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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-NFB-A02-S002-0006-01.CNF

Report Generated On	: 5/18/2017 2:42:18 PM
Sample Title	: NFB-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	: 8.928E+002 GWET
Sample Taken On	: 5/9/2017 1:30:00 PM
Acquisition Started	: 5/18/2017 12:42:04 PM
Live Time	: 7200.0 seconds
Real Time	: 7211.5 seconds
Dead Time	: 0.16 %

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: NFB-A02-S002-0006-01
Peak Analysis Performed on: 5/18/2017 2:42:19 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	285-	321	300.12	74.89	1.10	1.84E+003	73.37	5.48E+003
m	2	285-	321	309.08	77.13	1.10	2.49E+003	80.29	5.52E+003
M	3	323-	379	338.10	84.39	1.27	6.91E+002	68.15	6.73E+003
m	4	323-	379	349.41	87.21	1.28	1.48E+003	76.48	7.38E+003
m	5	323-	379	360.37	89.95	1.28	1.00E+003	73.84	7.61E+003
m	6	323-	379	373.27	93.17	1.29	1.43E+003	80.88	6.94E+003
	7	416-	427	422.19	105.40	1.02	3.61E+002	119.74	5.58E+003
	8	513-	523	516.68	129.01	0.68	5.68E+002	116.44	5.43E+003
	9	612-	622	615.99	153.83	0.56	3.90E+002	106.92	4.63E+003
	10	738-	750	744.72	186.00	1.13	8.64E+002	120.99	5.23E+003
M	11	829-	855	837.52	209.20	1.05	1.49E+003	36.39	4.73E+003
m	12	829-	855	851.21	212.62	1.05	6.20E+001	21.49	4.23E+003
M	13	949-	981	954.92	238.54	1.08	1.77E+004	145.33	3.68E+003
m	14	949-	981	965.45	241.17	1.08	2.08E+003	63.11	3.30E+003
	15	1071-	1088	1081.35	270.14	1.12	1.38E+003	114.11	3.58E+003
	16	1103-	1114	1109.22	277.10	1.07	6.48E+002	80.16	2.31E+003
	17	1175-	1187	1181.05	295.05	1.22	2.42E+003	90.94	2.22E+003
	18	1193-	1208	1200.63	299.95	1.12	1.07E+003	95.90	2.70E+003
M	19	1294-	1334	1312.08	327.80	1.17	1.11E+003	53.70	2.17E+003
m	20	1294-	1334	1329.17	332.07	1.18	1.14E+002	37.33	1.89E+003
	21	1346-	1361	1353.46	338.14	1.11	3.68E+003	105.75	2.49E+003
	22	1397-	1416	1407.78	351.72	1.22	4.98E+003	115.34	2.38E+003
	23	1628-	1645	1637.74	409.19	1.21	6.65E+002	79.11	1.72E+003
	24	1806-	1818	1811.05	452.50	0.89	7.12E+001	55.06	1.12E+003
	25	1845-	1859	1851.72	462.67	1.31	1.33E+003	69.91	1.24E+003
	26	1919-	1928	1923.58	480.63	0.40	3.97E+001	41.90	7.56E+002
	27	2010-	2024	2015.36	503.56	0.81	8.52E+001	55.68	1.05E+003
	28	2026-	2059	2042.97	510.46	1.51	3.79E+003	126.23	2.31E+003
	29	2242-	2258	2248.99	561.95	1.08	2.51E+002	59.45	1.05E+003
	30	2323-	2342	2332.60	582.85	1.26	8.32E+003	113.63	1.31E+003
	31	2425-	2452	2437.10	608.97	1.34	4.37E+003	102.16	1.34E+003
	32	2654-	2670	2661.82	665.13	1.27	1.06E+002	51.74	8.18E+002
	33	2803-	2812	2807.63	701.57	0.55	1.56E+001	33.86	5.00E+002
	34	2898-	2921	2908.95	726.89	1.41	1.84E+003	74.75	9.35E+002
	35	3014-	3032	3020.86	754.86	1.69	2.40E+002	48.83	6.31E+002
M	36	3045-	3099	3053.58	763.03	1.55	1.84E+002	24.09	5.81E+002
m	37	3045-	3099	3073.09	767.91	1.55	4.17E+002	30.00	6.60E+002
m	38	3045-	3099	3089.09	771.91	1.55	2.96E+002	27.34	6.73E+002
M	39	3123-	3150	3128.13	781.67	1.35	1.12E+002	19.89	3.90E+002
m	40	3123-	3150	3142.16	785.17	1.36	3.28E+002	27.04	4.85E+002
	41	3171-	3190	3179.90	794.60	1.32	1.06E+003	54.07	5.31E+002
	42	3218-	3232	3224.91	805.85	0.65	9.45E+001	34.72	3.85E+002

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	43	3315-	3371	3322.36	830.21	1.58	1.13E+002	20.41	4.23E+002
m	44	3315-	3371	3342.91	835.34	1.58	3.60E+002	26.53	4.68E+002
m	45	3315-	3371	3361.00	839.86	1.58	2.64E+002	23.94	4.35E+002
	46	3431-	3452	3442.13	860.14	1.24	1.10E+003	50.77	3.93E+002
	47	3565-	3580	3572.45	892.71	0.93	4.32E+001	32.81	3.43E+002
	48	3607-	3623	3616.75	903.78	0.97	1.72E+002	35.24	3.42E+002
	49	3633-	3659	3644.96	910.83	1.60	6.27E+003	90.23	4.26E+002
	50	3726-	3745	3736.64	933.74	1.54	1.94E+002	37.73	3.51E+002
M	51	3847-	3889	3859.31	964.40	1.59	1.17E+003	37.57	2.92E+002
m	52	3847-	3889	3876.29	968.65	1.59	3.78E+003	63.70	2.80E+002
	53	4308-	4323	4316.03	1078.55	0.58	1.07E+002	26.14	1.92E+002
	54	4436-	4451	4443.52	1110.41	0.32	7.05E+001	25.07	1.84E+002
	55	4471-	4492	4482.32	1120.11	1.62	1.09E+003	44.00	2.25E+002
	56	4520-	4531	4525.40	1130.87	0.39	1.74E+001	17.73	1.19E+002
	57	4612-	4635	4621.33	1154.85	1.41	1.38E+002	33.79	2.49E+002
	58	4940-	4963	4954.05	1238.00	1.70	4.48E+002	37.41	2.37E+002
	59	4979-	4998	4989.97	1246.98	0.49	1.39E+002	28.46	1.91E+002
	60	5076-	5087	5081.63	1269.88	0.88	2.30E+001	16.40	9.80E+001
	61	5118-	5134	5125.83	1280.93	1.04	7.13E+001	25.01	1.77E+002
	62	5505-	5524	5513.04	1377.70	1.16	2.32E+002	30.66	2.01E+002
M	63	5600-	5642	5608.23	1401.49	1.62	8.15E+001	13.99	1.50E+002
m	64	5600-	5642	5634.06	1407.95	1.62	1.56E+002	17.15	1.51E+002
	65	5658-	5671	5664.12	1415.46	0.73	1.68E+001	18.18	1.07E+002
	66	5830-	5859	5844.62	1460.57	2.19	4.43E+002	36.57	1.86E+002
M	67	5976-	6021	5986.58	1496.05	1.83	1.60E+002	17.01	1.49E+002
m	68	5976-	6021	6009.26	1501.72	1.83	8.75E+001	13.83	1.48E+002
	69	6027-	6048	6039.37	1509.24	0.86	1.08E+002	30.65	2.17E+002
	70	6151-	6164	6157.11	1538.67	0.32	3.30E+001	16.51	8.40E+001
	71	6316-	6333	6325.30	1580.70	0.66	8.69E+001	25.27	1.66E+002
M	72	6344-	6385	6356.17	1588.42	1.80	5.85E+002	27.04	1.69E+002
m	73	6344-	6385	6373.34	1592.71	1.80	3.26E+002	21.73	2.02E+002
	74	6475-	6496	6486.04	1620.87	1.61	2.74E+002	28.51	1.43E+002
	75	6518-	6538	6525.96	1630.85	1.63	2.69E+002	27.70	1.36E+002
	76	6552-	6566	6558.06	1638.87	0.81	4.96E+001	18.05	9.54E+001
	77	6644-	6657	6650.42	1661.95	0.44	6.12E+001	16.64	7.58E+001
	78	6908-	6935	6923.00	1730.08	1.07	2.11E+002	28.48	1.33E+002
	79	7048-	7080	7062.72	1765.00	1.71	9.93E+002	40.91	1.32E+002
	80	7384-	7406	7395.13	1848.07	1.27	1.44E+002	23.61	1.06E+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: NFB-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	1.0060E+000	1.01E+000	2.9821E+000
	Co-60	1173.23	99.85	9.9256E-002	9.93E-002	-4.7888E-002
		1332.49	99.98	1.0375E-001		4.8132E-003
>		2505.71	0.10	0.0000E+000		0.0000E+000
	Cs-137	32.06	5.54	9.1232E+003	1.45E-001	3.3923E+003
		661.66	84.99	1.4502E-001		2.5990E-002
+	Tl-208	72.80	2.02	1.4792E+001	1.43E-001	1.3258E-001
		74.97*	3.41	5.4205E+000		2.0420E+001
		84.90*	1.51	1.0077E+001		1.2842E+001
		277.36*	6.31	1.4338E+000		2.6106E+000
		510.77*	22.60	8.0722E-001		5.6241E+000
		583.19*	84.50	1.4280E-001		3.7300E+000
		763.13*	1.81	4.0339E+000		4.5941E+000
		860.56*	12.42	7.2224E-001		4.3935E+000
+	Bi-212	39.86	1.06	1.6771E+003	1.87E+000	4.2069E+002
		727.33*	6.74	1.8661E+000		1.1922E+001
		785.37*	1.11	6.1427E+000		1.3647E+001
		1620.74*	1.51	5.8020E+000		1.4359E+001
		1806.00	0.09	1.1371E+002		1.0246E+002
+	Pb-212	74.81*	10.40	1.7773E+000	2.18E-001	6.6953E+000
		77.11*	17.50	9.7521E-001		4.9502E+000
		87.30*	7.81	1.9144E+000		4.9847E+000
		115.18	0.59	2.3692E+001		7.3746E+000
		238.63*	43.30	2.1788E-001		9.5954E+000
		300.09*	3.28	3.4085E+000		8.6375E+000
+	Bi-214	76.86*	0.43	3.9707E+001	3.10E-001	2.0155E+002
		89.81*	0.24	5.8486E+001		1.0163E+002
		386.77	0.30	4.2166E+001		1.0603E+000
		454.77	0.29	4.1927E+001		6.5108E+000
		609.31*	45.49	3.0958E-001		3.7093E+000
		665.45*	1.53	6.3641E+000		2.8155E+000
		703.11	0.48	2.5888E+001		7.7073E+000
		719.86	0.39	3.1570E+001		1.8958E+001
		768.36*	4.89	1.5816E+000		3.8423E+000
		786.10*	0.31	2.1800E+001		4.8431E+001
		806.17*	1.26	5.8345E+000		3.4955E+000
		934.06*	3.10	2.7948E+000		3.2681E+000
		964.08*	0.36	1.6993E+001		1.7285E+002
		1051.96	0.31	2.9372E+001		-7.1392E-001
		1120.29*	14.91	5.5985E-001		4.4272E+000

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	Bi-214	1133.66	0.25	3.8297E+001	3.10E-001	1.3397E+001
		1155.19*	1.63	5.6936E+000		5.2509E+000
		1207.68	0.45	2.1860E+001		1.5126E+001
		1238.11*	5.79	1.6543E+000		5.0746E+000
		1280.96*	1.43	5.2812E+000		3.3545E+000
		1377.67*	4.00	2.2455E+000		4.1114E+000
		1385.31	0.76	1.4688E+001		5.1055E+000
		1401.50*	1.27	4.7154E+000		4.6146E+000
		1407.98*	2.15	2.8018E+000		5.2300E+000
		1509.23*	2.11	4.8875E+000		3.8767E+000
		1538.50*	0.38	1.5159E+001		6.6955E+000
		1543.32	0.20	5.1671E+001		3.8998E+001
		1583.22	0.69	2.5288E+001		1.9793E+001
		1594.73	0.25	7.4850E+001		7.7593E+000
		1599.31	0.23	5.8930E+001		1.5115E+000
		1661.28*	1.15	4.9007E+000		4.2247E+000
		1683.99	0.22	4.6221E+001		-6.7310E+000
		1729.59*	2.92	3.2196E+000		5.8229E+000
		1764.49*	15.40	6.5729E-001		5.2083E+000
		1847.42*	2.11	3.7855E+000		5.5973E+000
		1873.16	0.22	4.4535E+001		1.3184E+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	8.8481E+001	3.25E-001	-1.8973E+001
		74.81*	6.44	2.8448E+000		1.0717E+001
		77.11*	10.80	1.5662E+000		7.9502E+000
		87.30*	4.84	3.0618E+000		7.9724E+000
		242.00*	7.43	1.1961E+000		6.5387E+000
		258.87	0.52	2.4631E+001		4.9995E-001
		274.80	0.47	2.9666E+001		2.9158E+001
		295.22*	19.30	4.8328E-001		3.2673E+000
		351.93*	37.60	3.2456E-001		3.7731E+000
		462.00*	0.22	4.1768E+001		1.9843E+002
		533.66	0.19	6.4404E+001		3.0492E+001
		785.96*	1.07	6.3160E+000		1.4032E+001
		839.04*	0.59	1.1479E+001		2.1688E+001
+	Ra-224	81.07	0.13	1.6061E+002	2.19E+000	-1.4882E+003
		83.78*	0.22	7.0120E+001		8.9361E+001
		240.99*	4.10	2.1870E+000		1.1955E+001
+	Ra-226	81.07	0.20	1.0585E+002	3.14E+000	-9.8088E+002
		83.78*	0.33	4.5980E+001		5.8597E+001
		94.90	0.15	1.1494E+002		-1.9839E+001
		186.21*	3.59	3.1432E+000		4.6565E+000
+	Ac-228	99.50	1.26	1.2182E+001	3.85E-001	-6.1996E+000
		129.07*	2.50	4.0541E+000		4.3191E+000
		209.25*	3.97	2.5096E+000		8.2287E+000
		270.24*	3.55	3.5613E+000		9.7431E+000
		328.00*	3.04	2.8213E+000		1.0168E+001
		338.32*	11.40	1.0034E+000		9.1181E+000
		409.46*	2.02	5.4079E+000		1.0263E+001

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GWET)	Nuclide MDA (pCi/GWET)	Activity (pCi/GWET)
+	Ac-228	463.00*	4.45	2.0928E+000	3.85E-001	9.9425E+000
		755.31*	1.03	9.5139E+000		1.0459E+001
		772.29*	1.52	5.2042E+000		8.8925E+000
		794.94*	4.31	2.2039E+000		1.1421E+001
		835.70*	1.70	4.1270E+000		1.0247E+001
		911.20*	26.20	4.0371E-001		1.2366E+001
		964.79*	4.99	1.2472E+000		1.2687E+001
		968.96*	15.90	3.8472E-001		1.2892E+001
		1588.20*	3.06	2.2590E+000		1.4978E+001
		1630.62*	1.52	5.5595E+000		1.4062E+001
	Th-228	84.37*	1.26	1.2076E+001	1.21E+001	1.5390E+001
		131.61	0.13	1.1662E+002		2.4535E+001
		166.41	0.10	1.3721E+002		-1.1185E+001
		215.98	0.25	5.9942E+001		-5.9156E+000
	Pa-234m	258.23	0.07	1.7552E+002	1.14E+001	-2.5912E+001
		742.81	0.09	1.2785E+002		3.2403E+001
		766.36	0.32	4.3787E+001		6.7679E-001
		786.27	0.05	2.3284E+002		-2.9520E+001
		1001.03	0.85	1.1364E+001		1.1432E+000
		1737.77	0.02	4.8831E+002		2.8093E+002
	Th-234	63.30	3.75	1.1420E+001	4.23E+000	2.2572E+000
		92.59	4.33	4.2253E+000		-1.4107E-001
		112.81	0.22	6.5200E+001		-1.3974E+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: NFB-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	0.990	1460.82*	10.55	2.98213E+000	2.69257E-001
Eu-152m	0.998	89.85*	69.90	3.55214E-001	2.79661E-002
Tl-208	0.959	72.80 @	2.02		
		74.97* @	3.41	2.04197E+001	1.01967E+000
		84.90* @	1.51	1.28419E+001	1.31618E+000
		277.36*	6.31	2.61062E+000	3.35557E-001
		510.77* @	22.60	5.62409E+000	2.66119E-001
		583.19*	84.50	3.73001E+000	1.26906E-001
		763.13* @	1.81	4.59413E+000	6.13082E-001
		860.56*	12.42	4.39348E+000	2.28939E-001
TL-208e	0.995	1592.53*	99.16	2.57787E-001	2.33594E-002
Bi-211	0.927	351.03*	13.00	1.09213E+001	4.68617E-001
Bi-212	0.946	39.86 @	1.06		
		727.33*	6.74	1.19225E+001	6.11014E-001
		785.37*	1.11	1.36467E+001	1.17959E+000
		1620.74*	1.51	1.43593E+001	1.56815E+000
		1806.00 @	0.09		
Pb-212	0.985	74.81*	10.40	6.69530E+000	3.86108E-001
		77.11*	17.50	4.95021E+000	2.58935E-001
		87.30*	7.81	4.98475E+000	3.31910E-001
		115.18 @	0.59		
		238.63*	43.30	9.59538E+000	3.25335E-001
		300.09*	3.28	8.63749E+000	8.27765E-001
Bi-214	0.920	76.86* @	0.43	2.01553E+002	1.07620E+001
		89.81* @	0.24	1.01633E+002	8.79308E+000
		386.77 @	0.30		
		454.77 @	0.29		
		609.31*	45.49	3.70926E+000	1.39663E-001
		665.45* @	1.53	2.81548E+000	1.38277E+000
		703.11 @	0.48		
		719.86 @	0.39		
		768.36*	4.89	3.84226E+000	2.92360E-001
		786.10* @	0.31	4.84314E+001	8.85180E+000
		806.17* @	1.26	3.49546E+000	1.28733E+000
		934.06*	3.10	3.26806E+000	6.40535E-001
		964.08* @	0.36	1.72855E+002	8.89422E+000
		1051.96 @	0.31		
		1120.29*	14.91	4.42715E+000	2.08502E-001
		1133.66 @	0.25		
		1155.19* @	1.63	5.25090E+000	1.28915E+000
		1207.68 @	0.45		

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
Bi-214	0.920	1238.11*	5.79	5.07461E+000	4.47748E-001
		1280.96* @	1.43	3.35455E+000	1.18135E+000
		1377.67*	4.00	4.11141E+000	5.57538E-001
		1385.31 @	0.76		
		1401.50* @	1.27	4.61460E+000	8.03651E-001
		1407.98* @	2.15	5.22998E+000	6.02553E-001
		1509.23* @	2.11	3.87669E+000	1.10220E+000
		1538.50* @	0.38	6.69549E+000	3.36459E+000
		1543.32 @	0.20		
		1583.22 @	0.69		
		1594.73 @	0.25		
		1599.31 @	0.23		
		1661.28* @	1.15	4.22469E+000	1.15967E+000
		1683.99 @	0.22		
		1729.59* @	2.92	5.82288E+000	8.10026E-001
		1764.49*	15.40	5.20834E+000	2.83013E-001
		1847.42* @	2.11	5.59726E+000	9.48059E-001
		1873.16 @	0.22		
		2118.55 @	1.14		
		2204.21 @	5.08		
Pb-214	0.955	53.28 @	1.20		
		74.81*	6.44	1.07166E+001	6.39132E-001
		77.11*	10.80	7.95017E+000	4.56117E-001
		87.30*	4.84	7.97237E+000	5.51883E-001
		242.00*	7.43	6.53869E+000	3.02590E-001
		258.87 @	0.52		
		274.80 @	0.47		
		295.22*	19.30	3.26734E+000	1.65590E-001
		351.93*	37.60	3.77307E+000	1.57419E-001
		462.00* @	0.22	1.98429E+002	1.47063E+001
		533.66 @	0.19		
		785.96* @	1.07	1.40315E+001	1.59863E+000
		839.04* @	0.59	2.16879E+001	2.06120E+000
Ra-224	0.950	81.07 @	0.13		
		83.78* @	0.22	8.93608E+001	9.73314E+000
		240.99*	4.10	1.19552E+001	5.44071E-001
Ra-226	0.874	81.07 @	0.20		
		83.78* @	0.33	5.85965E+001	6.37675E+000
		94.90 @	0.15		
		186.21*	3.59	4.65654E+000	7.09917E-001
Ac-228	0.956	99.50 @	1.26		
		129.07* @	2.50	4.31907E+000	9.00190E-001
		209.25*	3.97	8.22872E+000	4.20492E-001
		270.24*	3.55	9.74312E+000	9.06787E-001
		328.00*	3.04	1.01679E+001	6.97887E-001
		338.32*	11.40	9.11805E+000	5.10653E-001
		409.46* @	2.02	1.02629E+001	1.30337E+000
		463.00*	4.45	9.94254E+000	8.16448E-001
		755.31* @	1.03	1.04594E+001	2.18437E+000
		772.29* @	1.52	8.89252E+000	9.18937E-001

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (pCi/GWET)	Activity Uncertainty
Ac-228	0.956	794.94*	4.31	1.14215E+001	7.44842E-001
		835.70* @	1.70	1.02466E+001	8.97621E-001
		911.20*	26.20	1.23660E+001	5.03694E-001
		964.79*	4.99	1.26866E+001	6.61097E-001
		968.96*	15.90	1.28924E+001	5.46634E-001
		1588.20*	3.06	1.49780E+001	9.86649E-001
		1630.62* @	1.52	1.40623E+001	1.59376E+000
Th-231	0.834	81.23 @	0.90		
		84.21*	6.60	2.91204E+000	3.46733E-001
		89.95* @	1.00	2.47982E+001	2.44546E+000

* = 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		0.990	2.982134E+000	2.692571E-001
X	Mn-54		0.960		
X	Cd-109		0.897		
	Eu-152m		0.998	3.181555E-001	2.813602E-002
X	Eu-155		0.935		
X	Tm-170		0.997		
	Tl-208	@	0.959	3.734697E+000	1.024146E-001
	TL-208e		0.995	2.577867E-001	2.335935E-002
	Bi-211		0.927	4.129117E+000	6.266677E-001
	Bi-212	@	0.946	1.186948E+001	4.890476E-001
	Pb-212	@	0.985	4.843314E+000	1.558861E-001
	Bi-214	@	0.920	4.111293E+000	9.500362E-002
	Pb-214	@	0.955	2.346545E+000	1.539566E-001
	Ra-224	@	0.950	7.664841E+000	5.949745E-001
	Ra-226	@	0.874	4.656540E+000	7.056387E-001
	Ac-228	@	0.956	1.086466E+001	1.456346E-001
X	Th-228		0.503		
	Th-231	@	0.834	1.583966E+000	3.020331E-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: 5/18/2017 2:42:19 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 6	93.17	1.8752E-001	6.01	Tol.	Yb-169 Th-227 Th-234
7	105.40	5.0090E-002	33.20	Tol.	Np-239
9	153.83	5.4201E-002	27.40	Sum	
m 12	212.62	8.6107E-003	34.67	Sum	
m 20	332.07	1.5788E-002	32.84	Sum	
24	452.50	9.8914E-003	77.31	Tol.	Ho-166m Bi-206
26	480.63	5.5127E-003	105.57	Sum	
27	503.56	1.1834E-002	65.35	Sum	
29	561.95	3.4811E-002	23.72		
33	701.57	2.1631E-003	217.39	Sum	
M 39	781.67	1.5544E-002	17.77		
M 43	830.21	1.5690E-002	18.07	Sum	
47	892.71	6.0018E-003	75.92	Sum	
48	903.78	2.3877E-002	20.50	Sum	
53	1078.55	1.4892E-002	24.38	Sum	
54	1110.41	9.7859E-003	35.58	S-Esc.	
56	1130.87	2.4214E-003	101.69	Sum	
59	1246.98	1.9260E-002	20.52	Sum	
60	1269.88	3.2002E-003	71.20	Sum	
65	1415.46	2.3401E-003	107.91	Sum	
M 67	1496.05	2.2254E-002	10.62	Sum	
m 68	1501.72	1.2157E-002	15.80		
71	1580.70	1.2070E-002	29.08	Sum	
76	1638.87	6.8951E-003	36.36	Sum	

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

Errors quoted at 1.000 sigma