Date: _____

9626 Niagara Falls Blvd Onsite Gamma Spec Screening Lab

Gamma Spectroscopy Detector work sheet.

Counted by (Initial,date)	Geometry Description	Analysis Number/Sample ID/Remarks	Sample Collection mmddyy hh:mm	Sample Quantity	Sample Units (GWET,GDRY,L, ft^3, etc)	Count Time (s)	Report Matches Sample Parameters (Initial, date)
cc/121016	450 cc SOIL	A5-CS001-0006-01	12-8-16 1355	871.2	GWET	7200	
cc/121016	450 cc SOIL	A5-CS002-0006-01	12-9-16 1445	867.8	GWET	7200	
cc/121216	450 cc SOIL	A5-CS003-0006-01	12-8-16 1400	995.2	GWET	7200	
cc/121216	450 cc SOIL	A5-CS004-0006-01	12-8-16 1405	974.9	GWET	7200	
cc/121216	450 cc SOIL	Duplicate A5-CS004-0006-02	12-8-16 1405	984.8	GWET	7200	
cc/121316	450 cc SOIL	A5-CS005-0006-01	12-9-16 1450	730.6	GWET	7200	
cc/121416	450 cc SOIL	A5-CS006-0006-01	12-8-16 1410	802.7	GWET	7200	
cc/121416	450 cc SOIL	A5-CS007-0006-01	12-8-16 1415	912.7	GWET	7200	
cc/121516	450 cc SOIL	A5-CS015-0006-01	12-13-16 0915	699.5	GWET	7200	
cc/121516	450 cc SOIL	A5-CS008-0006-01	12-8-16 1420	823.[illegible]	GWET	7200	

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

Filename: ERT01,C:\GENIE2K\CAMFILES\SMP-A5-CS001-0006-01.CNF

Report Generated On	: 12/10/2016 5:11:04 PM
Sample Title	: A5-CS001-0006-01
Sample Description	: 450 cc Soil
Sample Identification	:
Sample Type	:
Sample Geometry	:
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 100 - 8192
Peak Area Range (in channels)	: 100 - 8192
Identification Energy Tolerance	: 1.000 keV
Sample Size	: 8.712E+002 GWET
Sample Taken On	: 12/8/2016 1:55:00 PM
Acquisition Started	: 12/10/2016 3:11:00 PM
Live Time	: 7200.0 seconds
Real Time	: 7201.9 seconds
Dead Time	: 0.03 %

Energy Calibration Used Done On	: 12/10/2016
Efficiency Calibration Used Done On	: 9/27/2016
Efficiency ID	: ERT0101

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

Detector Name: ERT01
Sample Geometry:
Sample Title: A5-CS001-0006-01
Nuclide Library Used: C:\GENIE2K\CAMFILES\ERT_LIBRARY_LMDA.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	K-40	1460.82*	10.55	4.8140E-001	4.81E-001	1.2568E+001
	Co-60	1173.23	99.85	6.1355E-002	5.09E-002	9.2440E-003
		1332.49	99.98	5.0896E-002		-6.8554E-003
>		2505.71	0.10	0.0000E+000		0.0000E+000
	Cs-137	32.06	5.54	6.9292E+002	5.06E-002	-2.7051E+002
		661.66	84.99	5.0570E-002		9.1228E-003
+	Tl-208	72.80	2.02	5.2288E+000	4.64E-002	-5.8156E-001
		74.97*	3.41	1.8257E+000		3.5400E+000
		84.90	1.51	4.2161E+000		-6.1194E-001
		277.36	6.31	6.0387E-001		1.8472E-001
		510.77*	22.60	2.4137E-001		3.0886E-001
		583.19*	84.50	4.6449E-002		2.0717E-001
		763.13	1.81	2.6441E+000		1.8463E-001
		860.56*	12.42	2.7067E-001		2.7296E-001
+	Bi-212	39.86	1.06	3.7440E+002	5.26E-001	-6.8275E+001
		727.33*	6.74	5.2572E-001		7.9419E-001
		785.37	1.11	4.3601E+000		1.8918E+000
		1620.74	1.51	2.9114E+000		1.5022E+000
		1806.00	0.09	3.8421E+001		1.0123E+001
+	Pb-212	74.81*	10.40	5.9862E-001	6.46E-002	1.1607E+000
		77.11*	17.50	3.0932E-001		8.7932E-001
		87.30*	7.81	6.1729E-001		2.4534E-001
		115.18	0.59	6.8538E+000		-1.9367E+000
		238.63*	43.30	6.4625E-002		6.6800E-001
		300.09*	3.28	8.6992E-001		7.5209E-001
+	Bi-214	76.86*	0.43	1.2681E+001	7.86E-002	3.6049E+001
		89.81	0.24	2.4390E+001		9.0243E-002
		386.77	0.30	1.2693E+001		-1.3601E-001
		454.77	0.29	1.2916E+001		3.9559E+000
		609.31*	45.49	7.8571E-002		4.9856E-001
		665.45	1.53	2.8826E+000		-9.6302E-001
		703.11	0.48	9.6773E+000		5.4851E+000
		719.86	0.39	1.0637E+001		-9.3104E-001
		768.36*	4.89	6.0163E-001		2.5960E-001
		786.10	0.31	1.5555E+001		1.4831E+001
		806.17	1.26	3.4796E+000		-1.1035E+000
		934.06	3.10	1.6248E+000		2.4076E-001
		964.08*	0.36	8.5978E+000		7.5478E+000
		1051.96	0.31	1.5904E+001		1.1969E+000
		1120.29*	14.91	2.9672E-001		5.4372E-001

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	Bi-214	1133.66	0.25	2.0812E+001	7.86E-002	6.3378E+000
		1155.19	1.63	3.7942E+000		1.2490E+000
		1207.68	0.45	1.3909E+001		2.6759E+000
		1238.11*	5.79	7.4398E-001		7.9876E-001
		1280.96	1.43	3.7152E+000		-1.5627E+000
		1377.67	4.00	1.2671E+000		-2.1756E-002
		1385.31	0.76	6.0585E+000		-4.6808E+000
		1401.50	1.27	3.3474E+000		-1.9077E+000
		1407.98	2.15	2.1090E+000		5.0651E-001
		1509.23	2.11	2.0504E+000		-1.8455E+000
		1538.50	0.38	9.5902E+000		1.1549E+000
		1543.32	0.20	1.8810E+001		-1.0455E+000
		1583.22	0.69	7.0905E+000		4.0354E+000
		1594.73	0.25	2.0125E+001		1.2330E+001
		1599.31	0.23	1.7251E+001		2.0449E+000
		1661.28	1.15	3.3115E+000		1.2985E+000
		1683.99	0.22	1.6845E+001		1.2788E+001
		1729.59	2.92	1.3844E+000		7.2417E-001
		1764.49	15.40	4.6530E-001		7.2746E-001
		1847.42	2.11	1.8247E+000		1.0789E+000
		1873.16	0.22	1.6888E+001		2.0146E+000
>		2118.55	1.14	0.0000E+000		0.0000E+000
>		2204.21	5.08	0.0000E+000		0.0000E+000
+	Pb-214	53.28	1.20	3.3852E+001	8.82E-002	-5.3903E+000
		74.81*	6.44	9.6474E-001		1.8706E+000
		77.11*	10.80	5.0019E-001		1.4219E+000
		87.30*	4.84	9.9406E-001		3.9509E-001
		242.00*	7.43	3.3345E-001		6.9639E-001
		258.87	0.52	6.9502E+000		4.1523E+000
		274.80	0.47	8.1587E+000		-4.3098E-001
		295.22*	19.30	1.6925E-001		4.7414E-001
		351.93*	37.60	8.8152E-002		4.6124E-001
		462.00*	0.22	1.1644E+001		1.0100E+001
		533.66	0.19	2.1553E+001		4.1069E-001
		785.96	1.07	4.4651E+000		2.9368E+000
		839.04	0.59	8.3393E+000		2.4556E+000
+	Ra-224	81.07	0.13	5.1194E+001	6.06E-001	-7.3882E+001
		83.78	0.22	2.9255E+001		1.3663E+001
		240.99*	4.10	6.0551E-001		1.2646E+000
+	Ra-226	81.07	0.20	3.3973E+001	1.04E+000	-4.9030E+001
		83.78	0.33	1.9315E+001		9.0207E+000
		94.90	0.15	3.4693E+001		2.1475E+000
		186.21*	3.59	1.0355E+000		9.1416E-001
+	Ac-228	99.50	1.26	3.3446E+000	1.37E-001	2.9027E-001
		129.07*	2.50	1.7536E+000		3.3627E-001
		209.25*	3.97	7.9936E-001		3.9903E-001
		270.24*	3.55	9.0634E-001		7.6062E-001
		328.00	3.04	1.3270E+000		3.1638E-001
		338.32*	11.40	3.1460E-001		6.9397E-001
		409.46	2.02	2.0168E+000		3.5165E-001

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	Ac-228	463.00*	4.45	5.7947E-001	1.37E-001	5.0260E-001
		755.31	1.03	4.4040E+000		-4.8027E-001
		772.29	1.52	3.2238E+000		1.1472E+000
		794.94*	4.31	7.6224E-001		4.9133E-001
		835.70	1.70	2.9928E+000		1.1902E+000
		911.20*	26.20	1.3723E-001		7.0309E-001
		964.79*	4.99	6.2672E-001		5.5019E-001
		968.96*	15.90	2.0917E-001		6.9358E-001
		1588.20	3.06	1.7229E+000		8.4022E-001
		1630.62	1.52	2.6279E+000		1.8413E-001
	Th-228	84.37	1.26	5.0476E+000	5.05E+000	1.8113E+000
		131.61	0.13	3.1554E+001		7.4126E+000
		166.41	0.10	3.7878E+001		1.1964E+000
		215.98	0.25	1.4388E+001		-5.7539E+000
	Pa-234m	258.23	0.07	4.9406E+001	6.17E+000	3.9801E+001
		742.81	0.09	4.8057E+001		4.6000E+000
		766.36	0.32	1.5659E+001		1.1919E+001
		786.27	0.05	8.9978E+001		8.5792E+001
		1001.03	0.85	6.1678E+000		1.1637E+000
		1737.77	0.02	1.7800E+002		1.1824E+001
+	Th-234	63.30*	3.75	3.4873E+000	1.37E+000	3.0771E-001
		92.59*	4.33	1.3705E+000		1.1144E+000
		112.81	0.22	1.9023E+001		9.1712E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = Calculated MDA is zero due to zero counts in the region, or the region is outside the spectrum, or has not been calculated
@ = Half-life too short to be able to perform the decay correction

