
***** G A M M A S P E C T R U M A N A L Y S I S *****

Filename: C:\GENIE2K\CAMFILES\UNC 2017\IMC Samples\IMC-2002\UNC-IMC-200

Report Generated On : 5/15/2017 10:45:36 AM

Sample Title : W3H-IMC-2002-S-P-6

Sample Description :

Sample Identification : IMC-2002-S-P-6

Sample Type :

Sample Geometry : cylinder

Peak Locate Threshold : 3.00

Peak Locate Range (in channels) : 40 - 8192

Peak Area Range (in channels) : 40 - 8192

Identification Energy Tolerance : 1.000 keV

Sample Size : 2.874E+002 grams

Sample Taken On : 5/1/2017 12:00:00 AM

Acquisition Started : 5/10/2017 1:30:41 PM

Live Time : 1800.0 seconds

Real Time : 1800.4 seconds

Dead Time : 0.02 %

Energy Calibration Used Done On : 4/13/2017

Efficiency Calibration Used Done On : 5/15/2017

Efficiency ID : H-IMC-2002-S-P-6

***** P E A K A N A L Y S I S R E P O R T *****

Detector Name: 8566

Sample Title: W3H-IMC-2002-S-P-6

Peak Analysis Performed on: 5/15/2017 10:45:32 AM

Peak Analysis From Channel: 40

Peak Analysis To Channel: 8192

| | Peak No. | ROI start | ROI end | Peak centroid | Energy (keV) | FWHM (keV) | Net Peak Area | Net Area Uncert. | Continuum Counts |
|---|-------------|--------------|------------|------------------|-----------------|---------------|------------------|---------------------|---------------------|
| F | 1 | 47- | 59 | 53.28 | 13.44 | 0.43 | 9.93E+001 | 89.10 | 1.14E+002 |
| F | 2 | 59- | 71 | 65.20 | 16.43 | 0.75 | 2.50E+002 | 21.18 | 1.27E+002 |
| F | 3 | 209- | 217 | 213.08 | 53.43 | 0.51 | 5.82E+001 | 19.19 | 7.80E+001 |
| M | 4 | 285- | 318 | 291.24 | 72.99 | 0.69 | 8.51E+001 | 38.91 | 1.62E+002 |
| m | 5 | 285- | 318 | 299.60 | 75.08 | 0.69 | 1.92E+002 | 74.84 | 1.54E+002 |
| m | 6 | 285- | 318 | 308.70 | 77.36 | 0.70 | 9.06E+001 | 39.21 | 1.45E+002 |
| M | 7 | 331- | 365 | 337.34 | 84.53 | 0.81 | 2.57E+002 | 31.28 | 1.47E+002 |
| m | 8 | 331- | 365 | 348.98 | 87.44 | 0.82 | 4.24E+001 | 17.68 | 1.54E+002 |
| m | 9 | 331- | 365 | 359.25 | 90.01 | 0.82 | 1.08E+002 | 22.00 | 1.46E+002 |
| F | 10 | 366- | 377 | 372.81 | 93.41 | 0.88 | 1.69E+002 | 95.82 | 1.10E+002 |
| F | 11 | 419- | 427 | 422.09 | 105.74 | 0.59 | 3.71E+001 | 17.74 | 8.85E+001 |
| F | 12 | 477- | 486 | 481.89 | 120.70 | 0.56 | 3.29E+001 | 16.50 | 8.00E+001 |
| F | 13 | 569- | 582 | 574.24 | 143.81 | 0.79 | 3.07E+002 | 34.31 | 1.23E+002 |
| F | 14 | 644- | 660 | 652.71 | 163.45 | 1.00 | 1.42E+002 | 77.96 | 9.14E+001 |
| F | 15 | 734- | 748 | 741.68 | 185.71 | 0.91 | 1.34E+003 | 68.99 | 1.03E+002 |
| F | 16 | 813- | 827 | 819.89 | 205.28 | 0.81 | 1.05E+002 | 22.21 | 7.50E+001 |
| F | 17 | 945- | 959 | 953.00 | 238.59 | 1.01 | 1.26E+002 | 23.77 | 6.94E+001 |
| F | 18 | 1400- | 1414 | 1406.04 | 351.97 | 1.46 | 5.02E+001 | 15.64 | 2.55E+001 |
| F | 19 | 2032- | 2048 | 2040.30 | 510.69 | 1.76 | 6.84E+001 | 18.25 | 2.83E+001 |
| F | 20 | 2323- | 2334 | 2330.59 | 583.33 | 0.40 | 3.42E+001 | 2.41 | 1.80E+001 |
| F | 21 | 5824- | 5848 | 5835.46 | 1460.40 | 2.63 | 1.68E+002 | 25.89 | 4.17E+000 |

