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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-A02-S002-0006-01.CNF

Report Generated On	: 6/27/2017 6:56:39 PM
Sample Title	: HTC-A02-S002-0006-01
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	: 8.824E+002 GWET
Sample Taken On	: 5/15/2017 11:57:00 AM
Acquisition Started	: 6/27/2017 4:56:20 PM
Live Time	: 7200.0 seconds
Real Time	: 7216.9 seconds
Dead Time	: 0.23 %

Energy Calibration Used Done On	: 5/10/2017
Efficiency Calibration Used Done On	: 12/14/2016
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 *****
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Detector Name: ERT01
Sample Title: HTC-A02-S002-0006-01
Peak Analysis Performed on: 6/27/2017 6:56:39 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	248-	260	254.09	63.39	0.89	1.25E+003	146.52	7.66E+003
M	2	285-	400	300.19	74.91	1.08	6.39E+003	134.42	9.34E+003
m	3	285-	400	309.14	77.15	1.08	4.33E+003	124.27	9.15E+003
m	4	285-	400	318.20	79.41	1.08	2.83E+002	36.09	9.00E+003
m	5	285-	400	325.23	81.17	1.09	2.01E+002	22.45	8.93E+003
m	6	285-	400	336.36	83.95	1.09	1.64E+003	77.92	8.81E+003
m	7	285-	400	349.77	87.30	1.10	3.41E+003	88.40	8.63E+003
m	8	285-	400	360.29	89.93	1.10	5.50E+002	32.76	8.50E+003
m	9	285-	400	371.30	92.68	1.11	7.71E+003	134.98	8.35E+003
m	10	285-	400	379.21	94.66	1.11	9.93E+002	101.44	8.23E+003
m	11	285-	400	394.33	98.44	1.12	4.48E+002	69.25	8.09E+003
	12	447-	456	452.27	112.92	0.66	3.09E+002	120.06	6.24E+003
M	13	558-	584	561.86	140.31	1.04	2.42E+002	70.05	6.96E+003
m	14	558-	584	576.19	143.89	1.05	1.22E+003	90.92	9.04E+003
	15	641-	661	654.35	163.42	1.09	7.82E+002	211.52	1.21E+004
	16	733-	755	744.92	186.06	1.24	1.05E+004	240.39	1.22E+004
M	17	940-	977	944.74	236.00	1.11	7.98E+002	62.02	4.40E+003
m	18	940-	977	955.54	238.69	1.11	6.78E+002	59.65	5.36E+003
m	19	940-	977	968.76	242.00	1.12	1.08E+004	122.06	4.66E+003
M	20	1021-	1046	1025.38	256.15	1.13	3.30E+002	54.49	3.75E+003
m	21	1021-	1046	1036.01	258.81	1.13	7.84E+002	64.04	4.15E+003
M	22	1071-	1105	1078.80	269.50	1.10	7.72E+002	58.01	4.00E+003
m	23	1071-	1105	1085.69	271.22	1.10	6.78E+002	55.76	3.97E+003
m	24	1071-	1105	1099.82	274.75	1.10	4.59E+002	53.70	3.64E+003
M	25	1173-	1206	1181.54	295.18	1.13	2.43E+004	166.25	3.69E+003
m	26	1173-	1206	1200.31	299.87	1.14	1.71E+002	46.52	3.25E+003
	27	1291-	1306	1295.23	323.59	0.99	3.80E+002	98.56	3.10E+003
	28	1348-	1361	1354.01	338.28	0.95	2.16E+002	89.02	2.79E+003
	29	1394-	1419	1408.37	351.86	1.20	4.28E+004	251.56	4.74E+003
