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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-HTC-A01-S008-1824-01.CNF

Report Generated On	: 6/24/2017 6:15:03 PM
Sample Title	: HTC-A01-S008-1824-01
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	: 9.497E+002 GWET
Sample Taken On	: 5/13/2017 8:12:00 AM
Acquisition Started	: 6/24/2017 4:14:28 PM
Live Time	: 7200.0 seconds
Real Time	: 7232.0 seconds
Dead Time	: 0.44 %

Energy Calibration Used Done On	: 5/10/2017
Efficiency Calibration Used Done On	: 12/14/2016
Efficiency ID	: ERT0101

****
***** P E A K A N A L Y S I S R E P O R T *****
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Detector Name: ERT01
Sample Title: HTC-A01-S008-1824-01
Peak Analysis Performed on: 6/24/2017 6:15:03 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	243-	257	253.61	63.27	0.82	2.15E+002	216.47	1.62E+004
M	2	285-	316	300.07	74.88	1.03	8.77E+003	141.44	1.83E+004
m	3	285-	316	309.16	77.15	1.04	1.34E+004	162.78	1.82E+004
M	4	330-	385	338.15	84.40	1.34	2.60E+003	126.37	2.25E+004
m	5	330-	385	349.50	87.23	1.34	7.20E+003	148.36	2.23E+004
m	6	330-	385	360.53	89.99	1.35	5.69E+003	138.71	2.21E+004
m	7	330-	385	373.33	93.19	1.35	7.33E+003	148.89	2.18E+004
	8	385-	407	399.06	99.62	0.97	9.81E+002	341.57	2.98E+004
	9	408-	428	422.73	105.53	1.35	1.85E+003	318.97	2.75E+004
	10	450-	466	461.72	115.28	0.77	6.21E+002	269.60	2.30E+004
M	11	500-	532	516.97	129.09	1.05	3.49E+003	135.07	1.91E+004
m	12	500-	532	527.47	131.71	1.05	3.27E+002	103.50	1.63E+004
	13	572-	580	576.19	143.89	0.61	3.30E+002	160.50	1.19E+004
	14	609-	621	616.69	154.01	0.91	1.18E+003	210.36	1.64E+004
	15	648-	658	654.52	163.46	1.01	3.84E+002	175.74	1.28E+004
	16	738-	751	744.38	185.92	1.18	4.61E+003	217.92	1.55E+004
	17	832-	852	837.58	209.21	1.10	5.93E+003	283.19	2.02E+004
M	18	948-	979	955.03	238.57	1.10	6.62E+004	275.93	1.13E+004
m	19	948-	979	965.78	241.25	1.10	8.11E+003	116.92	9.16E+003
	20	1006-	1019	1011.04	252.57	0.62	2.08E+002	152.13	8.31E+003
	21	1068-	1091	1081.37	270.14	1.16	5.70E+003	236.98	1.26E+004
	22	1103-	1121	1109.77	277.24	1.11	2.63E+003	190.21	9.89E+003
	23	1148-	1158	1153.12	288.07	0.79	3.37E+002	113.88	5.29E+003
	24	1174-	1190	1181.22	295.10	1.15	1.02E+004	187.16	7.88E+003
	25	1195-	1208	1200.86	300.00	1.07	4.25E+003	146.66	6.23E+003
	26	1279-	1291	1287.03	321.54	0.71	1.56E+002	117.95	5.23E+003
M	27	1303-	1337	1312.19	327.83	1.15	3.61E+003	92.26	6.02E+003
m	28	1303-	1337	1329.20	332.08	1.16	4.04E+002	60.78	5.85E+003
M	29	1342-	1374	1353.60	338.18	1.15	1.40E+004	137.29	5.59E+003
m	30	1342-	1374	1364.12	340.81	1.15	4.80E+002	59.46	5.41E+003
	31	1397-	1420	1407.96	351.76	1.18	1.90E+004	224.69	7.87E+003
	32	1552-	1561	1556.23	388.82	0.30	8.50E+001	82.89	3.00E+003
	33	1630-	1651	1638.15	409.29	1.12	2.01E+003	154.98	5.84E+003
	34	1803-	1816	1811.32	452.57	1.14	3.03E+002	94.80	3.15E+003
	35	1839-	1863	1852.17	462.78	1.25	4.68E+003	161.01	5.15E+003
	36	1907-	1918	1913.17	478.02	0.34	4.78E+001	79.86	2.52E+003
	37	2030-	2060	2043.21	510.52	1.39	9.39E+003	194.31	5.78E+003
	38	2180-	2191	2186.78	546.40	0.83	1.73E+002	74.22	2.13E+003
	39	2236-	2261	2250.30	562.28	1.21	9.45E+002	136.87	4.18E+003
	40	2325-	2344	2332.88	582.92	1.30	2.60E+004	194.89	3.37E+003
	41	2428-	2453	2437.42	609.04	1.34	1.59E+004	175.99	3.45E+003
	42	2651-	2671	2662.02	665.18	1.08	5.29E+002	100.99	2.67E+003