****
***** 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: A5-CS001-0006-01
Nuclide Library Used: C:\GENIE2K\CAMFILES\ERT_LIBRARY_LMDA.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
K-40	0.983	1460.82*	10.55	1.25677E+001	4.58114E-001
Tl-208	0.839	72.80 @	2.02		
		74.97* @	3.41	3.53997E+000	3.24322E-001
		84.90 @	1.51		
		277.36	6.31		
		510.77* @	22.60	3.08860E-001	5.65562E-002
		583.19*	84.50	2.07166E-001	1.53670E-002
		763.13 @	1.81		
		860.56*	12.42	2.72964E-001	6.55519E-002
Bi-211	0.886	351.03*	13.00	1.33430E+000	9.29596E-002
Bi-212	0.551	39.86 @	1.06		
		727.33*	6.74	7.94188E-001	1.34012E-001
		785.37	1.11		
		1620.74	1.51		
		1806.00 @	0.09		
Pb-212	0.984	74.81*	10.40	1.16070E+000	1.11487E-001
		77.11*	17.50	8.79325E-001	7.13676E-002
		87.30*	7.81	2.45344E-001	1.34343E-001
		115.18 @	0.59		
		238.63*	43.30	6.67995E-001	3.64594E-002
		300.09*	3.28	7.52088E-001	2.00002E-001
Bi-214	0.474	76.86* @	0.43	3.60490E+001	2.95122E+000
		89.81 @	0.24		
		386.77 @	0.30		
		454.77 @	0.29		
		609.31*	45.49	4.98555E-001	3.07539E-002
		665.45 @	1.53		
		703.11 @	0.48		
		719.86 @	0.39		
		768.36*	4.89	2.59603E-001	1.33714E-001
		786.10 @	0.31		
		806.17 @	1.26		
		934.06	3.10		
		964.08* @	0.36	7.54784E+000	1.58367E+000
		1051.96 @	0.31		
		1120.29*	14.91	5.43720E-001	7.87900E-002
		1133.66 @	0.25		
		1155.19 @	1.63		
		1207.68 @	0.45		
		1238.11*	5.79	7.98757E-001	1.82146E-001
		1280.96 @	1.43		

Nuclide Name	Id Confidence	Energy (keV)		Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
Bi-214	0.474	1377.67		4.00		
		1385.31	@	0.76		
		1401.50	@	1.27		
		1407.98	@	2.15		
		1509.23	@	2.11		
		1538.50	@	0.38		
		1543.32	@	0.20		
		1583.22	@	0.69		
		1594.73	@	0.25		
		1599.31	@	0.23		
		1661.28	@	1.15		
		1683.99	@	0.22		
		1729.59	@	2.92		
		1764.49		15.40		
		1847.42	@	2.11		
		1873.16	@	0.22		
		2118.55	@	1.14		
		2204.21	@	5.08		
Pb-214	0.946	53.28	@	1.20		
		74.81*		6.44	1.87061E+000	1.81912E-001
		77.11*		10.80	1.42193E+000	1.20174E-001
		87.30*		4.84	3.95092E-001	2.16470E-001
		242.00*		7.43	6.96385E-001	6.83083E-002
		258.87	@	0.52		
		274.80	@	0.47		
		295.22*		19.30	4.74141E-001	4.75605E-002
		351.93*		37.60	4.61245E-001	3.18004E-002
		462.00*	@	0.22	1.00996E+001	2.76690E+000
		533.66	@	0.19		
		785.96	@	1.07		
		839.04	@	0.59		
Ra-224	0.785	81.07	@	0.13		
		83.78	@	0.22		
		240.99*		4.10	1.26456E+000	1.23585E-001
Ra-226	0.779	81.07	@	0.20		
		83.78	@	0.33		
		94.90	@	0.15		
		186.21*		3.59	9.14165E-001	2.34614E-001
Ac-228	0.738	99.50	@	1.26		
		129.07*	@	2.50	3.36274E-001	3.76309E-001
		209.25*		3.97	3.99027E-001	1.76305E-001
		270.24*		3.55	7.60624E-001	2.07293E-001
		328.00		3.04		
		338.32*		11.40	6.93972E-001	8.55930E-002
		409.46	@	2.02		
		463.00*		4.45	5.02597E-001	1.38834E-001
		755.31	@	1.03		
		772.29	@	1.52		
		794.94*		4.31	4.91333E-001	1.75313E-001
		835.70	@	1.70		

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
Ac-228	0.738	911.20*	26.20	7.03094E-001	5.45770E-002
		964.79*	4.99	5.50190E-001	1.15528E-001
		968.96*	15.90	6.93582E-001	6.35159E-002
		1588.20	3.06		
		1630.62 @	1.52		
Th-234	0.927	63.30*	3.75	3.07707E-001	7.42093E-001
		92.59*	4.33	1.11444E+000	3.07399E-001
		112.81 @	0.22		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.000 keV
Nuclide confidence index threshold = 0.45
Errors quoted at 1.000 sigma

****
***** INTERFERENCE CORRECTED REPORT *****
****

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/GWET)	Wt mean Activity Uncertainty
	K-40		0.983	1.256769E+001	4.581144E-001
X	Cd-109		0.955		
	Tl-208	@	0.839	2.117553E-001	1.485823E-002
	Bi-211		0.886	7.940790E-002	1.538019E-001
	Bi-212	@	0.551	7.941877E-001	1.340119E-001
	Pb-212	@	0.984	6.352502E-001	3.044109E-002
	Bi-214	@	0.474	5.000668E-001	2.762948E-002
	Pb-214	@	0.946	4.337948E-001	4.288966E-002
	Ra-224	@	0.785	4.768352E-001	1.452626E-001
	Ra-226	@	0.779	9.141646E-001	2.346144E-001
	Ac-228	@	0.738	6.591209E-001	3.091607E-002
	Th-234	@	0.927	9.962864E-001	2.839978E-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 1.000 sigma

********** UNIDENTIFIED PEAKS **********

Peak Locate Performed on: 12/10/2016 5:11:04 PM
Peak Locate From Channel: 100
Peak Locate To Channel: 8192

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty	Peak Type	Tol. Nuclide
30	1730.95	3.2973E-003	24.16	Sum	
31	1765.52	1.2046E-002	15.85		

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

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


Filename: ERT01,C:\GENIE2K\CAMFILES\SMP-A5-CS002-0006-01.CNF

Report Generated On              : 12/10/2016  7:13:57 PM

Sample Title                     : A5-CS002-0006-01
Sample Description               : 450 cc Soil
Sample Identification            :
Sample Type                      :
Sample Geometry                  :

Peak Locate Threshold            :  3.00
Peak Locate Range (in channels)  :   100 -  8192
Peak Area Range (in channels)    :   100 -  8192
Identification Energy Tolerance  :    1.000 keV

Sample Size                      :  8.678E+002 GWET

Sample Taken On                  : 12/9/2016   2:45:00 PM
Acquisition Started              : 12/10/2016  5:13:52 PM

Live Time                        :     7200.0 seconds
Real Time                        :     7201.9 seconds

