 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+03 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.047E-16 | 0.0000 | 4.011E-22 | 0.0000 | 0.000E+00 | 0.0000 | 3.056E-18 | 0.0000 | 2.672E-19 | 0.0000 | 8.725E-20 | 0.0000 | 2.404E-20 | 0.0000 |
| Pb-210 | 5.665E-23 | 0.0000 | 3.497E-23 | 0.0000 | 0.000E+00 | 0.0000 | 2.233E-20 | 0.0000 | 7.635E-23 | 0.0000 | 3.720E-23 | 0.0000 | 7.026E-22 | 0.0000 |
| Ra-226 | 1.692E-06 | 0.0120 | 1.036E-09 | 0.0000 | 0.000E+00 | 0.0000 | 5.544E-07 | 0.0039 | 1.802E-09 | 0.0000 | 1.310E-09 | 0.0000 | 1.264E-08 | 0.0001 |
| Sr-90 | 2.211E-21 | 0.0000 | 4.242E-24 | 0.0000 | 0.000E+00 | 0.0000 | 1.597E-19 | 0.0000 | 3.224E-21 | 0.0000 | 9.572E-22 | 0.0000 | 1.674E-22 | 0.0000 |
| Th-232 | 9.906E-05 | 0.7032 | 1.616E-07 | 0.0011 | 0.000E+00 | 0.0000 | 2.299E-05 | 0.1632 | 6.608E-08 | 0.0005 | 8.040E-08 | 0.0006 | 2.490E-07 | 0.0018 |
| Total | 1.008E-04 | 0.7152 | 1.627E-07 | 0.0012 | 0.000E+00 | 0.0000 | 2.355E-05 | 0.1672 | 6.788E-08 | 0.0005 | 8.171E-08 | 0.0006 | 2.616E-07 | 0.0019 |

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+03 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All pathways | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.081E-16 | 0.0000 |
| Pb-210 | 2.467E-19 | 0.0000 | 3.646E-22 | 0.0000 | 0.000E+00 | 0.0000 | 7.136E-21 | 0.0000 | 7.929E-23 | 0.0000 | 6.508E-23 | 0.0000 | 2.775E-19 | 0.0000 |
| Ra-226 | 1.552E-05 | 0.1102 | 2.026E-08 | 0.0001 | 0.000E+00 | 0.0000 | 4.522E-07 | 0.0032 | 5.246E-09 | 0.0000 | 5.760E-09 | 0.0000 | 1.827E-05 | 0.1297 |
| Sr-90 | 4.885E-19 | 0.0000 | 1.740E-22 | 0.0000 | 0.000E+00 | 0.0000 | 1.513E-20 | 0.0000 | 1.574E-21 | 0.0000 | 8.581E-22 | 0.0000 | 6.725E-19 | 0.0000 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.226E-04 | 0.8703 |
| Total | 1.552E-05 | 0.1102 | 2.026E-08 | 0.0001 | 0.000E+00 | 0.0000 | 4.522E-07 | 0.0032 | 5.246E-09 | 0.0000 | 5.760E-09 | 0.0000 | 1.409E-04 | 1.0000 |

***CNRSI(i,p,t) includes contribution from decay daughter radionuclides

# ATTACHMENT 8

# TRENCH UNIT
# RESRAD REPORT
# (on CD only)

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Dose Conversion Factor (and Related) Parameter Summary
Dose Library: FGR 12 & FGR 11

| Menu | Parameter | Current Value# | Base Case* | Parameter Name |
|---|---|---|---|---|
| A-1 | DCF's for external ground radiation, (mrem/yr)/(pCi/g) | | | |
| A-1 | Ac-228 (Source: FGR 12) | 5.978E+00 | 5.978E+00 | DCF1( 1) |
| A-1 | At-218 (Source: FGR 12) | 5.847E-03 | 5.847E-03 | DCF1( 2) |
| A-1 | Ba-137m (Source: FGR 12) | 3.606E+00 | 3.606E+00 | DCF1( 3) |
| A-1 | Bi-210 (Source: FGR 12) | 3.606E-03 | 3.606E-03 | DCF1( 4) |
| A-1 | Bi-212 (Source: FGR 12) | 1.171E+00 | 1.171E+00 | DCF1( 5) |
| A-1 | Bi-214 (Source: FGR 12) | 9.808E+00 | 9.808E+00 | DCF1( 6) |
| A-1 | Cs-137 (Source: FGR 12) | 7.510E-04 | 7.510E-04 | DCF1( 7) |
| A-1 | Pb-210 (Source: FGR 12) | 2.447E-03 | 2.447E-03 | DCF1( 8) |
| A-1 | Pb-212 (Source: FGR 12) | 7.043E-01 | 7.043E-01 | DCF1( 9) |
| A-1 | Pb-214 (Source: FGR 12) | 1.341E+00 | 1.341E+00 | DCF1( 10) |
| A-1 | Po-210 (Source: FGR 12) | 5.231E-05 | 5.231E-05 | DCF1( 11) |
| A-1 | Po-212 (Source: FGR 12) | 0.000E+00 | 0.000E+00 | DCF1( 12) |
| A-1 | Po-214 (Source: FGR 12) | 5.138E-04 | 5.138E-04 | DCF1( 13) |
| A-1 | Po-216 (Source: FGR 12) | 1.042E-04 | 1.042E-04 | DCF1( 14) |
| A-1 | Po-218 (Source: FGR 12) | 5.642E-05 | 5.642E-05 | DCF1( 15) |
| A-1 | Ra-224 (Source: FGR 12) | 5.119E-02 | 5.119E-02 | DCF1( 16) |
| A-1 | Ra-226 (Source: FGR 12) | 3.176E-02 | 3.176E-02 | DCF1( 17) |
| A-1 | Ra-228 (Source: FGR 12) | 0.000E+00 | 0.000E+00 | DCF1( 18) |
| A-1 | Rn-220 (Source: FGR 12) | 2.298E-03 | 2.298E-03 | DCF1( 19) |
| A-1 | Rn-222 (Source: FGR 12) | 2.354E-03 | 2.354E-03 | DCF1( 20) |
| A-1 | Sr-90 (Source: FGR 12) | 7.043E-04 | 7.043E-04 | DCF1( 21) |
| A-1 | Th-228 (Source: FGR 12) | 7.940E-03 | 7.940E-03 | DCF1( 22) |
| A-1 | Th-232 (Source: FGR 12) | 5.212E-04 | 5.212E-04 | DCF1( 23) |
| A-1 | Tl-208 (Source: FGR 12) | 2.298E+01 | 2.298E+01 | DCF1( 24) |
| A-1 | Tl-210 (Source: no data) | 0.000E+00 | -2.000E+00 | DCF1( 25) |
| A-1 | Y-90 (Source: FGR 12) | 2.391E-02 | 2.391E-02 | DCF1( 26) |
| | | | | |
| B-1 | Dose conversion factors for inhalation, mrem/pCi: | | | |
| B-1 | Cs-137+D | 3.190E-05 | 3.190E-05 | DCF2( 1) |
| B-1 | Pb-210+D | 2.320E-02 | 1.360E-02 | DCF2( 2) |
| B-1 | Ra-226+D | 8.594E-03 | 8.580E-03 | DCF2( 3) |
| B-1 | Ra-228+D | 5.078E-03 | 4.770E-03 | DCF2( 4) |
| B-1 | Sr-90+D | 1.308E-03 | 1.300E-03 | DCF2( 5) |
| B-1 | Th-228+D | 3.454E-01 | 3.420E-01 | DCF2( 6) |
| B-1 | Th-232 | 1.640E+00 | 1.640E+00 | DCF2( 7) |
| | | | | |
| D-1 | Dose conversion factors for ingestion, mrem/pCi: | | | |
| D-1 | Cs-137+D | 5.000E-05 | 5.000E-05 | DCF3( 1) |
| D-1 | Pb-210+D | 7.276E-03 | 5.370E-03 | DCF3( 2) |
| D-1 | Ra-226+D | 1.321E-03 | 1.320E-03 | DCF3( 3) |
| D-1 | Ra-228+D | 1.442E-03 | 1.440E-03 | DCF3( 4) |
| D-1 | Sr-90+D | 1.528E-04 | 1.420E-04 | DCF3( 5) |
| D-1 | Th-228+D | 8.086E-04 | 3.960E-04 | DCF3( 6) |
| D-1 | Th-232 | 2.730E-03 | 2.730E-03 | DCF3( 7) |
| | | | | |
| D-34 | Food transfer factors: | | | |
| D-34 | Cs-137+D , plant/soil concentration ratio, dimensionless | 4.000E-02 | 4.000E-02 | RTF( 1,1) |
| D-34 | Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 3.000E-02 | 3.000E-02 | RTF( 1,2) |
| D-34 | Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 8.000E-03 | 8.000E-03 | RTF( 1,3) |

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: FGR 12 & FGR 11

| Menu | Parameter | Current Value# | Base Case* | Parameter Name |
|---|---|---|---|---|
| D-34 | Pb-210+D , plant/soil concentration ratio, dimensionless | 1.000E-02 | 1.000E-02 | RTF( 2,1) |
| D-34 | Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 8.000E-04 | 8.000E-04 | RTF( 2,2) |
| D-34 | Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 3.000E-04 | 3.000E-04 | RTF( 2,3) |
| D-34 | | | | |
| D-34 | Ra-226+D , plant/soil concentration ratio, dimensionless | 4.000E-02 | 4.000E-02 | RTF( 3,1) |
| D-34 | Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-03 | 1.000E-03 | RTF( 3,2) |
| D-34 | Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 1.000E-03 | 1.000E-03 | RTF( 3,3) |
| D-34 | | | | |
| D-34 | Ra-228+D , plant/soil concentration ratio, dimensionless | 4.000E-02 | 4.000E-02 | RTF( 4,1) |
| D-34 | Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-03 | 1.000E-03 | RTF( 4,2) |
| D-34 | Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 1.000E-03 | 1.000E-03 | RTF( 4,3) |
| D-34 | | | | |
| D-34 | Sr-90+D , plant/soil concentration ratio, dimensionless | 3.000E-01 | 3.000E-01 | RTF( 5,1) |
| D-34 | Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 8.000E-03 | 8.000E-03 | RTF( 5,2) |
| D-34 | Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 2.000E-03 | 2.000E-03 | RTF( 5,3) |
| D-34 | | | | |
| D-34 | Th-228+D , plant/soil concentration ratio, dimensionless | 1.000E-03 | 1.000E-03 | RTF( 6,1) |
| D-34 | Th-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-04 | 1.000E-04 | RTF( 6,2) |
| D-34 | Th-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 5.000E-06 | 5.000E-06 | RTF( 6,3) |
| D-34 | | | | |
| D-34 | Th-232 , plant/soil concentration ratio, dimensionless | 1.000E-03 | 1.000E-03 | RTF( 7,1) |
| D-34 | Th-232 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d) | 1.000E-04 | 1.000E-04 | RTF( 7,2) |
| D-34 | Th-232 , milk/livestock-intake ratio, (pCi/L)/(pCi/d) | 5.000E-06 | 5.000E-06 | RTF( 7,3) |
| | | | | |
| D-5 | Bioaccumulation factors, fresh water, L/kg: | | | |
| D-5 | Cs-137+D , fish | 2.000E+03 | 2.000E+03 | BIOFAC( 1,1) |
| D-5 | Cs-137+D , crustacea and mollusks | 1.000E+02 | 1.000E+02 | BIOFAC( 1,2) |
| D-5 | | | | |
| D-5 | Pb-210+D , fish | 3.000E+02 | 3.000E+02 | BIOFAC( 2,1) |
| D-5 | Pb-210+D , crustacea and mollusks | 1.000E+02 | 1.000E+02 | BIOFAC( 2,2) |
| D-5 | | | | |
| D-5 | Ra-226+D , fish | 5.000E+01 | 5.000E+01 | BIOFAC( 3,1) |
| D-5 | Ra-226+D , crustacea and mollusks | 2.500E+02 | 2.500E+02 | BIOFAC( 3,2) |
| D-5 | | | | |
| D-5 | Ra-228+D , fish | 5.000E+01 | 5.000E+01 | BIOFAC( 4,1) |
| D-5 | Ra-228+D , crustacea and mollusks | 2.500E+02 | 2.500E+02 | BIOFAC( 4,2) |
| D-5 | | | | |
| D-5 | Sr-90+D , fish | 6.000E+01 | 6.000E+01 | BIOFAC( 5,1) |
| D-5 | Sr-90+D , crustacea and mollusks | 1.000E+02 | 1.000E+02 | BIOFAC( 5,2) |
| D-5 | | | | |
| D-5 | Th-228+D , fish | 1.000E+02 | 1.000E+02 | BIOFAC( 6,1) |
| D-5 | Th-228+D , crustacea and mollusks | 5.000E+02 | 5.000E+02 | BIOFAC( 6,2) |
| D-5 | | | | |
| D-5 | Th-232 , fish | 1.000E+02 | 1.000E+02 | BIOFAC( 7,1) |
| D-5 | Th-232 , crustacea and mollusks | 5.000E+02 | 5.000E+02 | BIOFAC( 7,2) |

#For DCF1(xxx) only, factors are for infinite depth & area. See ETFG table in Ground Pathway of Detailed Report.

*Base Case means Default.Lib w/o Associate Nuclide contributions.

Summary : RESRAD Default Parameters
File : C:\RESRAD_FAMILY\RESRAD\6.5\USERFILES\PARCEL G SURVEY UNIT 115 TRENCH MDA.RAD

Site-Specific Parameter Summary

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|---|---|---|---|---|---|
| R011 | Area of contaminated zone (m**2) | 2.900E+02 | 1.000E+04 | --- | AREA |
| R011 | Thickness of contaminated zone (m) | 2.000E+00 | 2.000E+00 | --- | THICK0 |
| R011 | Fraction of contamination that is submerged | 0.000E+00 | 0.000E+00 | --- | SUBMFRACT |
| R011 | Length parallel to aquifer flow (m) | 1.703E+01 | 1.000E+02 | --- | LCZPAQ |
| R011 | Basic radiation dose limit (mrem/yr) | 2.500E+01 | 3.000E+01 | --- | BRDL |
| R011 | Time since placement of material (yr) | 0.000E+00 | 0.000E+00 | --- | TI |
| R011 | Times for calculations (yr) | 1.000E+00 | 1.000E+00 | --- | T( 2) |
| R011 | Times for calculations (yr) | 3.000E+00 | 3.000E+00 | --- | T( 3) |
| R011 | Times for calculations (yr) | 1.000E+01 | 1.000E+01 | --- | T( 4) |
| R011 | Times for calculations (yr) | 3.000E+01 | 3.000E+01 | --- | T( 5) |
| R011 | Times for calculations (yr) | 1.000E+02 | 1.000E+02 | --- | T( 6) |
| R011 | Times for calculations (yr) | 3.000E+02 | 3.000E+02 | --- | T( 7) |
| R011 | Times for calculations (yr) | 1.000E+03 | 1.000E+03 | --- | T( 8) |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- | T( 9) |
| R011 | Times for calculations (yr) | not used | 0.000E+00 | --- | T(10) |
| | | | | | |
| R012 | Initial principal radionuclide (pCi/g): Cs-137 | 4.200E-02 | 0.000E+00 | --- | S1(1) |
| R012 | Initial principal radionuclide (pCi/g): Pb-210 | 3.370E-01 | 0.000E+00 | --- | S1(2) |
| R012 | Initial principal radionuclide (pCi/g): Ra-226 | 3.370E-01 | 0.000E+00 | --- | S1(3) |
| R012 | Initial principal radionuclide (pCi/g): Sr-90 | 7.500E-02 | 0.000E+00 | --- | S1(5) |
| R012 | Initial principal radionuclide (pCi/g): Th-232 | 5.070E-01 | 0.000E+00 | --- | S1(7) |
| R012 | Concentration in groundwater (pCi/L): Cs-137 | not used | 0.000E+00 | --- | W1( 1) |
| R012 | Concentration in groundwater (pCi/L): Pb-210 | not used | 0.000E+00 | --- | W1( 2) |
| R012 | Concentration in groundwater (pCi/L): Ra-226 | not used | 0.000E+00 | --- | W1( 3) |
| R012 | Concentration in groundwater (pCi/L): Sr-90 | not used | 0.000E+00 | --- | W1( 5) |
| R012 | Concentration in groundwater (pCi/L): Th-232 | not used | 0.000E+00 | --- | W1( 7) |
| | | | | | |
| R013 | Cover depth (m) | 0.000E+00 | 0.000E+00 | --- | COVER0 |
| R013 | Density of cover material (g/cm**3) | not used | 1.500E+00 | --- | DENSCV |
| R013 | Cover depth erosion rate (m/yr) | not used | 1.000E-03 | --- | VCV |
| R013 | Density of contaminated zone (g/cm**3) | 1.500E+00 | 1.500E+00 | --- | DENSCZ |
| R013 | Contaminated zone erosion rate (m/yr) | 1.000E-03 | 1.000E-03 | --- | VCZ |
| R013 | Contaminated zone total porosity | 4.000E-01 | 4.000E-01 | --- | TPCZ |
| R013 | Contaminated zone field capacity | 2.000E-01 | 2.000E-01 | --- | FCCZ |
| R013 | Contaminated zone hydraulic conductivity (m/yr) | 1.000E+01 | 1.000E+01 | --- | HCCZ |
| R013 | Contaminated zone b parameter | 5.300E+00 | 5.300E+00 | --- | BCZ |
| R013 | Average annual wind speed (m/sec) | 2.000E+00 | 2.000E+00 | --- | WIND |
| R013 | Humidity in air (g/m**3) | not used | 8.000E+00 | --- | HUMID |
| R013 | Evapotranspiration coefficient | 5.000E-01 | 5.000E-01 | --- | EVAPTR |
| R013 | Precipitation (m/yr) | 1.000E+00 | 1.000E+00 | --- | PRECIP |
| R013 | Irrigation (m/yr) | 2.000E-01 | 2.000E-01 | --- | RI |
| R013 | Irrigation mode | overhead | overhead | --- | IDITCH |
| R013 | Runoff coefficient | 2.000E-01 | 2.000E-01 | --- | RUNOFF |
| R013 | Watershed area for nearby stream or pond (m**2) | 1.000E+06 | 1.000E+06 | --- | WAREA |
| R013 | Accuracy for water/soil computations | 1.000E-03 | 1.000E-03 | --- | EPS |
| | | | | | |
| R014 | Density of saturated zone (g/cm**3) | 1.500E+00 | 1.500E+00 | --- | DENSAQ |
| R014 | Saturated zone total porosity | 4.000E-01 | 4.000E-01 | --- | TPSZ |
| R014 | Saturated zone effective porosity | 2.000E-01 | 2.000E-01 | --- | EPSZ |
| R014 | Saturated zone field capacity | 2.000E-01 | 2.000E-01 | --- | FCSZ |