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	43	2898-	2921	2909.36	726.99	1.43	5.90E+003	127.63	2.59E+003
	44	2967-	2976	2971.28	742.47	0.55	3.39E-001	50.02	1.10E+003
	45	3009-	3033	3021.38	754.99	1.42	8.75E+002	104.32	2.42E+003
M	46	3041-	3098	3053.45	763.00	1.37	3.99E+002	37.89	1.67E+003
m	47	3041-	3098	3073.60	768.04	1.37	1.42E+003	51.78	1.63E+003
m	48	3041-	3098	3089.16	771.93	1.37	1.08E+003	47.56	1.70E+003
M	49	3116-	3160	3128.62	781.79	1.60	3.89E+002	36.95	1.58E+003
m	50	3116-	3160	3142.88	785.35	1.60	1.25E+003	49.80	1.48E+003
	51	3169-	3189	3179.92	794.61	1.34	3.02E+003	95.07	1.66E+003
	52	3217-	3237	3225.16	805.92	1.38	3.34E+002	75.45	1.48E+003
M	53	3313-	3373	3322.63	830.28	1.57	3.39E+002	34.25	1.35E+003
m	54	3313-	3373	3343.28	835.44	1.58	1.23E+003	47.17	1.29E+003
m	55	3313-	3373	3361.40	839.96	1.58	8.03E+002	40.80	1.23E+003
	56	3433-	3457	3442.58	860.25	1.51	3.43E+003	95.44	1.36E+003
	57	3568-	3581	3574.03	893.10	0.98	1.59E+002	50.24	8.56E+002
	58	3607-	3631	3617.07	903.86	1.20	5.50E+002	78.01	1.34E+003
	59	3632-	3658	3645.39	910.94	1.56	1.92E+004	159.27	1.42E+003
	60	3726-	3750	3736.91	933.81	1.68	9.19E+002	73.74	1.09E+003
M	61	3804-	3888	3810.03	952.09	1.57	1.53E+002	24.96	6.26E+002
m	62	3804-	3888	3834.84	958.29	1.57	2.20E+002	26.01	7.77E+002
m	63	3804-	3888	3859.82	964.53	1.57	3.44E+003	62.92	7.61E+002
m	64	3804-	3888	3876.61	968.73	1.58	1.14E+004	110.04	7.16E+002
	65	3990-	4014	4005.40	1000.91	1.02	3.40E+002	62.95	8.78E+002
	66	4128-	4148	4134.05	1033.06	0.67	7.53E+001	52.15	7.25E+002
	67	4204-	4217	4210.34	1052.13	1.26	8.41E+001	37.88	4.89E+002
	68	4254-	4272	4261.64	1064.95	0.76	1.38E+002	48.54	6.56E+002
	69	4307-	4325	4316.72	1078.72	1.63	3.43E+002	48.94	6.07E+002
	70	4369-	4397	4376.41	1093.64	1.27	3.28E+002	66.35	8.75E+002
	71	4429-	4454	4443.54	1110.41	1.84	3.05E+002	59.70	7.67E+002
	72	4470-	4500	4482.58	1120.17	1.70	3.77E+003	93.96	1.03E+003
	73	4606-	4633	4622.40	1155.11	1.24	5.79E+002	66.47	8.53E+002
	74	4821-	4839	4833.14	1207.78	0.61	1.17E+002	43.09	5.14E+002
	75	4938-	4965	4954.36	1238.08	1.56	1.40E+003	71.68	8.28E+002
	76	4975-	5000	4989.15	1246.77	1.64	4.13E+002	60.62	7.67E+002
	77	5119-	5138	5126.30	1281.05	1.61	3.32E+002	47.44	5.45E+002
	78	5502-	5526	5513.75	1377.88	1.82	9.23E+002	60.64	6.69E+002
	79	5533-	5554	5543.79	1385.39	1.56	2.47E+002	47.24	5.28E+002
M	80	5598-	5646	5608.77	1401.63	1.71	3.27E+002	26.15	5.22E+002
m	81	5598-	5646	5635.36	1408.27	1.71	5.04E+002	30.59	5.23E+002
	82	5824-	5859	5846.33	1461.00	2.29	2.10E+003	79.34	7.63E+002
M	83	5974-	6026	5987.05	1496.17	1.84	5.17E+002	29.55	4.45E+002
m	84	5974-	6026	6009.88	1501.87	1.84	2.72E+002	23.92	4.40E+002
M	85	6030-	6068	6040.57	1509.54	1.95	4.62E+002	28.56	4.37E+002
m	86	6030-	6068	6055.02	1513.15	1.95	2.35E+002	22.85	4.34E+002
	87	6146-	6164	6156.86	1538.60	0.54	1.17E+002	36.68	3.62E+002
	88	6224-	6246	6231.82	1557.34	1.00	1.33E+002	38.63	3.49E+002
	89	6313-	6332	6325.88	1580.84	0.91	2.24E+002	41.19	4.20E+002
M	90	6345-	6389	6356.76	1588.56	1.79	1.52E+003	44.82	5.44E+002
m	91	6345-	6389	6374.27	1592.94	1.79	7.94E+002	34.49	5.42E+002
M	92	6474-	6568	6486.93	1621.10	1.87	7.97E+002	32.80	3.42E+002