Dead Time                        :   0.03 %


            Energy Calibration Used Done On        : 12/10/2016
            Efficiency Calibration Used Done On    : 9/27/2016
            Efficiency ID                          : ERT0101
```

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

Detector Name: ERT01
Sample Title: A5-CS002-0006-01
Peak Analysis Performed on: 12/10/2016 7:13:58 PM
Peak Analysis From Channel: 100
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
M	1	294-	315	300.27	75.10	0.96	2.54E+002	25.27	6.26E+002
m	2	294-	315	308.83	77.23	0.96	4.77E+002	30.42	5.28E+002
	3	366-	385	371.58	92.92	1.30	2.36E+002	57.68	8.74E+002
	4	512-	522	517.27	129.35	0.54	5.39E+001	32.05	4.08E+002
	5	737-	751	744.15	186.07	1.07	2.50E+002	39.75	4.62E+002
	6	817-	825	821.96	205.52	0.72	2.94E+001	23.53	2.46E+002
M	7	943-	972	954.66	238.70	1.12	1.41E+003	41.56	3.35E+002
m	8	943-	972	967.31	241.86	1.12	2.23E+002	20.10	2.63E+002
	9	1070-	1094	1081.05	270.30	1.26	1.35E+002	42.93	4.13E+002
	10	1173-	1193	1180.77	295.23	1.10	3.72E+002	39.36	3.18E+002
	11	1195-	1208	1200.57	300.18	0.71	9.65E+001	25.51	2.00E+002
	12	1305-	1319	1311.22	327.84	0.50	1.03E+002	24.83	1.76E+002
	13	1346-	1360	1353.11	338.32	1.21	2.17E+002	29.49	2.26E+002
	14	1400-	1415	1407.41	351.89	1.17	6.25E+002	34.89	1.97E+002
	15	1844-	1857	1852.07	463.06	1.04	8.55E+001	19.59	1.08E+002
	16	2030-	2058	2042.84	510.75	1.39	2.98E+002	36.79	2.26E+002
	17	2323-	2343	2331.63	582.95	1.36	5.62E+002	31.58	1.18E+002
	18	2425-	2445	2436.49	609.17	1.39	5.40E+002	30.23	1.04E+002
	19	2903-	2916	2908.48	727.17	0.48	6.81E+001	17.32	8.29E+001
	20	3084-	3093	3088.02	772.06	0.78	1.90E+001	10.79	4.20E+001
	21	3136-	3146	3141.51	785.43	0.44	4.22E+001	11.70	3.98E+001
	22	3169-	3186	3178.28	794.63	0.59	6.30E+001	16.62	6.50E+001
	23	3433-	3448	3441.96	860.55	0.58	7.20E+001	15.10	5.20E+001
	24	3634-	3654	3644.04	911.07	1.25	3.84E+002	24.51	5.99E+001
M	25	3850-	3885	3858.11	964.59	1.44	6.37E+001	10.78	7.34E+001
m	26	3850-	3885	3875.10	968.84	1.44	1.94E+002	16.07	6.92E+001
	27	4472-	4489	4480.49	1120.19	0.69	1.20E+002	18.98	7.39E+001
	28	5505-	5519	5512.31	1378.16	0.51	2.35E+001	10.04	2.65E+001
	29	5627-	5638	5632.42	1408.19	0.46	1.53E+001	6.58	1.07E+001
	30	5830-	5859	5844.24	1461.14	1.82	1.91E+003	45.60	3.67E+001
	31	7053-	7071	7061.77	1765.54	1.45	9.68E+001	12.05	1.43E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

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

Detector Name: ERT01
Sample Geometry:
Sample Title: A5-CS002-0006-01
Nuclide Library Used: C:\GENIE2K\CAMFILES\ERT_LIBRARY_LMDA.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	K-40	1460.82*	10.55	4.7801E-001	4.78E-001	1.3357E+001
	Co-60	1173.23	99.85	6.3778E-002	5.15E-002	8.9774E-005
		1332.49	99.98	5.1507E-002		9.7517E-003
>		2505.71	0.10	0.0000E+000		0.0000E+000
	Cs-137	32.06	5.54	7.2059E+002	5.17E-002	-1.3450E+002
		661.66	84.99	5.1663E-002		1.0979E-002
+	Tl-208	72.80	2.02	5.2051E+000	4.73E-002	-1.2773E+000
		74.97*	3.41	1.9158E+000		2.9122E+000
		84.90	1.51	4.2287E+000		9.1090E-001
		277.36	6.31	5.8332E-001		2.4116E-001
		510.77*	22.60	2.6691E-001		2.0348E-001
		583.19*	84.50	4.7322E-002		2.5931E-001
		763.13	1.81	2.5926E+000		-2.4686E+000
		860.56*	12.42	2.5479E-001		3.0192E-001
+	Bi-212	39.86	1.06	3.8536E+002	5.05E-001	3.1848E+001
		727.33*	6.74	5.0487E-001		4.6740E-001
		785.37*	1.11	2.1102E+000		1.8560E+000
		1620.74	1.51	2.5418E+000		-1.1163E+000
		1806.00	0.09	3.8535E+001		-1.0380E+001
+	Pb-212	74.81*	10.40	6.2815E-001	6.35E-002	9.5487E-001
		77.11*	17.50	3.1222E-001		9.6820E-001
		87.30	7.81	7.9516E-001		2.4939E-001
		115.18	0.59	6.8595E+000		8.8515E-001
		238.63*	43.30	6.3520E-002		6.9889E-001
		300.09*	3.28	8.4835E-001		7.2973E-001
	Bi-214	76.86	0.43	2.4045E+001	1.65E-001	-7.7433E-001
		89.81	0.24	2.5079E+001		1.4106E+001
		386.77	0.30	1.2606E+001		1.7713E+000
		454.77	0.29	1.2989E+001		3.0203E+000
		609.31	45.49	1.6480E-001		4.7563E-001
		665.45	1.53	2.9000E+000		1.1100E-001
		703.11	0.48	9.8162E+000		6.8017E-001
		719.86	0.39	1.1069E+001		-4.1393E+000
		768.36	4.89	1.0562E+000		3.6712E-002
		786.10	0.31	1.5113E+001		3.8969E-001
		806.17	1.26	3.4131E+000		-1.6295E+000
		934.06	3.10	1.5919E+000		5.0446E-001
		964.08	0.36	2.1166E+001		-1.5486E-001
		1051.96	0.31	1.6939E+001		-8.1495E+000
		1120.29	14.91	4.8601E-001		5.6148E-001

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
	Bi-214	1133.66	0.25	2.2402E+001	1.65E-001	1.9716E+000
		1155.19	1.63	3.7825E+000		-4.4357E-002
		1207.68	0.45	1.4064E+001		-1.4271E+000
		1238.11	5.79	1.1956E+000		9.6234E-002
		1280.96	1.43	4.0183E+000		2.2407E+000
		1377.67	4.00	1.2492E+000		1.0564E+000
		1385.31	0.76	5.8778E+000		-1.3285E+000
		1401.50	1.27	3.1797E+000		3.9513E-001
		1407.98	2.15	2.0172E+000		-4.0573E-001
		1509.23	2.11	2.1152E+000		-1.7247E+000
		1538.50	0.38	1.0585E+001		4.4750E+000
		1543.32	0.20	1.9772E+001		5.5207E+000
		1583.22	0.69	6.9075E+000		4.1186E+000
		1594.73	0.25	1.8803E+001		4.4943E+000
		1599.31	0.23	1.7937E+001		5.0957E+000
		1661.28	1.15	3.1454E+000		1.3676E+000
		1683.99	0.22	1.4553E+001		3.5870E-001
		1729.59	2.92	1.3898E+000		3.4791E-001
		1764.49	15.40	4.4144E-001		5.3184E-001
		1847.42	2.11	1.6942E+000		7.8459E-001
		1873.16	0.22	1.6495E+001		1.2809E+000
>		2118.55	1.14	0.0000E+000		0.0000E+000
>		2204.21	5.08	0.0000E+000		0.0000E+000
+	Pb-214	53.28	1.20	3.2877E+001	8.59E-002	-2.9097E+000
		74.81*	6.44	1.0133E+000		1.5403E+000
		77.11*	10.80	5.0536E-001		1.5671E+000
		87.30	4.84	1.2817E+000		4.0198E-001
		242.00*	7.43	3.2266E-001		6.5772E-001
		258.87	0.52	7.1644E+000		2.2112E-001
		274.80	0.47	7.9565E+000		3.2456E+000
		295.22*	19.30	2.0617E-001		4.7257E-001
		351.93*	37.60	8.5903E-002		4.5180E-001
		462.00	0.22	1.8722E+001		1.0118E+001
		533.66	0.19	2.1020E+001		5.8951E+000
		785.96*	1.07	2.1867E+000		1.9233E+000
		839.04	0.59	8.2706E+000		-8.3570E-001
+	Ra-224	81.07	0.13	5.1322E+001	5.85E-001	-2.0445E+001
		83.78	0.22	2.9479E+001		-1.9030E+001
		240.99*	4.10	5.8536E-001		1.1932E+000
+	Ra-226	81.07	0.20	3.4091E+001	9.77E-001	-1.3581E+001
		83.78	0.33	1.9481E+001		-1.2576E+001
		94.90	0.15	3.5306E+001		-1.3335E+000
		186.21*	3.59	9.7684E-001		1.1068E+000
+	Ac-228	99.50	1.26	3.4414E+000	1.50E-001	2.4776E+000
		129.07*	2.50	1.1684E+000		4.2640E-001
		209.25	3.97	1.0223E+000		2.3748E-001
		270.24*	3.55	1.2787E+000		8.8706E-001
		328.00*	3.04	9.3342E-001		8.8893E-001
		338.32*	11.40	2.8553E-001		5.1088E-001
		409.46	2.02	1.9823E+000		9.8435E-001

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	Ac-228	463.00*	4.45	6.2352E-001	1.50E-001	6.4237E-001
		755.31	1.03	4.3304E+000		2.3244E-001
		772.29*	1.52	1.5436E+000		6.0184E-001
		794.94*	4.31	8.0672E-001		7.1962E-001
		835.70	1.70	3.0611E+000		2.4775E+000
		911.20*	26.20	1.5011E-001		7.8274E-001
		964.79*	4.99	6.6635E-001		7.1906E-001
		968.96*	15.90	2.0393E-001		6.8918E-001
		1588.20	3.06	1.6010E+000		8.3085E-001
		1630.62	1.52	2.8913E+000		5.3490E-003
	Th-228	84.37	1.26	5.0771E+000	5.08E+000	-8.7996E-002
		131.61	0.13	3.1076E+001		7.9813E-001
		166.41	0.10	3.7130E+001		2.3859E+000
		215.98	0.25	1.4865E+001		-4.4766E-001
	Pa-234m	258.23	0.07	5.0058E+001	6.31E+000	-2.7481E+001
		742.81	0.09	4.7081E+001		2.5621E+001
		766.36	0.32	1.5406E+001		8.1148E+000
		786.27	0.05	8.7422E+001		2.2542E+000
		1001.03	0.85	6.3076E+000		5.0830E+000
		1737.77	0.02	1.5734E+002		-3.2450E+002
	Th-234	63.30	3.75	4.3783E+000	1.35E+000	9.7998E-001
		92.59	4.33	1.3458E+000		2.4614E-001
		112.81	0.22	1.9029E+001		-1.0313E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = Calculated MDA is zero due to zero counts in the region, or the region is outside the spectrum, or has not been calculated
@ = Half-life too short to be able to perform the decay correction

****
***** 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: A5-CS002-0006-01
Nuclide Library Used: C:\GENIE2K\CAMFILES\ERT_LIBRARY_LMDA.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)		Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
K-40	0.984	1460.82*		10.55	1.33566E+001	4.79666E-001
Tl-208	0.835	72.80	@	2.02		
		74.97*	@	3.41	2.91220E+000	3.06541E-001
		84.90	@	1.51		
		277.36		6.31		
		510.77*	@	22.60	2.03480E-001	5.96683E-002
		583.19*		84.50	2.59308E-001	1.70311E-002
		763.13	@	1.81		
		860.56*		12.42	3.01924E-001	6.37349E-002
Bi-212	0.760	39.86	@	1.06		
		727.33*		6.74	4.67400E-001	1.19841E-001
		785.37*		1.11	1.85604E+000	5.17080E-001
		1620.74		1.51		
		1806.00	@	0.09		
Pb-212	0.832	74.81*		10.40	9.54866E-001	1.04216E-001
		77.11*		17.50	9.68195E-001	7.55972E-002
		87.30		7.81		
		115.18	@	0.59		
		238.63*		43.30	6.98892E-001	3.78160E-002
		300.09*		3.28	7.29727E-001	1.95229E-001
Pb-214	0.867	53.28	@	1.20		
		74.81*		6.44	1.54033E+000	1.69739E-001
		77.11*		10.80	1.56712E+000	1.27814E-001
		87.30		4.84		
		242.00*		7.43	6.57717E-001	6.66621E-002
		258.87	@	0.52		
		274.80	@	0.47		
		295.22*		19.30	4.72573E-001	5.37481E-002
		351.93*		37.60	4.51805E-001	3.12165E-002
		462.00	@	0.22		
		533.66	@	0.19		
		785.96*	@	1.07	1.92332E+000	5.54513E-001
		839.04	@	0.59		
Ra-224	0.783	81.07	@	0.13		
		83.78	@	0.22		
		240.99*		4.10	1.19322E+000	1.20521E-001
Ra-226	0.776	81.07	@	0.20		
		83.78	@	0.33		
		94.90	@	0.15		
		186.21*		3.59	1.10684E+000	2.27163E-001
Ac-228	0.730	99.50	@	1.26		

Nuclide Name	Id Confidence	Energy (keV)		Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
Ac-228	0.730	129.07*	@	2.50	4.26401E-001	2.54005E-001
		209.25		3.97		
		270.24*		3.55	8.87058E-001	2.85224E-001
		328.00*		3.04	8.88931E-001	2.19548E-001
		338.32*		11.40	5.10882E-001	7.42457E-002
		409.46	@	2.02		
		463.00*		4.45	6.42368E-001	1.52865E-001
		755.31	@	1.03		
		772.29*	@	1.52	6.01844E-001	3.43728E-001
		794.94*		4.31	7.19622E-001	1.92117E-001
		835.70	@	1.70		
		911.20*		26.20	7.82735E-001	5.90437E-002
		964.79*		4.99	7.19059E-001	1.25170E-001
		968.96*		15.90	6.89180E-001	6.31367E-002
		1588.20		3.06		
		1630.62	@	1.52		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.000 keV
Nuclide confidence index threshold = 0.45
Errors quoted at 1.000 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/GWET)	Wt mean Activity Uncertainty
	K-40		0.984	1.335664E+001	4.796664E-001
	Tl-208	@	0.835	2.612474E-001	1.630966E-002
X	Bi-211		0.888		
	Bi-212	@	0.760	5.156339E-001	1.164830E-001
	Pb-212	@	0.832	6.868354E-001	3.124247E-002
	Pb-214	@	0.867	4.549646E-001	2.594566E-002
	Ra-224	@	0.783	3.678281E-001	1.285662E-001
	Ra-226	@	0.776	1.106837E+000	2.271634E-001
	Ac-228	@	0.730	6.912077E-001	3.359807E-002

? = 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 1.000 sigma

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

Peak Locate Performed on: 12/10/2016 7:13:58 PM
Peak Locate From Channel: 100
Peak Locate To Channel: 8192

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty	Peak Type	Tol. Nuclide
3	92.92	2.2191E-002	36.29	Tol.	Yb-169 Th-227 Th-234
6	205.52	4.0812E-003	80.08	Tol.	Ir-192
18	609.17	7.5056E-002	5.59	Sum	
27	1120.19	1.6677E-002	15.81	Tol.	Bi-214
28	1378.16	3.2625E-003	42.74	Sum	
29	1408.19	2.1287E-003	42.92	Tol.	Eu-152 Bi-214
31	1765.54	1.2704E-002	13.27		

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

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*************************************************************************
*****        G A M M A   S P E C T R U M   A N A L Y S I S        *****
*************************************************************************
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Filename: ERT01,C:\GENIE2K\CAMFILES\SMP-A5-CS003-0006-01.CNF

Report Generated On	: 12/12/2016 1:57:01 PM
Sample Title	: A5-CS003-0006-01
Sample Description	: 450 cc Soil
Sample Identification	:
Sample Type	:
Sample Geometry	:
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 100 - 8192
Peak Area Range (in channels)	: 100 - 8192
Identification Energy Tolerance	: 1.000 keV
Sample Size	: 9.952E+002 GWET
Sample Taken On	: 12/8/2016 2:00:00 PM
Acquisition Started	: 12/12/2016 11:56:57 AM
Live Time	: 7200.0 seconds
Real Time	: 7202.3 seconds
Dead Time	: 0.03 %

Energy Calibration Used Done On	: 12/10/2016
Efficiency Calibration Used Done On	: 9/27/2016
Efficiency ID	: ERT0101

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

Detector Name: ERT01
Sample Title: A5-CS003-0006-01
Peak Analysis Performed on: 12/12/2016 1:57:01 PM
Peak Analysis From Channel: 100
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
M	1	296-	318	300.28	75.10	1.02	2.81E+002	27.97	6.69E+002