Site-Specific Parameter Summary (continued)

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|---|---|---|---|---|---|
| R014 | Saturated zone hydraulic conductivity (m/yr) | 1.000E+02 | 1.000E+02 | --- | HCSZ |
| R014 | Saturated zone hydraulic gradient | 2.000E-02 | 2.000E-02 | --- | HGWT |
| R014 | Saturated zone b parameter | 5.300E+00 | 5.300E+00 | --- | BSZ |
| R014 | Water table drop rate (m/yr) | 1.000E-03 | 1.000E-03 | --- | VWT |
| R014 | Well pump intake depth (m below water table) | 1.000E+01 | 1.000E+01 | --- | DWIBWT |
| R014 | Model: Nondispersion (ND) or Mass-Balance (MB) | ND | ND | --- | MODEL |
| R014 | Well pumping rate (m**3/yr) | 2.500E+02 | 2.500E+02 | --- | UW |
| | | | | | |
| R015 | Number of unsaturated zone strata | 1 | 1 | --- | NS |
| R015 | Unsat. zone 1, thickness (m) | 4.000E+00 | 4.000E+00 | --- | H(1) |
| R015 | Unsat. zone 1, soil density (g/cm**3) | 1.500E+00 | 1.500E+00 | --- | DENSUZ(1) |
| R015 | Unsat. zone 1, total porosity | 4.000E-01 | 4.000E-01 | --- | TPUZ(1) |
| R015 | Unsat. zone 1, effective porosity | 2.000E-01 | 2.000E-01 | --- | EPUZ(1) |
| R015 | Unsat. zone 1, field capacity | 2.000E-01 | 2.000E-01 | --- | FCUZ(1) |
| R015 | Unsat. zone 1, soil-specific b parameter | 5.300E+00 | 5.300E+00 | --- | BUZ(1) |
| R015 | Unsat. zone 1, hydraulic conductivity (m/yr) | 1.000E+01 | 1.000E+01 | --- | HCUZ(1) |
| | | | | | |
| R016 | Distribution coefficients for Cs-137 | | | | |
| R016 | Contaminated zone (cm**3/g) | 4.600E+03 | 4.600E+03 | --- | DCNUCC( 1) |
| R016 | Unsaturated zone 1 (cm**3/g) | 4.600E+03 | 4.600E+03 | --- | DCNUCU( 1,1) |
| R016 | Saturated zone (cm**3/g) | 4.600E+03 | 4.600E+03 | --- | DCNUCS( 1) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 3.623E-05 | ALEACH( 1) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK( 1) |
| | | | | | |
| R016 | Distribution coefficients for Pb-210 | | | | |
| R016 | Contaminated zone (cm**3/g) | 1.000E+02 | 1.000E+02 | --- | DCNUCC( 2) |
| R016 | Unsaturated zone 1 (cm**3/g) | 1.000E+02 | 1.000E+02 | --- | DCNUCU( 2,1) |
| R016 | Saturated zone (cm**3/g) | 1.000E+02 | 1.000E+02 | --- | DCNUCS( 2) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 1.663E-03 | ALEACH( 2) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK( 2) |
| | | | | | |
| R016 | Distribution coefficients for Ra-226 | | | | |
| R016 | Contaminated zone (cm**3/g) | 7.000E+01 | 7.000E+01 | --- | DCNUCC( 3) |
| R016 | Unsaturated zone 1 (cm**3/g) | 7.000E+01 | 7.000E+01 | --- | DCNUCU( 3,1) |
| R016 | Saturated zone (cm**3/g) | 7.000E+01 | 7.000E+01 | --- | DCNUCS( 3) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 2.374E-03 | ALEACH( 3) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK( 3) |
| | | | | | |
| R016 | Distribution coefficients for Sr-90 | | | | |
| R016 | Contaminated zone (cm**3/g) | 3.000E+01 | 3.000E+01 | --- | DCNUCC( 5) |
| R016 | Unsaturated zone 1 (cm**3/g) | 3.000E+01 | 3.000E+01 | --- | DCNUCU( 5,1) |
| R016 | Saturated zone (cm**3/g) | 3.000E+01 | 3.000E+01 | --- | DCNUCS( 5) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 5.516E-03 | ALEACH( 5) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK( 5) |
| | | | | | |
| R016 | Distribution coefficients for Th-232 | | | | |
| R016 | Contaminated zone (cm**3/g) | 6.000E+04 | 6.000E+04 | --- | DCNUCC( 7) |
| R016 | Unsaturated zone 1 (cm**3/g) | 6.000E+04 | 6.000E+04 | --- | DCNUCU( 7,1) |
| R016 | Saturated zone (cm**3/g) | 6.000E+04 | 6.000E+04 | --- | DCNUCS( 7) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 2.778E-06 | ALEACH( 7) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK( 7) |

Site-Specific Parameter Summary (continued)

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|---|---|---|---|---|---|
| R016 | Distribution coefficients for daughter Ra-228 | | | | |
| R016 | Contaminated zone (cm**3/g) | 7.000E+01 | 7.000E+01 | --- | DCNUCC( 4) |
| R016 | Unsaturated zone 1 (cm**3/g) | 7.000E+01 | 7.000E+01 | --- | DCNUCU( 4,1) |
| R016 | Saturated zone (cm**3/g) | 7.000E+01 | 7.000E+01 | --- | DCNUCS( 4) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 2.374E-03 | ALEACH( 4) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK( 4) |
| | | | | | |
| R016 | Distribution coefficients for daughter Th-228 | | | | |
| R016 | Contaminated zone (cm**3/g) | 6.000E+04 | 6.000E+04 | --- | DCNUCC( 6) |
| R016 | Unsaturated zone 1 (cm**3/g) | 6.000E+04 | 6.000E+04 | --- | DCNUCU( 6,1) |
| R016 | Saturated zone (cm**3/g) | 6.000E+04 | 6.000E+04 | --- | DCNUCS( 6) |
| R016 | Leach rate (/yr) | 0.000E+00 | 0.000E+00 | 2.778E-06 | ALEACH( 6) |
| R016 | Solubility constant | 0.000E+00 | 0.000E+00 | not used | SOLUBK( 6) |
| | | | | | |
| R017 | Inhalation rate (m**3/yr) | 8.400E+03 | 8.400E+03 | --- | INHALR |
| R017 | Mass loading for inhalation (g/m**3) | 1.000E-04 | 1.000E-04 | --- | MLINH |
| R017 | Exposure duration | 3.000E+01 | 3.000E+01 | --- | ED |
| R017 | Shielding factor, inhalation | 4.000E-01 | 4.000E-01 | --- | SHF3 |
| R017 | Shielding factor, external gamma | 7.000E-01 | 7.000E-01 | --- | SHF1 |
| R017 | Fraction of time spent indoors | 5.000E-01 | 5.000E-01 | --- | FIND |
| R017 | Fraction of time spent outdoors (on site) | 2.500E-01 | 2.500E-01 | --- | FOTD |
| R017 | Shape factor flag, external gamma | 1.000E+00 | 1.000E+00 | >0 shows circular AREA. | FS |
| R017 | Radii of shape factor array (used if FS = -1): | | | | |
| R017 | Outer annular radius (m), ring 1: | not used | 5.000E+01 | --- | RAD_SHAPE(1) |
| R017 | Outer annular radius (m), ring 2: | not used | 7.071E+01 | --- | RAD_SHAPE(2) |
| R017 | Outer annular radius (m), ring 3: | not used | 0.000E+00 | --- | RAD_SHAPE(3) |
| R017 | Outer annular radius (m), ring 4: | not used | 0.000E+00 | --- | RAD_SHAPE(4) |
| R017 | Outer annular radius (m), ring 5: | not used | 0.000E+00 | --- | RAD_SHAPE(5) |
| R017 | Outer annular radius (m), ring 6: | not used | 0.000E+00 | --- | RAD_SHAPE(6) |
| R017 | Outer annular radius (m), ring 7: | not used | 0.000E+00 | --- | RAD_SHAPE(7) |
| R017 | Outer annular radius (m), ring 8: | not used | 0.000E+00 | --- | RAD_SHAPE(8) |
| R017 | Outer annular radius (m), ring 9: | not used | 0.000E+00 | --- | RAD_SHAPE(9) |
| R017 | Outer annular radius (m), ring 10: | not used | 0.000E+00 | --- | RAD_SHAPE(10) |
| R017 | Outer annular radius (m), ring 11: | not used | 0.000E+00 | --- | RAD_SHAPE(11) |
| R017 | Outer annular radius (m), ring 12: | not used | 0.000E+00 | --- | RAD_SHAPE(12) |
| | | | | | |
| R017 | Fractions of annular areas within AREA: | | | | |
| R017 | Ring 1 | not used | 1.000E+00 | --- | FRACA( 1) |
| R017 | Ring 2 | not used | 2.732E-01 | --- | FRACA( 2) |
| R017 | Ring 3 | not used | 0.000E+00 | --- | FRACA( 3) |
| R017 | Ring 4 | not used | 0.000E+00 | --- | FRACA( 4) |
| R017 | Ring 5 | not used | 0.000E+00 | --- | FRACA( 5) |
| R017 | Ring 6 | not used | 0.000E+00 | --- | FRACA( 6) |
| R017 | Ring 7 | not used | 0.000E+00 | --- | FRACA( 7) |
| R017 | Ring 8 | not used | 0.000E+00 | --- | FRACA( 8) |
| R017 | Ring 9 | not used | 0.000E+00 | --- | FRACA( 9) |
| R017 | Ring 10 | not used | 0.000E+00 | --- | FRACA(10) |
| R017 | Ring 11 | not used | 0.000E+00 | --- | FRACA(11) |
| R017 | Ring 12 | not used | 0.000E+00 | --- | FRACA(12) |

Site-Specific Parameter Summary (continued)

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|---|---|---|---|---|---|
| R018 | Fruits, vegetables and grain consumption (kg/yr) | 1.600E+02 | 1.600E+02 | --- | DIET(1) |
| R018 | Leafy vegetable consumption (kg/yr) | 1.400E+01 | 1.400E+01 | --- | DIET(2) |
| R018 | Milk consumption (L/yr) | 9.200E+01 | 9.200E+01 | --- | DIET(3) |
| R018 | Meat and poultry consumption (kg/yr) | 6.300E+01 | 6.300E+01 | --- | DIET(4) |
| R018 | Fish consumption (kg/yr) | 5.400E+00 | 5.400E+00 | --- | DIET(5) |
| R018 | Other seafood consumption (kg/yr) | 9.000E-01 | 9.000E-01 | --- | DIET(6) |
| R018 | Soil ingestion rate (g/yr) | 3.650E+01 | 3.650E+01 | --- | SOIL |
| R018 | Drinking water intake (L/yr) | 5.100E+02 | 5.100E+02 | --- | DWI |
| R018 | Contamination fraction of drinking water | 1.000E+00 | 1.000E+00 | --- | FDW |
| R018 | Contamination fraction of household water | not used | 1.000E+00 | --- | FHHW |
| R018 | Contamination fraction of livestock water | 1.000E+00 | 1.000E+00 | --- | FLW |
| R018 | Contamination fraction of irrigation water | 1.000E+00 | 1.000E+00 | --- | FIRW |
| R018 | Contamination fraction of aquatic food | 5.000E-01 | 5.000E-01 | --- | FR9 |
| R018 | Contamination fraction of plant food | -1 | -1 | 0.145E+00 | FPLANT |
| R018 | Contamination fraction of meat | -1 | -1 | 0.145E-01 | FMEAT |
| R018 | Contamination fraction of milk | -1 | -1 | 0.145E-01 | FMILK |
| | | | | | |
| R019 | Livestock fodder intake for meat (kg/day) | 6.800E+01 | 6.800E+01 | --- | LFI5 |
| R019 | Livestock fodder intake for milk (kg/day) | 5.500E+01 | 5.500E+01 | --- | LFI6 |
| R019 | Livestock water intake for meat (L/day) | 5.000E+01 | 5.000E+01 | --- | LWI5 |
| R019 | Livestock water intake for milk (L/day) | 1.600E+02 | 1.600E+02 | --- | LWI6 |
| R019 | Livestock soil intake (kg/day) | 5.000E-01 | 5.000E-01 | --- | LSI |
| R019 | Mass loading for foliar deposition (g/m**3) | 1.000E-04 | 1.000E-04 | --- | MLFD |
| R019 | Depth of soil mixing layer (m) | 1.500E-01 | 1.500E-01 | --- | DM |
| R019 | Depth of roots (m) | 9.000E-01 | 9.000E-01 | --- | DROOT |
| R019 | Drinking water fraction from ground water | 1.000E+00 | 1.000E+00 | --- | FGWDW |
| R019 | Household water fraction from ground water | not used | 1.000E+00 | --- | FGWHH |
| R019 | Livestock water fraction from ground water | 1.000E+00 | 1.000E+00 | --- | FGWLW |
| R019 | Irrigation fraction from ground water | 1.000E+00 | 1.000E+00 | --- | FGWIR |
| | | | | | |
| R19B | Wet weight crop yield for Non-Leafy (kg/m**2) | 7.000E-01 | 7.000E-01 | --- | YV(1) |
| R19B | Wet weight crop yield for Leafy (kg/m**2) | 1.500E+00 | 1.500E+00 | --- | YV(2) |
| R19B | Wet weight crop yield for Fodder (kg/m**2) | 1.100E+00 | 1.100E+00 | --- | YV(3) |
| R19B | Growing Season for Non-Leafy (years) | 1.700E-01 | 1.700E-01 | --- | TE(1) |
| R19B | Growing Season for Leafy (years) | 2.500E-01 | 2.500E-01 | --- | TE(2) |
| R19B | Growing Season for Fodder (years) | 8.000E-02 | 8.000E-02 | --- | TE(3) |
| R19B | Translocation Factor for Non-Leafy | 1.000E-01 | 1.000E-01 | --- | TIV(1) |
| R19B | Translocation Factor for Leafy | 1.000E+00 | 1.000E+00 | --- | TIV(2) |
| R19B | Translocation Factor for Fodder | 1.000E+00 | 1.000E+00 | --- | TIV(3) |
| R19B | Dry Foliar Interception Fraction for Non-Leafy | 2.500E-01 | 2.500E-01 | --- | RDRY(1) |
| R19B | Dry Foliar Interception Fraction for Leafy | 2.500E-01 | 2.500E-01 | --- | RDRY(2) |
| R19B | Dry Foliar Interception Fraction for Fodder | 2.500E-01 | 2.500E-01 | --- | RDRY(3) |
| R19B | Wet Foliar Interception Fraction for Non-Leafy | 2.500E-01 | 2.500E-01 | --- | RWET(1) |
| R19B | Wet Foliar Interception Fraction for Leafy | 2.500E-01 | 2.500E-01 | --- | RWET(2) |
| R19B | Wet Foliar Interception Fraction for Fodder | 2.500E-01 | 2.500E-01 | --- | RWET(3) |
| R19B | Weathering Removal Constant for Vegetation | 2.000E+01 | 2.000E+01 | --- | WLAM |
| | | | | | |
| C14 | C-12 concentration in water (g/cm**3) | not used | 2.000E-05 | --- | C12WTR |
| C14 | C-12 concentration in contaminated soil (g/g) | not used | 3.000E-02 | --- | C12CZ |
| C14 | Fraction of vegetation carbon from soil | not used | 2.000E-02 | --- | CSOIL |

Site-Specific Parameter Summary (continued)

| Menu | Parameter | User Input | Default | Used by RESRAD (If different from user input) | Parameter Name |
|---|---|---|---|---|---|
| C14 | Fraction of vegetation carbon from air | not used | 9.800E-01 | --- | CAIR |
| C14 | C-14 evasion layer thickness in soil (m) | not used | 3.000E-01 | --- | DMC |
| C14 | C-14 evasion flux rate from soil (1/sec) | not used | 7.000E-07 | --- | EVSN |
| C14 | C-12 evasion flux rate from soil (1/sec) | not used | 1.000E-10 | --- | REVSN |
| C14 | Fraction of grain in beef cattle feed | not used | 8.000E-01 | --- | AVFG4 |
| C14 | Fraction of grain in milk cow feed | not used | 2.000E-01 | --- | AVFG5 |
| | | | | | |
| STOR | Storage times of contaminated foodstuffs (days): | | | | |
| STOR | Fruits, non-leafy vegetables, and grain | 1.400E+01 | 1.400E+01 | --- | STOR_T(1) |
| STOR | Leafy vegetables | 1.000E+00 | 1.000E+00 | --- | STOR_T(2) |
| STOR | Milk | 1.000E+00 | 1.000E+00 | --- | STOR_T(3) |
| STOR | Meat and poultry | 2.000E+01 | 2.000E+01 | --- | STOR_T(4) |
| STOR | Fish | 7.000E+00 | 7.000E+00 | --- | STOR_T(5) |
| STOR | Crustacea and mollusks | 7.000E+00 | 7.000E+00 | --- | STOR_T(6) |
| STOR | Well water | 1.000E+00 | 1.000E+00 | --- | STOR_T(7) |
| STOR | Surface water | 1.000E+00 | 1.000E+00 | --- | STOR_T(8) |
| STOR | Livestock fodder | 4.500E+01 | 4.500E+01 | --- | STOR_T(9) |
| | | | | | |
| R021 | Thickness of building foundation (m) | not used | 1.500E-01 | --- | FLOOR1 |
| R021 | Bulk density of building foundation (g/cm**3) | not used | 2.400E+00 | --- | DENSFL |
| R021 | Total porosity of the cover material | not used | 4.000E-01 | --- | TPCV |
| R021 | Total porosity of the building foundation | not used | 1.000E-01 | --- | TPFL |
| R021 | Volumetric water content of the cover material | not used | 5.000E-02 | --- | PH2OCV |
| R021 | Volumetric water content of the foundation | not used | 3.000E-02 | --- | PH2OFL |
| R021 | Diffusion coefficient for radon gas (m/sec): | | | | |
| R021 | in cover material | not used | 2.000E-06 | --- | DIFCV |
| R021 | in foundation material | not used | 3.000E-07 | --- | DIFFL |
| R021 | in contaminated zone soil | not used | 2.000E-06 | --- | DIFCZ |
| R021 | Radon vertical dimension of mixing (m) | not used | 2.000E+00 | --- | HMIX |
| R021 | Average building air exchange rate (1/hr) | not used | 5.000E-01 | --- | REXG |
| R021 | Height of the building (room) (m) | not used | 2.500E+00 | --- | HRM |
| R021 | Building interior area factor | not used | 0.000E+00 | --- | FAI |
| R021 | Building depth below ground surface (m) | not used | -1.000E+00 | --- | DMFL |
| R021 | Emanating power of Rn-222 gas | not used | 2.500E-01 | --- | EMANA(1) |
| R021 | Emanating power of Rn-220 gas | not used | 1.500E-01 | --- | EMANA(2) |
| | | | | | |
| TITL | Number of graphical time points | 32 | --- | --- | NPTS |
| TITL | Maximum number of integration points for dose | 17 | --- | --- | LYMAX |
| TITL | Maximum number of integration points for risk | 257 | --- | --- | KYMAX |