M = First peak in a multiplet region

m = Other peak in a multiplet region

F = Fitted singlet

Errors quoted at 1.960 sigma

 ***** N U C L I D E I D E N T I F I C A T I O N R E P O R T *****

Sample Title: W3H-IMC-2002-S-P-6
 Nuclide Library Used: C:\GENIE2K\CAMFILES\UNC 2017 NLB 0328201

..... IDENTIFIED NUCLIDES

| Nuclide Name | Id Confidence | Energy (keV) | Yield (%) | Activity (pCi/gram) | Activity Uncertainty |
|-----------------|------------------|-----------------|--------------|------------------------|-------------------------|
| K-40 | 0.972 | 1460.82* | 10.66 | 1.10079E+001 | 1.93534E+000 |
| Pb-212 | 0.996 | 74.82* | 10.28 | 1.65254E+000 | 7.25603E-001 |
| | | 77.11* | 17.10 | 4.58945E-001 | 2.19003E-001 |
| | | 86.83 | 2.07 | | |
| | | 87.35* | 3.97 | 8.63953E-001 | 4.00010E-001 |
| | | 89.78* | 1.46 | 5.90890E+000 | 1.68920E+000 |
| | | 115.18 | 0.60 | | |
| | | 238.63* | 43.60 | 3.49253E-001 | 8.61840E-002 |
| | | 300.09 | 3.30 | | |
| PB-214 | 0.513 | 74.82* | 5.80 | 2.92899E+000 | 1.31250E+000 |
| | | 77.11* | 9.70 | 8.09069E-001 | 3.92888E-001 |
| | | 86.83 | 1.70 | | |
| | | 87.35* | 2.24 | 1.53120E+000 | 7.20899E-001 |
| | | 89.78* | 0.82 | 1.05207E+001 | 3.14291E+000 |
| | | 241.99 | 7.25 | | |
| | | 258.76 | 0.53 | | |
| | | 295.22 | 18.42 | | |
| | | 351.93* | 35.60 | 2.52909E-001 | 8.71410E-002 |
| | | 785.96 | 1.06 | | |
| | | 839.07 | 0.58 | | |
| Ra-226 | 0.879 | 81.07 | 0.20 | | |
| | | 83.79* | 0.32 | 6.53129E+001 | 1.53262E+001 |
| | | 186.21* | 3.64 | 3.61839E+001 | 6.40358E+000 |
| U-234 | 0.992 | 53.20* | 0.12 | 6.37159E+001 | 2.60349E+001 |
| | | 120.90* | 0.04 | 7.39686E+001 | 4.48998E+001 |
| U-235 | 0.999 | 89.96* | 3.43 | 2.51513E+000 | 7.23494E-001 |
| | | 93.35* | 5.54 | 2.40900E+000 | 1.45278E+000 |
| | | 104.82 | 0.69 | | |
| | | 105.60* | 1.31 | 2.20026E+000 | 1.14161E+000 |
| | | 108.58 | 0.50 | | |
| | | 109.19 | 1.66 | | |
| | | 143.76* | 10.96 | 2.34138E+000 | 5.31516E-001 |
| | | 163.36* | 5.08 | 2.51082E+000 | 1.45377E+000 |
| | | 194.94 | 0.63 | | |
| | | 202.12 | 1.08 | | |
| | | 205.32* | 5.02 | 2.21159E+000 | 5.85736E-001 |

* = Energy line found in the spectrum.