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
m 93	6474-	6568	6504.38	1625.46	1.87	1.66E+002	19.75	3.43E+002
m 94	6474-	6568	6526.90	1631.08	1.88	8.55E+002	34.12	3.75E+002
m 95	6474-	6568	6557.48	1638.73	1.88	2.34E+002	22.25	3.80E+002
M 96	6639-	6681	6650.06	1661.86	2.25	1.94E+002	22.17	3.40E+002
m 97	6639-	6681	6671.88	1667.32	2.25	1.03E+002	18.47	3.13E+002
98	6771-	6784	6777.76	1693.78	0.33	2.56E+001	25.29	2.22E+002
99	6913-	6937	6923.92	1730.31	2.06	6.62E+002	44.58	3.21E+002
100	7053-	7077	7063.64	1765.23	1.93	3.16E+003	67.86	3.55E+002
101	7354-	7371	7360.48	1839.41	0.74	6.63E+001	29.70	2.49E+002
102	7385-	7409	7396.35	1848.38	1.26	4.39E+002	42.85	3.37E+002

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 *****
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Detector Name: ERT01
Sample Geometry:
Sample Title: HTC-A01-S008-1824-01
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	2.0059E+000	2.01E+000	1.3726E+001
	Co-60	1173.23	99.85	1.5865E-001	1.59E-001	7.9459E-002
		1332.49	99.98	1.6595E-001		-2.2738E-002
>		2505.71	0.10	0.0000E+000		0.0000E+000
	Cs-137	32.06	5.54	1.4871E+004	2.24E-001	-1.3419E+003
		661.66	84.99	2.2366E-001		5.5399E-002
+	Tl-208	72.80	2.02	2.7010E+001	2.23E-001	-1.8265E+000
		74.97*	3.41	9.5940E+000		9.4383E+001
		84.90*	1.51	1.7863E+001		4.7016E+001
		277.36*	6.31	3.3438E+000		1.0279E+001
		510.77*	22.60	1.1908E+000		1.3921E+001
		583.19*	84.50	2.2313E-001		1.1339E+001
		763.13*	1.81	6.5906E+000		9.6999E+000
		860.56*	12.42	1.3675E+000		1.3271E+001
+	Bi-212	39.86	1.06	2.8495E+003	3.01E+000	3.6174E+001
		727.33*	6.74	3.0082E+000		3.7209E+001
		785.37*	1.11	1.0341E+001		5.0500E+001
		1620.74*	1.51	6.3383E+000		4.0612E+001
		1806.00	0.09	1.7307E+002		5.7737E+001
+	Pb-212	74.81*	10.40	3.1457E+000	3.70E-001	3.0947E+001
		77.11*	17.50	1.7166E+000		2.5912E+001
		87.30*	7.81	3.2254E+000		2.3571E+001
		115.18*	0.59	4.0243E+001		1.9981E+001
		238.63*	43.30	3.6959E-001		3.4856E+001
		300.09*	3.28	4.8181E+000		3.3342E+001
+	Bi-214	76.86*	0.43	6.7619E+001	4.58E-001	1.0207E+003
		89.81*	0.24	9.3377E+001		5.4272E+002
		386.77	0.30	6.4608E+001		2.8369E+001
		454.77	0.29	6.5094E+001		6.0416E+001
		609.31*	45.49	4.5839E-001		1.2651E+001
		665.45*	1.53	1.1545E+001		1.3278E+001
		703.11	0.48	4.1260E+001		1.9737E+001
		719.86	0.39	4.9074E+001		-1.2181E+001
		768.36*	4.89	2.3264E+000		1.2278E+001
		786.10*	0.31	3.5504E+001		1.7339E+002
		806.17*	1.26	1.1939E+001		1.1627E+001
		934.06*	3.10	4.9998E+000		1.4565E+001
		964.08*	0.36	2.5582E+001		4.7739E+002
		1051.96*	0.31	2.9817E+001		1.4444E+001
		1120.29*	14.91	1.2726E+000		1.4396E+001