Summary of Pathway Selections

| Pathway | User Selection |
|---|---|
| 1 -- external gamma | active |
| 2 -- inhalation (w/o radon) | active |
| 3 -- plant ingestion | active |
| 4 -- meat ingestion | active |
| 5 -- milk ingestion | active |
| 6 -- aquatic foods | active |
| 7 -- drinking water | active |
| 8 -- soil ingestion | active |
| 9 -- radon | suppressed |
| Find peak pathway doses | suppressed |

| Contaminated Zone Dimensions | | Initial Soil Concentrations, pCi/g | |
|---|---|---|---|
| Area: | 290.00 square meters | Cs-137 | 4.200E-02 |
| Thickness: | 2.00 meters | Pb-210 | 3.370E-01 |
| Cover Depth: | 0.00 meters | Ra-226 | 3.370E-01 |
| | | Sr-90 | 7.500E-02 |
| | | Th-232 | 5.070E-01 |

Total Dose TDOSE(t), mrem/yr
Basic Radiation Dose Limit = 2.500E+01 mrem/yr
Total Mixture Sum M(t) = Fraction of Basic Dose Limit Received at Time (t)

| t (years): | 0.000E+00 | 1.000E+00 | 3.000E+00 | 1.000E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
|---|---|---|---|---|---|---|---|---|
| TDOSE(t): | 3.420E+00 | 3.743E+00 | 4.442E+00 | 6.346E+00 | 7.675E+00 | 7.267E+00 | 6.263E+00 | 7.556E+00 |
| M(t): | 1.368E-01 | 1.497E-01 | 1.777E-01 | 2.539E-01 | 3.070E-01 | 2.907E-01 | 2.505E-01 | 3.023E-01 |

Maximum TDOSE(t): 7.696E+00 mrem/yr at t = 35.45 ± 0.07 years

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.545E+01 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Nuclide | | | | | | | | | | | | | | |
| Cs-137 | 3.169E-02 | 0.0041 | 2.579E-08 | 0.0000 | 0.000E+00 | 0.0000 | 9.223E-04 | 0.0001 | 8.065E-05 | 0.0000 | 2.634E-05 | 0.0000 | 7.255E-06 | 0.0000 |
| Pb-210 | 3.325E-04 | 0.0000 | 1.065E-04 | 0.0000 | 0.000E+00 | 0.0000 | 1.907E-01 | 0.0248 | 6.518E-04 | 0.0001 | 3.176E-04 | 0.0000 | 5.998E-03 | 0.0008 |
| Ra-226 | 1.745E+00 | 0.2268 | 3.297E-04 | 0.0000 | 0.000E+00 | 0.0000 | 7.908E-01 | 0.1028 | 2.513E-03 | 0.0003 | 2.094E-03 | 0.0003 | 1.524E-02 | 0.0020 |
| Sr-90 | 3.284E-04 | 0.0000 | 1.513E-06 | 0.0000 | 0.000E+00 | 0.0000 | 3.024E-02 | 0.0039 | 6.106E-04 | 0.0001 | 1.813E-04 | 0.0000 | 3.171E-05 | 0.0000 |
| Th-232 | 4.047E+00 | 0.5258 | 4.434E-02 | 0.0058 | 0.000E+00 | 0.0000 | 7.618E-01 | 0.0990 | 2.163E-03 | 0.0003 | 2.529E-03 | 0.0003 | 1.974E-02 | 0.0026 |
| Total | 5.825E+00 | 0.7568 | 4.478E-02 | 0.0058 | 0.000E+00 | 0.0000 | 1.774E+00 | 0.2306 | 6.020E-03 | 0.0008 | 5.148E-03 | 0.0007 | 4.102E-02 | 0.0053 |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.545E+01 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All Pathways* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Nuclide | | | | | | | | | | | | | | |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.273E-02 | 0.0043 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.981E-01 | 0.0257 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.556E+00 | 0.3322 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.139E-02 | 0.0041 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.877E+00 | 0.6338 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 7.696E+00 | 1.0000 |

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 7.199E-02 | 0.0210 | 5.859E-08 | 0.0000 | 0.000E+00 | 0.0000 | 2.095E-03 | 0.0006 | 1.832E-04 | 0.0001 | 5.982E-05 | 0.0000 | 1.648E-05 | 0.0000 |
| Pb-210 | 1.061E-03 | 0.0003 | 3.402E-04 | 0.0001 | 0.000E+00 | 0.0000 | 6.087E-01 | 0.1780 | 2.081E-03 | 0.0006 | 1.014E-03 | 0.0003 | 1.915E-02 | 0.0056 |
| Ra-226 | 1.927E+00 | 0.5635 | 1.333E-04 | 0.0000 | 0.000E+00 | 0.0000 | 4.599E-01 | 0.1345 | 1.360E-03 | 0.0004 | 1.623E-03 | 0.0005 | 3.828E-03 | 0.0011 |
| Sr-90 | 9.285E-04 | 0.0003 | 4.278E-06 | 0.0000 | 0.000E+00 | 0.0000 | 8.550E-02 | 0.0250 | 1.726E-03 | 0.0005 | 5.125E-04 | 0.0001 | 8.966E-05 | 0.0000 |
| Th-232 | 1.069E-01 | 0.0313 | 3.684E-02 | 0.0108 | 0.000E+00 | 0.0000 | 7.538E-02 | 0.0220 | 1.636E-04 | 0.0000 | 1.306E-04 | 0.0000 | 1.135E-02 | 0.0033 |
| Total | 2.108E+00 | 0.6164 | 3.732E-02 | 0.0109 | 0.000E+00 | 0.0000 | 1.232E+00 | 0.3601 | 5.514E-03 | 0.0016 | 3.340E-03 | 0.0010 | 3.443E-02 | 0.0101 |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All Pathways* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 7.435E-02 | 0.0217 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.324E-01 | 0.1849 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.394E+00 | 0.7000 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.876E-02 | 0.0259 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.308E-01 | 0.0675 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.420E+00 | 1.0000 |

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 7.034E-02 | 0.0188 | 5.725E-08 | 0.0000 | 0.000E+00 | 0.0000 | 2.047E-03 | 0.0005 | 1.790E-04 | 0.0000 | 5.845E-05 | 0.0000 | 1.610E-05 | 0.0000 |
| Pb-210 | 1.027E-03 | 0.0003 | 3.292E-04 | 0.0001 | 0.000E+00 | 0.0000 | 5.891E-01 | 0.1574 | 2.014E-03 | 0.0005 | 9.814E-04 | 0.0003 | 1.853E-02 | 0.0050 |
| Ra-226 | 1.922E+00 | 0.5135 | 1.433E-04 | 0.0000 | 0.000E+00 | 0.0000 | 4.775E-01 | 0.1276 | 1.423E-03 | 0.0004 | 1.651E-03 | 0.0004 | 4.402E-03 | 0.0012 |
| Sr-90 | 9.017E-04 | 0.0002 | 4.154E-06 | 0.0000 | 0.000E+00 | 0.0000 | 8.303E-02 | 0.0222 | 1.677E-03 | 0.0004 | 4.978E-04 | 0.0001 | 8.707E-05 | 0.0000 |
| Th-232 | 3.600E-01 | 0.0962 | 3.711E-02 | 0.0099 | 0.000E+00 | 0.0000 | 1.546E-01 | 0.0413 | 3.911E-04 | 0.0001 | 4.074E-04 | 0.0001 | 1.207E-02 | 0.0032 |
| Total | 2.354E+00 | 0.6291 | 3.758E-02 | 0.0100 | 0.000E+00 | 0.0000 | 1.306E+00 | 0.3490 | 5.684E-03 | 0.0015 | 3.596E-03 | 0.0010 | 3.511E-02 | 0.0094 |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All Pathways* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 7.265E-02 | 0.0194 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.120E-01 | 0.1635 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.407E+00 | 0.6432 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.620E-02 | 0.0230 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.646E-01 | 0.1509 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.743E+00 | 1.0000 |

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 6.716E-02 | 0.0151 | 5.466E-08 | 0.0000 | 0.000E+00 | 0.0000 | 1.955E-03 | 0.0004 | 1.709E-04 | 0.0000 | 5.581E-05 | 0.0000 | 1.537E-05 | 0.0000 |
| Pb-210 | 9.621E-04 | 0.0002 | 3.084E-04 | 0.0001 | 0.000E+00 | 0.0000 | 5.518E-01 | 0.1242 | 1.886E-03 | 0.0004 | 9.191E-04 | 0.0002 | 1.736E-02 | 0.0039 |
| Ra-226 | 1.911E+00 | 0.4303 | 1.622E-04 | 0.0000 | 0.000E+00 | 0.0000 | 5.102E-01 | 0.1149 | 1.536E-03 | 0.0003 | 1.700E-03 | 0.0004 | 5.490E-03 | 0.0012 |
| Sr-90 | 8.503E-04 | 0.0002 | 3.918E-06 | 0.0000 | 0.000E+00 | 0.0000 | 7.830E-02 | 0.0176 | 1.581E-03 | 0.0004 | 4.694E-04 | 0.0001 | 8.211E-05 | 0.0000 |
| Th-232 | 9.467E-01 | 0.2131 | 3.804E-02 | 0.0086 | 0.000E+00 | 0.0000 | 2.880E-01 | 0.0648 | 7.812E-04 | 0.0002 | 8.764E-04 | 0.0002 | 1.349E-02 | 0.0030 |
| Total | 2.927E+00 | 0.6589 | 3.851E-02 | 0.0087 | 0.000E+00 | 0.0000 | 1.430E+00 | 0.3220 | 5.956E-03 | 0.0013 | 4.021E-03 | 0.0009 | 3.643E-02 | 0.0082 |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+00 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All Pathways* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.936E-02 | 0.0156 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.732E-01 | 0.1290 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.430E+00 | 0.5471 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.129E-02 | 0.0183 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.288E+00 | 0.2899 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.442E+00 | 1.0000 |

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 5.712E-02 | 0.0090 | 4.648E-08 | 0.0000 | 0.000E+00 | 0.0000 | 1.662E-03 | 0.0003 | 1.454E-04 | 0.0000 | 4.746E-05 | 0.0000 | 1.308E-05 | 0.0000 |
| Pb-210 | 7.651E-04 | 0.0001 | 2.452E-04 | 0.0000 | 0.000E+00 | 0.0000 | 4.388E-01 | 0.0691 | 1.500E-03 | 0.0002 | 7.309E-04 | 0.0001 | 1.380E-02 | 0.0022 |
| Ra-226 | 1.874E+00 | 0.2953 | 2.184E-04 | 0.0000 | 0.000E+00 | 0.0000 | 6.065E-01 | 0.0956 | 1.869E-03 | 0.0003 | 1.844E-03 | 0.0003 | 8.724E-03 | 0.0014 |
| Sr-90 | 6.926E-04 | 0.0001 | 3.191E-06 | 0.0000 | 0.000E+00 | 0.0000 | 6.377E-02 | 0.0100 | 1.288E-03 | 0.0002 | 3.823E-04 | 0.0001 | 6.687E-05 | 0.0000 |
| Th-232 | 2.644E+00 | 0.4166 | 4.138E-02 | 0.0065 | 0.000E+00 | 0.0000 | 5.661E-01 | 0.0892 | 1.593E-03 | 0.0003 | 1.848E-03 | 0.0003 | 1.701E-02 | 0.0027 |
| Total | 4.577E+00 | 0.7212 | 4.185E-02 | 0.0066 | 0.000E+00 | 0.0000 | 1.677E+00 | 0.2642 | 6.395E-03 | 0.0010 | 4.853E-03 | 0.0008 | 3.962E-02 | 0.0062 |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+01 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All Pathways* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.899E-02 | 0.0093 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.558E-01 | 0.0718 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.493E+00 | 0.3929 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.620E-02 | 0.0104 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.272E+00 | 0.5156 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.346E+00 | 1.0000 |

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 3.596E-02 | 0.0047 | 2.926E-08 | 0.0000 | 0.000E+00 | 0.0000 | 1.046E-03 | 0.0001 | 9.150E-05 | 0.0000 | 2.988E-05 | 0.0000 | 8.231E-06 | 0.0000 |
| Pb-210 | 3.974E-04 | 0.0001 | 1.274E-04 | 0.0000 | 0.000E+00 | 0.0000 | 2.279E-01 | 0.0297 | 7.792E-04 | 0.0001 | 3.797E-04 | 0.0000 | 7.171E-03 | 0.0009 |
| Ra-226 | 1.772E+00 | 0.2309 | 3.149E-04 | 0.0000 | 0.000E+00 | 0.0000 | 7.674E-01 | 0.1000 | 2.430E-03 | 0.0003 | 2.067E-03 | 0.0003 | 1.435E-02 | 0.0019 |
| Sr-90 | 3.853E-04 | 0.0001 | 1.775E-06 | 0.0000 | 0.000E+00 | 0.0000 | 3.548E-02 | 0.0046 | 7.165E-04 | 0.0001 | 2.127E-04 | 0.0000 | 3.720E-05 | 0.0000 |
| Th-232 | 3.984E+00 | 0.5191 | 4.421E-02 | 0.0058 | 0.000E+00 | 0.0000 | 7.532E-01 | 0.0981 | 2.138E-03 | 0.0003 | 2.499E-03 | 0.0003 | 1.962E-02 | 0.0026 |
| Total | 5.793E+00 | 0.7548 | 4.466E-02 | 0.0058 | 0.000E+00 | 0.0000 | 1.785E+00 | 0.2326 | 6.156E-03 | 0.0008 | 5.188E-03 | 0.0007 | 4.119E-02 | 0.0054 |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All Pathways* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.713E-02 | 0.0048 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.368E-01 | 0.0308 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.559E+00 | 0.3334 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.683E-02 | 0.0048 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.806E+00 | 0.6261 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 7.675E+00 | 1.0000 |

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 7.117E-03 | 0.0010 | 5.791E-09 | 0.0000 | 0.000E+00 | 0.0000 | 2.071E-04 | 0.0000 | 1.811E-05 | 0.0000 | 5.913E-06 | 0.0000 | 1.629E-06 | 0.0000 |
| Pb-210 | 4.016E-05 | 0.0000 | 1.287E-05 | 0.0000 | 0.000E+00 | 0.0000 | 2.303E-02 | 0.0032 | 7.874E-05 | 0.0000 | 3.836E-05 | 0.0000 | 7.246E-04 | 0.0001 |
| Ra-226 | 1.456E+00 | 0.2004 | 3.540E-04 | 0.0000 | 0.000E+00 | 0.0000 | 8.010E-01 | 0.1102 | 2.580E-03 | 0.0004 | 1.982E-03 | 0.0003 | 1.716E-02 | 0.0024 |
| Sr-90 | 4.948E-05 | 0.0000 | 2.280E-07 | 0.0000 | 0.000E+00 | 0.0000 | 4.557E-03 | 0.0006 | 9.202E-05 | 0.0000 | 2.732E-05 | 0.0000 | 4.778E-06 | 0.0000 |
| Th-232 | 4.112E+00 | 0.5658 | 4.448E-02 | 0.0061 | 0.000E+00 | 0.0000 | 7.706E-01 | 0.1060 | 2.189E-03 | 0.0003 | 2.559E-03 | 0.0004 | 1.987E-02 | 0.0027 |
| Total | 5.575E+00 | 0.7672 | 4.484E-02 | 0.0062 | 0.000E+00 | 0.0000 | 1.599E+00 | 0.2201 | 4.958E-03 | 0.0007 | 4.613E-03 | 0.0006 | 3.775E-02 | 0.0052 |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All Pathways* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 7.349E-03 | 0.0010 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.392E-02 | 0.0033 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.279E+00 | 0.3137 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.730E-03 | 0.0007 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.951E+00 | 0.6814 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 7.267E+00 | 1.0000 |