m	2	296-	318	309.04	77.29	1.02	5.06E+002	32.65	7.77E+002
	3	346-	354	349.36	87.37	0.59	1.47E+002	35.11	5.07E+002
	4	366-	383	372.13	93.06	1.15	2.35E+002	59.60	1.01E+003
	5	612-	620	616.00	154.03	1.04	1.78E+001	28.18	3.62E+002
	6	738-	753	744.27	186.10	1.32	3.52E+002	45.91	5.81E+002
	7	832-	843	837.41	209.39	1.18	1.22E+002	33.83	4.06E+002
M	8	947-	976	954.69	238.71	1.09	1.65E+003	45.15	4.19E+002
m	9	947-	976	967.09	241.81	1.09	3.00E+002	22.29	3.26E+002
	10	1068-	1088	1080.70	270.21	1.24	1.04E+002	41.05	4.35E+002
	11	1173-	1188	1180.79	295.23	1.39	5.38E+002	35.94	2.51E+002
	12	1195-	1207	1200.54	300.17	1.06	1.01E+002	25.33	2.05E+002
	13	1300-	1316	1312.02	328.04	0.57	5.40E+001	31.32	2.95E+002
	14	1346-	1363	1352.79	338.24	1.27	3.40E+002	33.48	2.37E+002
	15	1399-	1415	1407.23	351.85	1.13	8.15E+002	38.88	2.23E+002
	16	1845-	1859	1851.87	463.01	1.07	8.61E+001	22.47	1.45E+002
	17	2028-	2052	2042.48	510.67	1.49	3.41E+002	36.98	2.49E+002
	18	2324-	2344	2331.92	583.03	1.27	5.85E+002	35.00	1.74E+002
	19	2428-	2446	2436.31	609.13	1.35	7.02E+002	33.42	1.22E+002
	20	2903-	2913	2908.23	727.11	0.84	1.06E+002	16.73	7.30E+001
	21	3172-	3186	3178.36	794.65	1.07	7.91E+001	15.67	5.69E+001
	22	3436-	3449	3442.11	860.59	1.51	3.71E+001	16.20	8.09E+001
	23	3633-	3654	3643.96	911.05	1.36	4.86E+002	27.27	6.86E+001
M	24	3850-	3886	3858.30	964.64	1.43	6.43E+001	10.96	8.04E+001
m	25	3850-	3886	3874.88	968.78	1.43	2.67E+002	18.15	7.01E+001
	26	4472-	4492	4481.18	1120.36	1.46	1.34E+002	23.26	1.12E+002
	27	5504-	5517	5511.54	1377.96	0.35	3.91E+001	10.27	2.39E+001
	28	5832-	5858	5844.29	1461.16	1.81	2.28E+003	49.43	3.85E+001
	29	6346-	6359	6353.19	1588.38	0.27	3.03E+001	7.36	8.65E+000
	30	7052-	7070	7061.27	1765.41	0.91	1.24E+002	12.58	9.81E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

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

Detector Name: ERT01
Sample Geometry:
Sample Title: A5-CS003-0006-01
Nuclide Library Used: C:\GENIE2K\CAMFILES\ERT_LIBRARY_LMDA.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	K-40	1460.82*	10.55	4.0796E-001	4.08E-001	1.3947E+001
	Co-60	1173.23	99.85	5.7038E-002	4.48E-002	-5.6994E-003
		1332.49	99.98	4.4772E-002		-7.5905E-003
>		2505.71	0.10	0.0000E+000		0.0000E+000
	Cs-137	32.06	5.54	7.0550E+002	5.09E-002	-1.0430E+001
		661.66	84.99	5.0881E-002		3.1181E-002
+	Tl-208	72.80	2.02	5.0972E+000	4.97E-002	-2.4611E+000
		74.97*	3.41	1.7309E+000		2.8143E+000
		84.90	1.51	4.1913E+000		-2.6671E+000
		277.36	6.31	5.6746E-001		-9.0595E-002
		510.77*	22.60	2.3069E-001		2.3767E-001
		583.19*	84.50	4.9706E-002		2.3623E-001
		763.13	1.81	2.4726E+000		-2.4137E+000
		860.56*	12.42	2.6576E-001		1.3594E-001
+	Bi-212	39.86	1.06	3.6281E+002	3.84E-001	-1.4847E+001
		727.33*	6.74	3.8443E-001		6.3661E-001
		785.37	1.11	4.0576E+000		2.6844E+000
		1620.74	1.51	2.6292E+000		1.5497E+000
		1806.00	0.09	3.6514E+001		9.7205E-001
+	Pb-212	74.81*	10.40	5.6755E-001	6.17E-002	9.2277E-001
		77.11*	17.50	3.2939E-001		8.9567E-001
		87.30*	7.81	4.4517E-001		4.1855E-001
		115.18	0.59	6.8541E+000		2.7468E-001
		238.63*	43.30	6.1701E-002		7.1672E-001
		300.09*	3.28	7.3273E-001		6.6949E-001
+	Bi-214	76.86*	0.43	1.3479E+001	7.61E-002	3.6652E+001
		89.81	0.24	2.4097E+001		-5.6145E-001
		386.77	0.30	1.2376E+001		3.8699E+000
		454.77	0.29	1.2579E+001		5.0073E+000
		609.31*	45.49	7.6068E-002		5.4793E-001
		665.45	1.53	2.8469E+000		-3.1066E-001
		703.11	0.48	9.3936E+000		6.7783E+000
		719.86	0.39	1.1075E+001		5.6265E+000
		768.36	4.89	1.0070E+000		4.5588E-001
		786.10	0.31	1.4453E+001		9.0446E+000
		806.17	1.26	3.5401E+000		3.8301E-001
		934.06	3.10	1.5410E+000		9.6732E-001
		964.08*	0.36	8.3311E+000		8.6900E+000
		1051.96	0.31	1.4853E+001		3.8432E+000
		1120.29*	14.91	3.5148E-001		4.8641E-001

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	Bi-214	1133.66	0.25	2.0715E+001	7.61E-002	-4.8299E+000
		1155.19	1.63	3.4348E+000		2.4401E-001
		1207.68	0.45	1.3768E+001		4.3167E-001
		1238.11	5.79	1.2014E+000		8.7755E-001
		1280.96	1.43	3.7688E+000		1.8793E+000
		1377.67*	4.00	6.3405E-001		6.1119E-001
		1385.31	0.76	5.6971E+000		-4.3404E+000
		1401.50	1.27	3.4230E+000		-2.6272E+000
		1407.98	2.15	2.1041E+000		4.4522E-001
		1509.23	2.11	1.9512E+000		6.1569E-001
		1538.50	0.38	9.9184E+000		6.7236E+000
		1543.32	0.20	1.7834E+001		9.8143E-001
		1583.22	0.69	6.1342E+000		-1.0942E-002
		1594.73	0.25	1.8663E+001		-4.4677E+000
		1599.31	0.23	1.7742E+001		-2.8618E+000
		1661.28	1.15	3.3993E+000		1.3466E+000
		1683.99	0.22	1.4918E+001		-6.3590E+000
		1729.59	2.92	1.2925E+000		6.6532E-001
		1764.49*	15.40	1.5772E-001		5.7468E-001
		1847.42	2.11	2.0034E+000		8.7138E-001
		1873.16	0.22	1.4383E+001		6.4970E+000
>		2118.55	1.14	0.0000E+000		0.0000E+000
>		2204.21	5.08	0.0000E+000		0.0000E+000
+	Pb-214	53.28	1.20	3.2269E+001	8.09E-002	2.6228E+000
		74.81*	6.44	9.1299E-001		1.4844E+000
		77.11*	10.80	5.3166E-001		1.4457E+000
		87.30*	4.84	7.1555E-001		6.7276E-001
		242.00*	7.43	3.1228E-001		7.7304E-001
		258.87	0.52	6.6984E+000		6.6336E-001
		274.80	0.47	7.6203E+000		3.1117E+000
		295.22*	19.30	1.4445E-001		5.9578E-001
		351.93*	37.60	8.0913E-002		5.1497E-001
		462.00	0.22	1.8121E+001		1.5195E+001
		533.66	0.19	2.0100E+001		-3.3076E+000
		785.96	1.07	4.1531E+000		1.3529E+000
		839.04	0.59	8.1612E+000		-1.8304E-001
+	Ra-224	81.07	0.13	5.1551E+001	5.68E-001	-6.9844E+000
		83.78	0.22	2.8963E+001		-1.0583E+001
		240.99*	4.10	5.6811E-001		1.4063E+000
+	Ra-226	81.07	0.20	3.4147E+001	9.71E-001	-4.6265E+000
		83.78	0.33	1.9087E+001		-6.9744E+000
		94.90	0.15	3.4125E+001		4.1837E+000
		186.21*	3.59	9.7051E-001		1.4551E+000
+	Ac-228	99.50	1.26	3.3147E+000	1.42E-001	1.5881E+000
		129.07	2.50	1.6016E+000		8.3363E-001
		209.25*	3.97	6.8665E-001		5.5538E-001
		270.24*	3.55	1.0765E+000		5.9572E-001
		328.00*	3.04	1.0897E+000		4.0774E-001
		338.32*	11.40	2.7263E-001		6.9969E-001
		409.46	2.02	1.8667E+000		6.2605E-001

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	Ac-228	463.00*	4.45	6.4255E-001	1.42E-001	5.6556E-001
		755.31	1.03	4.2035E+000		5.0444E-001
		772.29	1.52	3.2019E+000		3.2019E+000
		794.94*	4.31	6.2639E-001		7.9046E-001
		835.70	1.70	2.9430E+000		5.6639E-001
		911.20*	26.20	1.4209E-001		8.6925E-001
		964.79*	4.99	6.0840E-001		6.3461E-001
		968.96*	15.90	1.7934E-001		8.2855E-001
		1588.20*	3.06	5.7400E-001		6.8646E-001
		1630.62	1.52	2.5857E+000		1.1421E-001
	Th-228	84.37	1.26	4.9961E+000	5.00E+000	-3.4139E+000
		131.61	0.13	3.0771E+001		2.4453E+001
		166.41	0.10	3.7132E+001		-3.5854E+000
		215.98	0.25	1.4932E+001		2.8323E+000
	Pa-234m	258.23	0.07	4.7362E+001	5.44E+000	-6.3168E+000
		742.81	0.09	4.4027E+001		6.6000E+000
		766.36	0.32	1.5028E+001		-1.5010E-001
		786.27	0.05	8.3603E+001		5.2318E+001
		1001.03	0.85	5.4427E+000		2.8922E+000
		1737.77	0.02	1.7233E+002		-1.4127E+002
	Th-234	63.30	3.75	4.2270E+000	1.28E+000	1.4796E+000
		92.59	4.33	1.2824E+000		3.9159E-001
		112.81	0.22	1.8713E+001		4.1083E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = Calculated MDA is zero due to zero counts in the region, or the region is outside the spectrum, or has not been calculated
@ = Half-life too short to be able to perform the decay correction

****
***** 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: A5-CS003-0006-01
Nuclide Library Used: C:\GENIE2K\CAMFILES\ERT_LIBRARY_LMDA.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)		Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
K-40	0.982	1460.82*		10.55	1.39475E+001	4.79966E-001
Tl-208	0.838	72.80	@	2.02		
		74.97*	@	3.41	2.81432E+000	2.96609E-001
		84.90	@	1.51		
		277.36		6.31		
		510.77*	@	22.60	2.37670E-001	5.26961E-002
		583.19*		84.50	2.36231E-001	1.62637E-002
		763.13	@	1.81		
		860.56*		12.42	1.35941E-001	5.94689E-002
Bi-211	0.899	351.03*		13.00	1.48996E+000	9.41372E-002
Bi-212	0.569	39.86	@	1.06		
		727.33*		6.74	6.36613E-001	1.02439E-001
		785.37		1.11		
		1620.74		1.51		
		1806.00	@	0.09		
Pb-212	0.984	74.81*		10.40	9.22772E-001	1.00831E-001
		77.11*		17.50	8.95674E-001	7.05058E-002
		87.30*		7.81	4.18545E-001	1.02059E-001
		115.18	@	0.59		
		238.63*		43.30	7.16716E-001	3.79173E-002
		300.09*		3.28	6.69493E-001	1.69751E-001
Bi-214	0.526	76.86*	@	0.43	3.66516E+001	2.91178E+000
		89.81	@	0.24		
		386.77	@	0.30		
		454.77	@	0.29		
		609.31*		45.49	5.47928E-001	3.10175E-002
		665.45	@	1.53		
		703.11	@	0.48		
		719.86	@	0.39		
		768.36		4.89		
		786.10	@	0.31		
		806.17	@	1.26		
		934.06		3.10		
		964.08*	@	0.36	8.68998E+000	1.52192E+000
		1051.96	@	0.31		
		1120.29*		14.91	4.86412E-001	8.55024E-002
		1133.66	@	0.25		
		1155.19	@	1.63		
		1207.68	@	0.45		
		1238.11		5.79		
		1280.96	@	1.43		

Nuclide Name	Id Confidence	Energy (keV)		Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
Bi-214	0.526	1377.67*		4.00	6.11191E-001	1.61395E-001
		1385.31	@	0.76		
		1401.50	@	1.27		
		1407.98	@	2.15		
		1509.23	@	2.11		
		1538.50	@	0.38		
		1543.32	@	0.20		
		1583.22	@	0.69		
		1594.73	@	0.25		
		1599.31	@	0.23		
		1661.28	@	1.15		
		1683.99	@	0.22		
		1729.59	@	2.92		
		1764.49*		15.40	5.74678E-001	6.43987E-002
		1847.42	@	2.11		
		1873.16	@	0.22		
		2118.55	@	1.14		
		2204.21	@	5.08		
Pb-214	0.942	53.28	@	1.20		
		74.81*		6.44	1.48442E+000	1.63764E-001
		77.11*		10.80	1.44570E+000	1.18794E-001
		87.30*		4.84	6.72763E-001	1.64541E-001
		242.00*		7.43	7.73039E-001	6.75921E-002
		258.87	@	0.52		
		274.80	@	0.47		
		295.22*		19.30	5.95778E-001	4.69208E-002
		351.93*		37.60	5.14973E-001	3.21246E-002
		462.00	@	0.22		
		533.66	@	0.19		
		785.96	@	1.07		
		839.04	@	0.59		
Ra-224	0.795	81.07	@	0.13		
		83.78	@	0.22		
		240.99*		4.10	1.40635E+000	1.22398E-001
Ra-226	0.777	81.07	@	0.20		
		83.78	@	0.33		
		94.90	@	0.15		
		186.21*		3.59	1.45513E+000	2.32546E-001
Ac-228	0.778	99.50	@	1.26		
		129.07	@	2.50		
		209.25*		3.97	5.55375E-001	1.56560E-001
		270.24*		3.55	5.95723E-001	2.37435E-001
		328.00*		3.04	4.07739E-001	2.37526E-001
		338.32*		11.40	6.99693E-001	7.78686E-002
		409.46	@	2.02		
		463.00*		4.45	5.65565E-001	1.51977E-001
		755.31	@	1.03		
		772.29	@	1.52		
		794.94*		4.31	7.90456E-001	1.59811E-001
		835.70	@	1.70		

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
Ac-228	0.778	911.20*	26.20	8.69250E-001	5.96207E-002
		964.79*	4.99	6.34614E-001	1.11266E-001
		968.96*	15.90	8.28545E-001	6.50481E-002
		1588.20*	3.06	6.86462E-001	1.69445E-001
		1630.62 @	1.52		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.000 keV
Nuclide confidence index threshold = 0.45
Errors quoted at 1.000 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/GWET)	Wt mean Activity Uncertainty
	K-40		0.982	1.394750E+001	4.799655E-001
X	Cd-109		0.932		
	Tl-208	@	0.838	2.286335E-001	1.556236E-002
	Bi-211		0.899	4.044403E-002	1.520402E-001
	Bi-212	@	0.569	6.366131E-001	1.024391E-001
	Pb-212	@	0.984	6.208371E-001	3.055199E-002
	Bi-214	@	0.526	5.474096E-001	2.612347E-002
	Pb-214	@	0.942	5.009940E-001	4.194598E-002
	Ra-224	@	0.795	4.949159E-001	1.432147E-001
	Ra-226	@	0.777	1.455131E+000	2.325458E-001
	Ac-228	@	0.778	7.644358E-001	3.018663E-002

? = 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 1.000 sigma

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

Peak Locate Performed on: 12/12/2016 1:57:01 PM
Peak Locate From Channel: 100
Peak Locate To Channel: 8192

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty	Peak Type	Tol. Nuclide
4	93.06	2.2080E-002	37.67	Tol.	Yb-169 Th-227 Th-234
5	154.03	2.4653E-003	158.75	Sum	

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

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


Filename: ERT01,C:\GENIE2K\CAMFILES\SMP-A5-CS004-0006-01.CNF

Report Generated On              : 12/12/2016  4:03:55 PM

Sample Title                     : A5-CS004-0006-01
Sample Description               : 450 cc Soil
Sample Identification            :
Sample Type                      :
Sample Geometry                  :

Peak Locate Threshold            :  3.00
Peak Locate Range (in channels)  :   100 -  8192
Peak Area Range (in channels)    :   100 -  8192
Identification Energy Tolerance  :    1.000 keV

Sample Size                      :  9.749E+002 GWET

Sample Taken On                  : 12/8/2016   2:05:00 PM
Acquisition Started              : 12/12/2016  2:03:52 PM

Live Time                        :     7200.0 seconds
Real Time                        :     7202.0 seconds

Dead Time                        :   0.03 %


             Energy Calibration Used Done On       : 12/10/2016
             Efficiency Calibration Used Done On   : 9/27/2016
             Efficiency ID                         : ERT0101
```