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	Bi-214	1133.66	0.25	6.0432E+001	4.58E-001	8.6520E+000
		1155.19*	1.63	1.0377E+001		2.0646E+001
		1207.68*	0.45	2.6364E+001		1.5687E+001
		1238.11*	5.79	3.0566E+000		1.4942E+001
		1280.96*	1.43	9.1344E+000		1.4694E+001
		1377.67*	4.00	4.1199E+000		1.5414E+001
		1385.31*	0.76	1.8589E+001		2.1844E+001
		1401.50*	1.27	8.1425E+000		1.7397E+001
		1407.98*	2.15	4.8320E+000		1.5911E+001
		1509.23*	2.11	4.7096E+000		1.5513E+001
		1538.50*	0.38	3.1597E+001		2.2370E+001
		1543.32	0.20	8.2916E+001		-2.7310E+000
		1583.22	0.69	3.8629E+001		4.2128E+001
		1594.73	0.25	1.1475E+002		2.7361E+001
		1599.31	0.23	9.1655E+001		-1.7543E+001
		1661.28*	1.15	8.0475E+000		1.2579E+001
		1683.99	0.22	7.1123E+001		4.8962E+001
		1729.59*	2.92	4.4682E+000		1.7186E+001
		1764.49*	15.40	8.9214E-001		1.5626E+001
		1847.42*	2.11	6.4629E+000		1.6075E+001
		1873.16	0.22	6.8622E+001		8.7606E-001
>		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	1.4650E+002	5.91E-001	-4.8418E+001
		74.81*	6.44	4.8712E+000		4.7922E+001
		77.11*	10.80	2.6672E+000		4.0261E+001
		87.30*	4.84	4.9907E+000		3.6472E+001
		242.00*	7.43	1.8701E+000		2.3998E+001
		258.87	0.52	3.8544E+001		2.4219E+001
		274.80	0.47	4.7363E+001		7.2468E+000
		295.22*	19.30	9.3196E-001		1.2992E+001
		351.93*	37.60	5.9150E-001		1.3527E+001
		462.00*	0.22	9.5441E+001		6.5628E+002
		533.66	0.19	9.9574E+001		4.9981E+001
		785.96*	1.07	1.0286E+001		5.0234E+001
		839.04*	0.59	1.7994E+001		6.1924E+001
+	Ra-224	81.07	0.13	2.7730E+002	3.53E+000	-8.5178E+001
		83.78*	0.22	1.2430E+002		3.2716E+002
		240.99*	4.10	3.5342E+000		4.5354E+001
+	Ra-226	81.07	0.20	1.7682E+002	5.19E+000	-5.4313E+001
		83.78*	0.33	7.8856E+001		2.0755E+002
		94.90	0.15	1.8983E+002		7.9077E+002
		186.21*	3.59	5.1910E+000		2.4516E+001
+	Ac-228	99.50*	1.26	2.6650E+001	5.93E-001	1.6497E+001
		129.07*	2.50	6.7416E+000		2.5799E+001
		209.25*	3.97	6.8073E+000		3.1804E+001
		270.24*	3.55	7.1837E+000		3.9107E+001
		328.00*	3.04	4.5541E+000		3.2021E+001
		338.32*	11.40	1.1900E+000		3.3775E+001
		409.46*	2.02	1.0387E+001		3.0100E+001

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	Ac-228	463.00*	4.45	4.9430E+000	5.93E-001	3.3989E+001
		755.31*	1.03	1.9839E+001		3.7111E+001
		772.29*	1.52	7.9902E+000		3.1566E+001
		794.94*	4.31	3.8205E+000		3.1772E+001
		835.70*	1.70	6.6084E+000		3.3904E+001
		911.20*	26.20	7.0772E-001		3.6760E+001
		964.79*	4.99	1.9407E+000		3.6216E+001
		968.96*	15.90	5.9348E-001		3.7841E+001
		1588.20*	3.06	3.8827E+000		3.7928E+001
		1630.62*	1.52	6.6057E+000		4.3420E+001
+	Th-228	84.37*	1.26	2.1408E+001	2.14E+001	5.6344E+001
		131.61*	0.13	1.1897E+002		4.6229E+001
		166.41	0.10	2.2525E+002		-7.6578E+000
		215.98	0.25	9.5902E+001		6.1126E+001
+	Pa-234m	258.23	0.07	2.7410E+002	1.74E+001	2.1005E+002
		742.81*	0.09	1.0355E+002		1.4909E-001
		766.36	0.32	7.1242E+001		-4.7674E+001
		786.27*	0.05	2.0533E+002		1.0028E+003
		1001.03*	0.85	1.7351E+001		2.0603E+001
		1737.77	0.02	7.6246E+002		3.0160E+002
+	Th-234	63.30*	3.75	1.7926E+001	4.97E+000	3.2167E+000
		92.59*	4.33	4.9686E+000		3.6958E+001
		112.81	0.22	1.0502E+002		-2.5568E+001

+ = 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 *****
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Sample Title: HTC-A01-S008-1824-01
Nuclide Library Used: C:\GENIE2K\CAMFILES\ERT_LIBRARY_LMDA.NLB

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

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
Be-7	0.969	477.60*	10.44	2.50691E-001	4.19274E-001
K-40	0.995	1460.82*	10.55	1.37264E+001	6.41799E-001
Eu-152m	0.997	89.85*	69.90	1.90565E+000	7.02380E-002
Tl-208	0.966	72.80 @	2.02		
		74.97* @	3.41	9.43835E+001	3.22906E+000
		84.90* @	1.51	4.70159E+001	2.63068E+000
		277.36*	6.31	1.02794E+001	8.27732E-001
		510.77* @	22.60	1.39210E+001	5.32706E-001
		583.19*	84.50	1.13387E+001	3.63314E-001
		763.13* @	1.81	9.69989E+000	9.51229E-001
		860.56*	12.42	1.32713E+001	4.91407E-001
TL-208e	0.974	1592.53*	99.16	6.10640E-001	4.59119E-002
Bi-211	0.917	351.03*	13.00	3.92659E+001	1.49142E+000
Bi-212	0.952	39.86 @	1.06		
		727.33*	6.74	3.72091E+001	1.41129E+000
		785.37*	1.11	5.05000E+001	2.39862E+000
		1620.74*	1.51	4.06123E+001	2.14263E+000
		1806.00 @	0.09		
Pb-212	0.999	74.81*	10.40	3.09469E+001	1.38488E+000
		77.11*	17.50	2.59120E+001	1.11353E+000
		87.30*	7.81	2.35713E+001	1.10101E+000
		115.18* @	0.59	1.99815E+001	8.68904E+000
		238.63*	43.30	3.48562E+001	1.15587E+000
		300.09*	3.28	3.33419E+001	1.61006E+000
Bi-214	0.933	76.86* @	0.43	1.02070E+003	4.52074E+001
		89.81* @	0.24	5.42718E+002	2.79135E+001
		386.77 @	0.30		
		454.77 @	0.29		
		609.31*	45.49	1.26514E+001	3.98996E-001
		665.45* @	1.53	1.32782E+001	2.56162E+000
		703.11 @	0.48		
		719.86 @	0.39		
		768.36*	4.89	1.22780E+001	5.41683E-001
		786.10* @	0.31	1.73389E+002	2.91115E+001
		806.17* @	1.26	1.16269E+001	2.64060E+000
		934.06*	3.10	1.45653E+001	1.21639E+000
		964.08* @	0.36	4.77393E+002	2.10887E+001
		1051.96* @	0.31	1.44439E+001	6.53402E+000
		1120.29*	14.91	1.43963E+001	5.00978E-001
		1133.66 @	0.25		
		1155.19* @	1.63	2.06462E+001	2.42659E+000

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
Bi-214	0.933	1207.68* @	0.45	1.56871E+001	5.81646E+000
		1238.11*	5.79	1.49418E+001	8.75308E-001
		1280.96* @	1.43	1.46943E+001	2.14196E+000
		1377.67*	4.00	1.54144E+001	1.10888E+000
		1385.31* @	0.76	2.18438E+001	4.25179E+000
		1401.50* @	1.27	1.73968E+001	1.48446E+000
		1407.98* @	2.15	1.59112E+001	1.10815E+000
		1509.23* @	2.11	1.55127E+001	1.07655E+000
		1538.50* @	0.38	2.23697E+001	7.06765E+000
		1543.32 @	0.20		
		1583.22 @	0.69		
		1594.73 @	0.25		
		1599.31 @	0.23		
		1661.28* @	1.15	1.25786E+001	1.51625E+000
		1683.99 @	0.22		
		1729.59* @	2.92	1.71861E+001	1.29307E+000
		1764.49*	15.40	1.56256E+001	6.44218E-001
		1847.42* @	2.11	1.60752E+001	1.70677E+000
		1873.16 @	0.22		
		2118.55 @	1.14		
		2204.21 @	5.08		
Pb-214	0.958	53.28 @	1.20		
		74.81*	6.44	4.79218E+001	2.26493E+000
		77.11*	10.80	4.02609E+001	1.97326E+000
		87.30*	4.84	3.64718E+001	1.83821E+000
		242.00*	7.43	2.39980E+001	9.06672E-001
		258.87 @	0.52		
		274.80 @	0.47		
		295.22*	19.30	1.29924E+001	5.02010E-001
		351.93*	37.60	1.35267E+001	4.95572E-001
		462.00* @	0.22	6.56280E+002	4.10662E+001
		533.66 @	0.19		
		785.96* @	1.07	5.02341E+001	4.42655E+000
		839.04* @	0.59	6.19243E+001	3.61836E+000
Ra-224	0.945	81.07 @	0.13		
		83.78* @	0.22	3.27161E+002	2.19219E+001
		240.99*	4.10	4.53535E+001	1.67068E+000
Ra-226	0.868	81.07 @	0.20		
		83.78* @	0.33	2.07547E+002	1.38750E+001
		94.90 @	0.15		
		186.21*	3.59	2.45155E+001	1.43606E+000
Ac-228	0.991	99.50* @	1.26	1.64968E+001	5.78313E+000
		129.07* @	2.50	2.57990E+001	1.37543E+000
		209.25*	3.97	3.18036E+001	2.08417E+000
		270.24*	3.55	3.91075E+001	2.33087E+000
		328.00*	3.04	3.20214E+001	1.76501E+000
		338.32*	11.40	3.37746E+001	1.65739E+000
		409.46* @	2.02	3.00999E+001	2.68276E+000
		463.00*	4.45	3.39893E+001	2.44293E+000
		755.31* @	1.03	3.71108E+001	4.74248E+000

Nuclide Name	Id Confidence	Energy (keV)		Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
Ac-228	0.991	772.29*	@	1.52	3.15660E+001	2.01830E+000
		794.94*		4.31	3.17720E+001	1.62594E+000
		835.70*	@	1.70	3.39039E+001	2.06754E+000
		911.20*		26.20	3.67595E+001	1.43339E+000
		964.79*		4.99	3.62162E+001	1.62741E+000
		968.96*		15.90	3.78408E+001	1.51662E+000
		1588.20*		3.06	3.79278E+001	2.10007E+000
		1630.62*	@	1.52	4.34205E+001	2.69737E+000
Th-228	0.642	84.37*		1.26	5.63444E+001	3.27705E+000
		131.61*	@	0.13	4.62294E+001	1.46969E+001
		166.41	@	0.10		
		215.98		0.25		
Pa-234m	0.472	258.23	@	0.07		
		742.81*	@	0.09	1.49091E-001	2.20140E+001
		766.36		0.32		
		786.27*	@	0.05	1.00276E+003	4.85629E+001
		1001.03*		0.85	2.06030E+001	3.89700E+000
		1737.77	@	0.02		
Th-234	0.914	63.30*		3.75	3.21675E+000	3.85402E+000
		92.59*		4.33	3.69583E+001	2.02291E+000
		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

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***** 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 *****
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	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/GWET)	Wt mean Activity Uncertainty
	Be-7		0.969	2.506912E-001	4.192739E-001
	K-40		0.995	1.372635E+001	6.417987E-001
X	Mn-54		0.944		
X	Cd-109		0.902		
	Eu-152m		0.997	1.857572E+000	6.831137E-002
X	Eu-155		0.929		
X	Tm-170		0.996		
	Tl-208	@	0.966	1.178671E+001	2.667782E-001
	TL-208e		0.974	6.106401E-001	4.591192E-002
	Bi-211		0.917	8.434453E+000	1.909515E+000
	Bi-212	@	0.952	3.761021E+001	9.667243E-001
	Pb-212	@	0.999	2.208311E+001	4.964040E-001
	Bi-214	@	0.933	1.369185E+001	2.269229E-001
	Pb-214	@	0.958	1.062109E+001	4.558779E-001
	Ra-224	@	0.945	2.528086E+001	1.796538E+000
	Ra-226	@	0.868	2.451551E+001	1.376373E+000
	Ac-228	@	0.991	3.525340E+001	3.892019E-001
	Th-228	@	0.642	3.120971E+001	3.205814E+000
X	Th-231		0.833		
	Pa-234m	@	0.472	2.021874E+001	3.881317E+000
	Th-234	@	0.914	2.967033E+001	1.791168E+000

? = 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: 6/24/2017 6:15:03 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
9	105.53	2.5674E-001	17.26	Tol.	Eu-155 Np-239
13	143.89	4.4592E-002	49.99		
14	154.01	1.6413E-001	17.80	Sum	
15	163.46	5.3344E-002	45.76	Sum	
20	252.57	2.8829E-002	73.29	Tol.	Sb-127
23	288.07	4.6871E-002	33.74	Tol.	Pm-148x
26	321.54	2.1706E-002	75.47		
m 28	332.08	5.6060E-002	15.06	Sum	
m 30	340.81	6.6666E-002	12.39	Sum	
32	388.82	1.1803E-002	97.55	Sum	
34	452.57	4.2045E-002	31.32	Sum	
38	546.40	2.3999E-002	42.95	Sum	
39	562.28	1.3128E-001	14.48	Sum	
M 49	781.79	5.4040E-002	9.50	Tol.	Sb-127
M 53	830.28	4.7065E-002	10.11	Sum	
57	893.10	2.2038E-002	31.66	Sum	
58	903.86	7.6382E-002	14.19	Sum	
M 61	952.09	2.1275E-002	16.30	Sum	
m 62	958.29	3.0586E-002	11.81	Sum	
66	1033.06	1.0451E-002	69.30	Sum	
68	1064.95	1.9156E-002	35.19	Sum	
69	1078.72	4.7682E-002	14.25	Sum	
70	1093.64	4.5564E-002	20.23	Sum	
71	1110.41	4.2392E-002	19.56	S-Esc.	
76	1246.77	5.7354E-002	14.68	Sum	
M 83	1496.17	7.1801E-002	5.72	Sum	
m 84	1501.87	3.7749E-002	8.80	Sum	
m 86	1513.15	3.2685E-002	9.71	Sum	
88	1557.34	1.8493E-002	29.01	Sum	
89	1580.84	3.1148E-002	18.36	Sum	
m 93	1625.46	2.2997E-002	11.93	Sum	
m 95	1638.73	3.2552E-002	9.49	Sum	
m 97	1667.32	1.4352E-002	17.87	Sum	
98	1693.78	3.5585E-003	98.70	Sum	
101	1839.41	9.2143E-003	44.76	Sum	

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

Errors quoted at 1.000 sigma