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 6.954E-05 | 0.0000 | 5.659E-11 | 0.0000 | 0.000E+00 | 0.0000 | 2.024E-06 | 0.0000 | 1.770E-07 | 0.0000 | 5.779E-08 | 0.0000 | 1.592E-08 | 0.0000 |
| Pb-210 | 5.748E-08 | 0.0000 | 1.842E-08 | 0.0000 | 0.000E+00 | 0.0000 | 3.296E-05 | 0.0000 | 1.127E-07 | 0.0000 | 5.491E-08 | 0.0000 | 1.037E-06 | 0.0000 |
| Ra-226 | 8.308E-01 | 0.1326 | 2.095E-04 | 0.0000 | 0.000E+00 | 0.0000 | 4.705E-01 | 0.0751 | 1.518E-03 | 0.0002 | 1.153E-03 | 0.0002 | 1.021E-02 | 0.0016 |
| Sr-90 | 1.405E-07 | 0.0000 | 6.475E-10 | 0.0000 | 0.000E+00 | 0.0000 | 1.294E-05 | 0.0000 | 2.614E-07 | 0.0000 | 7.759E-08 | 0.0000 | 1.357E-08 | 0.0000 |
| Th-232 | 4.109E+00 | 0.6561 | 4.445E-02 | 0.0071 | 0.000E+00 | 0.0000 | 7.702E-01 | 0.1230 | 2.188E-03 | 0.0003 | 2.558E-03 | 0.0004 | 1.986E-02 | 0.0032 |
| Total | 4.940E+00 | 0.7888 | 4.466E-02 | 0.0071 | 0.000E+00 | 0.0000 | 1.241E+00 | 0.1981 | 3.706E-03 | 0.0006 | 3.711E-03 | 0.0006 | 3.007E-02 | 0.0048 |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+02 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All Pathways* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 7.182E-05 | 0.0000 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.424E-05 | 0.0000 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.314E+00 | 0.2099 |
| Sr-90 | 2.606E-05 | 0.0000 | 7.203E-09 | 0.0000 | 0.000E+00 | 0.0000 | 6.262E-07 | 0.0000 | 6.506E-08 | 0.0000 | 3.551E-08 | 0.0000 | 4.022E-05 | 0.0000 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.949E+00 | 0.7901 |
| Total | 2.606E-05 | 0.0000 | 7.203E-09 | 0.0000 | 0.000E+00 | 0.0000 | 6.262E-07 | 0.0000 | 6.506E-08 | 0.0000 | 3.551E-08 | 0.0000 | 6.263E+00 | 1.0000 |

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 6.415E-12 | 0.0000 | 5.221E-18 | 0.0000 | 0.000E+00 | 0.0000 | 1.867E-13 | 0.0000 | 1.633E-14 | 0.0000 | 5.331E-15 | 0.0000 | 1.469E-15 | 0.0000 |
| Pb-210 | 6.376E-18 | 0.0000 | 2.043E-18 | 0.0000 | 0.000E+00 | 0.0000 | 3.656E-15 | 0.0000 | 1.250E-17 | 0.0000 | 6.091E-18 | 0.0000 | 1.150E-16 | 0.0000 |
| Ra-226 | 1.165E-01 | 0.0154 | 2.938E-05 | 0.0000 | 0.000E+00 | 0.0000 | 6.596E-02 | 0.0087 | 2.128E-04 | 0.0000 | 1.617E-04 | 0.0000 | 1.432E-03 | 0.0002 |
| Sr-90 | 1.716E-16 | 0.0000 | 7.907E-19 | 0.0000 | 0.000E+00 | 0.0000 | 1.580E-14 | 0.0000 | 3.191E-16 | 0.0000 | 9.474E-17 | 0.0000 | 1.657E-17 | 0.0000 |
| Th-232 | 4.101E+00 | 0.5427 | 4.436E-02 | 0.0059 | 0.000E+00 | 0.0000 | 7.687E-01 | 0.1017 | 2.184E-03 | 0.0003 | 2.553E-03 | 0.0003 | 1.982E-02 | 0.0026 |
| Total | 4.218E+00 | 0.5581 | 4.439E-02 | 0.0059 | 0.000E+00 | 0.0000 | 8.346E-01 | 0.1105 | 2.396E-03 | 0.0003 | 2.715E-03 | 0.0004 | 2.125E-02 | 0.0028 |

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All Pathways* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. | mrem/yr | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.625E-12 | 0.0000 |
| Pb-210 | 4.970E-14 | 0.0000 | 5.675E-17 | 0.0000 | 0.000E+00 | 0.0000 | 1.111E-15 | 0.0000 | 1.234E-17 | 0.0000 | 1.013E-17 | 0.0000 | 5.469E-14 | 0.0000 |
| Ra-226 | 2.377E+00 | 0.3145 | 2.337E-03 | 0.0003 | 0.000E+00 | 0.0000 | 5.321E-02 | 0.0070 | 6.203E-04 | 0.0001 | 7.051E-04 | 0.0001 | 2.618E+00 | 0.3464 |
| Sr-90 | 6.263E-14 | 0.0000 | 1.732E-17 | 0.0000 | 0.000E+00 | 0.0000 | 1.506E-15 | 0.0000 | 1.567E-16 | 0.0000 | 8.543E-17 | 0.0000 | 8.080E-14 | 0.0000 |
| Th-232 | 6.125E-31 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.939E+00 | 0.6536 |
| Total | 2.377E+00 | 0.3145 | 2.337E-03 | 0.0003 | 0.000E+00 | 0.0000 | 5.321E-02 | 0.0070 | 6.203E-04 | 0.0001 | 7.051E-04 | 0.0001 | 7.556E+00 | 1.0000 |

*Sum of all water independent and dependent pathways.

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

| Parent (i) | Product (j) | Thread Fraction | DSR(j,t) At Time in Years (mrem/yr)/(pCi/g) 0.000E+00 | 1.000E+00 | 3.000E+00 | 1.000E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
|---|---|---|---|---|---|---|---|---|---|---|
| Cs-137+D | Cs-137+D | 1.000E+00 | 1.770E+00 | 1.730E+00 | 1.651E+00 | 1.404E+00 | 8.841E-01 | 1.750E-01 | 1.710E-03 | 1.577E-10 |
| Pb-210+D | Pb-210+D | 1.000E+00 | 1.877E+00 | 1.816E+00 | 1.701E+00 | 1.353E+00 | 7.026E-01 | 7.099E-02 | 1.016E-04 | 1.623E-13 |
| Ra-226+D | Ra-226+D | 1.000E+00 | 7.070E+00 | 7.050E+00 | 7.011E+00 | 6.874E+00 | 6.499E+00 | 5.340E+00 | 3.046E+00 | 1.833E+00 |
| Ra-226+D | Pb-210+D | 1.000E+00 | 3.455E-02 | 9.265E-02 | 2.011E-01 | 5.246E-01 | 1.094E+00 | 1.424E+00 | 8.545E-01 | 5.935E+00 |
| Ra-226+D | ∑DSR(j) | | 7.104E+00 | 7.143E+00 | 7.212E+00 | 7.399E+00 | 7.593E+00 | 6.764E+00 | 3.900E+00 | 7.768E+00 |
| Sr-90+D | Sr-90+D | 1.000E+00 | 1.183E+00 | 1.149E+00 | 1.084E+00 | 8.827E-01 | 4.911E-01 | 6.307E-02 | 5.363E-04 | 1.077E-12 |
| Th-232 | Th-232 | 1.000E+00 | 1.636E-01 | 1.636E-01 | 1.636E-01 | 1.636E-01 | 1.636E-01 | 1.635E-01 | 1.634E-01 | 1.631E-01 |
| Th-232 | Ra-228+D | 1.000E+00 | 2.571E-01 | 7.402E-01 | 1.547E+00 | 3.216E+00 | 4.335E+00 | 4.439E+00 | 4.437E+00 | 4.428E+00 |
| Th-232 | Th-228+D | 1.000E+00 | 3.450E-02 | 2.099E-01 | 8.300E-01 | 3.074E+00 | 4.980E+00 | 5.163E+00 | 5.160E+00 | 5.150E+00 |
| Th-232 | ∑DSR(j) | | 4.552E-01 | 1.114E+00 | 2.540E+00 | 6.453E+00 | 9.479E+00 | 9.766E+00 | 9.760E+00 | 9.741E+00 |

The DSR includes contributions from associated (half-life ≤ 180 days) daughters.

Single Radionuclide Soil Guidelines G(i,t) in pCi/g
Basic Radiation Dose Limit = 2.500E+01 mrem/yr

| Nuclide (i) | t= 0.000E+00 | 1.000E+00 | 3.000E+00 | 1.000E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
|---|---|---|---|---|---|---|---|---|
| Cs-137 | 1.412E+01 | 1.445E+01 | 1.514E+01 | 1.780E+01 | 2.828E+01 | 1.429E+02 | 1.462E+04 | 1.585E+11 |
| Pb-210 | 1.332E+01 | 1.377E+01 | 1.470E+01 | 1.848E+01 | 3.558E+01 | 3.521E+02 | 2.460E+05 | *7.634E+13 |
| Ra-226 | 3.519E+00 | 3.500E+00 | 3.467E+00 | 3.379E+00 | 3.293E+00 | 3.696E+00 | 6.410E+00 | 3.218E+00 |
| Sr-90 | 2.113E+01 | 2.175E+01 | 2.307E+01 | 2.832E+01 | 5.091E+01 | 3.964E+02 | 4.661E+04 | 2.320E+13 |
| Th-232 | 5.492E+01 | 2.245E+01 | 9.842E+00 | 3.874E+00 | 2.637E+00 | 2.560E+00 | 2.561E+00 | 2.566E+00 |

*At specific activity limit

Summed Dose/Source Ratios DSR(i,t) in (mrem/yr)/(pCi/g)
and Single Radionuclide Soil Guidelines G(i,t) in pCi/g
at tmin = time of minimum single radionuclide soil guideline
and at tmax = time of maximum total dose = 35.45 ± 0.07 years

| Nuclide (i) | Initial (pCi/g) | tmin (years) | DSR(i,tmin) | G(i,tmin) (pCi/g) | DSR(i,tmax) | G(i,tmax) (pCi/g) |
|---|---|---|---|---|---|---|
| Cs-137 | 4.200E-02 | 0.000E+00 | 1.770E+00 | 1.412E+01 | 7.793E-01 | 3.208E+01 |
| Pb-210 | 3.370E-01 | 0.000E+00 | 1.877E+00 | 1.332E+01 | 5.877E-01 | 4.254E+01 |
| Ra-226 | 3.370E-01 | 1.000E+03 | 7.768E+00 | 3.218E+00 | 7.586E+00 | 3.296E+00 |
| Sr-90 | 7.500E-02 | 0.000E+00 | 1.183E+00 | 2.113E+01 | 4.185E-01 | 5.973E+01 |
| Th-232 | 5.070E-01 | 88.3 ± 0.2 | 9.766E+00 | 2.560E+00 | 9.620E+00 | 2.599E+00 |

Individual Nuclide Dose Summed Over All Pathways
Parent Nuclide and Branch Fraction Indicated

| Nuclide (j) | Parent (i) | THF(i) | DOSE (j,t), mrem/yr t= 0.000E+00 | 1.000E+00 | 3.000E+00 | 1.000E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
|---|---|---|---|---|---|---|---|---|---|---|
| Cs-137 | Cs-137 | 1.000E+00 | 7.435E-02 | 7.265E-02 | 6.936E-02 | 5.899E-02 | 3.713E-02 | 7.349E-03 | 7.182E-05 | 6.625E-12 |
| Pb-210 | Pb-210 | 1.000E+00 | 6.324E-01 | 6.120E-01 | 5.732E-01 | 4.558E-01 | 2.368E-02 | 2.392E-02 | 3.424E-05 | 5.469E-14 |
| Pb-210 | Ra-226 | 1.000E+00 | 1.164E-02 | 3.122E-02 | 6.777E-02 | 1.768E-01 | 3.687E-01 | 4.801E-01 | 2.880E-01 | 2.000E+00 |
| Pb-210 | ∑DOSE(j) | | 6.440E-01 | 6.432E-01 | 6.410E-01 | 6.326E-01 | 6.055E-01 | 5.040E-01 | 2.880E-01 | 2.000E+00 |
| Ra-226 | Ra-226 | 1.000E+00 | 2.383E+00 | 2.376E+00 | 2.363E+00 | 2.317E+00 | 2.190E+00 | 1.799E+00 | 1.026E+00 | 6.178E-01 |
| Sr-90 | Sr-90 | 1.000E+00 | 8.876E-02 | 8.620E-02 | 8.129E-02 | 6.620E-02 | 3.683E-02 | 4.730E-03 | 4.022E-05 | 8.080E-14 |
| Th-232 | Th-232 | 1.000E+00 | 8.294E-02 | 8.294E-02 | 8.294E-02 | 8.294E-02 | 8.293E-02 | 8.291E-02 | 8.287E-02 | 8.271E-02 |
| Ra-228 | Th-232 | 1.000E+00 | 1.304E-01 | 3.753E-01 | 7.841E-01 | 1.631E+00 | 2.198E+00 | 2.251E+00 | 2.249E+00 | 2.245E+00 |
| Th-228 | Th-232 | 1.000E+00 | 1.749E-02 | 1.064E-01 | 4.208E-01 | 1.558E+00 | 2.525E+00 | 2.618E+00 | 2.616E+00 | 2.611E+00 |

THF(i) is the thread fraction of the parent nuclide.

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

| Nuclide (j) | Parent (i) | THF(i) | S(j,t), pCi/g t= 0.000E+00 | 1.000E+00 | 3.000E+00 | 1.000E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
|---|---|---|---|---|---|---|---|---|---|---|
| Cs-137 | Cs-137 | 1.000E+00 | 4.200E-02 | 4.104E-02 | 3.918E-02 | 3.332E-02 | 2.098E-02 | 4.152E-03 | 4.057E-05 | 3.743E-12 |
| Pb-210 | Pb-210 | 1.000E+00 | 3.370E-01 | 3.261E-01 | 3.055E-01 | 2.429E-01 | 1.262E-01 | 1.275E-02 | 1.825E-05 | 2.024E-15 |
| Pb-210 | Ra-226 | 1.000E+00 | 0.000E+00 | 1.029E-02 | 2.980E-02 | 8.802E-02 | 1.906E-01 | 2.510E-01 | 1.507E-01 | 2.113E-02 |
| Pb-210 | ∑S(j): | | 3.370E-01 | 3.364E-01 | 3.353E-01 | 3.309E-01 | 3.168E-01 | 2.638E-01 | 1.507E-01 | 2.113E-02 |
| Ra-226 | Ra-226 | 1.000E+00 | 3.370E-01 | 3.361E-01 | 3.342E-01 | 3.277E-01 | 3.098E-01 | 2.545E-01 | 1.452E-01 | 2.035E-02 |
| Sr-90 | Sr-90 | 1.000E+00 | 7.500E-02 | 7.283E-02 | 6.868E-02 | 5.594E-02 | 3.112E-02 | 3.997E-03 | 1.135E-05 | 1.386E-14 |
| Th-232 | Th-232 | 1.000E+00 | 5.070E-01 | 5.070E-01 | 5.070E-01 | 5.070E-01 | 5.070E-01 | 5.069E-01 | 5.066E-01 | 5.056E-01 |
| Ra-228 | Th-232 | 1.000E+00 | 0.000E+00 | 5.751E-02 | 1.533E-01 | 3.518E-01 | 4.847E-01 | 4.971E-01 | 4.968E-01 | 4.958E-01 |
| Th-228 | Th-232 | 1.000E+00 | 0.000E+00 | 9.445E-03 | 6.288E-02 | 2.839E-01 | 4.783E-01 | 4.971E-01 | 4.968E-01 | 4.958E-01 |

THF(i) is the thread fraction of the parent nuclide.

RESCALC.EXE execution time = 3.20 seconds

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Cancer Risk Slope Factors Summary Table
Risk Library: FGR 13 Morbidity

| Menu | Parameter | Current Value | Base Case* | Parameter Name |
|---|---|---|---|---|
| Sf-1 | Ground external radiation slope factors, 1/yr per (pCi/g): | | | |
| Sf-1 | Cs-137+D | 2.55E-06 | 5.32E-10 | SLPF( 1,1) |
| Sf-1 | Pb-210+D | 4.21E-09 | 1.41E-09 | SLPF( 2,1) |
| Sf-1 | Ra-226+D | 8.49E-06 | 2.29E-08 | SLPF( 3,1) |
| Sf-1 | Ra-228+D | 4.53E-06 | 0.00E+00 | SLPF( 4,1) |
| Sf-1 | Sr-90+D | 1.96E-08 | 4.82E-10 | SLPF( 5,1) |
| Sf-1 | Th-228+D | 7.76E-06 | 5.59E-09 | SLPF( 6,1) |
| Sf-1 | Th-232 | 3.42E-10 | 3.42E-10 | SLPF( 7,1) |
| | | | | |
| Sf-2 | Inhalation, slope factors, 1/(pCi): | | | |
| Sf-2 | Cs-137+D | 1.12E-10 | 1.12E-10 | SLPF( 1,2) |
| Sf-2 | Pb-210+D | 3.08E-08 | 1.58E-08 | SLPF( 2,2) |
| Sf-2 | Ra-226+D | 2.83E-08 | 2.82E-08 | SLPF( 3,2) |
| Sf-2 | Ra-228+D | 4.37E-08 | 4.37E-08 | SLPF( 4,2) |
| Sf-2 | Sr-90+D | 4.33E-10 | 4.25E-10 | SLPF( 5,2) |
| Sf-2 | Th-228+D | 1.44E-07 | 1.32E-07 | SLPF( 6,2) |
| Sf-2 | Th-232 | 4.33E-08 | 4.33E-08 | SLPF( 7,2) |
| | | | | |
| Sf-3 | Food ingestion, slope factors, 1/(pCi): | | | |
| Sf-3 | Cs-137+D | 3.74E-11 | 3.74E-11 | SLPF( 1,3) |
| Sf-3 | Pb-210+D | 3.44E-09 | 1.18E-09 | SLPF( 2,3) |
| Sf-3 | Ra-226+D | 5.15E-10 | 5.14E-10 | SLPF( 3,3) |
| Sf-3 | Ra-228+D | 1.43E-09 | 1.43E-09 | SLPF( 4,3) |
| Sf-3 | Sr-90+D | 9.53E-11 | 6.88E-11 | SLPF( 5,3) |
| Sf-3 | Th-228+D | 4.22E-10 | 1.48E-10 | SLPF( 6,3) |
| Sf-3 | Th-232 | 1.33E-10 | 1.33E-10 | SLPF( 7,3) |
| | | | | |
| Sf-3 | Water ingestion, slope factors, 1/(pCi): | | | |
| Sf-3 | Cs-137+D | 3.04E-11 | 3.04E-11 | SLPF( 1,4) |
| Sf-3 | Pb-210+D | 2.66E-09 | 8.81E-10 | SLPF( 2,4) |
| Sf-3 | Ra-226+D | 3.86E-10 | 3.85E-10 | SLPF( 3,4) |
| Sf-3 | Ra-228+D | 1.04E-09 | 1.04E-09 | SLPF( 4,4) |
| Sf-3 | Sr-90+D | 7.40E-11 | 5.59E-11 | SLPF( 5,4) |
| Sf-3 | Th-228+D | 2.99E-10 | 1.07E-10 | SLPF( 6,4) |
| Sf-3 | Th-232 | 1.01E-10 | 1.01E-10 | SLPF( 7,4) |
| | | | | |
| Sf-3 | Soil ingestion, slope factors, 1/(pCi): | | | |
| Sf-3 | Cs-137+D | 3.74E-11 | 3.74E-11 | SLPF( 1,5) |
| Sf-3 | Pb-210+D | 3.44E-09 | 1.18E-09 | SLPF( 2,5) |
| Sf-3 | Ra-226+D | 5.15E-10 | 5.14E-10 | SLPF( 3,5) |
| Sf-3 | Ra-228+D | 1.43E-09 | 1.43E-09 | SLPF( 4,5) |
| Sf-3 | Sr-90+D | 9.53E-11 | 6.88E-11 | SLPF( 5,5) |
| Sf-3 | Th-228+D | 4.22E-10 | 1.48E-10 | SLPF( 6,5) |
| Sf-3 | Th-232 | 1.33E-10 | 1.33E-10 | SLPF( 7,5) |
| | | | | |
| Sf-Rn | Radon Inhalation slope factors, 1/(pCi): | | | |
| Sf-Rn | Rn-222 | 1.80E-12 | 1.80E-12 | SLPFRN(1,1) |
| Sf-Rn | Po-218 | 3.70E-12 | 3.70E-12 | SLPFRN(1,2) |
| Sf-Rn | Pb-214 | 6.20E-12 | 6.20E-12 | SLPFRN(1,3) |
| Sf-Rn | Bi-214 | 1.50E-11 | 1.50E-11 | SLPFRN(1,4) |