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

Detector Name: ERT01
Sample Title: A5-CS004-0006-01
Peak Analysis Performed on: 12/12/2016 4:03:56 PM
Peak Analysis From Channel: 100
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
M	1	289-	319	300.11	75.06	0.97	2.96E+002	26.11	5.47E+002
m	2	289-	319	309.13	77.31	0.97	4.10E+002	28.43	4.97E+002
M	3	343-	383	349.56	87.42	1.07	1.28E+002	23.15	6.69E+002
m	4	343-	383	360.55	90.17	1.08	7.33E+001	20.81	6.44E+002
m	5	343-	383	372.05	93.04	1.08	2.52E+002	26.98	6.17E+002
	6	740-	753	743.73	185.96	0.70	2.23E+002	38.47	4.46E+002
	7	831-	844	837.42	209.39	0.35	8.02E+001	35.52	4.29E+002
M	8	948-	977	954.68	238.71	1.12	1.38E+003	41.10	3.22E+002
m	9	948-	977	966.70	241.71	1.13	1.95E+002	18.94	2.89E+002
	10	1069-	1090	1080.17	270.08	1.00	2.12E+002	38.21	3.33E+002
	11	1104-	1118	1109.52	277.42	1.00	1.01E+001	28.78	2.84E+002
	12	1172-	1193	1180.62	295.19	1.34	4.14E+002	39.46	3.00E+002
	13	1193-	1210	1200.70	300.21	0.64	5.04E+001	32.42	3.08E+002
	14	1301-	1317	1311.93	328.02	1.02	7.12E+001	28.81	2.42E+002
	15	1348-	1360	1353.30	338.36	0.91	2.88E+002	27.24	1.71E+002
	16	1398-	1416	1407.47	351.91	1.16	6.94E+002	38.57	2.35E+002
	17	1846-	1859	1852.06	463.06	0.61	8.04E+001	20.21	1.19E+002
	18	2026-	2053	2042.14	510.58	1.71	3.63E+002	34.30	1.82E+002
	19	2323-	2344	2331.86	583.01	1.36	4.63E+002	31.76	1.45E+002
	20	2429-	2449	2436.35	609.14	1.22	5.41E+002	31.48	1.25E+002
	21	2902-	2915	2908.10	727.08	1.06	1.20E+002	16.71	5.76E+001
	22	3068-	3078	3073.04	768.32	0.42	3.49E+001	12.15	4.71E+001
	23	3136-	3146	3141.49	785.43	1.20	3.51E+001	11.00	3.59E+001
	24	3174-	3184	3179.21	794.86	0.95	5.46E+001	13.02	4.74E+001
	25	3434-	3449	3441.97	860.55	0.64	7.49E+001	14.62	4.61E+001
	26	3632-	3655	3644.04	911.07	1.69	3.32E+002	25.13	7.49E+001
M	27	3850-	3887	3858.15	964.60	1.64	6.18E+001	11.07	7.76E+001
m	28	3850-	3887	3875.88	969.03	1.64	2.15E+002	16.53	6.19E+001
	29	4469-	4490	4480.88	1120.29	0.42	1.23E+002	19.52	6.86E+001
	30	4946-	4959	4952.90	1238.30	0.92	4.33E+001	14.69	6.17E+001
	31	5505-	5518	5512.22	1378.13	1.52	3.26E+001	9.02	1.74E+001
	32	5831-	5857	5843.92	1461.06	1.86	1.85E+003	44.84	3.67E+001
	33	6479-	6490	6484.44	1621.20	0.29	2.70E+001	5.20	0.00E+000
	34	6915-	6930	6921.86	1730.56	1.27	2.95E+001	8.30	1.25E+001
	35	7051-	7069	7060.29	1765.17	0.91	8.87E+001	11.73	1.43E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