@ = Energy line not used for Weighted Mean Activity

Energy Tolerance : 1.000 keV

Nuclide confidence index threshold = 0.10

Errors quoted at 1.960 sigma

***** I N T E R F E R E N C E C O R R E C T E D R E P O R T *****

| Nuclide Name | Nuclide Id Confidence | Wt mean Activity (pCi/gram) | Wt mean Activity Uncertainty |
|-----------------|-----------------------------|-----------------------------------|------------------------------------|
| K-40 | 0.972 | 1.100793E+001 | 1.935344E+000 |
| Pb-212 | 0.996 | 3.713834E-001 | 7.824574E-002 |
| PB-214 | 0.513 | 2.657492E-001 | 8.466864E-002 |
| Ra-226 | 0.879 | 4.051327E+001 | 5.908575E+000 |
| U-234 | 0.992 | 6.629572E+001 | 2.252252E+001 |
| U-235 | 0.999 | 2.295163E+000 | 3.129101E-001 |

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

***** U N I D E N T I F I E D P E A K S *****

Peak Locate Performed on: 5/15/2017 10:45:31 AM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192

| | Peak No. | Energy (keV) | Peak Size in Counts per Second | Peak CPS % Uncertainty | Peak Type | Tol. Nuclide |
|---|-------------|-----------------|-----------------------------------|---------------------------|--------------|-----------------|
| F | 1 | 13.44 | 5.5160E-002 | 89.74 | | |
| F | 2 | 16.43 | 1.3905E-001 | 8.46 | | |
| M | 4 | 72.99 | 4.7297E-002 | 45.70 | | |
| F | 19 | 510.69 | 3.7998E-002 | 26.69 | | |
| F | 20 | 583.33 | 1.8974E-002 | 7.07 | | |

M = First peak in a multiplet region

m = Other peak in a multiplet region

F = Fitted singlet

Errors quoted at 1.960 sigma

***** N U C L I D E M D A R E P O R T *****

Detector Name: 8566
Sample Geometry: cylinder
Sample Title: W3H-IMC-2002-S-P-6
Nuclide Library Used: C:\GENIE2K\CAMFILES\UNC 2017 NLB 0328201

| | Nuclide Name | Energy (keV) | Yield (%) | Line MDA (pCi/gram) | Nuclide MDA (pCi/gram) | Activity (pCi/gram) | Dec. Leve (pCi/gram) |
|---|-----------------|-----------------|--------------|------------------------|---------------------------|------------------------|-------------------------|
| + | K-40 | 1460.82* | 10.66 | 8.559E-001 | 8.56E-001 | 1.101E+001 | 3.394E-00 |
| | Pb-210 | 46.54 | 4.25 | 2.590E+000 | 2.59E+000 | 2.245E+000 | 1.239E+00 |
| | BI-212 | 727.33 | 6.67 | 2.385E+000 | 2.38E+000 | 1.696E+000 | 1.116E+00 |
| | | 785.37 | 1.10 | 1.321E+001 | | -8.036E+000 | 6.108E+00 |
| | | 1078.62 | 0.56 | 3.027E+001 | | -3.074E+001 | 1.385E+00 |
| | | 1620.50 | 1.47 | 1.138E+001 | | -3.900E-001 | 4.988E+00 |
| + | Pb-212 | 74.82* | 10.28 | 5.205E-001 | 1.37E-001 | 1.653E+000 | 2.486E-00 |
| | | 77.11* | 17.10 | 2.970E-001 | | 4.589E-001 | 1.417E-00 |
| | | 86.83 | 2.07 | 3.920E+000 | | -5.836E+000 | 1.907E+00 |
| | | 87.35* | 3.97 | 1.233E+000 | | 8.640E-001 | 5.889E-00 |
| | | 89.78* | 1.46 | 3.233E+000 | | 5.909E+000 | 1.543E+00 |
| | | 115.18 | 0.60 | 9.418E+000 | | -4.193E+000 | 4.532E+00 |
| | | 238.63* | 43.60 | 1.367E-001 | | 3.493E-001 | 6.460E-00 |
| | | 300.09 | 3.30 | 2.257E+000 | | -4.468E+000 | 1.066E+00 |
| | BI-214 | 76.86 | 0.55 | 1.740E+001 | 3.25E-001 | 4.744E+001 | 8.485E+00 |
| | | 79.29 | 0.91 | 7.899E+000 | | 1.237E+000 | 3.822E+00 |
| | | 609.32 | 45.49 | 3.253E-001 | | 1.501E-001 | 1.532E-00 |
| | | 665.45 | 1.53 | 9.541E+000 | | 4.135E+000 | 4.464E+00 |
| | | 768.36 | 4.89 | 3.466E+000 | | 2.457E+000 | 1.623E+00 |
| | | 806.18 | 1.26 | 1.232E+001 | | -4.339E+000 | 5.717E+00 |
| | | 934.06 | 3.11 | 5.912E+000 | | 2.384E-001 | 2.749E+00 |
| | | 1120.29 | 14.92 | 1.560E+000 | | 6.560E-001 | 7.296E-00 |
| | | 1155.21 | 1.63 | 1.172E+001 | | -3.273E+000 | 5.388E+00 |
| | | 1238.11 | 5.83 | 3.826E+000 | | -1.342E+000 | 1.773E+00 |
| | | 1280.98 | 1.43 | 1.261E+001 | | -4.343E+000 | 5.716E+00 |
| | | 1377.67 | 3.99 | 3.994E+000 | | 1.016E+000 | 1.772E+00 |
| | | 1385.31 | 0.79 | 2.060E+001 | | -6.533E+000 | 9.165E+00 |
| | | 1401.52 | 1.33 | 1.360E+001 | | 6.127E+000 | 6.115E+00 |
| | | 1407.99 | 2.39 | 7.059E+000 | | 1.238E+000 | 3.148E+00 |
| | | 1509.21 | 2.13 | 9.206E+000 | | 4.267E+000 | 4.147E+00 |
| | | 1583.20 | 0.70 | 2.758E+001 | | -6.961E+000 | 1.235E+00 |
| | | 1661.27 | 1.05 | 1.455E+001 | | -6.645E+000 | 6.263E+00 |
| | | 1729.59 | 2.88 | 5.842E+000 | | 1.127E-001 | 2.540E+00 |
| | | 1764.49 | 15.30 | 1.351E+000 | | 2.566E-001 | 6.026E-00 |
| | | 1847.43 | 2.03 | 8.305E+000 | | 3.900E+000 | 3.576E+00 |
| > | | 2118.51 | 1.16 | 0.000E+000 | | 0.000E+000 | 0.000E+00 |
| > | | 2204.06 | 4.92 | 0.000E+000 | | 0.000E+000 | 0.000E+00 |
| > | | 2447.70 | 1.55 | 0.000E+000 | | 0.000E+000 | 0.000E+00 |
| + | PB-214 | 74.82* | 5.80 | 9.226E-001 | 1.46E-001 | 2.929E+000 | 4.407E-00 |
| | | 77.11* | 9.70 | 5.237E-001 | | 8.091E-001 | 2.497E-00 |
| | | 86.83 | 1.70 | 4.774E+000 | | -7.107E+000 | 2.322E+00 |
| | | 87.35* | 2.24 | 2.185E+000 | | 1.531E+000 | 1.044E+00 |