Cancer Risk Slope Factors Summary Table (continued)

Risk Library: FGR 13 Morbidity

| Menu | Parameter | Current Value | Base Case* | Parameter Name |
|---|---|---|---|---|
| Sf-Rn | Rn-220 | 1.90E-13 | 1.90E-13 | SLPFRN(2,1) |
| Sf-Rn | Po-216 | 3.00E-15 | 3.00E-15 | SLPFRN(2,2) |
| Sf-Rn | Pb-212 | 3.90E-11 | 3.90E-11 | SLPFRN(2,3) |
| Sf-Rn | Bi-212 | 3.70E-11 | 3.70E-11 | SLPFRN(2,4) |
| | | | | |
| Sf-Rn | Radon K factors, (mrem/WLM): | | | |
| Sf-Rn | Rn-222 Indoor | 7.60E+02 | 7.60E+02 | KFACTR(1,1) |
| Sf-Rn | Rn-222 Outdoor | 5.70E+02 | 5.70E+02 | KFACTR(1,2) |
| Sf-Rn | Rn-220 Indoor | 1.50E+02 | 1.50E+02 | KFACTR(2,1) |
| Sf-Rn | Rn-220 Outdoor | 2.50E+02 | 2.50E+02 | KFACTR(2,2) |

*Base Case means Default.Lib w/o Associate Nuclide contributions.

Risk Slope and Environmental Transport Factors for the Ground Pathway

| Nuclide (i) | Slope(i)* | ETFG(i,t) At Time in Years (dimensionless) t= 0.000E+00 | 1.000E+00 | 3.000E+00 | 1.000E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
|---|---|---|---|---|---|---|---|---|---|
| Ac-228 | 4.530E-06 | 5.114E-01 | 5.114E-01 | 5.114E-01 | 5.114E-01 | 5.114E-01 | 5.114E-01 | 5.114E-01 | 5.114E-01 |
| At-218 | 3.570E-09 | 5.310E-01 | 5.310E-01 | 5.310E-01 | 5.310E-01 | 5.310E-01 | 5.310E-01 | 5.310E-01 | 5.310E-01 |
| Ba-137m | 2.690E-06 | 5.082E-01 | 5.082E-01 | 5.082E-01 | 5.082E-01 | 5.082E-01 | 5.082E-01 | 5.082E-01 | 5.082E-01 |
| Bi-210 | 2.760E-09 | 5.194E-01 | 5.194E-01 | 5.194E-01 | 5.194E-01 | 5.194E-01 | 5.194E-01 | 5.194E-01 | 5.194E-01 |
| Bi-212 | 8.870E-07 | 5.094E-01 | 5.094E-01 | 5.094E-01 | 5.094E-01 | 5.094E-01 | 5.094E-01 | 5.094E-01 | 5.094E-01 |
| Bi-214 | 7.480E-06 | 5.111E-01 | 5.111E-01 | 5.111E-01 | 5.111E-01 | 5.111E-01 | 5.111E-01 | 5.111E-01 | 5.111E-01 |
| Cs-137 | 5.320E-10 | 5.273E-01 | 5.273E-01 | 5.273E-01 | 5.273E-01 | 5.273E-01 | 5.273E-01 | 5.273E-01 | 5.273E-01 |
| Pb-210 | 1.410E-09 | 5.321E-01 | 5.321E-01 | 5.321E-01 | 5.321E-01 | 5.321E-01 | 5.321E-01 | 5.321E-01 | 5.321E-01 |
| Pb-212 | 5.090E-07 | 5.269E-01 | 5.269E-01 | 5.269E-01 | 5.269E-01 | 5.269E-01 | 5.269E-01 | 5.269E-01 | 5.269E-01 |
| Pb-214 | 9.820E-07 | 5.191E-01 | 5.191E-01 | 5.191E-01 | 5.191E-01 | 5.191E-01 | 5.191E-01 | 5.191E-01 | 5.191E-01 |
| Po-210 | 3.950E-11 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 |
| Po-212 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Po-214 | 3.860E-10 | 5.082E-01 | 5.082E-01 | 5.082E-01 | 5.082E-01 | 5.082E-01 | 5.082E-01 | 5.082E-01 | 5.082E-01 |
| Po-216 | 7.870E-11 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 |
| Po-218 | 4.260E-11 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 |
| Ra-224 | 3.720E-08 | 5.264E-01 | 5.264E-01 | 5.264E-01 | 5.264E-01 | 5.264E-01 | 5.264E-01 | 5.264E-01 | 5.264E-01 |
| Ra-226 | 2.290E-08 | 5.300E-01 | 5.300E-01 | 5.300E-01 | 5.300E-01 | 5.300E-01 | 5.300E-01 | 5.300E-01 | 5.300E-01 |
| Ra-228 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Rn-220 | 1.700E-09 | 5.090E-01 | 5.090E-01 | 5.090E-01 | 5.090E-01 | 5.090E-01 | 5.090E-01 | 5.090E-01 | 5.090E-01 |
| Rn-222 | 1.740E-09 | 5.090E-01 | 5.090E-01 | 5.090E-01 | 5.090E-01 | 5.090E-01 | 5.090E-01 | 5.090E-01 | 5.090E-01 |
| Sr-90 | 4.820E-10 | 5.298E-01 | 5.298E-01 | 5.298E-01 | 5.298E-01 | 5.298E-01 | 5.298E-01 | 5.298E-01 | 5.298E-01 |
| Th-228 | 5.590E-09 | 5.306E-01 | 5.306E-01 | 5.306E-01 | 5.306E-01 | 5.306E-01 | 5.306E-01 | 5.306E-01 | 5.306E-01 |
| Th-232 | 3.420E-10 | 5.353E-01 | 5.353E-01 | 5.353E-01 | 5.353E-01 | 5.353E-01 | 5.353E-01 | 5.353E-01 | 5.353E-01 |
| Tl-208 | 1.760E-05 | 5.104E-01 | 5.104E-01 | 5.104E-01 | 5.104E-01 | 5.104E-01 | 5.104E-01 | 5.104E-01 | 5.103E-01 |
| Tl-210 | 0.000E+00 | 6.000E-01 | 6.000E-01 | 6.000E-01 | 6.000E-01 | 6.000E-01 | 6.000E-01 | 6.000E-01 | 6.000E-01 |
| Y-90 | 1.910E-08 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 | 5.098E-01 |

* - Units are 1/yr per (pCi/g) at infinite depth and area. Multiplication by ETFG(i,t) converts to site conditions.

Amount of Intake Quantities QINT(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As pCi/yr at t= 0.000E+00 years

| Radio- | Water Independent Pathways (Inhalation w/o radon) | | | | | Water Dependent Pathways | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | Inhalation | Plant | Meat | Milk | Soil | Water | Fish | Plant | Meat | Milk | Ingestion* |
| Cs-137 | 1.858E-03 | 4.239E+01 | 3.707E+00 | 1.210E+00 | 3.334E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.764E+01 |
| Pb-210 | 1.491E-02 | 8.503E+01 | 2.907E-01 | 1.416E-01 | 2.675E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.814E+01 |
| Ra-226 | 1.491E-02 | 3.401E+02 | 9.913E-01 | 1.214E+00 | 2.675E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.450E+02 |
| Ra-228 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Sr-90 | 3.318E-03 | 5.677E+02 | 1.146E+01 | 3.402E+00 | 5.954E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.831E+02 |
| Th-228 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Th-232 | 2.243E-02 | 1.280E+01 | 2.632E-02 | 1.877E-03 | 4.025E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.686E+01 |

* Sum of all ingestion pathways, i.e. water independent plant, meat, milk, soil
and water-dependent water, fish, plant, meat, milk pathways

Amount of Intake Quantities QINT9(irn,i,t) and QINT9W(irn,i,t) for Inhalation of
Radon and its Decay Products as pCi/yr at t= 0.000E+00 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.175E-06 | 0.0085 | 4.501E-12 | 0.0000 | 3.429E-08 | 0.0002 | 2.998E-09 | 0.0000 | 9.791E-10 | 0.0000 | 2.697E-10 | 0.0000 |
| Pb-210 | 2.164E-08 | 0.0002 | 1.336E-08 | 0.0001 | 8.559E-06 | 0.0617 | 2.946E-08 | 0.0002 | 1.430E-08 | 0.0001 | 2.684E-07 | 0.0019 |
| Ra-226 | 4.214E-05 | 0.3039 | 1.213E-08 | 0.0001 | 5.037E-06 | 0.0363 | 1.469E-08 | 0.0001 | 1.798E-08 | 0.0001 | 3.962E-08 | 0.0003 |
| Ra-228 | 2.542E-05 | 0.1833 | 2.123E-08 | 0.0002 | 1.578E-05 | 0.1138 | 4.512E-08 | 0.0003 | 5.573E-08 | 0.0004 | 1.248E-07 | 0.0009 |
| Sr-90 | 1.495E-08 | 0.0001 | 2.869E-11 | 0.0000 | 1.080E-06 | 0.0078 | 2.180E-08 | 0.0002 | 6.473E-09 | 0.0000 | 1.132E-09 | 0.0000 |
| Th-228 | 3.836E-05 | 0.2767 | 6.155E-08 | 0.0004 | 1.610E-07 | 0.0012 | 5.166E-10 | 0.0000 | 3.424E-11 | 0.0000 | 3.240E-08 | 0.0002 |
| Th-232 | 2.784E-09 | 0.0000 | 2.913E-08 | 0.0002 | 5.108E-08 | 0.0004 | 1.050E-10 | 0.0000 | 7.491E-12 | 0.0000 | 1.606E-08 | 0.0001 |
| Total | 1.071E-04 | 0.7726 | 1.374E-07 | 0.0010 | 3.070E-05 | 0.2214 | 1.147E-07 | 0.0008 | 9.551E-08 | 0.0007 | 4.827E-07 | 0.0035 |

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 0.000E+00 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Plant | | Meat | | Milk | | All Pathways** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.214E-06 | 0.0088 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.906E-06 | 0.0642 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.726E-05 | 0.3408 |
| Ra-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.144E-05 | 0.2989 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.124E-06 | 0.0081 |
| Th-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.862E-05 | 0.2785 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 9.917E-08 | 0.0007 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.387E-04 | 1.0000 |

** Sum of water independent ground, inhalation, plant, meat, milk, soil
and water dependent water, fish, plant, meat, milk pathways

Excess Cancer Risks CNRS9(irn,i,t) and CNRS9W(irn,i,t) for Inhalation of
Radon and its Decay Products at t= 0.000E+00 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.175E-06 | 0.0085 | 4.501E-12 | 0.0000 | 0.000E+00 | 0.0000 | 3.429E-08 | 0.0002 | 2.998E-09 | 0.0000 | 9.791E-10 | 0.0000 | 2.697E-10 | 0.0000 |
| Pb-210 | 1.419E-08 | 0.0001 | 8.759E-09 | 0.0001 | 0.000E+00 | 0.0000 | 5.593E-06 | 0.0403 | 1.912E-08 | 0.0001 | 9.317E-09 | 0.0001 | 1.760E-07 | 0.0013 |
| Ra-226 | 4.214E-05 | 0.3039 | 1.673E-08 | 0.0001 | 0.000E+00 | 0.0000 | 8.003E-06 | 0.0577 | 2.503E-08 | 0.0002 | 2.297E-08 | 0.0002 | 1.321E-07 | 0.0010 |
| Sr-90 | 1.495E-08 | 0.0001 | 2.869E-11 | 0.0000 | 0.000E+00 | 0.0000 | 1.080E-06 | 0.0078 | 2.180E-08 | 0.0002 | 6.473E-09 | 0.0000 | 1.132E-09 | 0.0000 |
| Th-232 | 6.378E-05 | 0.4600 | 1.119E-07 | 0.0008 | 0.000E+00 | 0.0000 | 1.599E-05 | 0.1153 | 4.575E-08 | 0.0003 | 5.578E-08 | 0.0004 | 1.733E-07 | 0.0012 |
| Total | 1.071E-04 | 0.7726 | 1.374E-07 | 0.0010 | 0.000E+00 | 0.0000 | 3.070E-05 | 0.2214 | 1.147E-07 | 0.0008 | 9.551E-08 | 0.0007 | 4.827E-07 | 0.0035 |

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 0.000E+00 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All pathways | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.214E-06 | 0.0088 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.821E-06 | 0.0420 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.034E-05 | 0.3631 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.124E-06 | 0.0081 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.016E-05 | 0.5781 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.387E-04 | 1.0000 |

***CNRSI(i,p,t) includes contribution from decay daughter radionuclides

Amount of Intake Quantities QINT(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As pCi/yr at t= 1.000E+00 years

| Radio- | Water Independent Pathways (Inhalation w/o radon) | | | | | Water Dependent Pathways | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | Inhalation | Plant | Meat | Milk | Soil | Water | Fish | Plant | Meat | Milk | Ingestion* |
| Cs-137 | 1.815E-03 | 4.142E+01 | 3.622E+00 | 1.183E+00 | 3.258E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.655E+01 |
| Pb-210 | 1.488E-02 | 8.517E+01 | 2.933E-01 | 1.424E-01 | 2.671E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.828E+01 |
| Ra-226 | 1.487E-02 | 3.392E+02 | 9.889E-01 | 1.211E+00 | 2.668E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.441E+02 |
| Ra-228 | 2.544E-03 | 5.592E+01 | 1.416E-01 | 1.852E-01 | 4.566E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.670E+01 |
| Sr-90 | 3.222E-03 | 5.514E+02 | 1.114E+01 | 3.306E+00 | 5.782E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.664E+02 |
| Th-228 | 4.178E-04 | 9.332E-01 | 3.714E-03 | 2.498E-04 | 7.498E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.012E+00 |
| Th-232 | 2.243E-02 | 1.280E+01 | 2.632E-02 | 1.877E-03 | 4.025E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.686E+01 |

* Sum of all ingestion pathways, i.e. water independent plant, meat, milk, soil
and water-dependent water, fish, plant, meat, milk pathways

Amount of Intake Quantities QINT9(irn,i,t) and QINT9W(irn,i,t) for Inhalation of
Radon and its Decay Products as pCi/yr at t= 1.000E+00 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.148E-06 | 0.0081 | 4.398E-12 | 0.0000 | 3.351E-08 | 0.0002 | 2.930E-09 | 0.0000 | 9.567E-10 | 0.0000 | 2.636E-10 | 0.0000 |
| Pb-210 | 2.160E-08 | 0.0002 | 1.333E-08 | 0.0001 | 8.542E-06 | 0.0601 | 2.942E-08 | 0.0002 | 1.428E-08 | 0.0001 | 2.679E-07 | 0.0019 |
| Ra-226 | 4.202E-05 | 0.2958 | 1.209E-08 | 0.0001 | 5.023E-06 | 0.0354 | 1.465E-08 | 0.0001 | 1.793E-08 | 0.0001 | 3.951E-08 | 0.0003 |
| Ra-228 | 2.647E-05 | 0.1863 | 2.212E-08 | 0.0002 | 1.644E-05 | 0.1157 | 4.700E-08 | 0.0003 | 5.805E-08 | 0.0004 | 1.300E-07 | 0.0009 |
| Sr-90 | 1.452E-08 | 0.0001 | 2.786E-11 | 0.0000 | 1.049E-06 | 0.0074 | 2.118E-08 | 0.0001 | 6.286E-09 | 0.0000 | 1.100E-09 | 0.0000 |
| Th-228 | 4.024E-05 | 0.2833 | 6.457E-08 | 0.0005 | 1.685E-07 | 0.0012 | 5.397E-10 | 0.0000 | 3.578E-11 | 0.0000 | 3.398E-08 | 0.0002 |
| Th-232 | 2.784E-09 | 0.0000 | 2.913E-08 | 0.0002 | 5.108E-08 | 0.0004 | 1.050E-10 | 0.0000 | 7.491E-12 | 0.0000 | 1.606E-08 | 0.0001 |
| Total | 1.099E-04 | 0.7737 | 1.413E-07 | 0.0010 | 3.130E-05 | 0.2203 | 1.158E-07 | 0.0008 | 9.754E-08 | 0.0007 | 4.888E-07 | 0.0034 |

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+00 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Plant | | Meat | | Milk | | All Pathways** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.186E-06 | 0.0083 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.889E-06 | 0.0626 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.713E-05 | 0.3317 |
| Ra-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.317E-05 | 0.3038 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.092E-06 | 0.0077 |
| Th-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.051E-05 | 0.2851 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 9.917E-08 | 0.0007 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.421E-04 | 1.0000 |