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

Detector Name: ERT01
Sample Geometry:
Sample Title: A5-CS004-0006-01
Nuclide Library Used: C:\GENIE2K\CAMFILES\ERT_LIBRARY_LMDA.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	K-40	1460.82*	10.55	4.1200E-001	4.12E-001	1.1537E+001
	Co-60	1173.23	99.85	5.2690E-002	4.31E-002	-7.1596E-003
		1332.49	99.98	4.3143E-002		1.3157E-002
>		2505.71	0.10	0.0000E+000		0.0000E+000
	Cs-137	32.06	5.54	6.3645E+002	4.55E-002	-1.9462E+002
		661.66	84.99	4.5498E-002		1.5879E-005
+	Tl-208	72.80	2.02	4.7612E+000	4.70E-002	6.6914E-001
		74.97*	3.41	1.6039E+000		3.0306E+000
		84.90	1.51	3.8196E+000		-2.7001E-001
		277.36*	6.31	4.5403E-001		3.3934E-002
		510.77*	22.60	2.1457E-001		2.7379E-001
		583.19*	84.50	4.7008E-002		1.9036E-001
		763.13	1.81	2.3778E+000		-1.2399E+000
		860.56*	12.42	2.1517E-001		2.8022E-001
+	Bi-212	39.86	1.06	3.3709E+002	1.29E-001	8.2351E+001
		727.33*	6.74	3.7585E-001		7.3793E-001
		785.37*	1.11	1.8005E+000		1.3798E+000
		1620.74*	1.51	1.2868E-001		1.2821E+000
		1806.00	0.09	3.4897E+001		3.8788E+000
+	Pb-212	74.81*	10.40	5.2589E-001	5.57E-002	9.9368E-001
		77.11*	17.50	2.6956E-001		7.4055E-001
		87.30*	7.81	5.0292E-001		3.7163E-001
		115.18	0.59	6.0610E+000		-1.0273E+000
		238.63*	43.30	5.5654E-002		6.1136E-001
		300.09*	3.28	1.0115E+000		3.4002E-001
+	Bi-214	76.86*	0.43	1.1030E+001	8.08E-002	3.0301E+001
		89.81*	0.24	1.4801E+001		6.3963E+000
		386.77	0.30	1.1613E+001		4.0491E+000
		454.77	0.29	1.2124E+001		2.0734E-001
		609.31*	45.49	8.0784E-002		4.3114E-001
		665.45	1.53	2.5372E+000		-5.0408E-001
		703.11	0.48	8.9672E+000		5.1260E+000
		719.86	0.39	1.0189E+001		5.8683E+000
		768.36*	4.89	4.5549E-001		3.0535E-001
		786.10*	0.31	6.4214E+000		4.9210E+000
		806.17	1.26	3.0918E+000		2.3357E+000
		934.06	3.10	1.4897E+000		6.8280E-001
		964.08*	0.36	8.3613E+000		8.5238E+000
		1051.96	0.31	1.4565E+001		1.0462E+001
		1120.29*	14.91	2.8733E-001		4.5842E-001

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	Bi-214	1133.66	0.25	1.8481E+001	8.08E-002	-2.4097E+000
		1155.19	1.63	3.1545E+000		1.6935E+000
		1207.68	0.45	1.2667E+001		-4.3573E-001
		1238.11*	5.79	6.5292E-001		4.4376E-001
		1280.96	1.43	3.4509E+000		1.4084E-001
		1377.67*	4.00	5.6038E-001		5.2000E-001
		1385.31	0.76	5.2935E+000		-2.4002E+000
		1401.50	1.27	3.0302E+000		-2.8676E+000
		1407.98	2.15	1.9063E+000		-5.3555E-001
		1509.23	2.11	1.7535E+000		9.3738E-001
		1538.50	0.38	9.0916E+000		-3.5448E+000
		1543.32	0.20	1.6970E+001		8.4766E+000
		1583.22	0.69	6.1104E+000		1.7188E+000
		1594.73	0.25	1.7058E+001		2.4770E+000
		1599.31	0.23	1.4989E+001		-2.4178E+000
		1661.28	1.15	2.7668E+000		-2.3007E+000
		1683.99	0.22	1.6402E+001		7.1216E+000
		1729.59*	2.92	8.1719E-001		7.5667E-001
		1764.49*	15.40	1.8519E-001		4.1134E-001
		1847.42	2.11	1.8842E+000		-6.7978E-001
		1873.16	0.22	1.5490E+001		6.3931E+000
>		2118.55	1.14	0.0000E+000		0.0000E+000
>		2204.21	5.08	0.0000E+000		0.0000E+000
+	Pb-214	53.28	1.20	2.9101E+001	8.79E-002	6.6098E+000
		74.81*	6.44	8.4589E-001		1.5983E+000
		77.11*	10.80	4.3506E-001		1.1952E+000
		87.30*	4.84	8.0831E-001		5.9730E-001
		242.00*	7.43	3.0062E-001		5.1327E-001
		258.87	0.52	6.3362E+000		1.3571E+000
		274.80	0.47	7.2379E+000		3.6213E-001
		295.22*	19.30	1.8086E-001		4.6865E-001
		351.93*	37.60	8.7902E-002		4.4716E-001
		462.00	0.22	1.7595E+001		1.0480E+001
		533.66	0.19	1.9297E+001		5.3496E+000
		785.96*	1.07	1.8604E+000		1.4257E+000
		839.04	0.59	7.9042E+000		5.9540E+000
+	Ra-224	81.07	0.13	4.5941E+001	5.47E-001	-1.3145E+001
		83.78	0.22	2.6449E+001		1.0733E+001
		240.99*	4.10	5.4695E-001		9.3385E-001
+	Ra-226	81.07	0.20	3.0429E+001	8.47E-001	-8.7064E+000
		83.78	0.33	1.7429E+001		7.0724E+000
		94.90	0.15	3.1764E+001		-2.0007E+000
		186.21*	3.59	8.4692E-001		8.5050E-001
+	Ac-228	99.50	1.26	3.1825E+000	1.56E-001	3.2366E-001
		129.07	2.50	1.4743E+000		-5.9582E-001
		209.25*	3.97	7.5278E-001		3.7120E-001
		270.24*	3.55	9.7745E-001		1.2437E+000
		328.00*	3.04	1.0085E+000		5.4900E-001
		338.32*	11.40	2.1354E-001		6.0534E-001
		409.46	2.02	1.7187E+000		4.2632E-001

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	Ac-228	463.00*	4.45	5.8291E-001	1.56E-001	5.3895E-001
		755.31	1.03	3.7867E+000		-6.6781E-001
		772.29	1.52	2.8802E+000		3.3478E-003
		794.94*	4.31	5.3630E-001		5.5688E-001
		835.70	1.70	2.7385E+000		8.5964E-001
		911.20*	26.20	1.5580E-001		6.0280E-001
		964.79*	4.99	6.1066E-001		6.2253E-001
		968.96*	15.90	1.7270E-001		6.8225E-001
		1588.20	3.06	1.5032E+000		9.6208E-001
		1630.62	1.52	2.1229E+000		1.6423E+000
	Th-228	84.37	1.26	4.5213E+000	4.52E+000	-1.0553E-001
		131.61	0.13	2.8836E+001		8.4637E+000
		166.41	0.10	3.4435E+001		-3.2969E-001
		215.98	0.25	1.3543E+001		-4.6732E+000
	Pa-234m	258.23	0.07	4.5473E+001	5.30E+000	2.9705E+001
		742.81	0.09	4.2327E+001		-5.6156E+000
		766.36	0.32	1.3628E+001		-6.7708E+000
		786.27	0.05	7.5332E+001		-9.9337E-001
		1001.03	0.85	5.2995E+000		8.2654E-001
		1737.77	0.02	1.6939E+002		-8.5977E+000
	Th-234	63.30	3.75	3.8764E+000	1.18E+000	5.2601E-001
		92.59	4.33	1.1801E+000		1.6150E+000
		112.81	0.22	1.7226E+001		1.2385E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = Calculated MDA is zero due to zero counts in the region, or the region is outside the spectrum, or has not been calculated
@ = Half-life too short to be able to perform the decay correction

****
***** 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: A5-CS004-0006-01
Nuclide Library Used: C:\GENIE2K\CAMFILES\ERT_LIBRARY_LMDA.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
K-40	0.991	1460.82*	10.55	1.15368E+001	4.16839E-001
Eu-152m	0.984	89.85*	69.90	2.23398E-002	6.38643E-003
Tl-208	0.932	72.80 @	2.02		
		74.97* @	3.41	3.03057E+000	2.87435E-001
		84.90 @	1.51		
		277.36*	6.31	3.39343E-002	9.62930E-002
		510.77* @	22.60	2.73793E-001	5.02841E-002
		583.19*	84.50	1.90358E-001	1.46597E-002
		763.13 @	1.81		
		860.56*	12.42	2.80223E-001	5.51460E-002
Bi-211	0.885	351.03*	13.00	1.29376E+000	8.99328E-002
Bi-212	0.951	39.86 @	1.06		
		727.33*	6.74	7.37928E-001	1.05038E-001
		785.37*	1.11	1.37979E+000	4.33858E-001
		1620.74*	1.51	1.28209E+000	2.50281E-001
		1806.00 @	0.09		
Pb-212	0.984	74.81*	10.40	9.93678E-001	9.85081E-002
		77.11*	17.50	7.40554E-001	6.12458E-002
		87.30*	7.81	3.71628E-001	6.95216E-002
		115.18 @	0.59		
		238.63*	43.30	6.11358E-001	3.31754E-002
		300.09*	3.28	3.40018E-001	2.19343E-001
Bi-214	0.705	76.86* @	0.43	3.03014E+001	2.52697E+000
		89.81* @	0.24	6.39625E+000	1.84288E+000
		386.77 @	0.30		
		454.77 @	0.29		
		609.31*	45.49	4.31138E-001	2.83501E-002
		665.45 @	1.53		
		703.11 @	0.48		
		719.86 @	0.39		
		768.36*	4.89	3.05355E-001	1.06545E-001
		786.10* @	0.31	4.92100E+000	1.73847E+000
		806.17 @	1.26		
		934.06	3.10		
		964.08* @	0.36	8.52384E+000	1.56570E+000
		1051.96 @	0.31		
		1120.29*	14.91	4.58418E-001	7.33873E-002
		1133.66 @	0.25		
		1155.19 @	1.63		
		1207.68 @	0.45		
		1238.11*	5.79	4.43763E-001	1.50928E-001