| | Nuclide Name | Energy (keV) | Yield (%) | Line MDA (pCi/gram) | Nuclide MDA (pCi/gram) | Activity (pCi/gram) | Dec. Leve (pCi/gram) |
|---|--------------|--------------|-----------|---------------------|------------------------|---------------------|----------------------|
| + | PB-214 | 89.78* | 0.82 | 5.757E+000 | 1.46E-001 | 1.052E+001 | 2.746E+00 |
| | | 241.99 | 7.25 | 1.285E+000 | | -3.346E-001 | 6.194E-00 |
| | | 258.76 | 0.53 | 1.186E+001 | | -4.095E+000 | 5.594E+00 |
| | | 295.22 | 18.42 | 4.286E-001 | | -1.031E-001 | 2.033E-00 |
| | | 351.93* | 35.60 | 1.461E-001 | | 2.529E-001 | 6.622E-00 |
| | | 785.96 | 1.06 | 1.337E+001 | | -2.541E+000 | 6.165E+00 |
| | | 839.07 | 0.58 | 2.748E+001 | | 2.638E-001 | 1.274E+00 |
| | | | | | | | |
| + | Ra-226 | 81.07 | 0.20 | 3.115E+001 | 1.60E+000 | 1.629E+001 | 1.500E+00 |
| | | 83.79* | 0.32 | 1.502E+001 | | 6.531E+001 | 7.167E+00 |
| | | 186.21* | 3.64 | 1.597E+000 | | 3.618E+001 | 7.620E-00 |
| | AC-228 | 89.96 | 1.90 | 6.696E+011 | 1.32E+011 | -1.018E+012 | 3.248E+01 |
| | | 93.35 | 3.10 | 4.135E+011 | | -2.386E+011 | 2.006E+01 |
| | | 99.51 | 1.26 | 6.750E+011 | | -4.209E+011 | 3.227E+01 |
| | | 105.60 | 0.74 | 1.440E+012 | | -6.514E+011 | 6.948E+01 |
| | | 129.07 | 2.42 | 3.636E+011 | | -2.846E+011 | 1.739E+01 |
| | | 153.98 | 0.72 | 1.270E+012 | | -6.183E+011 | 6.063E+01 |
| | | 209.25 | 3.89 | 2.999E+011 | | -3.054E+010 | 1.433E+01 |
| | | 214.85 | 0.76 | 1.242E+012 | | -2.238E+010 | 5.862E+01 |
| | | 270.24 | 3.46 | 3.495E+011 | | 1.630E+011 | 1.653E+01 |
| | | 328.00 | 2.95 | 4.764E+011 | | 3.437E+011 | 2.247E+01 |
| | | 338.32 | 11.27 | 1.326E+011 | | 1.280E+011 | 6.267E+01 |
| | | 409.46 | 1.92 | 7.891E+011 | | 1.644E+011 | 3.684E+01 |
| | | 463.00 | 4.40 | 3.919E+011 | | 2.002E+010 | 1.830E+01 |
| | | 562.50 | 0.87 | 2.456E+012 | | 5.346E+011 | 1.148E+01 |
| | | 674.75 | 2.10 | 1.142E+012 | | -6.062E+011 | 5.310E+01 |
| | | 726.86 | 0.62 | 4.521E+012 | | 3.590E+012 | 2.115E+01 |
| | | 755.32 | 1.00 | 2.810E+012 | | 1.102E+012 | 1.312E+01 |
| | | 772.29 | 1.49 | 2.030E+012 | | 4.451E+011 | 9.511E+01 |
| | | 794.95 | 4.25 | 6.379E+011 | | 2.307E+010 | 2.959E+01 |
| | | 830.49 | 0.54 | 5.354E+012 | | 9.948E+010 | 2.489E+01 |
| | | 835.71 | 1.61 | 1.848E+012 | | 3.356E+009 | 8.606E+01 |
| | | 840.38 | 0.91 | 3.056E+012 | | 1.080E+012 | 1.415E+01 |
| | | 904.20 | 0.77 | 4.180E+012 | | -5.785E+012 | 1.947E+01 |
| | | 911.20 | 25.80 | 1.319E+011 | | 4.754E+010 | 6.168E+01 |
| | | 964.77 | 4.99 | 7.271E+011 | | 5.041E+011 | 3.402E+01 |
| | | 968.97 | 15.80 | 2.275E+011 | | 1.684E+011 | 1.064E+01 |
| | | 1247.08 | 0.50 | 7.852E+012 | | 3.890E+011 | 3.635E+01 |
| | | 1459.14 | 0.83 | 9.767E+012 | | 2.518E+013 | 4.683E+01 |
| | | 1495.91 | 0.86 | 3.112E+012 | | 1.622E+011 | 1.358E+01 |
| | | 1588.20 | 3.22 | 1.087E+012 | | 2.581E+011 | 4.876E+01 |
| | | 1630.63 | 1.51 | 1.749E+012 | | -1.701E+012 | 7.529E+01 |
| | TH-230 | 67.67 | 0.38 | 1.879E+001 | 1.88E+001 | 8.874E+000 | 9.051E+00 |
| | PA-234 | 742.81 | 0.11 | 1.441E+002 | 1.97E+001 | 2.062E+001 | 6.715E+00 |
| | | 766.42 | 0.32 | 5.237E+001 | | 6.783E+000 | 2.449E+00 |
| | | 1001.03 | 0.84 | 1.966E+001 | | -1.537E+001 | 9.021E+00 |
| | TH-234 | 63.29 | 3.70 | 2.016E+000 | 2.02E+000 | 5.578E-001 | 9.698E-00 |
| | | 92.38 | 2.13 | 3.783E+000 | | 7.938E+000 | 1.841E+00 |
| | | 92.80 | 2.10 | 3.646E+000 | | 1.095E+000 | 1.772E+00 |
| | | 112.81 | 0.21 | 2.667E+001 | | -4.458E+001 | 1.283E+00 |
| + | U-234 | 53.20* | 0.12 | 5.330E+001 | 5.33E+001 | 6.372E+001 | 2.517E+00 |
| | | 120.90* | 0.04 | 1.054E+002 | | 7.397E+001 | 4.964E+00 |