** Sum of water independent ground, inhalation, plant, meat, milk, soil
and water dependent water, fish, plant, meat, milk pathways

Excess Cancer Risks CNRS9(irn,i,t) and CNRS9W(irn,i,t) for Inhalation of
Radon and its Decay Products at t= 1.000E+00 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.148E-06 | 0.0081 | 4.398E-12 | 0.0000 | 0.000E+00 | 0.0000 | 3.351E-08 | 0.0002 | 2.930E-09 | 0.0000 | 9.567E-10 | 0.0000 | 2.636E-10 | 0.0000 |
| Pb-210 | 1.373E-08 | 0.0001 | 8.477E-09 | 0.0001 | 0.000E+00 | 0.0000 | 5.413E-06 | 0.0381 | 1.851E-08 | 0.0001 | 9.017E-09 | 0.0001 | 1.703E-07 | 0.0012 |
| Ra-226 | 4.203E-05 | 0.2958 | 1.695E-08 | 0.0001 | 0.000E+00 | 0.0000 | 8.152E-06 | 0.0574 | 2.556E-08 | 0.0002 | 2.319E-08 | 0.0002 | 1.371E-07 | 0.0010 |
| Sr-90 | 1.452E-08 | 0.0001 | 2.786E-11 | 0.0000 | 0.000E+00 | 0.0000 | 1.049E-06 | 0.0074 | 2.118E-08 | 0.0001 | 6.286E-09 | 0.0000 | 1.100E-09 | 0.0000 |
| Th-232 | 6.672E-05 | 0.4696 | 1.158E-07 | 0.0008 | 0.000E+00 | 0.0000 | 1.665E-05 | 0.1172 | 4.764E-08 | 0.0003 | 5.809E-08 | 0.0004 | 1.800E-07 | 0.0013 |
| Total | 1.099E-04 | 0.7737 | 1.413E-07 | 0.0010 | 0.000E+00 | 0.0000 | 3.130E-05 | 0.2203 | 1.158E-07 | 0.0008 | 9.754E-08 | 0.0007 | 4.888E-07 | 0.0034 |

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+00 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All pathways | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.186E-06 | 0.0083 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.633E-06 | 0.0397 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.038E-05 | 0.3546 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.092E-06 | 0.0077 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.378E-05 | 0.5897 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.421E-04 | 1.0000 |

***CNRSI(i,p,t) includes contribution from decay daughter radionuclides

Amount of Intake Quantities QINT(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As pCi/yr at t= 3.000E+00 years

| Radio- | Water Independent Pathways (Inhalation w/o radon) | | | | | Water Dependent Pathways | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | Inhalation | Plant | Meat | Milk | Soil | Water | Fish | Plant | Meat | Milk | Ingestion* |
| Cs-137 | 1.733E-03 | 3.954E+01 | 3.458E+00 | 1.129E+00 | 3.111E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.444E+01 |
| Pb-210 | 1.483E-02 | 8.488E+01 | 2.923E-01 | 1.419E-01 | 2.662E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.798E+01 |
| Ra-226 | 1.478E-02 | 3.373E+02 | 9.834E-01 | 1.204E+00 | 2.653E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.421E+02 |
| Ra-228 | 6.783E-03 | 1.526E+02 | 4.236E-01 | 5.305E-01 | 1.217E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.548E+02 |
| Sr-90 | 3.038E-03 | 5.200E+02 | 1.050E+01 | 3.117E+00 | 5.453E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.341E+02 |
| Th-228 | 2.782E-03 | 3.489E+00 | 1.296E-02 | 8.500E-04 | 4.992E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.002E+00 |
| Th-232 | 2.243E-02 | 1.280E+01 | 2.632E-02 | 1.877E-03 | 4.025E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.686E+01 |

* Sum of all ingestion pathways, i.e. water independent plant, meat, milk, soil
and water-dependent water, fish, plant, meat, milk pathways

Amount of Intake Quantities QINT9(irn,i,t) and QINT9W(irn,i,t) for Inhalation of
Radon and its Decay Products as pCi/yr at t= 3.000E+00 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.096E-06 | 0.0074 | 4.199E-12 | 0.0000 | 3.199E-08 | 0.0002 | 2.797E-09 | 0.0000 | 9.134E-10 | 0.0000 | 2.516E-10 | 0.0000 |
| Pb-210 | 2.151E-08 | 0.0001 | 1.328E-08 | 0.0001 | 8.506E-06 | 0.0574 | 2.929E-08 | 0.0002 | 1.422E-08 | 0.0001 | 2.667E-07 | 0.0018 |
| Ra-226 | 4.178E-05 | 0.2821 | 1.202E-08 | 0.0001 | 4.995E-06 | 0.0337 | 1.456E-08 | 0.0001 | 1.783E-08 | 0.0001 | 3.929E-08 | 0.0003 |
| Ra-228 | 2.821E-05 | 0.1905 | 2.357E-08 | 0.0002 | 1.752E-05 | 0.1183 | 5.017E-08 | 0.0003 | 6.193E-08 | 0.0004 | 1.385E-07 | 0.0009 |
| Sr-90 | 1.370E-08 | 0.0001 | 2.628E-11 | 0.0000 | 9.888E-07 | 0.0067 | 1.997E-08 | 0.0001 | 5.928E-09 | 0.0000 | 1.037E-09 | 0.0000 |
| Th-228 | 4.387E-05 | 0.2961 | 7.038E-08 | 0.0005 | 1.822E-07 | 0.0012 | 5.811E-10 | 0.0000 | 3.854E-11 | 0.0000 | 3.704E-08 | 0.0003 |
| Th-232 | 2.784E-09 | 0.0000 | 2.913E-08 | 0.0002 | 5.108E-08 | 0.0003 | 1.050E-10 | 0.0000 | 7.491E-12 | 0.0000 | 1.606E-08 | 0.0001 |
| Total | 1.150E-04 | 0.7763 | 1.484E-07 | 0.0010 | 3.228E-05 | 0.2179 | 1.175E-07 | 0.0008 | 1.009E-07 | 0.0007 | 4.990E-07 | 0.0034 |

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+00 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Plant | | Meat | | Milk | | All Pathways** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.132E-06 | 0.0076 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.851E-06 | 0.0597 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.686E-05 | 0.3163 |
| Ra-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.601E-05 | 0.3106 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.029E-06 | 0.0069 |
| Th-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.416E-05 | 0.2981 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 9.917E-08 | 0.0007 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.481E-04 | 1.0000 |

** Sum of water independent ground, inhalation, plant, meat, milk, soil
and water dependent water, fish, plant, meat, milk pathways

Excess Cancer Risks CNRS9(irn,i,t) and CNRS9W(irn,i,t) for Inhalation of
Radon and its Decay Products at t= 3.000E+00 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.096E-06 | 0.0074 | 4.199E-12 | 0.0000 | 0.000E+00 | 0.0000 | 3.199E-08 | 0.0002 | 2.797E-09 | 0.0000 | 9.134E-10 | 0.0000 | 2.516E-10 | 0.0000 |
| Pb-210 | 1.286E-08 | 0.0001 | 7.939E-09 | 0.0001 | 0.000E+00 | 0.0000 | 5.070E-06 | 0.0342 | 1.733E-08 | 0.0001 | 8.446E-09 | 0.0001 | 1.595E-07 | 0.0011 |
| Ra-226 | 4.179E-05 | 0.2821 | 1.736E-08 | 0.0001 | 0.000E+00 | 0.0000 | 8.431E-06 | 0.0569 | 2.652E-08 | 0.0002 | 2.360E-08 | 0.0002 | 1.465E-07 | 0.0010 |
| Sr-90 | 1.370E-08 | 0.0001 | 2.628E-11 | 0.0000 | 0.000E+00 | 0.0000 | 9.888E-07 | 0.0067 | 1.997E-08 | 0.0001 | 5.928E-09 | 0.0000 | 1.037E-09 | 0.0000 |
| Th-232 | 7.208E-05 | 0.4866 | 1.231E-07 | 0.0008 | 0.000E+00 | 0.0000 | 1.775E-05 | 0.1198 | 5.085E-08 | 0.0003 | 6.197E-08 | 0.0004 | 1.916E-07 | 0.0013 |
| Total | 1.150E-04 | 0.7763 | 1.484E-07 | 0.0010 | 0.000E+00 | 0.0000 | 3.228E-05 | 0.2179 | 1.175E-07 | 0.0008 | 1.009E-07 | 0.0007 | 4.990E-07 | 0.0034 |

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+00 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All pathways | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.132E-06 | 0.0076 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.276E-06 | 0.0356 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.044E-05 | 0.3405 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.029E-06 | 0.0069 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 9.027E-05 | 0.6093 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.481E-04 | 1.0000 |

***CNRSI(i,p,t) includes contribution from decay daughter radionuclides

Amount of Intake Quantities QINT(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As pCi/yr at t= 1.000E+01 years

| Radio- | Water Independent Pathways (Inhalation w/o radon) | | | | | Water Dependent Pathways | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | Inhalation | Plant | Meat | Milk | Soil | Water | Fish | Plant | Meat | Milk | Ingestion* |
| Cs-137 | 1.474E-03 | 3.363E+01 | 2.941E+00 | 9.603E-01 | 2.645E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.780E+01 |
| Pb-210 | 1.464E-02 | 8.377E+01 | 2.885E-01 | 1.400E-01 | 2.627E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.683E+01 |
| Ra-226 | 1.449E-02 | 3.307E+02 | 9.643E-01 | 1.181E+00 | 2.601E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.355E+02 |
| Ra-228 | 1.556E-02 | 3.529E+02 | 1.008E+00 | 1.245E+00 | 2.793E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.579E+02 |
| Sr-90 | 2.475E-03 | 4.235E+02 | 8.553E+00 | 2.539E+00 | 4.441E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.350E+02 |
| Th-228 | 1.256E-02 | 1.157E+01 | 3.782E-02 | 2.501E-03 | 2.254E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.386E+01 |
| Th-232 | 2.243E-02 | 1.280E+01 | 2.632E-02 | 1.877E-03 | 4.025E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.685E+01 |

* Sum of all ingestion pathways, i.e. water independent plant, meat, milk, soil
and water-dependent water, fish, plant, meat, milk pathways

Amount of Intake Quantities QINT9(irn,i,t) and QINT9W(irn,i,t) for Inhalation of
Radon and its Decay Products as pCi/yr at t= 1.000E+01 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 9.323E-07 | 0.0058 | 3.571E-12 | 0.0000 | 2.721E-08 | 0.0002 | 2.379E-09 | 0.0000 | 7.768E-10 | 0.0000 | 2.140E-10 | 0.0000 |
| Pb-210 | 2.118E-08 | 0.0001 | 1.307E-08 | 0.0001 | 8.377E-06 | 0.0519 | 2.885E-08 | 0.0002 | 1.400E-08 | 0.0001 | 2.627E-07 | 0.0016 |
| Ra-226 | 4.097E-05 | 0.2541 | 1.179E-08 | 0.0001 | 4.898E-06 | 0.0304 | 1.428E-08 | 0.0001 | 1.748E-08 | 0.0001 | 3.853E-08 | 0.0002 |
| Ra-228 | 3.187E-05 | 0.1977 | 2.662E-08 | 0.0002 | 1.981E-05 | 0.1228 | 5.682E-08 | 0.0004 | 7.008E-08 | 0.0004 | 1.565E-07 | 0.0010 |
| Sr-90 | 1.115E-08 | 0.0001 | 2.140E-11 | 0.0000 | 8.054E-07 | 0.0050 | 1.626E-08 | 0.0001 | 4.828E-09 | 0.0000 | 8.445E-10 | 0.0000 |
| Th-228 | 5.236E-05 | 0.3247 | 8.400E-08 | 0.0005 | 2.134E-07 | 0.0013 | 6.730E-10 | 0.0000 | 4.468E-11 | 0.0000 | 4.421E-08 | 0.0003 |
| Th-232 | 2.784E-09 | 0.0000 | 2.913E-08 | 0.0002 | 5.108E-08 | 0.0003 | 1.050E-10 | 0.0000 | 7.491E-12 | 0.0000 | 1.606E-08 | 0.0001 |
| Total | 1.262E-04 | 0.7824 | 1.646E-07 | 0.0010 | 3.418E-05 | 0.2119 | 1.194E-07 | 0.0007 | 1.072E-07 | 0.0007 | 5.190E-07 | 0.0032 |

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+01 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Plant | | Meat | | Milk | | All Pathways** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 9.629E-07 | 0.0060 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.716E-06 | 0.0541 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.595E-05 | 0.2850 |
| Ra-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.199E-05 | 0.3224 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.385E-07 | 0.0052 |
| Th-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.270E-05 | 0.3268 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 9.916E-08 | 0.0006 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.613E-04 | 1.0000 |

** Sum of water independent ground, inhalation, plant, meat, milk, soil
and water dependent water, fish, plant, meat, milk pathways

Excess Cancer Risks CNRS9(irn,i,t) and CNRS9W(irn,i,t) for Inhalation of
Radon and its Decay Products at t= 1.000E+01 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 9.323E-07 | 0.0058 | 3.571E-12 | 0.0000 | 0.000E+00 | 0.0000 | 2.721E-08 | 0.0002 | 2.379E-09 | 0.0000 | 7.768E-10 | 0.0000 | 2.140E-10 | 0.0000 |
| Pb-210 | 1.023E-08 | 0.0001 | 6.313E-09 | 0.0000 | 0.000E+00 | 0.0000 | 4.031E-06 | 0.0250 | 1.378E-08 | 0.0001 | 6.716E-09 | 0.0000 | 1.268E-07 | 0.0008 |
| Ra-226 | 4.098E-05 | 0.2541 | 1.855E-08 | 0.0001 | 0.000E+00 | 0.0000 | 9.243E-06 | 0.0573 | 2.934E-08 | 0.0002 | 2.477E-08 | 0.0002 | 1.744E-07 | 0.0011 |
| Sr-90 | 1.115E-08 | 0.0001 | 2.140E-11 | 0.0000 | 0.000E+00 | 0.0000 | 8.054E-07 | 0.0050 | 1.626E-08 | 0.0001 | 4.828E-09 | 0.0000 | 8.445E-10 | 0.0000 |
| Th-232 | 8.423E-05 | 0.5224 | 1.398E-07 | 0.0009 | 0.000E+00 | 0.0000 | 2.007E-05 | 0.1245 | 5.760E-08 | 0.0004 | 7.013E-08 | 0.0004 | 2.168E-07 | 0.0013 |
| Total | 1.262E-04 | 0.7824 | 1.646E-07 | 0.0010 | 0.000E+00 | 0.0000 | 3.418E-05 | 0.2119 | 1.194E-07 | 0.0007 | 1.072E-07 | 0.0007 | 5.190E-07 | 0.0032 |

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+01 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All pathways | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 9.629E-07 | 0.0060 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.195E-06 | 0.0260 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.047E-05 | 0.3130 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.385E-07 | 0.0052 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.048E-04 | 0.6498 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.613E-04 | 1.0000 |

***CNRSI(i,p,t) includes contribution from decay daughter radionuclides

Amount of Intake Quantities QINT(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As pCi/yr at t= 3.000E+01 years

| Radio- | Water Independent Pathways (Inhalation w/o radon) | | | | | Water Dependent Pathways | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | Inhalation | Plant | Meat | Milk | Soil | Water | Fish | Plant | Meat | Milk | Ingestion* |
| Cs-137 | 9.279E-04 | 2.117E+01 | 1.851E+00 | 6.045E-01 | 1.665E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.379E+01 |
| Pb-210 | 1.401E-02 | 8.020E+01 | 2.762E-01 | 1.340E-01 | 2.515E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.312E+01 |
| Ra-226 | 1.370E-02 | 3.127E+02 | 9.116E-01 | 1.116E+00 | 2.459E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.172E+02 |
| Ra-228 | 2.144E-02 | 4.871E+02 | 1.399E+00 | 1.724E+00 | 3.848E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.941E+02 |
| Sr-90 | 1.377E-03 | 2.356E+02 | 4.758E+00 | 1.413E+00 | 2.471E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.420E+02 |
| Th-228 | 2.116E-02 | 1.815E+01 | 5.689E-02 | 3.780E-03 | 3.797E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.201E+01 |
| Th-232 | 2.243E-02 | 1.280E+01 | 2.631E-02 | 1.877E-03 | 4.025E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.685E+01 |

* Sum of all ingestion pathways, i.e. water independent plant, meat, milk, soil
and water-dependent water, fish, plant, meat, milk pathways

Amount of Intake Quantities QINT9(irn,i,t) and QINT9W(irn,i,t) for Inhalation of
Radon and its Decay Products as pCi/yr at t= 3.000E+01 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 5.869E-07 | 0.0035 | 2.248E-12 | 0.0000 | 1.713E-08 | 0.0001 | 1.498E-09 | 0.0000 | 4.890E-10 | 0.0000 | 1.347E-10 | 0.0000 |
| Pb-210 | 2.019E-08 | 0.0001 | 1.246E-08 | 0.0001 | 7.985E-06 | 0.0476 | 2.749E-08 | 0.0002 | 1.334E-08 | 0.0001 | 2.504E-07 | 0.0015 |
| Ra-226 | 3.873E-05 | 0.2307 | 1.115E-08 | 0.0001 | 4.631E-06 | 0.0276 | 1.350E-08 | 0.0001 | 1.653E-08 | 0.0001 | 3.642E-08 | 0.0002 |
| Ra-228 | 3.432E-05 | 0.2044 | 2.867E-08 | 0.0002 | 2.134E-05 | 0.1271 | 6.129E-08 | 0.0004 | 7.554E-08 | 0.0004 | 1.685E-07 | 0.0010 |
| Sr-90 | 6.206E-09 | 0.0000 | 1.191E-11 | 0.0000 | 4.480E-07 | 0.0027 | 9.048E-09 | 0.0001 | 2.686E-09 | 0.0000 | 4.698E-10 | 0.0000 |
| Th-228 | 5.863E-05 | 0.3491 | 9.407E-08 | 0.0006 | 2.359E-07 | 0.0014 | 7.378E-10 | 0.0000 | 4.903E-11 | 0.0000 | 4.951E-08 | 0.0003 |
| Th-232 | 2.784E-09 | 0.0000 | 2.913E-08 | 0.0002 | 5.107E-08 | 0.0003 | 1.050E-10 | 0.0000 | 7.490E-12 | 0.0000 | 1.606E-08 | 0.0001 |
| Total | 1.323E-04 | 0.7879 | 1.755E-07 | 0.0010 | 3.470E-05 | 0.2067 | 1.137E-07 | 0.0007 | 1.086E-07 | 0.0006 | 5.215E-07 | 0.0031 |