M	30	1534-	1563	1547.66	386.68	1.13	2.96E+002	39.59	2.10E+003
m	31	1534-	1563	1555.80	388.71	1.13	3.34E+002	41.58	2.04E+003
M	32	1598-	1629	1608.11	401.78	1.02	3.20E+002	41.29	1.86E+003
m	33	1598-	1629	1620.56	404.90	1.02	2.07E+002	38.05	1.94E+003
	34	1808-	1828	1820.67	454.91	0.77	2.66E+002	88.95	2.11E+003
	35	1872-	1885	1879.64	469.64	0.45	2.73E+001	61.46	1.36E+003
	36	1917-	1929	1922.20	480.28	1.19	2.34E+002	57.89	1.18E+003
	37	1944-	1954	1948.99	486.98	1.16	3.37E+002	51.47	9.68E+002
	38	2033-	2060	2044.29	510.79	2.51	1.02E+003	102.31	2.09E+003
	39	2129-	2141	2136.08	533.73	1.04	1.23E+002	52.04	9.82E+002
M	40	2313-	2338	2320.89	579.92	1.30	2.96E+002	32.87	1.07E+003
m	41	2313-	2338	2333.16	582.99	1.30	2.70E+002	32.01	9.09E+002
	42	2429-	2450	2438.03	609.20	1.36	3.41E+004	197.63	1.31E+003

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	43	2655-	2670	2662.73	665.36	1.28	1.00E+003	57.54	7.68E+002
	44	2804-	2823	2812.79	702.86	1.43	3.80E+002	60.97	9.48E+002
	45	2874-	2888	2879.79	719.60	1.21	1.74E+002	48.14	7.42E+002
	46	2956-	2982	2972.12	742.68	1.46	2.29E+002	73.16	1.17E+003
	47	3057-	3087	3074.57	768.28	1.45	3.51E+003	98.85	1.28E+003
	48	3135-	3154	3145.19	785.93	1.35	7.55E+002	61.17	8.53E+002
	49	3217-	3237	3225.93	806.11	1.49	7.68E+002	61.24	8.20E+002
	50	3324-	3339	3329.40	831.97	0.40	8.64E+001	46.51	6.88E+002
	51	3348-	3365	3357.59	839.01	1.14	3.88E+002	52.13	7.16E+002
	52	3637-	3654	3645.96	911.08	1.75	2.22E+002	49.85	6.96E+002
	53	3728-	3752	3737.75	934.02	1.63	1.72E+003	74.54	9.19E+002
M	54	3849-	3887	3858.82	964.28	1.70	2.02E+002	27.29	7.18E+002
m	55	3849-	3887	3876.71	968.75	1.70	1.49E+002	25.11	6.99E+002
	56	3954-	3966	3959.22	989.37	0.28	1.17E+001	34.86	4.56E+002
	57	3995-	4014	4006.05	1001.08	1.19	5.50E+002	51.77	6.08E+002
	58	4197-	4222	4210.50	1052.17	1.48	2.47E+002	56.54	6.94E+002
	59	4274-	4291	4282.15	1070.08	1.16	1.17E+002	43.57	5.48E+002
	60	4472-	4496	4483.72	1120.45	1.66	7.64E+003	103.05	7.20E+002
	61	4529-	4548	4536.34	1133.61	1.00	1.26E+002	44.88	5.39E+002
	62	4611-	4632	4623.65	1155.43	1.83	8.49E+002	53.32	5.32E+002
	63	4725-	4738	4730.36	1182.09	0.78	7.29E+001	31.84	3.40E+002
	64	4824-	4843	4834.13	1208.03	1.75	1.84E+002	41.64	4.43E+002
	65	4945-	4968	4955.87	1238.45	1.61	2.72E+003	70.78	5.69E+002
	66	5011-	5033	5016.61	1253.63	0.80	1.35E+002	44.03	4.64E+002
	67	5119-	5137	5127.41	1281.33	1.51	6.60E+002	46.51	4.42E+002
	68	5502-	5527	5514.93	1378.17	1.75	2.08E+003	62.81	4.39E+002
	69	5534-	5558	5545.28	1385.76	1.75	4.01E+002	46.51	4.26E+002
M	70	5598-	5648	5610.71	1402.11	1.85	6.22E+002	30.53	4.22E+002
m	71	5598-	5648	5636.10	1408.46	1.85	1.09E+003	38.24	4.47E+002
	72	5804-	5818	5811.19	1452.21	1.07	2.97E+001	27.91	2.60E+002
	73	5835-	5860	5847.81	1461.37	1.79	4.20E+002	49.41	4.75E+002
	74	6031-	6053	6042.10	1509.92	1.88	9.48E+002	52.11	4.53E+002
M	75	6145-	6188	6159.88	1539.36	1.89	1.52E+002	21.70	4.68E+002
m	76	6145-	6188	6179.17	1544.18	1.89	1.77E+002	21.78	3.73E+002
	77	6330-	6350	6339.08	1584.14	1.09	2.19E+002	37.74	3.32E+002
M	78	6371-	6413	6384.65	1595.53	1.71	1.29E+002	17.92	2.61E+002
m	79	6371-	6413	6403.94	1600.35	1.71	1.22E+002	17.47	2.45E+002
	80	6641-	6664	6651.89	1662.32	1.30	4.29E+002	33.90	1.80E+002
	81	6733-	6752	6741.58	1684.74	0.79	7.15E+001	23.88	1.43E+002
	82	6775-	6789	6781.41	1694.69	0.34	3.56E+001	21.24	1.43E+002
	83	6911-	6940	6925.45	1730.69	1.83	1.34E+003	48.00	2.03E+002
	84	7051-	7079	7065.61	1765.72	1.99	6.35E+003	83.60	1.38E+002
	85	7352-	7372	7361.49	1839.66	0.68	7.00E+001	24.15	1.41E+002
	86	7386-	7411	7398.09	1848.81	1.55	8.64E+002	38.75	1.51E+002
	87	7489-	7511	7502.42	1874.89	0.61	1.05E+002	21.21	8.91E+001
	88	7564-	7577	7570.28	1891.85	0.57	3.70E+001	13.67	5.40E+001

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-A02-S002-0006-01
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	1.5099E+000	1.51E+000	2.8521E+000
	Co-60	1173.23	99.85	1.5030E-001	1.50E-001	-1.0071E-001
		1332.49	99.98	1.5525E-001		1.9454E-001
>		2505.71	0.10	0.0000E+000		0.0000E+000
	Cs-137	32.06	5.54	1.1729E+004	1.77E-001	3.5794E+003
		661.66	84.99	1.7664E-001		-3.5976E-002
+	Tl-208	72.80	2.02	2.1031E+001	9.48E-002	1.5033E+000
		74.97*	3.41	7.3944E+000		7.3984E+001
		84.90*	1.51	1.2186E+001		3.2226E+001
		277.36	6.31	2.7191E+000		-1.1295E+000
		510.77*	22.60	7.4807E-001		1.3802E+000
		583.19*	84.50	9.4780E-002		1.2371E-001
		763.13	1.81	1.1314E+001		-1.4600E+000
		860.56	12.42	1.2080E+000		8.1744E-003
	Bi-212	39.86	1.06	2.2260E+003	2.09E+000	6.6399E+002
		727.33	6.74	2.0852E+000		-1.1421E+000
		785.37	1.11	1.4944E+001		3.5943E+001
		1620.74	1.51	9.4008E+000		-2.3194E-001
		1806.00	0.09	1.0867E+002		2.5597E+001
+	Pb-212	74.81*	10.40	2.4245E+000	2.75E-001	2.4258E+001
		77.11*	17.50	1.3118E+000		8.9993E+000
		87.30*	7.81	2.1623E+000		1.2000E+001
		115.18	0.59	2.8805E+001		-6.5568E+000
		238.63*	43.30	2.7487E-001		3.7188E-001
		300.09*	3.28	3.1904E+000		1.4420E+000
+	Bi-214	76.86*	0.43	5.1629E+001	2.82E-001	3.5418E+002
		89.81*	0.24	6.2538E+001		5.6477E+001
		386.77*	0.30	3.1201E+001		3.0348E+001
		454.77*	0.29	4.6984E+001		3.0510E+001
		609.31*	45.49	2.8244E-001		2.9316E+001
		665.45*	1.53	6.1055E+000		2.7135E+001
		703.11*	0.48	2.4286E+001		3.3978E+001
		719.86*	0.39	2.4168E+001		1.9303E+001
		768.36*	4.89	3.4576E+000		3.2720E+001
		786.10*	0.31	3.8443E+001		1.1305E+002
		806.17*	1.26	9.6090E+000		2.8771E+001
		934.06*	3.10	4.9594E+000		2.9432E+001
		964.08*	0.36	2.6749E+001		3.0176E+001
		1051.96*	0.31	4.7180E+001		4.5677E+001
		1120.29*	14.91	1.0534E+000		3.1392E+001

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	Bi-214	1133.66*	0.25	4.9870E+001	2.82E-001	3.0716E+001
		1155.19*	1.63	8.0786E+000		3.2623E+001
		1207.68*	0.45	2.6802E+001		2.6602E+001
		1238.11*	5.79	2.5801E+000		3.1231E+001
		1280.96*	1.43	8.7198E+000		3.1466E+001
		1377.67*	4.00	3.6586E+000		3.7370E+001
		1385.31*	0.76	1.8873E+001		3.8198E+001
		1401.50*	1.27	7.8970E+000		3.5649E+001
		1407.98*	2.15	4.8094E+000		3.7014E+001
		1509.23*	2.11	7.1737E+000		3.4297E+001
		1538.50*	0.38	2.9771E+001		3.1255E+001
		1543.32*	0.20	5.0149E+001		6.8601E+001
		1583.22*	0.69	1.8670E+001		2.4906E+001
		1594.73*	0.25	3.4332E+001		4.0652E+001
		1599.31	0.23	7.1391E+001		5.1212E+000
		1661.28	1.15	1.3853E+001		3.5512E+001
		1683.99*	0.22	3.9865E+001		2.6731E+001
		1729.59	2.92	7.6884E+000		3.7723E+001
		1764.49	15.40	2.8747E+000		3.3767E+001
		1847.42	2.11	9.2782E+000		3.9196E+001
		1873.16	0.22	4.8940E+001		4.9658E+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	1.1340E+002	5.13E-001	-4.9427E+001
		74.81*	6.44	3.7511E+000		3.7532E+001
		77.11*	10.80	2.0365E+000		1.3971E+001
		87.30*	4.84	3.3428E+000		1.8552E+001
		242.00*	7.43	1.4397E+000		3.4330E+001
		258.87*	0.52	1.9988E+001		3.6722E+001
		274.80*	0.47	2.1386E+001		2.4570E+001
		295.22*	19.30	5.4923E-001		3.3240E+001
		351.93*	37.60	5.1327E-001		3.2910E+001
		462.00	0.22	6.1869E+001		3.7289E+001
		533.66*	0.19	4.6429E+001		2.3866E+001
		785.96*	1.07	1.1138E+001		3.2753E+001
		839.04*	0.59	1.8842E+001		3.2187E+001
	Ra-224	81.07	0.13	2.2171E+002	5.89E+000	-4.6282E+003
		83.78	0.22	1.2439E+002		-8.8504E+002
		240.99	4.10	5.8914E+000		-8.8529E-002
+	Ra-226	81.07*	0.20	9.7025E+001	5.87E+000	3.1204E+001
		83.78*	0.33	5.3746E+001		1.4214E+002
		94.90*	0.15	9.3461E+001		1.5487E+002
		186.21*	3.59	5.8701E+000		6.0323E+001
	Ac-228	99.50	1.26	1.4578E+001	6.25E-001	1.4702E-001
		129.07	2.50	7.0769E+000		6.9051E+000
		209.25	3.97	4.4636E+000		-2.1485E-001
		270.24	3.55	5.0988E+000		2.1312E-001
		328.00	3.04	5.3967E+000		9.7027E-001
		338.32	11.40	1.4600E+000		-1.4816E-001
		409.46	2.02	7.7127E+000		-2.1380E+000

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
	Ac-228	463.00	4.45	3.2884E+000	6.25E-001	3.0182E+000
		755.31	1.03	1.3729E+001		2.6357E+000
		772.29	1.52	1.4902E+001		8.5988E-001
		794.94	4.31	3.2728E+000		6.3230E-001
		835.70	1.70	9.5352E+000		1.0260E+001
		911.20	26.20	6.2530E-001		-1.7878E-001
		964.79	4.99	3.3349E+000		-9.1639E-002
		968.96	15.90	1.0469E+000		-6.2309E-002
		1588.20	3.06	5.8938E+000		7.5866E+000
		1630.62	1.52	9.0488E+000		1.3275E+000
+	Th-228	84.37*	1.26	1.4603E+001	1.46E+001	3.8620E+001
		131.61	0.13	1.3546E+002		-2.1583E+001
		166.41	0.10	1.7278E+002		2.7410E+001
		215.98	0.25	6.7613E+001		-5.7434E+001
+	Pa-234m	258.23*	0.07	1.4192E+002	1.44E+001	2.6073E+002
		742.81*	0.09	1.5901E+002		1.0845E+002
		766.36	0.32	6.8354E+001		4.8722E+002
		786.27*	0.05	2.2233E+002		6.5381E+002
		1001.03*	0.85	1.4376E+001		3.6058E+001
		1737.77	0.02	8.8319E+002		1.0949E+002
+	Th-234	63.30*	3.75	1.2624E+001	3.35E+000	2.3143E+001
		92.59*	4.33	3.3460E+000		4.2193E+001
		112.81*	0.22	5.1235E+001		2.8482E+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 *****
****

Sample Title: HTC-A02-S002-0006-01
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	0.953	1460.82*		10.55	2.85211E+000	3.59142E-001
Eu-152m	0.999	89.85*		69.90	1.98331E-001	1.30264E-002
Tl-208	0.732	72.80	@	2.02		
		74.97*	@	3.41	7.39836E+001	2.72143E+000
		84.90*	@	1.51	3.22263E+001	1.77770E+000
		277.36		6.31		
		510.77*	@	22.60	1.38017E+000	1.72523E-001
		583.19*		84.50	1.23713E-001	1.55734E-002
		763.13	@	1.81		
		860.56		12.42		
Bi-211	0.895	351.03*		13.00	9.55415E+001	3.49296E+000
Pb-211	0.695	74.81*	@	0.23	1.05480E+003	6.00719E+001
		77.11*	@	0.39	3.91327E+002	2.35949E+001
		87.30*	@	0.17	5.20966E+002	3.10096E+001
		404.85*		3.78	1.71055E+000	3.20311E-001
		427.09		1.76		
		832.01*		3.52	1.19149E+000	6.42537E-001
Pb-212	0.986	74.81*		10.40	2.42581E+001	1.13397E+000
		77.11*		17.50	8.99925E+000	4.51949E-001
		87.30*		7.81	1.20005E+001	5.91477E-001
		115.18	@	0.59		
		238.63*		43.30	3.71880E-001	3.60193E-002
		300.09*		3.28	1.44196E+000	3.96295E-001
Bi-214	0.762	76.86*	@	0.43	3.54183E+002	1.81881E+001
		89.81*	@	0.24	5.64766E+001	4.22659E+000
		386.77*	@	0.30	3.03479E+001	4.21418E+000
		454.77*	@	0.29	3.05099E+001	1.02730E+001
		609.31*		45.49	2.93156E+001	8.81731E-001
		665.45*	@	1.53	2.71345E+001	1.72761E+000
		703.11*	@	0.48	3.39784E+001	5.58408E+000
		719.86*	@	0.39	1.93034E+001	5.38289E+000
		768.36*		4.89	3.27198E+001	1.22663E+000
		786.10*	@	0.31	1.13052E+002	2.05856E+001
		806.17*	@	1.26	2.87710E+001	2.39657E+000
		934.06*		3.10	2.94318E+001	1.44130E+000
		964.08*	@	0.36	3.01760E+001	4.25749E+000
		1051.96*	@	0.31	4.56771E+001	1.06262E+001
		1120.29*		14.91	3.13924E+001	8.72384E-001
		1133.66*	@	0.25	3.07162E+001	1.09986E+001
		1155.19*	@	1.63	3.26233E+001	2.20318E+000
		1207.68*	@	0.45	2.66017E+001	6.11776E+000

Nuclide Name	Id Confidence	Energy (keV)		Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
Bi-214	0.762	1238.11*		5.79	3.12308E+001	1.20759E+000
		1280.96*	@	1.43	3.14658E+001	2.39497E+000
		1377.67*		4.00	3.73696E+001	1.57337E+000
		1385.31*	@	0.76	3.81982E+001	4.62791E+000
		1401.50*	@	1.27	3.56487E+001	2.04442E+000
		1407.98*	@	2.15	3.70138E+001	1.81453E+000
		1509.23*	@	2.11	3.42966E+001	2.17253E+000
		1538.50*	@	0.38	3.12555E+001	4.67221E+000
		1543.32*	@	0.20	6.86005E+001	1.91855E+001
		1583.22*	@	0.69	2.49060E+001	4.36917E+000
		1594.73*	@	0.25	4.06525E+001	8.67445E+000
		1599.31	@	0.23		
		1661.28	@	1.15		
		1683.99*	@	0.22	2.67312E+001	8.99632E+000
		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	0.988	53.28	@	1.20		
		74.81*		6.44	3.75316E+001	1.84494E+000
		77.11*		10.80	1.39706E+001	7.75025E-001
		87.30*		4.84	1.85522E+001	9.79541E-001
		242.00*		7.43	3.43305E+001	1.26099E+000
		258.87*	@	0.52	3.67225E+001	3.31305E+000
		274.80*	@	0.47	2.45697E+001	3.03367E+000
		295.22*		19.30	3.32404E+001	1.15427E+000
		351.93*		37.60	3.29105E+001	1.15711E+000
		462.00	@	0.22		
		533.66*	@	0.19	2.38664E+001	1.01968E+001
		785.96*	@	1.07	3.27535E+001	3.69576E+000
		839.04*	@	0.59	3.21873E+001	4.42281E+000
Rn-219	0.987	76.86*	@	0.56	2.70435E+002	4.48750E+001
		79.29*	@	0.93	9.84585E+000	2.04589E+000
		89.80*	@	0.42	3.29324E+001	5.89277E+000
		130.60	@	0.13		
		271.23*		10.80	1.58744E+000	1.73859E-001
		401.81*		6.60	1.50490E+000	2.30866E-001
Ra-223	0.789	81.07*		15.30	4.03274E-001	4.65829E-002
		83.78*		25.40	1.84230E+000	1.07904E-001
		94.90*		11.50	2.01410E+000	2.18298E-001
		122.32	@	1.21		
		144.24*		3.27	7.08749E+000	5.96298E-001
		154.21		5.70		
		158.63	@	0.69		
		179.54	@	0.15		
		269.46*		13.90	1.40029E+000	1.21254E-001
		288.18	@	0.16		
		323.87*		3.99	2.64438E+000	6.93676E-001

Nuclide Name	Id Confidence	Energy (keV)		Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
Ra-223	0.789	328.38	@	0.21		
		338.32*		2.84	2.15810E+000	8.94975E-001
		342.87	@	0.22		
		371.68	@	0.49		
		445.03	@	1.29		
Ra-226	0.996	81.07*	@	0.20	3.12041E+001	3.77113E+000
		83.78*	@	0.33	1.42137E+002	9.40839E+000
		94.90*	@	0.15	1.54874E+002	1.74454E+001
		186.21*		3.59	6.03229E+001	2.47423E+000
Th-228	0.483	84.37*		1.26	3.86205E+001	2.21686E+000
		131.61	@	0.13		
		166.41	@	0.10		
		215.98		0.25		
Pa-234m	0.595	258.23*	@	0.07	2.60726E+002	2.30506E+001
		742.81*	@	0.09	1.08449E+002	3.49481E+001
		766.36		0.32		
		786.27*	@	0.05	6.53814E+002	5.59093E+001
		1001.03*		0.85	3.60580E+001	3.53727E+000
		1737.77	@	0.02		
Th-234	0.999	63.30*		3.75	2.31431E+001	2.91073E+000
		92.59*		4.33	4.21926E+001	2.26962E+000
		112.81*	@	0.22	2.84815E+001	1.14789E+001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.000 keV
Nuclide confidence index threshold = 0.45
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
	K-40		0.953	2.852110E+000	3.591418E-001
X	Cd-109		0.918		
	Eu-152m		0.999	7.957841E-002	1.302747E-002
X	Tm-170		0.985		
	Tl-208	@	0.732	1.247753E-001	1.553937E-002
	Bi-211		0.895	3.644725E+001	3.382716E+000
	Pb-211	@	0.695	1.546140E+000	2.857915E-001
	Pb-212	@	0.986	3.387733E-001	3.564205E-002
	Bi-214	@	0.762	3.116899E+001	4.455610E-001
	Pb-214	@	0.988	2.035576E+001	3.760593E-001
	Rn-219	@	0.987	1.543441E+000	1.149101E-001
	Ra-223	@	0.789	8.035863E-002	4.850392E-002
	Ra-226	@	0.996	5.169357E+001	2.194204E+000
	Th-228	@	0.483	2.274055E+001	2.307212E+000
X	Th-231		0.991		
	Pa-234m	@	0.595	3.605802E+001	3.537269E+000
	Th-234	@	0.999	3.498984E+001	1.789823E+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: 6/27/2017 6:56:39 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 11	98.44	6.2211E-002	15.46	D-Esc.	
M 13	140.31	3.2503E-002	29.94	Sum	
15	163.42	1.0862E-001	27.05	Sum	
M 17	236.00	1.1078E-001	7.78	Sum	
M 20	256.15	4.5874E-002	16.50	Sum	
m 31	388.71	4.6424E-002	12.44	Sum	
35	469.64	3.7867E-003	225.41	Sum	
36	480.28	3.2482E-002	24.75	Sum	
37	486.98	4.6806E-002	15.27	D-Esc.	
M 40	579.92	4.1179E-002	11.09	Sum	
52	911.08	3.0111E-002	23.01	Sum	
m 55	968.75	2.0719E-002	16.83	Sum	
56	989.37	1.6284E-003	297.30	Sum	
59	1070.08	1.6312E-002	37.10	Sum	
63	1182.09	1.0124E-002	43.68		
66	1253.63	1.8707E-002	32.69	Sum	
72	1452.21	4.1187E-003	94.11	Sum	
m 79	1600.35	1.6894E-002	14.36	Sum	
80	1662.32	5.9521E-002	7.91	Sum	
82	1694.69	4.9432E-003	59.67		
83	1730.69	1.8555E-001	3.59	Sum	
84	1765.72	8.8122E-001	1.32	Sum	
85	1839.66	9.7166E-003	34.52	Sum	
86	1848.81	1.2006E-001	4.48	Sum	
87	1874.89	1.4576E-002	20.21	Sum	
88	1891.85	5.1381E-003	36.96	Sum	

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

Errors quoted at 1.000 sigma