| | Nuclide Name | Energy (keV) | Yield (%) | Line MDA (pCi/gram) | Nuclide MDA (pCi/gram) | Activity (pCi/gram) | Dec. Leve (pCi/gram) |
|---|-----------------|-----------------|--------------|------------------------|---------------------------|------------------------|-------------------------|
| + | U-235 | 89.96* | 3.43 | 1.376E+000 | 4.81E-001 | 2.515E+000 | 6.566E-00 |
| | | 93.35* | 5.54 | 8.924E-001 | | 2.409E+000 | 4.269E-00 |
| | | 104.82 | 0.69 | 8.856E+000 | | 1.016E+001 | 4.274E+00 |
| | | 105.60* | 1.31 | 3.064E+000 | | 2.200E+000 | 1.452E+00 |
| | | 108.58 | 0.50 | 1.276E+001 | | 7.100E+000 | 6.170E+00 |
| | | 109.19 | 1.66 | 3.734E+000 | | 3.685E+000 | 1.804E+00 |
| | | 143.76* | 10.96 | 4.812E-001 | | 2.341E+000 | 2.303E-00 |
| | | 163.36* | 5.08 | 1.029E+000 | | 2.511E+000 | 4.906E-00 |
| | | 194.94 | 0.63 | 9.097E+000 | | 7.424E+000 | 4.330E+00 |
| | | 202.12 | 1.08 | 7.221E+000 | | 2.908E+000 | 3.479E+00 |
| | | 205.32* | 5.02 | 1.078E+000 | | 2.212E+000 | 5.104E-00 |