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+01 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Plant | | Meat | | Milk | | All Pathways** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.062E-07 | 0.0036 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 8.309E-06 | 0.0495 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.344E-05 | 0.2587 |
| Ra-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.599E-05 | 0.3334 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.665E-07 | 0.0028 |
| Th-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.901E-05 | 0.3514 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 9.916E-08 | 0.0006 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.679E-04 | 1.0000 |

** Sum of water independent ground, inhalation, plant, meat, milk, soil
and water dependent water, fish, plant, meat, milk pathways

Excess Cancer Risks CNRS9(irn,i,t) and CNRS9W(irn,i,t) for Inhalation of
Radon and its Decay Products at t= 3.000E+01 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 5.869E-07 | 0.0035 | 2.248E-12 | 0.0000 | 0.000E+00 | 0.0000 | 1.713E-08 | 0.0001 | 1.498E-09 | 0.0000 | 4.890E-10 | 0.0000 | 1.347E-10 | 0.0000 |
| Pb-210 | 5.313E-09 | 0.0000 | 3.279E-09 | 0.0000 | 0.000E+00 | 0.0000 | 2.094E-06 | 0.0125 | 7.160E-09 | 0.0000 | 3.489E-09 | 0.0000 | 6.589E-08 | 0.0004 |
| Ra-226 | 3.875E-05 | 0.2307 | 2.033E-08 | 0.0001 | 0.000E+00 | 0.0000 | 1.052E-05 | 0.0627 | 3.384E-08 | 0.0002 | 2.639E-08 | 0.0002 | 2.209E-07 | 0.0013 |
| Sr-90 | 6.206E-09 | 0.0000 | 1.191E-11 | 0.0000 | 0.000E+00 | 0.0000 | 4.480E-07 | 0.0027 | 9.048E-09 | 0.0001 | 2.686E-09 | 0.0000 | 4.698E-10 | 0.0000 |
| Th-232 | 9.296E-05 | 0.5536 | 1.519E-07 | 0.0009 | 0.000E+00 | 0.0000 | 2.162E-05 | 0.1288 | 6.213E-08 | 0.0004 | 7.560E-08 | 0.0005 | 2.341E-07 | 0.0014 |
| Total | 1.323E-04 | 0.7879 | 1.755E-07 | 0.0010 | 0.000E+00 | 0.0000 | 3.470E-05 | 0.2067 | 1.137E-07 | 0.0007 | 1.086E-07 | 0.0006 | 5.215E-07 | 0.0031 |

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+01 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All pathways | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.062E-07 | 0.0036 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.179E-06 | 0.0130 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.957E-05 | 0.2952 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.665E-07 | 0.0028 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.151E-04 | 0.6854 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.679E-04 | 1.0000 |

***CNRSI(i,p,t) includes contribution from decay daughter radionuclides

Amount of Intake Quantities QINT(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As pCi/yr at t= 1.000E+02 years

| Radio- | Water Independent Pathways (Inhalation w/o radon) | | | | | Water Dependent Pathways | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | Inhalation | Plant | Meat | Milk | Soil | Water | Fish | Plant | Meat | Milk | Ingestion* |
| Cs-137 | 1.837E-04 | 4.190E+00 | 3.664E-01 | 1.196E-01 | 3.296E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.709E+00 |
| Pb-210 | 1.167E-02 | 6.677E+01 | 2.299E-01 | 1.116E-01 | 2.094E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.920E+01 |
| Ra-226 | 1.126E-02 | 2.569E+02 | 7.490E-01 | 9.170E-01 | 2.021E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.606E+02 |
| Ra-228 | 2.199E-02 | 4.996E+02 | 1.435E+00 | 1.769E+00 | 3.946E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.067E+02 |
| Sr-90 | 1.768E-04 | 3.026E+01 | 6.111E-01 | 1.814E-01 | 3.173E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.108E+01 |
| Th-228 | 2.199E-02 | 1.878E+01 | 5.869E-02 | 3.901E-03 | 3.946E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.279E+01 |
| Th-232 | 2.242E-02 | 1.280E+01 | 2.631E-02 | 1.877E-03 | 4.024E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.685E+01 |

* Sum of all ingestion pathways, i.e. water independent plant, meat, milk, soil
and water-dependent water, fish, plant, meat, milk pathways

Amount of Intake Quantities QINT9(irn,i,t) and QINT9W(irn,i,t) for Inhalation of
Radon and its Decay Products as pCi/yr at t= 1.000E+02 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.162E-07 | 0.0007 | 4.449E-13 | 0.0000 | 3.390E-09 | 0.0000 | 2.964E-10 | 0.0000 | 9.679E-11 | 0.0000 | 2.666E-11 | 0.0000 |
| Pb-210 | 1.674E-08 | 0.0001 | 1.033E-08 | 0.0001 | 6.618E-06 | 0.0417 | 2.279E-08 | 0.0001 | 1.106E-08 | 0.0001 | 2.076E-07 | 0.0013 |
| Ra-226 | 3.182E-05 | 0.2004 | 9.158E-09 | 0.0001 | 3.805E-06 | 0.0240 | 1.109E-08 | 0.0001 | 1.358E-08 | 0.0001 | 2.993E-08 | 0.0002 |
| Ra-228 | 3.455E-05 | 0.2175 | 2.886E-08 | 0.0002 | 2.147E-05 | 0.1352 | 6.169E-08 | 0.0004 | 7.604E-08 | 0.0005 | 1.696E-07 | 0.0011 |
| Sr-90 | 7.970E-10 | 0.0000 | 1.529E-12 | 0.0000 | 5.754E-08 | 0.0004 | 1.162E-09 | 0.0000 | 3.450E-10 | 0.0000 | 6.034E-11 | 0.0000 |
| Th-228 | 5.921E-05 | 0.3729 | 9.500E-08 | 0.0006 | 2.380E-07 | 0.0015 | 7.437E-10 | 0.0000 | 4.943E-11 | 0.0000 | 5.000E-08 | 0.0003 |
| Th-232 | 2.783E-09 | 0.0000 | 2.912E-08 | 0.0002 | 5.106E-08 | 0.0003 | 1.050E-10 | 0.0000 | 7.489E-12 | 0.0000 | 1.605E-08 | 0.0001 |
| Total | 1.257E-04 | 0.7916 | 1.725E-07 | 0.0011 | 3.225E-05 | 0.2031 | 9.788E-08 | 0.0006 | 1.012E-07 | 0.0006 | 4.733E-07 | 0.0030 |

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+02 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Plant | | Meat | | Milk | | All Pathways** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.200E-07 | 0.0008 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 6.887E-06 | 0.0434 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.569E-05 | 0.2247 |
| Ra-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.636E-05 | 0.3549 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.991E-08 | 0.0004 |
| Th-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.960E-05 | 0.3753 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 9.914E-08 | 0.0006 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.588E-04 | 1.0000 |

** Sum of water independent ground, inhalation, plant, meat, milk, soil
and water dependent water, fish, plant, meat, milk pathways

Excess Cancer Risks CNRS9(irn,i,t) and CNRS9W(irn,i,t) for Inhalation of
Radon and its Decay Products at t= 1.000E+02 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.162E-07 | 0.0007 | 4.449E-13 | 0.0000 | 0.000E+00 | 0.0000 | 3.390E-09 | 0.0000 | 2.964E-10 | 0.0000 | 9.679E-11 | 0.0000 | 2.666E-11 | 0.0000 |
| Pb-210 | 5.368E-10 | 0.0000 | 3.314E-10 | 0.0000 | 0.000E+00 | 0.0000 | 2.116E-07 | 0.0013 | 7.235E-10 | 0.0000 | 3.525E-10 | 0.0000 | 6.658E-09 | 0.0000 |
| Ra-226 | 3.184E-05 | 0.2005 | 1.916E-08 | 0.0001 | 0.000E+00 | 0.0000 | 1.021E-05 | 0.0643 | 3.316E-08 | 0.0002 | 2.429E-08 | 0.0002 | 2.308E-07 | 0.0015 |
| Sr-90 | 7.970E-10 | 0.0000 | 1.529E-12 | 0.0000 | 0.000E+00 | 0.0000 | 5.754E-08 | 0.0004 | 1.162E-09 | 0.0000 | 3.450E-10 | 0.0000 | 6.034E-11 | 0.0000 |
| Th-232 | 9.376E-05 | 0.5904 | 1.530E-07 | 0.0010 | 0.000E+00 | 0.0000 | 2.176E-05 | 0.1370 | 6.254E-08 | 0.0004 | 7.610E-08 | 0.0005 | 2.357E-07 | 0.0015 |
| Total | 1.257E-04 | 0.7916 | 1.725E-07 | 0.0011 | 0.000E+00 | 0.0000 | 3.225E-05 | 0.2031 | 9.788E-08 | 0.0006 | 1.012E-07 | 0.0006 | 4.733E-07 | 0.0030 |

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+02 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All pathways | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.200E-07 | 0.0008 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.202E-07 | 0.0014 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 4.236E-05 | 0.2667 |
| Sr-90 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.991E-08 | 0.0004 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.161E-04 | 0.7308 |
| Total | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.588E-04 | 1.0000 |

***CNRSI(i,p,t) includes contribution from decay daughter radionuclides

Amount of Intake Quantities QINT(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As pCi/yr at t= 3.000E+02 years

| Radio- | Water Independent Pathways (Inhalation w/o radon) | | | | | Water Dependent Pathways | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | Inhalation | Plant | Meat | Milk | Soil | Water | Fish | Plant | Meat | Milk | Ingestion* |
| Cs-137 | 1.795E-06 | 4.095E-02 | 3.581E-03 | 1.169E-03 | 3.221E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.602E-02 |
| Pb-210 | 6.668E-03 | 3.816E+01 | 1.314E-01 | 6.376E-02 | 1.197E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.955E+01 |
| Ra-226 | 6.422E-03 | 1.465E+02 | 4.272E-01 | 5.231E-01 | 1.153E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.486E+02 |
| Ra-228 | 2.198E-02 | 4.993E+02 | 1.434E+00 | 1.768E+00 | 3.944E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.064E+02 |
| Sr-90 | 5.022E-07 | 8.594E-02 | 1.736E-03 | 5.153E-04 | 9.012E-05 | 1.720E-01 | 4.755E-05 | 4.134E-03 | 4.295E-04 | 2.344E-04 | 2.651E-01 |
| Th-228 | 2.198E-02 | 1.877E+01 | 5.866E-02 | 3.899E-03 | 3.944E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.278E+01 |
| Th-232 | 2.241E-02 | 1.279E+01 | 2.630E-02 | 1.876E-03 | 4.022E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.684E+01 |

* Sum of all ingestion pathways, i.e. water independent plant, meat, milk, soil
and water-dependent water, fish, plant, meat, milk pathways

Amount of Intake Quantities QINT9(irn,i,t) and QINT9W(irn,i,t) for Inhalation of
Radon and its Decay Products as pCi/yr at t= 3.000E+02 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.135E-09 | 0.0000 | 4.348E-15 | 0.0000 | 3.312E-11 | 0.0000 | 2.897E-12 | 0.0000 | 9.458E-13 | 0.0000 | 2.606E-13 | 0.0000 |
| Pb-210 | 9.558E-09 | 0.0001 | 5.900E-09 | 0.0000 | 3.780E-06 | 0.0269 | 1.301E-08 | 0.0001 | 6.316E-09 | 0.0000 | 1.185E-07 | 0.0008 |
| Ra-226 | 1.815E-05 | 0.1294 | 5.224E-09 | 0.0000 | 2.170E-06 | 0.0155 | 6.328E-09 | 0.0000 | 7.747E-09 | 0.0001 | 1.707E-08 | 0.0001 |
| Ra-228 | 3.453E-05 | 0.2461 | 2.884E-08 | 0.0002 | 2.146E-05 | 0.1530 | 6.166E-08 | 0.0004 | 7.600E-08 | 0.0005 | 1.695E-07 | 0.0012 |
| Sr-90 | 2.264E-12 | 0.0000 | 4.343E-15 | 0.0000 | 1.634E-10 | 0.0000 | 3.301E-12 | 0.0000 | 9.798E-13 | 0.0000 | 1.714E-13 | 0.0000 |
| Th-228 | 5.918E-05 | 0.4219 | 9.495E-08 | 0.0007 | 2.378E-07 | 0.0017 | 7.433E-10 | 0.0000 | 4.940E-11 | 0.0000 | 4.998E-08 | 0.0004 |
| Th-232 | 2.782E-09 | 0.0000 | 2.911E-08 | 0.0002 | 5.104E-08 | 0.0004 | 1.049E-10 | 0.0000 | 7.485E-12 | 0.0000 | 1.605E-08 | 0.0001 |
| Total | 1.119E-04 | 0.7975 | 1.640E-07 | 0.0012 | 2.770E-05 | 0.1975 | 8.185E-08 | 0.0006 | 9.012E-08 | 0.0006 | 3.712E-07 | 0.0026 |

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+02 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Plant | | Meat | | Milk | | All Pathways** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.172E-09 | 0.0000 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.933E-06 | 0.0280 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.036E-05 | 0.1451 |
| Ra-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.633E-05 | 0.4015 |
| Sr-90 | 2.952E-10 | 0.0000 | 1.051E-13 | 0.0000 | 9.136E-12 | 0.0000 | 9.493E-13 | 0.0000 | 5.182E-13 | 0.0000 | 4.760E-10 | 0.0000 |
| Th-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.956E-05 | 0.4246 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 9.908E-08 | 0.0007 |
| Total | 2.952E-10 | 0.0000 | 1.051E-13 | 0.0000 | 9.136E-12 | 0.0000 | 9.493E-13 | 0.0000 | 5.182E-13 | 0.0000 | 1.403E-04 | 1.0000 |

** Sum of water independent ground, inhalation, plant, meat, milk, soil
and water dependent water, fish, plant, meat, milk pathways

Excess Cancer Risks CNRS9(irn,i,t) and CNRS9W(irn,i,t) for Inhalation of
Radon and its Decay Products at t= 3.000E+02 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.135E-09 | 0.0000 | 4.348E-15 | 0.0000 | 0.000E+00 | 0.0000 | 3.312E-11 | 0.0000 | 2.897E-12 | 0.0000 | 9.458E-13 | 0.0000 | 2.606E-13 | 0.0000 |
| Pb-210 | 7.683E-13 | 0.0000 | 4.743E-13 | 0.0000 | 0.000E+00 | 0.0000 | 3.029E-10 | 0.0000 | 1.035E-12 | 0.0000 | 5.045E-13 | 0.0000 | 9.529E-12 | 0.0000 |
| Ra-226 | 1.816E-05 | 0.1295 | 1.112E-08 | 0.0001 | 0.000E+00 | 0.0000 | 5.950E-06 | 0.0424 | 1.934E-08 | 0.0001 | 1.406E-08 | 0.0001 | 1.356E-07 | 0.0010 |
| Sr-90 | 2.264E-12 | 0.0000 | 4.343E-15 | 0.0000 | 0.000E+00 | 0.0000 | 1.634E-10 | 0.0000 | 3.301E-12 | 0.0000 | 9.798E-13 | 0.0000 | 1.714E-13 | 0.0000 |
| Th-232 | 9.371E-05 | 0.6680 | 1.529E-07 | 0.0011 | 0.000E+00 | 0.0000 | 2.175E-05 | 0.1551 | 6.251E-08 | 0.0004 | 7.605E-08 | 0.0005 | 2.356E-07 | 0.0017 |
| Total | 1.119E-04 | 0.7975 | 1.640E-07 | 0.0012 | 0.000E+00 | 0.0000 | 2.770E-05 | 0.1975 | 8.185E-08 | 0.0006 | 9.012E-08 | 0.0006 | 3.712E-07 | 0.0026 |

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 3.000E+02 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All pathways | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.172E-09 | 0.0000 |
| Pb-210 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 3.152E-10 | 0.0000 |
| Ra-226 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 2.429E-05 | 0.1732 |
| Sr-90 | 2.952E-10 | 0.0000 | 1.051E-13 | 0.0000 | 0.000E+00 | 0.0000 | 9.136E-12 | 0.0000 | 9.493E-13 | 0.0000 | 5.182E-13 | 0.0000 | 4.760E-10 | 0.0000 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.160E-04 | 0.8268 |
| Total | 2.952E-10 | 0.0000 | 1.051E-13 | 0.0000 | 0.000E+00 | 0.0000 | 9.136E-12 | 0.0000 | 9.493E-13 | 0.0000 | 5.182E-13 | 0.0000 | 1.403E-04 | 1.0000 |

***CNRSI(i,p,t) includes contribution from decay daughter radionuclides

Amount of Intake Quantities QINT(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As pCi/yr at t= 1.000E+03 years

| Radio- | Water Independent Pathways (Inhalation w/o radon) | | | | | Water Dependent Pathways | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | Inhalation | Plant | Meat | Milk | Soil | Water | Fish | Plant | Meat | Milk | Ingestion* |
| Cs-137 | 1.656E-13 | 3.777E-09 | 3.303E-10 | 1.079E-10 | 2.971E-11 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.245E-09 |
| Pb-210 | 9.347E-04 | 5.349E+00 | 1.842E-02 | 8.938E-03 | 1.677E-01 | 2.630E+02 | 3.002E-01 | 5.880E+00 | 6.547E-02 | 5.365E-02 | 2.748E+02 |
| Ra-226 | 9.003E-04 | 2.054E+01 | 5.989E-02 | 7.333E-02 | 1.616E-01 | 3.509E+02 | 1.160E-01 | 7.906E+00 | 1.091E-01 | 2.386E-01 | 3.801E+02 |
| Ra-228 | 2.193E-02 | 4.983E+02 | 1.432E+00 | 1.765E+00 | 3.936E+00 | 4.271E-28 | 0.000E+00 | 9.489E-30 | 0.000E+00 | 0.000E+00 | 5.055E+02 |
| Sr-90 | 6.132E-16 | 1.049E-10 | 2.119E-12 | 6.292E-13 | 1.100E-13 | 4.160E-10 | 1.150E-13 | 1.000E-11 | 1.041E-12 | 5.674E-13 | 5.356E-10 |
| Th-228 | 2.193E-02 | 1.873E+01 | 5.855E-02 | 3.891E-03 | 3.936E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.273E+01 |
| Th-232 | 2.237E-02 | 1.277E+01 | 2.624E-02 | 1.872E-03 | 4.014E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.681E+01 |

* Sum of all ingestion pathways, i.e. water independent plant, meat, milk, soil
and water-dependent water, fish, plant, meat, milk pathways

Amount of Intake Quantities QINT9(irn,i,t) and QINT9W(irn,i,t) for Inhalation of
Radon and its Decay Products as pCi/yr at t= 1.000E+03 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+03 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.047E-16 | 0.0000 | 4.011E-22 | 0.0000 | 3.056E-18 | 0.0000 | 2.672E-19 | 0.0000 | 8.725E-20 | 0.0000 | 2.404E-20 | 0.0000 |
| Pb-210 | 1.340E-09 | 0.0000 | 8.271E-10 | 0.0000 | 5.298E-07 | 0.0037 | 1.824E-09 | 0.0000 | 8.854E-10 | 0.0000 | 1.662E-08 | 0.0001 |
| Ra-226 | 2.545E-06 | 0.0178 | 7.323E-10 | 0.0000 | 3.042E-07 | 0.0021 | 8.870E-10 | 0.0000 | 1.086E-09 | 0.0000 | 2.393E-09 | 0.0000 |
| Ra-228 | 3.446E-05 | 0.2406 | 2.879E-08 | 0.0002 | 2.142E-05 | 0.1495 | 6.154E-08 | 0.0004 | 7.585E-08 | 0.0005 | 1.692E-07 | 0.0012 |
| Sr-90 | 2.764E-21 | 0.0000 | 5.303E-24 | 0.0000 | 1.996E-19 | 0.0000 | 4.030E-21 | 0.0000 | 1.196E-21 | 0.0000 | 2.093E-22 | 0.0000 |
| Th-228 | 5.906E-05 | 0.4123 | 9.477E-08 | 0.0007 | 2.374E-07 | 0.0017 | 7.419E-10 | 0.0000 | 4.931E-11 | 0.0000 | 4.988E-08 | 0.0003 |
| Th-232 | 2.777E-09 | 0.0000 | 2.905E-08 | 0.0002 | 5.094E-08 | 0.0004 | 1.047E-10 | 0.0000 | 7.470E-12 | 0.0000 | 1.601E-08 | 0.0001 |
| Total | 9.607E-05 | 0.6707 | 1.542E-07 | 0.0011 | 2.254E-05 | 0.1574 | 6.510E-08 | 0.0005 | 7.788E-08 | 0.0005 | 2.541E-07 | 0.0018 |

Excess Cancer Risks CNRS(i,p,t) for Individual Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+03 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Plant | | Meat | | Milk | | All Pathways** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.081E-16 | 0.0000 |
| Pb-210 | 1.947E-05 | 0.1359 | 2.878E-08 | 0.0002 | 5.637E-07 | 0.0039 | 6.283E-09 | 0.0000 | 5.145E-09 | 0.0000 | 2.063E-05 | 0.1440 |
| Ra-226 | 3.878E-06 | 0.0271 | 1.712E-09 | 0.0000 | 1.166E-07 | 0.0008 | 1.610E-09 | 0.0000 | 3.520E-09 | 0.0000 | 6.856E-06 | 0.0479 |
| Ra-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.622E-05 | 0.3924 |
| Sr-90 | 6.107E-19 | 0.0000 | 2.174E-22 | 0.0000 | 1.891E-20 | 0.0000 | 1.967E-21 | 0.0000 | 1.073E-21 | 0.0000 | 8.406E-19 | 0.0000 |
| Th-228 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 5.945E-05 | 0.4150 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 9.889E-08 | 0.0007 |
| Total | 2.335E-05 | 0.1630 | 3.049E-08 | 0.0002 | 6.804E-07 | 0.0047 | 7.893E-09 | 0.0001 | 8.665E-09 | 0.0001 | 1.432E-04 | 1.0000 |

** Sum of water independent ground, inhalation, plant, meat, milk, soil
and water dependent water, fish, plant, meat, milk pathways

Excess Cancer Risks CNRS9(irn,i,t) and CNRS9W(irn,i,t) for Inhalation of
Radon and its Decay Products at t= 1.000E+03 years

| Radon | Radionuclides | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pathway | Rn-222 | Po-218 | Pb-214 | Bi-214 | Rn-220 | Po-216 | Pb-212 | Bi-212 |
| Water-ind. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Water-dep. | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Total | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

Water-ind. == Water-independent Water-dep. == Water-dependent

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+03 years

Water Independent Pathways (Inhalation excludes radon)

| Radio- | Ground | | Inhalation | | Radon | | Plant | | Meat | | Milk | | Soil | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 1.047E-16 | 0.0000 | 4.011E-22 | 0.0000 | 0.000E+00 | 0.0000 | 3.056E-18 | 0.0000 | 2.672E-19 | 0.0000 | 8.725E-20 | 0.0000 | 2.404E-20 | 0.0000 |
| Pb-210 | 8.523E-23 | 0.0000 | 5.261E-23 | 0.0000 | 0.000E+00 | 0.0000 | 3.360E-20 | 0.0000 | 1.149E-22 | 0.0000 | 5.596E-23 | 0.0000 | 1.057E-21 | 0.0000 |
| Ra-226 | 2.546E-06 | 0.0178 | 1.559E-09 | 0.0000 | 0.000E+00 | 0.0000 | 8.341E-07 | 0.0058 | 2.711E-09 | 0.0000 | 1.971E-09 | 0.0000 | 1.901E-08 | 0.0001 |
| Sr-90 | 2.764E-21 | 0.0000 | 5.303E-24 | 0.0000 | 0.000E+00 | 0.0000 | 1.996E-19 | 0.0000 | 4.030E-21 | 0.0000 | 1.196E-21 | 0.0000 | 2.093E-22 | 0.0000 |
| Th-232 | 9.352E-05 | 0.6529 | 1.526E-07 | 0.0011 | 0.000E+00 | 0.0000 | 2.171E-05 | 0.1516 | 6.238E-08 | 0.0004 | 7.591E-08 | 0.0005 | 2.351E-07 | 0.0016 |
| Total | 9.607E-05 | 0.6707 | 1.542E-07 | 0.0011 | 0.000E+00 | 0.0000 | 2.254E-05 | 0.1574 | 6.510E-08 | 0.0005 | 7.788E-08 | 0.0005 | 2.541E-07 | 0.0018 |

Total Excess Cancer Risk CNRS(i,p,t)*** for Initially Existent Radionuclides (i) and Pathways (p)
and Fraction of Total Risk at t= 1.000E+03 years

Water Dependent Pathways

| Radio- | Water | | Fish | | Radon | | Plant | | Meat | | Milk | | All pathways | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclide | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. | risk | fract. |
| Cs-137 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.081E-16 | 0.0000 |
| Pb-210 | 3.711E-19 | 0.0000 | 5.485E-22 | 0.0000 | 0.000E+00 | 0.0000 | 1.074E-20 | 0.0000 | 1.193E-22 | 0.0000 | 9.790E-23 | 0.0000 | 4.175E-19 | 0.0000 |
| Ra-226 | 2.335E-05 | 0.1630 | 3.049E-08 | 0.0002 | 0.000E+00 | 0.0000 | 6.804E-07 | 0.0047 | 7.893E-09 | 0.0001 | 8.665E-09 | 0.0001 | 2.748E-05 | 0.1919 |
| Sr-90 | 6.107E-19 | 0.0000 | 2.174E-22 | 0.0000 | 0.000E+00 | 0.0000 | 1.891E-20 | 0.0000 | 1.967E-21 | 0.0000 | 1.073E-21 | 0.0000 | 8.406E-19 | 0.0000 |
| Th-232 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 0.000E+00 | 0.0000 | 1.158E-04 | 0.8081 |
| Total | 2.335E-05 | 0.1630 | 3.049E-08 | 0.0002 | 0.000E+00 | 0.0000 | 6.804E-07 | 0.0047 | 7.893E-09 | 0.0001 | 8.665E-09 | 0.0001 | 1.432E-04 | 1.0000 |

***CNRSI(i,p,t) includes contribution from decay daughter radionuclides

# ATTACHMENT 9

# RESPONSE TO COMMENTS

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**RESPONSE TO COMMENTS**
**DRAFT SURVEY UNIT PROJECT REPORTS FOR SURVEY UNITS 100, 101, 102, AND 115 (WORK PACKAGE 12)**
**PARCEL G SANITARY SEWER AND STORM DRAIN REMOVAL PROJECT**
**HUNTERS POINT SHIPYARD**
**SAN FRANCISCO, CALIFORNIA**

Comments from Ryan Miya, Ph.D.
Senior Hazardous Substances Scientist
San Francisco Peninsula Team Leader
Brownfields and Environmental Restoration Program – Berkeley
Department of Toxic Substances Control

Comments Dated: April 20, 2010

| GENERAL COMMENTS TO ALL DRAFT SUPRs | RESPONSE |
|---|---|
| **Comment 1. Section 1.2 – Background.** The specific radionuclides of concern (ROCs) should also be listed and briefly described in this section as it pertains to each survey unit The same comment applies to Section 3.2 – Survey Units. | **Response 1.** The sanitary sewer and storm drain systems are being removed due to the potential for radioactive materials to be present inside the piping and surrounding soils. The Navy has provided this information in the Survey Unit Project Report Abstract (SUPRA), Section 2.0. The intent of the SUPRA is to eliminate the need for repeating information applicable to all sanitary sewer and storm drain survey units. |
| **Comment 2. Section 3.2 - Survey Units.** Please note if any of the soil and materials removed as a component of the trench survey unit remediation had any visual staining observed which could indicate the potential presence of the other contaminants of concern identified within applicable IR Sites. | **Response 2.** No visible staining was noted in any of the soil or materials removed as a component of the trench survey unit remediation. Therefore, no additional chemical sampling was performed. |
| **Comment 3. Section 3.2.1 – Trench Survey Unit.** Please summarize the approximate total length of pipe segments removed, the volume of radiologically-impacted soil remediated, and the total volume of soil removed from each trench survey unit. | **Response 3.** The Navy will provide this information in the Removal Action Completion Report (RACR) for the appropriate parcel. |
| **Comment 4. Section 3.2.2 – Excavated Soil Unit 33, and 108 as applicable.** Please specify if any additional analyses on the excavated soil units 33 and 108 (beyond the radiological analyses) were conducted in order to verify the quality of the backfill. | **Response 4.** The Navy conducted additional soil analyses only if the excavated soil came from an identified Installation Restoration site. If the excavated soil was not obtained from an Installation Restoration site, only radiological analyses were performed. |



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**RESPONSE TO COMMENTS**
**DRAFT SURVEY UNIT PROJECT REPORTS FOR SURVEY UNITS 100, 101, 102, AND 115 (WORK PACKAGE 12)**
**PARCEL G, SANITARY SEWER AND STORM DRAIN REMOVAL PROJECT**
**HUNTERS POINT SHIPYARD**
**SAN FRANCISCO, CALIFORNIA**

Comments from Larry Morgan
Senior Health Physicist
Emergency, Restoration and Waste Management Section
Environmental Management Branch
California Department of Public Health

Comments Dated: April 12, 2010

| SPECIFIC COMMENTS TO ALL DRAFT SUPRs | RESPONSE |
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| **Comment 1. Section 1.2 "Background."** Include a brief description of radionuclides of concern and specific information on the conceptual model for the trench survey units 100, 101, 102 and 115. | **Response 1.** The sanitary sewer and storm drain systems are being removed due to the potential for radioactive materials to be present inside the piping and surrounding soils. The Navy has provided this information in the SUPRA, Section 2.0. The intent of the SUPRA is to eliminate the need for repeating information applicable to all sanitary sewer and storm drain survey units. |
| **Comment 2. Section 3.21 "Trench Survey Unit."** Include a sentence stating the sampling diagram showing the 18 systematic sample locations are included in figure 3-1 and attachment 2. | **Response 2.** The final 18 systematic sample locations are provided on Figure 3-1 and in Attachment 1. The Navy will add a statement as requested.<br><br>Section 3.2.1 will state, "*Figure 3-1 shows the approximate systematic sampling locations, and provides lengths of piping segments and locally assigned identification for each trench segment.*" |
| **Comment 3. Section 3.2 – Excavated Soil Unit 33 and 108.** Include a figure showing the location where the excavated soil Survey Unit33 in proximity to the trench survey units. Show also if there are buildings in close location of excavated soil unit 33 and what parcel. Why was the excavated soil survey unit chosen? | **Response 3.** The Navy has provided information concerning excavated soil units in Section 3.2.4 of the SUPRA. Soils surrounding the excavated sanitary sewer and storm drain pipe make up the soil of the excavated survey unit. As such, Figure 1-1 of the respective Survey Unit Project Report (SUPR) will show the origin of the excavated soil unit soil. All excavated soil units for this SUPR package originated from Parcel G. |



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| RESPONSE TO COMMENTS<br>DRAFT SURVEY UNIT PROJECT REPORTS FOR SURVEY UNITS 100, 101, 102, AND 115 (WORK PACKAGE 12)<br>PARCEL G, SANITARY SEWER AND STORM DRAIN REMOVAL PROJECT<br>HUNTERS POINT SHIPYARD<br>SAN FRANCISCO, CALIFORNIA | |
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| **Comment 4. Section 3.2 – Excavated Soil Unit 33 Survey Unit 101.** "identified a few measurements above the investigation" besides additional samples collected, did the Navy collected some subsurface and step out sample to ensure no measurements above the investigation level. | **Response 4.** The Navy collected additional samples to further characterize the extent of contamination that was present whenever contamination was found. |
| **Comment 5. Section 3.2.1 "Survey Units."** The Trench Survey Units 100, 101, 102 and 115 have elevated levels of radionuclides exceeding the applicable action level are found in the trench or overburden and then remediated, it is not clear whether the elevated radionuclide levels found in the overburden are consistent with the sewer and storm drain are the source of contamination. Add statements to Section 3.2 or another location in the SUPR explaining whether or not the findings for the applicable trench survey unit are consistent with the conceptual model for the sewer trench unit are consistent with the conceptual model for the sewer trench. | **Response 5.** Soil contamination levels found in the excavated soils and within the trenches are consistent with the sanitary sewer and storm drain system being the source of contamination. The RACR will include a discussion about the conceptual model for the sanitary sewer and storm drain system. |
| **Comment 6. Section 4, "Laboratory Analysis."** does not state data analysis criteria for the on and offsite results. In addition, state why the onsite and offsit offsite chose their counting times, which gamma peak or method was used by the offsite laboratory data and what detailed information was compared. | **Response 6.** The Navy has revised Section 4.0 to include this information. |
| **Comment 7.** When onsite laboratory data for Bi-214 or Pb-214 is used in Section 4 for comparison or discussion, it would be useful to specify in Section 4 why this data is useful even though the samples being counted at the onsite laboratory have not been held for in growth ofRa-226 daughters. | **Response 7.** The Navy has revised Section 4.0 to include this information. |
| **Comment 8.** In Section 5.0 of the SUPRA, it is noted that "When most of the data are non-detect or less than the MDA, the statistical tests may not be valid, but are a necessary tool to identify if the correct number of samples has been collected." the comments above indicate that the | **Response 8.** The statement quoted is misleading and will be deleted from the SUPRA. As stated in NUREG 1505, "A Nonparametric Statistical Methodology for the Design and Analysis of Final Status Decommissioning Surveys," the determination of an adequate number of samples is only |

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| statistical tests are not valid and, therefore, it is questionable if they could used as a tool to identify if the correct number of samples has been collected, since the mean values and standard deviation calculated from those results are not meaningful and biased low. Where is the data, including the mostly non-detect data, used to identify if the correct number of samples has been collected ? | necessary for performing a retrospective power analysis when using the WRS test and the null hypothesis is not rejected. In that case, it is important to know that the null hypothesis was not rejected simply because there was insufficient power. As stated in Section 5.0 of the SUPRs, because all of the data are below the release criteria for the ROCs, there is no basis for performing statistical analysis. Therefore, the corresponding retrospective power analysis is also unnecessary. |
| **Comment 9.** Section 6.0 Table 6-1 "Modeling Input Parameters Trench Survey Unit Mean Soil Activity Concentrations" has data provided based on individual reports with flagged (# All peaks for activity calculation had bad shape and B Activity less then MDA and failed test). The specific data reports have flagged data which has large negative numbers, large uncertainties and less then MDA values. Potential Dose and risk values calculated on the data provided are unsupported with large uncertainties and it is recommended that the MDA values themselves should be evaluated for the dose and risk values. | **Response 9.** The Navy will revise Section 6.0 to include only one set of modeling parameters using the MDA values or actual results (if larger than MDA) for that modeling. |
| **Comment 10.** Attachment 1 "Trench Units 100, 101, 102 and 115 Radiation/Contamination Survey Form", include background reference gamma counts for Trench 100 and sampling grid for the reference area. | **Response 10.** The mean background plus three sigma investigation level is provided in Attachment 1. A description of the reference area sample results is included in Section 3.3 of the SUPRA. Because the sampling grid in the reference area does not change from survey unit to survey unit, it is not included in the SUPRs. |
| **Comment 11.** Attachment 2 "Laboratory Analysis Reports for Trench Units" It is noted that the individual laboratory results reported typically accompanied by the "#" flag. The Laboratory analysis report describes the "#" flag as "all peaks for activity calculation had bad shape Poisson Shape. Has the Navy and contractor addressed these analysis reports that has flagged a # especially the radionuclide of concern for Ra-226? | **Response 11.** Yes. The Navy will provide additional information describing all applicable gamma spectroscopy flags in Section 3.0 of the SUPRs. |