Nuclide Name	Id Confidence	Energy (keV)		Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
Bi-214	0.705	1280.96	@	1.43		
		1377.67*		4.00	5.19999E-001	1.44516E-001
		1385.31	@	0.76		
		1401.50	@	1.27		
		1407.98	@	2.15		
		1509.23	@	2.11		
		1538.50	@	0.38		
		1543.32	@	0.20		
		1583.22	@	0.69		
		1594.73	@	0.25		
		1599.31	@	0.23		
		1661.28	@	1.15		
		1683.99	@	0.22		
		1729.59*	@	2.92	7.56672E-001	2.14221E-001
		1764.49*		15.40	4.11338E-001	6.00049E-002
		1847.42	@	2.11		
		1873.16	@	0.22		
		2118.55	@	1.14		
		2204.21	@	5.08		
Pb-214	0.956	53.28	@	1.20		
		74.81*		6.44	1.59835E+000	1.60305E-001
		77.11*		10.80	1.19522E+000	1.02783E-001
		87.30*		4.84	5.97300E-001	1.12309E-001
		242.00*		7.43	5.13273E-001	5.51153E-002
		258.87	@	0.52		
		274.80	@	0.47		
		295.22*		19.30	4.68650E-001	4.87154E-002
		351.93*		37.60	4.47156E-001	3.07584E-002
		462.00	@	0.22		
		533.66	@	0.19		
		785.96*	@	1.07	1.42571E+000	4.60615E-001
		839.04	@	0.59		
Ra-224	0.816	81.07	@	0.13		
		83.78	@	0.22		
		240.99*		4.10	9.33846E-001	9.99696E-002
Ra-226	0.771	81.07	@	0.20		
		83.78	@	0.33		
		94.90	@	0.15		
		186.21*		3.59	8.50499E-001	1.94710E-001
Ac-228	0.741	99.50	@	1.26		
		129.07	@	2.50		
		209.25*		3.97	3.71199E-001	1.65799E-001
		270.24*		3.55	1.24374E+000	2.32359E-001
		328.00*		3.04	5.49003E-001	2.24031E-001
		338.32*		11.40	6.05335E-001	6.52803E-002
		409.46	@	2.02		
		463.00*		4.45	5.38951E-001	1.39901E-001
		755.31	@	1.03		
		772.29	@	1.52		
		794.94*		4.31	5.56884E-001	1.34756E-001

Nuclide Name	Id Confidence	Energy (keV)		Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
Ac-228	0.741	835.70	@	1.70		
		911.20*		26.20	6.02799E-001	5.19534E-002
		964.79*		4.99	6.22533E-001	1.14464E-001
		968.96*		15.90	6.82246E-001	5.88337E-002
		1588.20		3.06		
		1630.62	@	1.52		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.000 keV
Nuclide confidence index threshold = 0.45
Errors quoted at 1.000 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/GWET)	Wt mean Activity Uncertainty
	K-40		0.991	1.153682E+001	4.168393E-001
X	Cd-109		0.941		
	Eu-152m		0.984	2.084688E-002	6.384051E-003
	Tl-208	@	0.932	1.940662E-001	1.392679E-002
	Bi-211		0.885	2.364041E-001	1.491687E-001
	Bi-212	@	0.951	8.231333E-001	9.387333E-002
	Pb-212	@	0.984	5.309152E-001	2.713142E-002
	Bi-214	@	0.705	4.274530E-001	2.296632E-002
	Pb-214	@	0.956	3.654488E-001	4.164891E-002
	Ra-224	@	0.816	2.689504E-001	1.249248E-001
	Ra-226	@	0.771	8.504987E-001	1.947095E-001
	Ac-228	@	0.741	6.205971E-001	2.791360E-002

? = 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 1.000 sigma

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

Peak Locate Performed on: 12/12/2016 4:03:56 PM
Peak Locate From Channel: 100
Peak Locate To Channel: 8192

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty	Peak Type	Tol. Nuclide
m	5	93.04	2.4402E-002	15.72	Tol.	Yb-169 Th-227 Th-234

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

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


Filename: ERT01,C:\GENIE2K\CAMFILES\SMP-A5-CS004-0006-02.CNF

Report Generated On              : 12/12/2016  6:38:09 PM

Sample Title                     : A5-CS004-0006-02
Sample Description               : 450 cc Soil
Sample Identification            :
Sample Type                      :
Sample Geometry                  :

Peak Locate Threshold            :  3.00
Peak Locate Range (in channels)  :   100 -  8192
Peak Area Range (in channels)    :   100 -  8192
Identification Energy Tolerance  :    1.000 keV

Sample Size                      :  9.848E+002 GWET

Sample Taken On                  : 12/8/2016   2:05:00 PM
Acquisition Started              : 12/12/2016  4:38:03 PM

Live Time                        :     7200.0 seconds
Real Time                        :     7202.0 seconds

Dead Time                        :   0.03 %


            Energy Calibration Used Done On       : 12/10/2016
            Efficiency Calibration Used Done On   : 9/27/2016
            Efficiency ID                         : ERT0101
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****
***** P E A K A N A L Y S I S R E P O R T *****
****

Detector Name: ERT01
Sample Title: A5-CS004-0006-02
Peak Analysis Performed on: 12/12/2016 6:38:09 PM
Peak Analysis From Channel: 100
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
	1	101-	109	104.04	26.04	0.45	2.63E+001	29.98	4.09E+002
M	2	296-	314	299.93	75.01	0.97	3.06E+002	26.32	4.70E+002
m	3	296-	314	308.92	77.26	0.98	4.35E+002	29.76	5.40E+002
M	4	329-	355	336.99	84.28	0.92	6.84E+001	19.91	5.68E+002
m	5	329-	355	349.26	87.34	0.93	1.89E+002	26.07	6.14E+002
	6	366-	385	371.14	92.81	0.89	2.12E+002	59.25	9.37E+002
	7	735-	753	744.18	186.08	1.27	3.13E+002	48.13	5.93E+002
	8	829-	849	836.73	209.21	0.76	1.26E+002	47.41	5.83E+002
M	9	948-	976	954.51	238.66	1.15	1.34E+003	40.92	3.42E+002
m	10	948-	976	966.72	241.71	1.15	2.39E+002	20.50	3.05E+002
	11	1071-	1095	1080.70	270.21	1.29	1.92E+002	45.42	4.53E+002
	12	1176-	1188	1180.72	295.22	1.06	3.77E+002	30.77	2.12E+002
	13	1196-	1206	1200.41	300.14	1.03	5.07E+001	21.48	1.71E+002
	14	1346-	1359	1353.29	338.36	1.08	2.48E+002	29.47	2.26E+002
	15	1399-	1416	1407.44	351.90	1.18	6.81E+002	38.69	2.51E+002
	16	1633-	1646	1637.22	409.35	0.56	4.48E+001	20.33	1.33E+002
	17	1846-	1860	1851.04	462.80	0.40	8.51E+001	20.11	1.10E+002
	18	2029-	2055	2042.25	510.61	1.32	3.65E+002	37.04	2.30E+002
	19	2323-	2342	2331.65	582.96	1.49	5.16E+002	30.31	1.14E+002
	20	2424-	2445	2436.50	609.17	1.04	5.84E+002	32.89	1.33E+002
	21	2899-	2918	2908.24	727.11	1.25	1.33E+002	21.84	9.77E+001
	22	3065-	3080	3072.37	768.15	0.62	6.36E+001	17.17	7.64E+001
	23	3169-	3183	3178.08	794.58	0.57	7.14E+001	16.06	6.46E+001
	24	3434-	3448	3440.87	860.28	1.63	5.24E+001	14.93	5.86E+001
	25	3633-	3654	3644.31	911.14	1.35	3.85E+002	24.73	6.05E+001
M	26	3850-	3883	3858.05	964.58	1.53	5.44E+001	10.17	6.99E+001
m	27	3850-	3883	3874.68	968.73	1.53	1.89E+002	16.22	8.05E+001
	28	4469-	4489	4481.21	1120.37	0.69	1.28E+002	19.08	6.52E+001
	29	5505-	5517	5511.01	1377.83	0.73	3.48E+001	8.80	1.63E+001
	30	5830-	5855	5843.98	1461.08	1.67	1.93E+003	45.42	3.04E+001
	31	6348-	6362	6354.38	1588.68	0.30	3.21E+001	9.35	1.79E+001
	32	7050-	7072	7060.06	1765.11	1.47	1.09E+002	11.85	8.35E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

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

Detector Name: ERT01
Sample Geometry:
Sample Title: A5-CS004-0006-02
Nuclide Library Used: C:\GENIE2K\CAMFILES\ERT_LIBRARY_LMDA.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	K-40	1460.82*	10.55	3.7956E-001	3.80E-001	1.1908E+001
	Co-60	1173.23	99.85	5.6642E-002	4.60E-002	9.0336E-003
		1332.49	99.98	4.5999E-002		2.2413E-002
>		2505.71	0.10	0.0000E+000		0.0000E+000
	Cs-137	32.06	5.54	6.4886E+002	4.75E-002	7.2058E+000
		661.66	84.99	4.7454E-002		-1.3165E-002
+	Tl-208	72.80	2.02	4.7847E+000	4.03E-002	-3.6322E+000
		74.97*	3.41	1.4769E+000		3.1102E+000
		84.90*	1.51	2.5847E+000		1.1084E+000
		277.36	6.31	5.4556E-001		2.8213E-001
		510.77*	22.60	2.3132E-001		2.7411E-001
		583.19*	84.50	4.0319E-002		2.1021E-001
		763.13	1.81	2.3020E+000		-3.8171E-001
		860.56*	12.42	2.3494E-001		1.9407E-001
+	Bi-212	39.86	1.06	3.3833E+002	5.39E-001	-4.4204E+001
		727.33*	6.74	5.3948E-001		8.0906E-001
		785.37	1.11	3.9254E+000		1.7281E+000
		1620.74	1.51	2.1066E+000		-2.6655E-001
		1806.00	0.09	3.1473E+001		-4.7015E+000
+	Pb-212	74.81*	10.40	4.8424E-001	5.66E-002	1.0198E+000
		77.11*	17.50	2.7879E-001		7.8000E-001
		87.30*	7.81	4.7816E-001		5.4444E-001
		115.18	0.59	6.3971E+000		1.6785E-001
		238.63*	43.30	5.6646E-002		5.8794E-001
		300.09*	3.28	6.4791E-001		3.3863E-001
+	Bi-214	76.86*	0.43	1.1406E+001	8.40E-002	3.1912E+001
		89.81	0.24	2.3075E+001		3.9827E+000
		386.77	0.30	1.1481E+001		-1.9745E+000
		454.77	0.29	1.2480E+001		1.2123E+001
		609.31*	45.49	8.4003E-002		4.6075E-001
		665.45	1.53	2.6723E+000		-9.0332E-001
		703.11	0.48	8.4892E+000		1.3753E-001
		719.86	0.39	9.8744E+000		-7.2174E-001
		768.36*	4.89	6.3540E-001		5.5015E-001
		786.10	0.31	1.3854E+001		7.0640E+000
		806.17	1.26	3.1387E+000		-1.2927E+000
		934.06	3.10	1.5433E+000		1.1576E+000
		964.08*	0.36	7.8757E+000		7.4213E+000
		1051.96	0.31	1.4504E+001		1.4514E+000
		1120.29*	14.91	2.7290E-001		4.7004E-001