+ = Nuclide identified during the nuclide identification

* = Energy line found in the spectrum

> = MDA value not calculated

@ = Half-life too short to be able to perform the decay correction

 *** LINE ACTIVITY CONSISTENCY EVALUATOR ***

=====
 Analysis using Key Line Activities
 =====

Filename: C:\GENIE2K\CAMFILES\UNC 2017\IMC Samples\IMC-2002\UNC-IMC-200

Equation used to calculate plot: $\ln(\text{Ratio}) = A + B \cdot \ln(\text{Energy})$

where: Ratio = Activity/KL Activity

Notes:

'^' Denotes Key Line energy

* All uncertainties quoted at 1.96 sigma

| Nuclide | Energy (keV) | Activity (pCi/gram) | Activity %Uncert* | Ratio[%Uncert] | A | B [uncert] |
|---------|-----------------|------------------------|----------------------|----------------|-------|---------------|
| ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| K-40 | 1460.8 ^ | 1.10E+001 | 17.581 | | | |
| Pb-212 | 74.8 | 1.65E+000 | 43.908 | 4.732[50.367] | 7.90 | -1.420 |
| | 77.1 | 4.59E-001 | 47.719 | 1.314[53.722] | | [0.396] |
| | 87.3 | 8.64E-001 | 46.300 | 2.474[52.465] | | |
| | 89.8 | 5.91E+000 | 28.587 | 16.919[37.765] | | |
| | 238.6 ^ | 3.49E-001 | 24.677 | 1.000[34.898] | | |
| PB-214 | 74.8 | 2.93E+000 | 44.811 | 11.581[56.526] | 9.56 | -1.608 |
| | 77.1 | 8.09E-001 | 48.561 | 3.199[59.542] | | [0.383] |
| | 87.3 | 1.53E+000 | 47.081 | 6.054[58.342] | | |
| | 89.8 | 1.05E+001 | 29.874 | 41.599[45.603] | | |
| | 351.9 ^ | 2.53E-001 | 34.455 | 1.000[48.727] | | |
| Ra-226 | 83.8 | 6.53E+001 | 23.466 | 1.805[29.391] | 3.87 | -0.740 |
| | 186.2 ^ | 3.62E+001 | 17.697 | 1.000[25.028] | | [0.483] |
| U-234 | 53.2 ^ | 6.37E+001 | 40.861 | 1.000[57.786] | -0.72 | 0.182 |
| | 120.9 | 7.40E+001 | 60.701 | 1.161[73.173] | | [1.136] |
| U-235 | 90.0 | 2.52E+000 | 28.766 | 1.074[36.644] | 0.53 | -0.107 |
| | 93.3 | 2.41E+000 | 60.307 | 1.029[64.438] | | [0.549] |
| | 105.6 | 2.20E+000 | 51.885 | 0.940[56.634] | | |
| | 143.8 ^ | 2.34E+000 | 22.701 | 1.000[32.104] | | |
| | 163.4 | 2.51E+000 | 57.900 | 1.072[62.191] | | |
| | 205.3 | 2.21E+000 | 26.485 | 0.945[34.882] | | |