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	Bi-214	1133.66	0.25	2.0424E+001	8.40E-002	5.8862E+000
		1155.19	1.63	3.5746E+000		1.8549E+000
		1207.68	0.45	1.2911E+001		1.9475E+000
		1238.11	5.79	1.1267E+000		8.9737E-001
		1280.96	1.43	3.6612E+000		9.6212E-001
		1377.67*	4.00	5.2227E-001		5.4829E-001
		1385.31	0.76	5.5622E+000		-1.6912E+000
		1401.50	1.27	3.2555E+000		-2.0492E+000
		1407.98	2.15	2.0498E+000		-2.7759E-001
		1509.23	2.11	1.6680E+000		-2.9468E-001
		1538.50	0.38	8.7461E+000		1.5741E+000
		1543.32	0.20	1.5124E+001		6.0298E+000
		1583.22	0.69	6.6624E+000		-2.9195E+000
		1594.73	0.25	1.9948E+001		1.5786E+001
		1599.31	0.23	1.7574E+001		8.3000E+000
		1661.28	1.15	2.9600E+000		-9.1467E-002
		1683.99	0.22	1.4902E+001		-2.8172E+000
		1729.59	2.92	1.2247E+000		-2.9072E-002
		1764.49*	15.40	1.5532E-001		5.0477E-001
		1847.42	2.11	1.8146E+000		-6.3755E-001
		1873.16	0.22	1.3466E+001		-3.0773E+000
>		2118.55	1.14	0.0000E+000		0.0000E+000
>		2204.21	5.08	0.0000E+000		0.0000E+000
+	Pb-214	53.28	1.20	3.0510E+001	8.82E-002	-7.6439E+000
		74.81*	6.44	7.7882E-001		1.6402E+000
		77.11*	10.80	4.4991E-001		1.2588E+000
		87.30*	4.84	7.6843E-001		8.7496E-001
		242.00*	7.43	3.0575E-001		6.2254E-001
		258.87	0.52	6.2108E+000		1.5781E+000
		274.80	0.47	7.6078E+000		2.1990E+000
		295.22*	19.30	1.2730E-001		4.2226E-001
		351.93*	37.60	8.8207E-002		4.3407E-001
		462.00*	0.22	1.1415E+001		1.1322E+001
		533.66	0.19	1.9700E+001		1.7650E+000
		785.96	1.07	4.0400E+000		2.7834E+000
		839.04	0.59	8.2790E+000		3.4762E+000
+	Ra-224	81.07	0.13	4.6824E+001	5.56E-001	-1.5570E+001
		83.78*	0.22	1.7986E+001		7.7128E+000
		240.99*	4.10	5.5635E-001		1.1328E+000
+	Ra-226	81.07	0.20	3.1010E+001	1.04E+000	-1.0311E+001
		83.78*	0.33	1.1851E+001		5.0819E+000
		94.90	0.15	3.2087E+001		2.3824E+000
		186.21*	3.59	1.0442E+000		1.2801E+000
+	Ac-228	99.50	1.26	3.1879E+000	1.36E-001	2.5135E-001
		129.07	2.50	1.5713E+000		4.2538E-001
		209.25*	3.97	9.9414E-001		5.7866E-001
		270.24*	3.55	1.1818E+000		1.1159E+000
		328.00	3.04	1.1532E+000		2.0113E-001
		338.32*	11.40	2.4629E-001		5.1627E-001
		409.46*	2.02	1.2309E+000		5.9981E-001

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	Ac-228	463.00*	4.45	5.6919E-001	1.36E-001	5.6457E-001
		755.31	1.03	3.9511E+000		2.3836E+000
		772.29	1.52	3.0815E+000		5.1949E-001
		794.94*	4.31	6.6851E-001		7.2115E-001
		835.70	1.70	2.9004E+000		7.0289E-001
		911.20*	26.20	1.3551E-001		6.9261E-001
		964.79*	4.99	5.7526E-001		5.4207E-001
		968.96*	15.90	1.9370E-001		5.9377E-001
		1588.20*	3.06	8.5330E-001		7.3415E-001
		1630.62	1.52	2.3295E+000		8.6898E-002
	Th-228	84.37*	1.26	3.0975E+000	3.10E+000	1.3283E+000
		131.61	0.13	2.9866E+001		9.3430E+000
		166.41	0.10	3.4460E+001		-5.9003E+000
		215.98	0.25	1.4194E+001		4.6414E+000
	Pa-234m	258.23	0.07	4.4330E+001	5.41E+000	1.2922E+001
		742.81	0.09	4.4103E+001		-9.0112E+000
		766.36	0.32	1.4098E+001		5.6778E+000
		786.27	0.05	8.0137E+001		4.0861E+001
		1001.03	0.85	5.4120E+000		-2.6187E-002
		1737.77	0.02	1.6436E+002		-3.3229E+001
+	Th-234	63.30	3.75	3.9520E+000	1.27E+000	1.1494E+000
		92.59*	4.33	1.2710E+000		6.2983E-001
		112.81	0.22	1.7501E+001		-2.8937E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = Calculated MDA is zero due to zero counts in the region, or the region is outside the spectrum, or has not been calculated
@ = Half-life too short to be able to perform the decay correction

****
***** 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: A5-CS004-0006-02
Nuclide Library Used: C:\GENIE2K\CAMFILES\ERT_LIBRARY_LMDA.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)		Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
K-40	0.990	1460.82*		10.55	1.19082E+001	4.24681E-001
Tl-208	0.854	72.80	@	2.02		
		74.97*	@	3.41	3.11025E+000	2.88485E-001
		84.90*	@	1.51	1.10839E+000	3.24871E-001
		277.36		6.31		
		510.77*	@	22.60	2.74112E-001	5.35309E-002
		583.19*		84.50	2.10211E-001	1.42971E-002
		763.13	@	1.81		
		860.56*		12.42	1.94071E-001	5.55090E-002
Bi-211	0.886	351.03*		13.00	1.25591E+000	8.86240E-002
Bi-212	0.569	39.86	@	1.06		
		727.33*		6.74	8.09063E-001	1.34953E-001
		785.37		1.11		
		1620.74		1.51		
		1806.00	@	0.09		
Pb-212	0.985	74.81*		10.40	1.01980E+000	9.90587E-002
		77.11*		17.50	7.80000E-001	6.38839E-002
		87.30*		7.81	5.44442E-001	7.93245E-002
		115.18	@	0.59		
		238.63*		43.30	5.87939E-001	3.21570E-002
		300.09*		3.28	3.38629E-001	1.44226E-001
Bi-214	0.604	76.86*	@	0.43	3.19121E+001	2.63597E+000
		89.81	@	0.24		
		386.77	@	0.30		
		454.77	@	0.29		
		609.31*		45.49	4.60746E-001	2.95369E-002
		665.45	@	1.53		
		703.11	@	0.48		
		719.86	@	0.39		
		768.36*		4.89	5.50149E-001	1.49236E-001
		786.10	@	0.31		
		806.17	@	1.26		
		934.06		3.10		
		964.08*	@	0.36	7.42130E+000	1.42094E+000
		1051.96	@	0.31		
		1120.29*		14.91	4.70036E-001	7.11331E-002
		1133.66	@	0.25		
		1155.19	@	1.63		
		1207.68	@	0.45		
		1238.11		5.79		
		1280.96	@	1.43		

Nuclide Name	Id Confidence	Energy (keV)		Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
Bi-214	0.604	1377.67*		4.00	5.48291E-001	1.39769E-001
		1385.31	@	0.76		
		1401.50	@	1.27		
		1407.98	@	2.15		
		1509.23	@	2.11		
		1538.50	@	0.38		
		1543.32	@	0.20		
		1583.22	@	0.69		
		1594.73	@	0.25		
		1599.31	@	0.23		
		1661.28	@	1.15		
		1683.99	@	0.22		
		1729.59	@	2.92		
		1764.49*		15.40	5.04771E-001	6.08993E-002
		1847.42	@	2.11		
		1873.16	@	0.22		
		2118.55	@	1.14		
		2204.21	@	5.08		
Pb-214	0.946	53.28	@	1.20		
		74.81*		6.44	1.64019E+000	1.61261E-001
		77.11*		10.80	1.25875E+000	1.07278E-001
		87.30*		4.84	8.74962E-001	1.28553E-001
		242.00*		7.43	6.22536E-001	6.05743E-002
		258.87	@	0.52		
		274.80	@	0.47		
		295.22*		19.30	4.22256E-001	3.86834E-002
		351.93*		37.60	4.34070E-001	3.03200E-002
		462.00*	@	0.22	1.13218E+001	2.74425E+000
		533.66	@	0.19		
		785.96	@	1.07		
		839.04	@	0.59		
Ra-224	0.883	81.07	@	0.13		
		83.78*	@	0.22	7.71276E+000	2.27843E+000
		240.99*		4.10	1.13276E+000	1.09809E-001
Ra-226	0.879	81.07	@	0.20		
		83.78*	@	0.33	5.08191E+000	1.50107E+000
		94.90	@	0.15		
		186.21*		3.59	1.28011E+000	2.42916E-001
Ac-228	0.751	99.50	@	1.26		
		129.07	@	2.50		
		209.25*		3.97	5.78658E-001	2.19699E-001
		270.24*		3.55	1.11590E+000	2.69326E-001
		328.00		3.04		
		338.32*		11.40	5.16268E-001	6.68845E-002
		409.46*	@	2.02	5.99811E-001	2.73551E-001
		463.00*		4.45	5.64568E-001	1.38292E-001
		755.31	@	1.03		
		772.29	@	1.52		
		794.94*		4.31	7.21147E-001	1.64777E-001
		835.70	@	1.70		

Nuclide Name	Id Confidence	Energy (keV)		Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
Ac-228	0.751	911.20*		26.20	6.92611E-001	5.25388E-002
		964.79*		4.99	5.42068E-001	1.03885E-001
		968.96*		15.90	5.93768E-001	5.59649E-002
		1588.20*		3.06	7.34153E-001	2.16618E-001
		1630.62	@	1.52		
Th-231	0.637	81.23	@	0.90		
		84.21*		6.60	2.52555E-001	7.55900E-002
		89.95	@	1.00		
Th-234	0.454	63.30		3.75		
		92.59*		4.33	6.29829E-001	2.78046E-001
		112.81	@	0.22		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.000 keV
Nuclide confidence index threshold = 0.45
Errors quoted at 1.000 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/GWET)	Wt mean Activity Uncertainty
	K-40		0.990	1.190820E+001	4.246808E-001
X	Cd-109		0.927		
X	Tm-170		1.000		
	Tl-208	@	0.854	2.103165E-001	1.373405E-002
	Bi-211		0.886	1.154459E-001	1.332751E-001
	Bi-212	@	0.569	8.090629E-001	1.349529E-001
	Pb-212	@	0.985	5.474539E-001	2.611136E-002
	Bi-214	@	0.604	4.732288E-001	2.412302E-002
	Pb-214	@	0.946	3.941691E-001	3.498305E-002
	Ra-224	@	0.883	4.155336E-001	1.261713E-001
	Ra-226	@	0.879	1.280110E+000	2.419722E-001
	Ac-228	@	0.751	6.156170E-001	2.797752E-002
X	Th-228		0.500		
	Th-231	@	0.637	1.274084E-001	7.517395E-002
	Th-234	@	0.454	6.298289E-001	2.780464E-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 1.000 sigma

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

Peak Locate Performed on: 12/12/2016 6:38:09 PM
Peak Locate From Channel: 100
Peak Locate To Channel: 8192

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty	Peak Type	Tol. Nuclide
1	26.04	3.6549E-003	113.94	Tol.	Am-241

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma