LEGe GAMMA SPECTROMETRY

OF

NOPAL I SAMPLES

308 - - - Q200408170026

Technical Activity Supporting Documentation:
Experimental Data for LEGe Gamma
Spectrometry of Nopal I Samples (12/29/1995
through 01/22/1996)

Gamma spectrometry calculations for Nopal I rock powders

Sample= **BL5**

Self attenuation correction

A/O = [ln(T/I)]/[(T/I)-1]
T = transmitted intensity through sample or standards
I = intensity through empty vial

Point source		Empty vial	Standard - DP1B		Standard - DM1B		Sample	
SRM 4275C		12/28/95	12/28/95		12/28/95		12/28/95	
Isotope	keV	I	T	A/O	T	A/O	T	A/O
Sb125	27.3	6.65E+05	4.27E+05	1.23780258	3.81E+05	1.30421408	1.68E+05	1.84947195
Eu154,155	42.9	8.55E+05	7.41E+05	1.07325633	6.83E+05	1.11650378	4.98E+05	1.29447812
Eu154,155	48.6	2.73E+05	2.46E+05	1.05297373	2.29E+05	1.09044757	1.82E+05	1.21639532
Eu155	86.4	3.48E+05	3.36E+05	1.01764827	3.29E+05	1.02833504	3.16E+05	1.04900539
Eu155	105	2.23E+05	2.17E+05	1.0136992	2.13E+05	1.02311521	2.04E+05	1.04518665
Eu154	123	1.82E+06	1.78E+06	1.01115272	1.75E+06	1.01973854	1.58E+06	1.06907184
Sb125	178	4.34E+04	4.30E+04	1.00463681	4.22E+04	1.01408513	4.04E+04	1.03624236
Eu154	248	1.05E+05	1.05E+05	#DIV/0!	1.04E+05	1.00479236	1.03E+05	1.0096465
Eu154	592	1.41E+04	1.45E+04	0.98607828	1.46E+04	0.98267782	1.49E+04	0.97266057
Sb125	600	1.11E+04	1.15E+04	0.98240348	1.16E+04	0.97813177	1.09E+04	1.00911871
Sb125	636	6.12E+03	6.26E+03	0.98873359	6.24E+03	0.99032238	6.45E+03	0.97397082

Sample correction factor (CF) relative to each normalization standard

CF= (A/O of sample)/(A/O of DP1B and DM1B)

Isotope	keV	CF (DP1B)	CF (DM1B)
Sb125	27.3	1.49415746	1.418073906
Eu154,155	42.9	1.20612205	1.159403256
Eu154,155	48.6	1.15520007	1.115500971
Eu155	86.4	1.03081332	1.020100801
Eu155	105	1.03106193	1.021572785
Eu154	123	1.05728028	1.048378376
Sb125	178	1.03145968	1.02184948
Eu154	248	#DIV/0!	1.004830993
Eu154	592	0.98639286	0.989806172
Sb125	600	1.02719375	1.031679715
Sb125	636	0.98506901	0.983488648

Fit a polynomial curve through plot of CF versus keV for peaks < 200 keV using cricket graph.
Calculate CFs for natural series gamma peaks using polynomial equation.

CF (DP1B) equation = y = -0.630logx+2.297
CF (DM1B) equation = y =-0.526logx+2.077

Isotope	keV	CF (DP1B)	CF (DM1B)
231Th->235U	25.6	1.40980882	1.336265778
231Pa	27.4	1.39121715	1.320743204
210Pb	46.5	1.24650464	1.199919747
227Ac	50	1.2266489	1.183341778
234U+214Pb	53.2	1.20967567	1.169170481
234Th->238U	63.3	1.16211566	1.129461649
230Th	67.6	1.14413358	1.114448038
234Th->238U	92.6	1.05803508	1.042562621
228Ac->228Ra	129	0.96732848	0.966829812
235U+226Ra	186	1	1
227Th->227Ac	236	1	1
212Pb->228Th	239	1	1
214Pb->226Ra	242	1	1
214Pb->226Ra	295	1	1
214Pb->226Ra	352	1	1
208Tl->228Th	583	1	1
214Bi->226Ra	609	1	1

Sample activity calculations

As (Bq/g) = Is * CFs * An * Wn / In * Ws

As = radionuclide activity of sample (Bq/g)
Is = peak intensity (cps)
CFs = correction factor relative to normalization standard n
Ws = weight of sample (g)
An = nominal radionuclide activity of the normalization standard (Bq/g)
In = peak intensity (cps)
Wn = weight of normalization standard (g)
* note Is and In should be background-corrected values

Counting time (sec) =		80000		80000		80000	
Weight (g) =		3		3.001		2.994	
		Sample counts	Uncertainty	DP1B counts	Uncertainty	DM1B counts	Uncertainty
Isotope	keV	1/8/96		1/4/96		1/5/96	
231Th->235U	25.6	8.37E+04	1.38E+03	2.04E+03	1.18E+02	0	0
231Pa	27.4	7.52E+04	1.24E+03	1.74E+03	1.03E+02	0	0
210Pb	46.5	1.53E+06	1.59E+03	2.29E+04	1.86E+02	0	0
227Ac	50	1.25E+05	1.47E+03	2.15E+03	1.41E+02	0	0
234U+214Pb	53.2	4.18E+05	1.10E+03	5.39E+03	1.31E+02	0	0
234Th->238U	63.3	1.73E+06	1.62E+04	2.14E+04	2.96E+02	0	0
230Th	67.6	1.98E+06	1.16E+03	2.51E+03	1.28E+02	0	0
234Th->238U	92.6	2.11E+06	1.81E+03	2.58E+04	1.97E+02	0	0
228Ac->228Ra	129	0	0	0	0	4.77E+03	1.08E+02
235U+226Ra	186	1.61E+06	1.50E+03	1.92E+04	1.67E+02	0	0
227Th->227Ac	236	8.58E+04	6.10E+02	1.08E+03	1.02E+02	0	0
212Pb->228Th	239	2.72E+03	5.22E+02	0	0	5.35E+04	2.45E+02
214Pb->226Ra	242	1.20E+06	1.26E+03	1.33E+04	1.33E+02	0	0
214Pb->226Ra	295	2.26E+06	1.88E+03	2.48E+04	1.78E+02	0	0
214Pb->226Ra	352	3.16E+06	2.04E+03	3.48E+04	2.16E+02	0	0
208Tl->228Th	583	0	0	0	0	5.79E+03	1.03E+02
214Bi->226Ra	609	1.23E+06	1.45E+03	1.32E+04	1.54E+02	0	0

Isotope	keV	An (Bq/g)	Is	In (DP1B)	In (DM1B)	As (Bq/g)		Uncertainty
231Th->235U	25.6	0.044395	1.04625	0.0255	0	23.1194142	±	1.96308775
231Pa	27.4	0.044395	0.94	0.02175	0	24.0317183	±	2.06393075
210Pb	46.5	0.9361	19.125	0.28625	0	701.874304	±	42.5028285
227Ac	50	0.044395	1.5625	0.026875	0	28.5044809	±	2.55575967
234U+214Pb	53.2	0.9361	5.225	0.067375	0	790.616654	±	51.2296809
234Th->238U	63.3	0.9361	21.625	0.2675	0	791.755665	±	49.3118595
230Th	67.6	0.9361	2.475	0.031375	0	760.637438	±	60.0610643
234Th->238U	92.6	0.9361	26.375	0.3225	0	729.243071	±	44.1119076
228Ac->228Ra	129	0.55494	0	0	0.059625	0	±	#DIV/0!
235U+226Ra	186	0.9361	20.125	0.24	0	706.698456	±	42.8501863
227Th->227Ac	236	0.044395	1.0725	0.0135	0	31.7530058	±	3.56006268
212Pb->228Th	239	0.55494	0.034	0	0.66875	0.2534161	±	0.05008421
214Pb->226Ra	242	0.9361	15	0.16625	0	760.394734	±	46.2597876
214Pb->226Ra	295	0.9361	28.25	0.31	0	768.008902	±	46.4125765
214Pb->226Ra	352	0.9361	39.75	0.435	0	770.118172	±	46.456303
208Tl->228Th	583	0.55494	0	0	0.072375	0	±	#DIV/0!
214Bi->226Ra	609	0.9361	15.375	0.165	0	785.309183	±	48.0099578

U(ppb) = 63657372.1

Th(ppb) = 62230.5776

Interference Correction

Isotope	keV	An (Bq/g)	Is	In (DP1B)	As (Bq/g)		
234U(242)	53.2	0.9361	3.011632494	0.04284351	716.630637	±	43.5973312
234U(295)	53.2	0.9361	3.602536759	0.04957098	740.899617	±	44.7742989
234U(352)	53.2	0.9361	4.044144047	0.05445243	757.16029	±	45.6746369
235U(63.3)	186	0.044395	1.157271093	0.01431538	32.3112411	±	2.01239783
235U(92.6)	186	0.044395	1.21456875	0.01485113	32.6876771	±	1.97727733
226Ra(63.3)	186	0.9361	19.12916875	0.22768163	708.07231	±	44.099921
226Ra(92.6)	186	0.9361	18.91043125	0.22514888	707.849854	±	42.8178321

234U/238U	=	0.932396462	±	0.059491685
230Th/234U	=	1.030352669	±	0.082601946
226Ra/230Th	=	0.930893321	±	0.075131351

Gamma spectrometry calculations for Nopal I rock powders

Sample= **BL5D**

Self attenuation correction

A/O = [ln(T/I)]/[(T/I)-1]

T = transmitted intensity through sample or standards

I = intensity through empty vial

Point source		Empty vial	Standard - DP1B		Standard - DM1B		Sample	
SRM 4275C		12/28/95	12/28/95		12/28/95		12/29/95	
Isotope	keV	I	T	A/O	T	A/O	T	A/O
Sb125	27.3	6.65E+05	4.27E+05	1.23780258	3.81E+05	1.30421408	4.05E+05	1.26835955
Eu154,155	42.9	8.55E+05	7.41E+05	1.07325633	6.83E+05	1.11650378	7.23E+05	1.08618842
Eu154,155	48.6	2.73E+05	2.46E+05	1.05297373	2.29E+05	1.09044757	2.41E+05	1.06363241
Eu155	86.4	3.48E+05	3.36E+05	1.01764827	3.29E+05	1.02833504	3.33E+05	1.02219176
Eu155	105	2.23E+05	2.17E+05	1.0136992	2.13E+05	1.02311521	2.16E+05	1.01603145
Eu154	123	1.82E+06	1.78E+06	1.01115272	1.75E+06	1.01973854	1.75E+06	1.01973854
Sb125	178	4.34E+04	4.30E+04	1.00463681	4.22E+04	1.01408513	4.23E+04	1.0128911
Eu154	248	1.05E+05	1.05E+05	#DIV/0!	1.04E+05	1.00479236	1.04E+05	1.00479236
Eu154	592	1.41E+04	1.45E+04	0.98607828	1.46E+04	0.98267782	1.45E+04	0.98607828
Sb125	600	1.11E+04	1.15E+04	0.98240348	1.16E+04	0.97813177	1.15E+04	0.98240348
Sb125	636	6.12E+03	6.26E+03	0.98873359	6.24E+03	0.99032238	6.05E+03	1.00576294

Sample correction factor (CF) relative to each normalization standard

CF= (A/O of sample)/(A/O of DP1B and DM1B)

Isotope	keV	CF (DP1B)	CF (DM1B)
Sb125	27.3	1.02468647	0.972508709
Eu154,155	42.9	1.01204939	0.972847948
Eu154,155	48.6	1.01012246	0.975409036
Eu155	86.4	1.00446469	0.994026
Eu155	105	1.00230073	0.993076281
Eu154	123	1.00849112	1
Sb125	178	1.0082162	0.998822558
Eu154	248	#DIV/0!	1
Eu154	592	1	1.003460403
Sb125	600	1	1.004367205
Sb125	636	1.0172234	1.01559145

Fit a polynomial curve through plot of CF versus keV for peaks < 200 keV using cricket graph.
Calculate CFs for natural series gamma peaks using polynomial equation.

CF (DP1B) equation = y = -0.026logx+1.058
CF (DM1B) equation = y =0.046logx+0.901

Isotope	keV	CF (DP1B)	CF (DM1B)
231Th->235U	25.6	1.02138576	0.965779038
231Pa	27.4	1.02061849	0.967136526
210Pb	46.5	1.01464622	0.977702836
227Ac	50	1.01382678	0.97915262
234U+214Pb	53.2	1.0131263	0.980391935
234Th->238U	63.3	1.0111635	0.983864571
230Th	67.6	1.01042139	0.985177548
234Th->238U	92.6	1.00686811	0.991464105
228Ac->228Ra	129	1.00312467	0.998087127
235U+226Ra	186	1	1
227Th->227Ac	236	1	1
212Pb->228Th	239	1	1
214Pb->226Ra	242	1	1
214Pb->226Ra	295	1	1
214Pb->226Ra	352	1	1
208Tl->228Th	583	1	1
214Bi->226Ra	609	1	1

Sample activity calculations

As (Bq/g) = Is * CFs * An * Wn / In * Ws

As = radionuclide activity of sample (Bq/g)
Is = peak intensity (cps)
CFs = correction factor relative to normalization standard n
Ws = weight of sample (g)
An = nominal radionuclide activity of the normalization standard (Bq/g)
In = peak intensity (cps)
Wn = weight of normalization standard (g)
* note Is and In should be background-corrected values

Counting time (sec) =		80000		80000		80000
Weight (g) =		3.0155		3.001		2.994
		Sample counts	Uncertainty	DP1B counts	Uncertainty	DM1B counts	Uncertainty
Isotope	keV	1/10/96		1/4/96		1/5/96	
231Th->235U	25.6	2.98E+04	6.03E+02	2.04E+03	1.18E+02	0	0
231Pa	27.4	2.47E+04	5.19E+02	1.74E+03	1.03E+02	0	0
210Pb	46.5	3.26E+05	7.17E+02	2.29E+04	1.86E+02	0	0
227Ac	50	3.18E+04	4.58E+02	2.15E+03	1.41E+02	0	0
234U+214Pb	53.2	8.18E+04	5.12E+02	5.39E+03	1.31E+02	0	0
234Th->238U	63.3	3.03E+05	1.14E+03	2.14E+04	2.96E+02	0	0
230Th	67.6	3.69E+04	5.00E+02	2.51E+03	1.28E+02	0	0
234Th->238U	92.6	3.76E+05	7.56E+02	2.58E+04	1.97E+02	0	0
228Ac->228Ra	129	0	0	0	0	4.77E+03	1.08E+02
235U+226Ra	186	2.79E+05	9.79E+02	1.92E+04	1.67E+02	0	0
227Th->227Ac	236	1.38E+04	2.61E+02	1.08E+03	1.02E+02	0	0
212Pb->228Th	239	1.93E+01	2.09E+02	0	0	5.35E+04	2.45E+02
214Pb->226Ra	242	2.04E+05	5.19E+02	1.33E+04	1.33E+02	0	0
214Pb->226Ra	295	3.87E+05	8.92E+02	2.48E+04	1.78E+02	0	0
214Pb->226Ra	352	4.27E+05	7.56E+02	3.48E+04	2.16E+02	0	0
208Tl->228Th	583	0	0	0	0	5.79E+03	1.03E+02
214Bi->226Ra	609	1.42E+05	4.96E+02	1.32E+04	1.54E+02	0	0

Isotope	keV	An (Bq/g)	Is	In (DP1B)	In (DM1B)	As (Bq/g)		Uncertainty
231Th->235U	25.6	0.044395	0.37	0.0255	0	5.95402606	±	0.51082738
231Pa	27.4	0.044395	0.30875	0.02175	0	5.82063711	±	0.50561225
210Pb	46.5	0.9361	4.1	0.28625	0	123.112054	±	7.45895468
227Ac	50	0.044395	0.3975	0.026875	0	6.02437236	±	0.54247297
234U+214Pb	53.2	0.9361	1.0225	0.067375	0	130.249391	±	8.47109293
234Th->238U	63.3	0.9361	3.7875	0.2675	0	121.282409	±	7.48173231
230Th	67.6	0.9361	0.46125	0.031375	0	125.835375	±	10.0543959
234Th->238U	92.6	0.9361	4.7	0.3225	0	124.304915	±	7.52258926
228Ac->228Ra	129	0.55494	0	0	0.059625	0	±	#DIV/0!
235U+226Ra	186	0.9361	3.4875	0.24	0	123.097873	±	7.47556523
227Th->227Ac	236	0.044395	0.1725	0.0135	0	5.13351363	±	0.58254538
212Pb->228Th	239	0.55494	0.00024125	0	0.66875	0.00180743	±	0.01957284
214Pb->226Ra	242	0.9361	2.55	0.16625	0	129.934985	±	7.9105466
214Pb->226Ra	295	0.9361	4.8375	0.31	0	132.192513	±	7.99159523
214Pb->226Ra	352	0.9361	5.3375	0.435	0	103.943229	±	6.27256861
208Tl->228Th	583	0.55494	0	0	0.072375	0	±	#DIV/0!
214Bi->226Ra	609	0.9361	1.775	0.165	0	91.1301293	±	5.57930169

U(ppb) = 9751138.86

Th(ppb) = 443.843961

Interference Correction

Isotope	keV	An (Bq/g)	Is	In (DP1B)	As (Bq/g)		
234U(242)	53.2	0.9361	0.646227524	0.04284351	129.452836	±	7.88119297
234U(295)	53.2	0.9361	0.744671118	0.04957098	128.928277	±	7.79425841
234U(352)	53.2	0.9361	0.863938525	0.05445243	136.168538	±	8.21724034
235U(63.3)	186	0.044395	0.17636145	0.01245589	5.68837532	±	0.35090745
235U(92.6)	186	0.044395	0.216435	0.01485113	5.85500847	±	0.3543289
226Ra(63.3)	186	0.9361	3.313085625	0.22768163	123.26854	±	7.60425377
226Ra(92.6)	186	0.9361	3.271065	0.22514888	123.074184	±	7.44810886

234U/238U	=	1.084382733	±	0.068653594
230Th/234U	=	0.956802584	±	0.077654636
226Ra/230Th	=	0.97960164	±	0.079520929

Gamma spectrometry calculations for Nopal I rock powders

Sample= **BL5Db**

Self attenuation correction

A/O = [ln(T/I)]/[(T/I)-1]

T = transmitted intensity through sample or standards

I = intensity through empty vial

Point source		Empty vial	Standard - DP1B		Standard - DM1B		Sample	
SRM 4275C		12/28/95	12/28/95		12/28/95		12/29/95	
Isotope	keV	I	T	A/O	T	A/O	T	A/O
Sb125	27.3	6.65E+05	4.27E+05	1.23780258	3.81E+05	1.30421408	4.05E+05	1.26835955
Eu154,155	42.9	8.55E+05	7.41E+05	1.07325633	6.83E+05	1.11650378	7.23E+05	1.08618842
Eu154,155	48.6	2.73E+05	2.46E+05	1.05297373	2.29E+05	1.09044757	2.41E+05	1.06363241
Eu155	86.4	3.48E+05	3.36E+05	1.01764827	3.29E+05	1.02833504	3.35E+05	1.02219176
Eu155	105	2.23E+05	2.17E+05	1.0136992	2.13E+05	1.02311521	2.16E+05	1.01603145
Eu154	123	1.82E+06	1.78E+06	1.01115272	1.75E+06	1.01973854	1.76E+06	1.01973854
Sb125	178	4.34E+04	4.30E+04	1.00463681	4.22E+04	1.01408513	4.23E+04	1.0128911
Eu154	248	1.05E+05	1.05E+05	#DIV/0!	1.04E+05	1.00479236	1.04E+05	1.00479236
Eu154	592	1.41E+04	1.45E+04	0.98607828	1.46E+04	0.98267782	1.45E+04	0.98607828
Sb125	600	1.11E+04	1.15E+04	0.98240348	1.16E+04	0.97813177	1.15E+04	0.98240348
Sb125	636	6.12E+03	6.26E+03	0.98873359	6.24E+03	0.99032238	6.06E+03	1.00576294

Sample correction factor (CF) relative to each normalization standard

CF= (A/O of sample)/(A/O of DP1B and DM1B)

Isotope	keV	CF (DP1B)	CF (DM1B)
Sb125	27.3	1.02468647	0.972508709
Eu154,155	42.9	1.01204939	0.972847948
Eu154,155	48.6	1.01012246	0.975409036
Eu155	86.4	1.00446469	0.994026
Eu155	105	1.00230073	0.993076281
Eu154	123	1.00849112	1
Sb125	178	1.0082162	0.998822558
Eu154	248	#DIV/0!	1
Eu154	592	1	1.003460403
Sb125	600	1	1.004367205
Sb125	636	1.0172234	1.01559145

Fit a polynomial curve through plot of CF versus keV for peaks < 200 keV using cricket graph.
Calculate CFs for natural series gamma peaks using polynomial equation.

CF (DP1B) equation = y = -0.026logx+1.058
CF (DM1B) equation = y =0.048logx+0.901

Isotope	keV	CF (DP1B)	CF (DM1B)
231Th->235U	25.6	1.02138576	0.965779038
231Pa	27.4	1.02061849	0.967136526
210Pb	46.5	1.01464622	0.977702836
227Ac	50	1.01382678	0.97915262
234U+214Pb	53.2	1.0131263	0.980391935
234Th->238U	63.3	1.0111635	0.983864571
230Th	67.6	1.01042139	0.985177548
234Th->238U	92.6	1.00686811	0.991464105
228Ac->228Ra	129	1.00312467	0.998087127
235U+226Ra	186	1	1
227Th->227Ac	236	1	1
212Pb->228Th	239	1	1
214Pb->226Ra	242	1	1
214Pb->226Ra	295	1	1
214Pb->226Ra	352	1	1
208Tl->228Th	583	1	1
214Bi->226Ra	609	1	1

Sample activity calculations

As (Bq/g) = Is * CFs * An * Wn / In * Ws

As = radionuclide activity of sample (Bq/g)
Is = peak intensity (cps)
CFs = correction factor relative to normalization standard n
Ws = weight of sample (g)
An = nominal radionuclide activity of the normalization standard (Bq/g)
In = peak intensity (cps)
Wn = weight of normalization standard (g)
* note Is and In should be background-corrected values

Counting time (sec) =			80000		80000		80000	
Weight (g) =			3.0155		3.001		2.994	
			Sample counts	Uncertainty	DP1B counts	Uncertainty	DM1B counts	Uncertainty
Isotope	keV		1/16/96		1/4/96		1/5/96	
231Th->235U	25.6		2.80E+04	4.89E+02	2.04E+03	1.18E+02	0	0
231Pa	27.4		2.40E+04	4.38E+02	1.74E+03	1.03E+02	0	0
210Pb	46.5		3.30E+05	7.47E+02	2.29E+04	1.86E+02	0	0
227Ac	50		3.21E+04	4.71E+02	2.15E+03	1.41E+02	0	0
234U+214Pb	53.2		8.26E+04	5.49E+02	5.39E+03	1.31E+02	0	0
234Th->238U	63.3		3.03E+05	1.08E+03	2.14E+04	2.96E+02	0	0
230Th	67.6		3.85E+04	5.78E+02	2.51E+03	1.28E+02	0	0
234Th->238U	92.6		4.10E+05	9.87E+03	2.58E+04	1.97E+02	0	0
228Ac->228Ra	129		0	0	0	0	4.77E+03	1.08E+02
235U+226Ra	186		2.86E+05	7.29E+02	1.92E+04	1.67E+02	0	0
227Th->227Ac	236		1.50E+04	4.49E+02	1.08E+03	1.02E+02	0	0
212Pb->228Th	239		0.00E+00	0.00E+00	0	0	5.35E+04	2.45E+02
214Pb->226Ra	242		2.21E+05	6.17E+02	1.33E+04	1.33E+02	0	0
214Pb->226Ra	295		4.36E+05	7.83E+02	2.48E+04	1.78E+02	0	0
214Pb->226Ra	352		6.60E+05	1.34E+03	3.48E+04	2.16E+02	0	0
208Tl->228Th	583		0	0	0	0	5.79E+03	1.03E+02
214Bi->226Ra	609		3.26E+05	6.89E+02	1.32E+04	1.54E+02	0	0

Isotope	keV	An (Bq/g)	Is	In (DP1B)	In (DM1B)	As (Bq/g)		Uncertainty
231Th->235U	25.6	0.044395	0.35	0.0255	0	5.63218681	±	0.47959087
231Pa	27.4	0.044395	0.3	0.02175	0	5.65567978	±	0.48773994
210Pb	46.5	0.9361	4.125	0.28625	0	123.862738	±	7.50478933
227Ac	50	0.044395	0.40125	0.026875	0	6.08120606	±	0.54785603
234U+214Pb	53.2	0.9361	1.0325	0.067375	0	131.523223	±	8.55883011
234Th->238U	63.3	0.9361	3.7875	0.2675	0	121.282409	±	7.48030596
230Th	67.6	0.9361	0.45625	0.031375	0	124.471306	±	9.99623779
234Th->238U	92.6	0.9361	5.125	0.3225	0	135.545253	±	8.82379903
228Ac->228Ra	129	0.55494	0	0	0.059625	0	±	#DIV/0!
235U+226Ra	186	0.9361	3.575	0.24	0	126.18635	±	7.65707973
227Th->227Ac	236	0.044395	0.19875	0.0135	0	5.91470049	±	0.6825573
212Pb->228Th	239	0.55494	0	0	0.66875	0	±	#DIV/0!
214Pb->226Ra	242	0.9361	2.7625	0.16625	0	140.7629	±	8.57128689
214Pb->226Ra	295	0.9361	5.475	0.31	0	149.613231	±	9.04474923
214Pb->226Ra	352	0.9361	8.25	0.435	0	160.661666	±	9.69663057
208Tl->228Th	583	0.55494	0	0	0.072375	0	±	#DIV/0!
214Bi->226Ra	609	0.9361	4.075	0.165	0	209.214241	±	12.7955983

U(ppb) = 9751138.86

Th(ppb) = 0

Interference Correction

Isotope	keV	An (Bq/g)	Is	In (DP1B)	As (Bq/g)		
234U(242)	53.2	0.9361	0.624871484	0.04284351	125.174776	±	7.62210011
234U(295)	53.2	0.9361	0.718058009	0.04957098	124.320629	±	7.51570503
234U(352)	53.2	0.9361	0.787416689	0.05445243	124.107649	±	7.49043661
235U(63.3)	186	0.044395	0.17636145	0.01245589	5.68837532	±	0.35084056
235U(92.6)	186	0.044395	0.23600625	0.01485113	6.38445072	±	0.41561847
226Ra(63.3)	186	0.9361	3.400585625	0.22768163	126.524114	±	7.80359736
226Ra(92.6)	186	0.9361	3.33899375	0.22514888	125.630011	±	8.1783312

234U/238U	=	1.026812977	±	0.065015799
230Th/234U	=	0.99949375	±	0.081535544
226Ra/230Th	=	1.016492222	±	0.082915182

Gamma spectrometry calculations for Nopal I rock powders

Sample= **NOPI-466-GAM1**

Self attenuation correction

A/O = {ln(T/I)}/[(T/I)-1]

T = transmitted intensity through sample or standards

I = intensity through empty vial

Point source		Empty vial	Standard - DP1B		Standard - DM1B		Sample	
SRM 4275C		12/28/95	12/28/95		12/28/95		12/29/95	
Isotope	keV	I	T	A/O	T	A/O	T	A/O
Sb125	27.3	6.65E+05	4.27E+05	1.23780258	3.81E+05	1.30421408	4.34E+05	1.22850116
Eu154,155	42.9	8.55E+05	7.41E+05	1.07325633	6.83E+05	1.11650378	7.43E+05	1.07184498
Eu154,155	48.6	2.73E+05	2.46E+05	1.05297373	2.29E+05	1.09044757	2.45E+05	1.05508245
Eu155	86.4	3.48E+05	3.36E+05	1.01764827	3.29E+05	1.02833504	3.32E+05	1.02371836
Eu155	105	2.23E+05	2.17E+05	1.0136992	2.13E+05	1.02311521	2.14E+05	1.0207393
Eu154	123	1.82E+06	1.78E+06	1.01115272	1.75E+06	1.01973854	1.76E+06	1.01685499
Sb125	178	4.34E+04	4.30E+04	1.00463681	4.22E+04	1.01408513	4.18E+04	1.01889913
Eu154	248	1.05E+05	1.05E+05	#DIV/0!	1.04E+05	1.00479236	1.03E+05	1.0096465
Eu154	592	1.41E+04	1.45E+04	0.98607828	1.46E+04	0.98267782	1.41E+04	#DIV/0!
Sb125	600	1.11E+04	1.15E+04	0.98240348	1.16E+04	0.97813177	1.00E+04	1.05308743
Sb125	636	6.12E+03	6.26E+03	0.98873359	6.24E+03	0.99032238	5.81E+03	1.02621593

Sample correction factor (CF) relative to each normalization standard

CF= (A/O of sample)/(A/O of DP1B and DM1B)

Isotope	keV	CF (DP1B)	CF (DM1B)
Sb125	27.3	0.99248554	0.941947475
Eu154,155	42.9	0.99868499	0.960001206
Eu154,155	48.6	1.00200263	0.967568252
Eu155	86.4	1.00596482	0.995510534
Eu155	105	1.00694496	0.997677769
Eu154	123	1.00563937	0.997172265
Sb125	178	1.0141965	1.004747141
Eu154	248	#DIV/0!	1.004830993
Eu154	592	#DIV/0!	#DIV/0!
Sb125	600	1.07195002	1.076631448
Sb125	636	1.03790944	1.036244306

Fit a polynomial curve through plot of CF versus keV for peaks < 200 keV using cricket graph.
Calculate CFs for natural series gamma peaks using polynomial equation.

CF (DP1B) equation = y =0.021logx+0.965
CF (DM1B) equation = y =0.091logx+0.813

Isotope	keV	CF (DP1B)	CF (DM1B)
231Th->235U	25.6	0.99457304	0.941149837
231Pa	27.4	0.99519276	0.943835301
210Pb	46.5	1.00001651	0.964738219
227Ac	50	1.00067837	0.96760627
234U+214Pb	53.2	1.00124414	0.970057959
234Th->238U	63.3	1.00282948	0.976927738
230Th	67.6	1.00342888	0.979525149
234Th->238U	92.6	1.00629883	0.9919616
228Ac->228Ra	129	1.00932238	1.005063664
235U+226Ra	186	1	1
227Th->227Ac	236	1	1
212Pb->228Th	239	1	1
214Pb->226Ra	242	1	1
214Pb->226Ra	295	1	1
214Pb->226Ra	352	1	1
208Tl->228Th	583	1	1
214Bi->226Ra	609	1	1

Sample activity calculations

As (Bq/g) = Is * CFs * An * Wn / In * Ws

As = radionuclide activity of sample (Bq/g)
Is = peak intensity (cps)
CFs = correction factor relative to normalization standard n
Ws = weight of sample (g)
An = nominal radionuclide activity of the normalization standard (Bq/g)
In = peak intensity (cps)
Wn = weight of normalization standard (g)
* note Is and In should be background-corrected values

Counting time (sec) =		80000		80000		80000	
Weight (g) =		3.001		3.001		2.994	
		Sample counts	Uncertainty	DP1B counts	Uncertainty	DM1B counts	Uncertainty
Isotope	keV	1/22/96		1/4/96		1/5/96	
231Th->235U	25.6	1.37E+02	4.70E+01	2.04E+03	1.18E+02	0	0
231Pa	27.4	0.00E+00	0.00E+00	1.74E+03	1.03E+02	0	0
210Pb	46.5	2.23E+03	6.50E+01	2.29E+04	1.86E+02	0	0
227Ac	50	0.00E+00	0.00E+00	2.15E+03	1.41E+02	0	0
234U+214Pb	53.2	4.48E+02	4.70E+01	5.39E+03	1.31E+02	0	0
234Th->238U	63.3	1.27E+03	6.79E+01	2.14E+04	2.96E+02	0	0
230Th	67.6	0.00E+00	0.00E+00	2.51E+03	1.28E+02	0	0
234Th->238U	92.6	2.06E+03	1.19E+02	2.58E+04	1.97E+02	0	0
228Ac->228Ra	129	1.08E+02	5.14E+01	0	0	4.77E+03	1.08E+02
235U+226Ra	186	1.29E+03	6.95E+01	1.92E+04	1.67E+02	0	0
227Th->227Ac	236	6.41E+01	2.39E+01	1.08E+03	1.02E+02	0	0
212Pb->228Th	239	1.74E+03	8.18E+01	0	0	5.35E+04	2.45E+02
214Pb->226Ra	242	1.14E+03	6.26E+01	1.33E+04	1.33E+02	0	0
214Pb->226Ra	295	2.15E+03	5.88E+01	2.48E+04	1.78E+02	0	0
214Pb->226Ra	352	3.31E+03	8.99E+01	3.48E+04	2.16E+02	0	0
208Tl->228Th	583	2.88E+02	4.01E+01	0	0	5.79E+03	1.03E+02
214Bi->226Ra	609	1.71E+03	5.24E+01	1.32E+04	1.54E+02	0	0

Isotope	keV	An (Bq/g)	Is	In (DP1B)	In (DM1B)	As (Bq/g)		Uncertainty
231Th->235U	25.6	0.044395	0.0017125	0.0255	0	0.02670503	±	0.00942805
231Pa	27.4	0.044395	0	0.02175	0	0	±	#DIV/0!
210Pb	46.5	0.9361	0.027875	0.28625	0	0.82097662	±	0.05516802
227Ac	50	0.044395	0	0.026875	0	0	±	#DIV/0!
234U+214Pb	53.2	0.9361	0.0056	0.067375	0	0.70159014	±	0.08648918
234Th->238U	63.3	0.9361	0.015875	0.2675	0	0.50173139	±	0.04091427
230Th	67.6	0.9361	0	0.031375	0	0	±	#DIV/0!
234Th->238U	92.6	0.9361	0.02575	0.3225	0	0.67737431	±	0.05665429
228Ac->228Ra	129	0.55494	0.00135	0	0.059625	0.11346522	±	0.0543245
235U+226Ra	186	0.9361	0.016125	0.24	0	0.5664254	±	0.04594081
227Th->227Ac	236	0.044395	0.00080125	0.0135	0	0.02373014	±	0.00923772
212Pb->228Th	239	0.55494	0.02175	0	0.66875	0.16216581	±	0.01080571
214Pb->226Ra	242	0.9361	0.01425	0.16625	0	0.72261579	±	0.05921641
214Pb->226Ra	295	0.9361	0.026875	0.31	0	0.73087148	±	0.04847763
214Pb->226Ra	352	0.9361	0.041375	0.435	0	0.80186819	±	0.0512474
208Tl->228Th	583	0.55494	0	0	0.072375	0	±	0
214Bi->226Ra	609	0.9361	0.021375	0.165	0	1.09213523	±	0.07467459

U(ppb) = 40339.3412

Th(ppb) = 39822.5363

Interference Correction

Isotope	keV	An (Bq/g)	Is	In (DP1B)	As (Bq/g)		
234U(242)	53.2	0.9361	0.003497301	0.04284351	0.68903642	±	0.05646467
234U(295)	53.2	0.9361	0.004056506	0.04957098	0.69074679	±	0.04581622
234U(352)	53.2	0.9361	0.00437087	0.05445243	0.67755553	±	0.04330257
235U(63.3)	186	0.044395	0.000733112	0.01235323	0.02372772	±	0.0019349
235U(92.6)	186	0.044395	0.001185788	0.01485113	0.03192373	±	0.00267004
226Ra(63.3)	186	0.9361	0.015393956	0.22768163	0.57000216	±	0.04648149
226Ra(92.6)	186	0.9361	0.014939213	0.22514888	0.55938673	±	0.04678603

234U/238U	=	1.366826133	±	0.14367351
230Th/234U	=	0	±	#DIV/0!
226Ra/230Th	=	#DIV/0!	±	#DIV/0!

Gamma spectrometry calculations for Nopal I rock powders

Sample= **NOPI-467-GAM1**

Self attenuation correction

A/O = [ln(T/I)]/[(T/I)-1]

T = transmitted intensity through sample or standards

I = intensity through empty vial

Point source		Empty vial	Standard - DP1B		Standard - DM1B		Sample	
SRM 4275C		12/28/95	12/28/95		12/28/95		12/29/95	
Isotope	keV	I	T	A/O	T	A/O	T	A/O
Sb125	27.3	6.65E+05	4.27E+05	1.23780258	3.81E+05	1.30421408	4.13E+05	1.25700688
Eu154,155	42.9	8.55E+05	7.41E+05	1.07325633	6.83E+05	1.11650378	7.24E+05	1.0854589
Eu154,155	48.6	2.73E+05	2.46E+05	1.05297373	2.29E+05	1.09044757	2.40E+05	1.06579921
Eu155	86.4	3.48E+05	3.36E+05	1.01764827	3.29E+05	1.02833504	3.27E+05	1.03144398
Eu155	105	2.23E+05	2.17E+05	1.0136992	2.13E+05	1.02311521	2.11E+05	1.02791177
Eu154	123	1.82E+06	1.78E+06	1.01115272	1.75E+06	1.01973854	1.74E+06	1.02264407
Sb125	178	4.34E+04	4.30E+04	1.00463681	4.22E+04	1.01408513	4.19E+04	1.0176899
Eu154	248	1.05E+05	1.05E+05	#DIV/0!	1.04E+05	1.00479236	1.03E+05	1.0096465
Eu154	592	1.41E+04	1.45E+04	0.98607828	1.46E+04	0.98267782	1.42E+04	0.99647058
Sb125	600	1.11E+04	1.15E+04	0.98240348	1.16E+04	0.97813177	1.09E+04	1.00911871
Sb125	636	6.12E+03	6.26E+03	0.98873359	6.24E+03	0.99032238	6.36E+03	0.98089016

Sample correction factor (CF) relative to each normalization standard

CF= (A/O of sample)/(A/O of DP1B and DM1B)

Isotope	keV	CF (DP1B)	CF (DM1B)
Sb125	27.3	1.01551483	0.963804102
Eu154,155	42.9	1.01136967	0.972194552
Eu154,155	48.6	1.01218025	0.977396109
Eu155	86.4	1.01355645	1.003023274
Eu155	105	1.0140205	1.004688196
Eu154	123	1.0113646	1.002849291
Sb125	178	1.01299285	1.003554709
Eu154	248	#DIV/0!	1.004830993
Eu154	592	1.01053902	1.014035887
Sb125	600	1.02719375	1.031679715
Sb125	636	0.9920672	0.990475609

Fit a polynomial curve through plot of CF versus keV for peaks < 200 keV using cricket graph.
Calculate CFs for natural series gamma peaks using polynomial equation.

CF (DP1B) equation = y =-0.002logx+1.017

CF (DM1B) equation = y =-0.070logx+0.862

Isotope	keV	CF (DP1B)	CF (DM1B)
231Th->235U	25.6	1.01418352	0.960576798
231Pa	27.4	1.0141245	0.962642539
210Pb	46.5	1.01366509	0.978721707
227Ac	50	1.01360206	0.9809279
234U+214Pb	53.2	1.01354818	0.982813814
234Th->238U	63.3	1.01339719	0.98809826
230Th	67.6	1.01334011	0.990096269
234Th->238U	92.6	1.01306678	0.999662769
228Ac->228Ra	129	1.01277882	1.00974128
235U+226Ra	186	1	1
227Th->227Ac	236	1	1
212Pb->228Th	239	1	1
214Pb->226Ra	242	1	1
214Pb->226Ra	295	1	1
214Pb->226Ra	352	1	1
208Tl->228Th	583	1	1
214Bi->226Ra	609	1	1

Sample activity calculations

As (Bq/g) = Is * CFs * An * Wn / In * Ws

As = radionuclide activity of sample (Bq/g)
Is = peak intensity (cps)
CFs = correction factor relative to normalization standard n
Ws = weight of sample (g)
An = nominal radionuclide activity of the normalization standard (Bq/g)
In = peak intensity (cps)
Wn = weight of normalization standard (g)
* note Is and In should be background-corrected values

Counting time (sec) =		80000		80000		80000	
Weight (g) =		3.003		3.001		2.994	
		Sample counts	Uncertainty	DP1B counts	Uncertainty	DM1B counts	Uncertainty
Isotope	keV	1/22/96		1/4/96		1/5/96	
231Th->235U	25.6	1.02E+02	4.05E+01	2.04E+03	1.18E+02	0	0
231Pa	27.4	0.00E+00	0.00E+00	1.74E+03	1.03E+02	0	0
210Pb	46.5	1.54E+03	5.62E+01	2.29E+04	1.86E+02	0	0
227Ac	50	9.75E+01	3.68E+01	2.15E+03	1.41E+02	0	0
234U+214Pb	53.2	2.72E+02	4.12E+01	5.39E+03	1.31E+02	0	0
234Th->238U	63.3	1.12E+03	6.13E+01	2.14E+04	2.96E+02	0	0
230Th	67.6	3.28E+01	7.49E+01	2.51E+03	1.28E+02	0	0
234Th->238U	92.6	1.90E+03	1.01E+02	2.58E+04	1.97E+02	0	0
228Ac->228Ra	129	1.13E+02	5.00E+01	0	0	4.77E+03	1.08E+02
235U+226Ra	186	9.75E+02	8.36E+01	1.92E+04	1.67E+02	0	0
227Th->227Ac	236	5.94E+01	2.02E+01	1.08E+03	1.02E+02	0	0
212Pb->228Th	239	1.79E+03	1.20E+02	0	0	5.35E+04	2.45E+02
214Pb->226Ra	242	8.84E+02	6.54E+01	1.33E+04	1.33E+02	0	0
214Pb->226Ra	295	1.48E+03	7.94E+01	2.48E+04	1.78E+02	0	0
214Pb->226Ra	352	2.31E+03	8.20E+01	3.48E+04	2.16E+02	0	0
208Tl->228Th	583	2.29E+02	3.73E+01	0	0	5.79E+03	1.03E+02
214Bi->226Ra	609	1.14E+03	4.78E+01	1.32E+04	1.54E+02	0	0

Isotope	keV	An (Bq/g)	Is	In (DP1B)	In (DM1B)		As (Bq/g)		Uncertainty
231Th->235U	25.6	0.044395	0.001275	0.0255	0		0.02028813	±	0.00823112
231Pa	27.4	0.044395	0	0.02175	0		0	±	#DIV/0!
210Pb	46.5	0.9361	0.01925	0.28625	0		0.57507343	±	0.04065467
227Ac	50	0.044395	0.00121875	0.026875	0		0.01839031	±	0.00713105
234U+214Pb	53.2	0.9361	0.0034	0.067375	0		0.43148739	±	0.07107638
234Th->238U	63.3	0.9361	0.014	0.2675	0		0.44743249	±	0.03686074
230Th	67.6	0.9361	0.0004075	0.031375	0		0.1110306	±	0.25524769
234Th->238U	92.6	0.9361	0.02375	0.3225	0		0.62938377	±	0.05068031
228Ac->228Ra	129	0.55494	0.0014125	0	0.059625		0.11935025	±	0.05380504
235U+226Ra	186	0.9361	0.0121875	0.24	0		0.42839753	±	0.04498708
227Th->227Ac	236	0.044395	0.0007425	0.0135	0		0.02200483	±	0.00787778
212Pb->228Th	239	0.55494	0.02225	0	0.66875		0.16600432	±	0.01366373
214Pb->226Ra	242	0.9361	0.0108	0.16625	0		0.54803169	±	0.05321737
214Pb->226Ra	295	0.9361	0.0185	0.31	0		0.50344683	±	0.04068178
214Pb->226Ra	352	0.9361	0.028875	0.435	0		0.55998489	±	0.03697131
208Tl->228Th	583	0.55494	0	0	0.072375		0	±	0
214Bi->226Ra	609	0.9361	0.01425	0.165	0		0.72857538	±	0.0540042

U(ppb) = 35973.6948

Th(ppb) = 40765.1465

Interference Correction

Isotope	keV	An (Bq/g)	Is	In (DP1B)		As (Bq/g)		
234U(242)	53.2	0.9361	0.001806375	0.04284351		0.3605047	±	0.03500731
234U(295)	53.2	0.9361	0.002337502	0.04957098		0.40319251	±	0.03258058
234U(352)	53.2	0.9361	0.002542208	0.05445243		0.39919206	±	0.02635545
235U(63.3)	186	0.044395	0.000653337	0.01248341		0.02093918	±	0.00172503
235U(92.6)	186	0.044395	0.001093688	0.01485113		0.02946384	±	0.00237254
226Ra(63.3)	186	0.9361	0.0115428	0.22768163		0.4276877	±	0.03523411
226Ra(92.6)	186	0.9361	0.011093813	0.22514888		0.41567568	±	0.03347174

234U/238U =	0.866342441	±	0.110624735	
230Th/234U =	0.286434663	±	0.659075923	
226Ra/230Th =	3.851980483	±	8.857968287	

Gamma spectrometry calculations for Nopal I rock powders

Sample= **NOPI-468-GAM1**

Self attenuation correction

A/O = [ln(T/I)]/[(T/I)-1]

T = transmitted intensity through sample or standards

I = intensity through empty vial

Point source		Empty vial	Standard - DP1B		Standard - DM1B		Sample	
SRM 4275C		12/28/95	12/28/95		12/28/95		12/29/95	
Isotope	keV	I	T	A/O	T	A/O	T	A/O
Sb125	27.3	6.65E+05	4.27E+05	1.23780258	3.81E+05	1.30421408	4.83E+05	1.19193015
Eu154,155	42.9	8.55E+05	7.41E+05	1.07325633	6.83E+05	1.11650378	7.61E+05	1.0593642
Eu154,155	48.6	2.73E+05	2.46E+05	1.05297373	2.29E+05	1.09044757	2.52E+05	1.0405552
Eu155	86.4	3.48E+05	3.36E+05	1.01764827	3.29E+05	1.02833504	3.40E+05	1.0116735
Eu155	105	2.23E+05	2.17E+05	1.0136992	2.13E+05	1.02311521	2.19E+05	1.00907732
Eu154	123	1.82E+06	1.78E+06	1.01115272	1.75E+06	1.01973854	1.79E+06	1.00833346
Sb125	178	4.34E+04	4.30E+04	1.00463681	4.22E+04	1.01408513	4.35E+04	0.99884969
Eu154	248	1.05E+05	1.05E+05	#DIV/0!	1.04E+05	1.00479236	1.05E+05	#DIV/0!
Eu154	592	1.41E+04	1.45E+04	0.98607828	1.46E+04	0.98267782	1.47E+04	0.97930837
Sb125	600	1.11E+04	1.15E+04	0.98240348	1.16E+04	0.97813177	1.15E+04	0.98240348
Sb125	636	6.12E+03	6.26E+03	0.98873359	6.24E+03	0.99032238	4.15E+03	1.20677006

Sample correction factor (CF) relative to each normalization standard

CF= (A/O of sample)/(A/O of DP1B and DM1B)

Isotope	keV	CF (DP1B)	CF (DM1B)
Sb125	27.3	0.96294044	0.913906832
Eu154,155	42.9	0.9870561	0.948822759
Eu154,155	48.6	0.98820623	0.95424597
Eu155	86.4	0.99412885	0.983797564
Eu155	105	0.99544058	0.986279271
Eu154	123	0.99721183	0.988815682
Sb125	178	0.9942396	0.98497618
Eu154	248	#DIV/0!	#DIV/0!
Eu154	592	0.9931345	0.996571147
Sb125	600	1	1.004367205
Sb125	636	1.22052096	1.218562853

Fit a polynomial curve through plot of CF versus keV for peaks < 200 keV using cricket graph.
Calculate CFs for natural series gamma peaks using polynomial equation.

CF (DP1B) equation = y =0.044logx+0.908
CF (DM1B) equation = y =0.113logx+0.759

Isotope	keV	CF (DP1B)	CF (DM1B)
231Th->235U	25.6	0.96996256	0.918131116
231Pa	27.4	0.97126102	0.921465814
210Pb	46.5	0.98136793	0.947422184
227Ac	50	0.98275468	0.95098361
234U+214Pb	53.2	0.98394011	0.954028014
234Th->238U	63.3	0.98726176	0.962558619
230Th	67.6	0.98851765	0.965783977
234Th->238U	92.6	0.99453088	0.981227041
228Ac->228Ra	129	1.00086595	0.997496637
235U+226Ra	186	1	1
227Th->227Ac	236	1	1
212Pb->228Th	239	1	1
214Pb->226Ra	242	1	1
214Pb->226Ra	295	1	1
214Pb->226Ra	352	1	1
208Tl->228Th	583	1	1
214Bi->226Ra	609	1	1

Sample activity calculations

As (Bq/g) = Is * CFs * An * Wn / In * Ws

As = radionuclide activity of sample (Bq/g)
Is = peak intensity (cps)
CFs = correction factor relative to normalization standard n
Ws = weight of sample (g)
An = nominal radionuclide activity of the normalization standard (Bq/g)
In = peak intensity (cps)
Wn = weight of normalization standard (g)
* note Is and In should be background-corrected values

Counting time (sec) =		80000		80000		80000	
Weight (g) =		3.002		3.001		2.994	
		Sample counts	Uncertainty	DP1B counts	Uncertainty	DM1B counts	Uncertainty
Isotope	keV	1/19/98		1/4/96		1/5/96	
231Th->235U	25.6	6.19E+01	3.64E+01	2.04E+03	1.18E+02	0	0
231Pa	27.4	0.00E+00	0.00E+00	1.74E+03	1.03E+02	0	0
210Pb	46.5	1.65E+03	5.79E+01	2.29E+04	1.86E+02	0	0
227Ac	50	1.65E+02	4.06E+01	2.15E+03	1.41E+02	0	0
234U+214Pb	53.2	3.16E+02	3.98E+01	5.39E+03	1.31E+02	0	0
234Th->238U	63.3	7.88E+02	1.05E+02	2.14E+04	2.96E+02	0	0
230Th	67.6	8.48E+01	2.41E+01	2.51E+03	1.28E+02	0	0
234Th->238U	92.6	1.40E+03	9.30E+01	2.58E+04	1.97E+02	0	0
228Ac->228Ra	129	1.15E+02	4.98E+01	0	0	4.77E+03	1.08E+02
235U+226Ra	186	8.80E+02	8.40E+01	1.92E+04	1.67E+02	0	0
227Th->227Ac	236	4.61E+01	2.87E+01	1.08E+03	1.02E+02	0	0
212Pb->228Th	239	1.85E+03	8.86E+01	0	0	5.35E+04	2.45E+02
214Pb->226Ra	242	9.18E+02	6.06E+01	1.33E+04	1.33E+02	0	0
214Pb->226Ra	295	1.54E+03	5.29E+01	2.48E+04	1.78E+02	0	0
214Pb->226Ra	352	2.36E+03	8.26E+01	3.48E+04	2.16E+02	0	0
208Tl->228Th	583	2.80E+02	3.80E+01	0	0	5.79E+03	1.03E+02
214Bi->226Ra	609	1.10E+03	4.22E+01	1.32E+04	1.54E+02	0	0

Isotope	keV	An (Bq/g)	Is	In (DP1B)	In (DM1B)		As (Bq/g)		Uncertainty
231Th->235U	25.6	0.044395	0.00102375	0.0255	0		0.01557469	±	0.00704274
231Pa	27.4	0.044395	0	0.02175	0		0	±	#DIV/0!
210Pb	46.5	0.9361	0.020625	0.28625	0		0.59631983	±	0.04173107
227Ac	50	0.044395	0.0020625	0.026875	0		0.03016486	±	0.00789183
234U+214Pb	53.2	0.9361	0.00395	0.067375	0		0.48648103	±	0.06889152
234Th->238U	63.3	0.9361	0.00985	0.2675	0		0.30657991	±	0.04500207
230Th	67.6	0.9361	0.00106	0.031375	0		0.28164723	±	0.08305927
234Th->238U	92.6	0.9361	0.0175	0.3225	0		0.45511959	±	0.04088752
228Ac->228Ra	129	0.55494	0.0014375	0	0.059625		0.11994977	±	0.05200839
235U+226Ra	186	0.9361	0.011	0.24	0		0.38652748	±	0.04370876
227Th->227Ac	236	0.044395	0.00057625	0.0135	0		0.01707214	±	0.0100706
212Pb->228Th	239	0.55494	0.023125	0	0.66875		0.17247512	±	0.01160029
214Pb->226Ra	242	0.9361	0.01145	0.16625	0		0.5808216	±	0.05219895
214Pb->226Ra	295	0.9361	0.01925	0.31	0		0.52368239	±	0.03640057
214Pb->226Ra	352	0.9361	0.0295	0.435	0		0.57191526	±	0.03768624
208Tl->228Th	583	0.55494	0	0	0.072375		0	±	0
214Bi->226Ra	609	0.9361	0.01375	0.165	0		0.70277723	±	0.05071637

U(ppb) = 24649.1085

Th(ppb) = 42354.1616

Interference Correction

Isotope	keV	An (Bq/g)	Is	In (DP1B)		As (Bq/g)		
234U(242)	53.2	0.9361	0.002260463	0.04284351		0.43780419	±	0.03934585
234U(295)	53.2	0.9361	0.002844428	0.04957098		0.47614037	±	0.03309598
234U(352)	53.2	0.9361	0.003073641	0.05445243		0.46838564	±	0.03086417
235U(63.3)	186	0.044395	0.000447815	0.01216146		0.0147273	±	0.00216178
235U(92.6)	186	0.044395	0.000805875	0.01485113		0.02170297	±	0.00194977
226Ra(63.3)	186	0.9361	0.010546408	0.22768163		0.39063891	±	0.05734087
226Ra(92.6)	186	0.9361	0.010194125	0.22514888		0.38183796	±	0.03430397

234U/238U = 1.502958026 ± 0.251479167
230Th/234U = 0.611244477 ± 0.186824495
226Ra/230Th = 1.38697938 ± 0.449252242

Gamma spectrometry calculations for Nopal I rock powders

Sample= **NOPI-469-GAM1**

Self attenuation correction

A/O = [ln(T/I)]/[(T/I)-1]
T = transmitted intensity through sample or standards
I = intensity through empty vial

Point source		Empty vial	Standard - DP1B		Standard - DM1B		Sample	
SRM 4275C		12/28/95	12/28/95		12/28/95		12/29/95	
Isotope	keV	I	T	A/O	T	A/O	T	A/O
Sb125	27.3	6.65E+05	4.27E+05	1.23780258	3.81E+05	1.30421408	4.00E+05	1.27560173
Eu154,155	42.9	8.55E+05	7.41E+05	1.07325633	6.83E+05	1.11650378	7.19E+05	1.08911982
Eu154,155	48.6	2.73E+05	2.46E+05	1.05297373	2.29E+05	1.09044757	2.36E+05	1.07016875
Eu155	86.4	3.48E+05	3.36E+05	1.01764827	3.29E+05	1.02833504	3.26E+05	1.03300792
Eu155	105	2.23E+05	2.17E+05	1.0136992	2.13E+05	1.02311521	2.10E+05	1.03033275
Eu154	123	1.82E+06	1.78E+06	1.01115272	1.75E+06	1.01973854	1.73E+06	1.02557187
Sb125	178	4.34E+04	4.30E+04	1.00463681	4.22E+04	1.01408513	4.13E+04	1.02500345
Eu154	248	1.05E+05	1.05E+05	#DIV/0!	1.04E+05	1.00479236	1.10E+05	0.97692033
Eu154	592	1.41E+04	1.45E+04	0.98607828	1.46E+04	0.98267782	1.42E+04	0.99647058
Sb125	600	1.11E+04	1.15E+04	0.98240348	1.16E+04	0.97813177	1.12E+04	0.99552237
Sb125	636	6.12E+03	6.26E+03	0.98873359	6.24E+03	0.99032238	6.20E+03	0.99352046

Sample correction factor (CF) relative to each normalization standard

CF= (A/O of sample)/(A/O of DP1B and DM1B)

Isotope	keV	CF (DP1B)	CF (DM1B)
Sb125	27.3	1.0305373	0.978061618
Eu154,155	42.9	1.01478071	0.975473466
Eu154,155	48.6	1.01632996	0.981403211
Eu155	86.4	1.01509328	1.004544126
Eu155	105	1.01640876	1.007054471
Eu154	123	1.01426011	1.005720417
Sb125	178	1.02027264	1.010766675
Eu154	248	#DIV/0!	0.972260907
Eu154	592	1.01053902	1.014035887
Sb125	600	1.01335387	1.017779399
Sb125	636	1.00484142	1.003229331

Fit a polynomial curve through plot of CF versus keV for peaks < 200 keV using cricket graph.
Calculate CFs for natural series gamma peaks using polynomial equation.

CF (DP1B) equation = y =-0.017logx+1.049
CF (DM1B) equation = y =-0.055logx+0.992

Isotope	keV	CF (DP1B)	CF (DM1B)
231Th->235U	25.6	1.02505992	0.970861438
231Pa	27.4	1.02455824	0.972514032
210Pb	46.5	1.0206533	0.985377365
227Ac	50	1.02011751	0.98714232
234U+214Pb	53.2	1.0196595	0.988651051
234Th->238U	63.3	1.01837614	0.992878608
230Th	67.6	1.01789091	0.994477015
234Th->238U	92.6	1.01556761	1.002130215
228Ac->228Ra	129	1.01311997	1.010193024
235U+226Ra	186	1	1
227Th->227Ac	236	1	1
212Pb->228Th	239	1	1
214Pb->226Ra	242	1	1
214Pb->226Ra	295	1	1
214Pb->226Ra	352	1	1
208Tl->228Th	583	1	1
214Bi->226Ra	609	1	1

Sample activity calculations

As (Bq/g) = Is * CFs * An * Wn / In * Ws

As = radionuclide activity of sample (Bq/g)
Is = peak intensity (cps)
CFs = correction factor relative to normalization standard n
Ws = weight of sample (g)
An = nominal radionuclide activity of the normalization standard (Bq/g)
In = peak intensity (cps)
Wn = weight of normalization standard (g)
* note Is and In should be background-corrected values

Counting time (sec) =			80000		80000		80000	
Weight (g) =			2.999		3.001		2.994	
			Sample counts	Uncertainty	DP1B counts	Uncertainty	DM1B counts	Uncertainty
Isotope	keV		1/17/96		1/4/96		1/5/96	
231Th->235U	25.6		1.70E+02	4.73E+01	2.04E+03	1.18E+02	0	0
231Pa	27.4		0.00E+00	0.00E+00	1.74E+03	1.03E+02	0	0
210Pb	46.5		3.62E+03	7.79E+01	2.29E+04	1.86E+02	0	0
227Ac	50		2.57E+02	4.58E+01	2.15E+03	1.41E+02	0	0
234U+214Pb	53.2		6.60E+02	5.33E+01	5.39E+03	1.31E+02	0	0
234Th->238U	63.3		2.15E+03	6.06E+01	2.14E+04	2.96E+02	0	0
230Th	67.6		1.68E+02	4.31E+01	2.51E+03	1.28E+02	0	0
234Th->238U	92.6		3.18E+03	1.48E+02	2.58E+04	1.97E+02	0	0
228Ac->228Ra	129		1.30E+02	6.09E+01	0	0	4.77E+03	1.08E+02
235U+226Ra	186		2.03E+03	1.03E+02	1.92E+04	1.67E+02	0	0
227Th->227Ac	236		9.43E+01	2.51E+01	1.08E+03	1.02E+02	0	0
212Pb->228Th	239		1.78E+03	6.16E+01	0	0	5.35E+04	2.45E+02
214Pb->226Ra	242		1.77E+03	6.06E+01	1.33E+04	1.33E+02	0	0
214Pb->226Ra	295		3.21E+03	7.08E+01	2.48E+04	1.78E+02	0	0
214Pb->226Ra	352		4.71E+03	8.26E+01	3.48E+04	2.16E+02	0	0
208Tl->228Th	583		2.17E+02	3.80E+01	0	0	5.79E+03	1.03E+02
214Bi->226Ra	609		2.46E+03	6.42E+01	1.32E+04	1.54E+02	0	0

Isotope	keV	An (Bq/g)	Is	In (DP1B)	In (DM1B)		As (Bq/g)		Uncertainty
231Th->235U	25.6	0.044395	0.002125	0.0255	0		0.03413065	±	0.00991322
231Pa	27.4	0.044395	0	0.02175	0		0	±	#DIV/0!
210Pb	46.5	0.9361	0.04525	0.28625	0		1.35930226	±	0.08734565
227Ac	50	0.044395	0.0032125	0.026875	0		0.04872158	±	0.00970279
234U+214Pb	53.2	0.9361	0.00825	0.067375	0		1.05190144	±	0.10887298
234Th->238U	63.3	0.9361	0.026875	0.2675	0		0.86198083	±	0.06218031
230Th	67.6	0.9361	0.00235	0.031375	0		0.64231796	±	0.15569898
234Th->238U	92.6	0.9361	0.03975	0.3225	0		1.05458348	±	0.08048315
228Ac->228Ra	129	0.55494	0.001725	0	0.059625		0.14562615	±	0.06471295
235U+226Ra	186	0.9361	0.025375	0.24	0		0.89075756	±	0.07042108
227Th->227Ac	236	0.044395	0.00117875	0.0135	0		0.03488707	±	0.01007307
212Pb->228Th	239	0.55494	0.02225	0	0.66875		0.1657832	±	0.01091091
214Pb->226Ra	242	0.9361	0.022125	0.16625	0		1.12120837	±	0.08519408
214Pb->226Ra	295	0.9361	0.040125	0.31	0		1.09048089	±	0.07014756
214Pb->226Ra	352	0.9361	0.058875	0.435	0		1.14026651	±	0.07162905
208Tl->228Th	583	0.55494	0	0	0.072375		0	±	0
214Bi->226Ra	609	0.9361	0.030625	0.165	0		1.56371233	±	0.10399292

U(ppb) = 69303.4945

Th(ppb) = 40710.8473

Interference Correction

Isotope	keV	An (Bq/g)	Is	In (DP1B)		As (Bq/g)		
234U(242)	53.2	0.9361	0.004985283	0.04284351		0.99959631	±	0.07595349
234U(295)	53.2	0.9361	0.005945528	0.04957098		1.03034532	±	0.06627921
234U(352)	53.2	0.9361	0.006500996	0.05445243		1.02561077	±	0.06442662
235U(63.3)	186	0.044395	0.001260336	0.01254474		0.0401422	±	0.00289572
235U(92.6)	186	0.044395	0.001830488	0.01485113		0.04924747	±	0.00375844
226Ra(63.3)	186	0.9361	0.024137406	0.22768163		0.89315601	±	0.06442918
226Ra(92.6)	186	0.9361	0.023544513	0.22514888		0.88101769	±	0.06723704

234U/238U	=	1.181601065	±	0.107397954
230Th/234U	=	0.630640108	±	0.156795257
226Ra/230Th	=	1.39052005	±	0.341633187

Gamma spectrometry calculations for Nopal I rock powders

Sample= **NOPI-470-GAM1**

Self attenuation correction

A/O = [ln(T/I)]/[(T/I)-1]
T = transmitted intensity through sample or standards
I = intensity through empty vial

Point source		Empty vial	Standard - DP1B		Standard - DM1B		Sample	
SRM 4275C		12/28/95	12/28/95		12/28/95		12/29/95	
Isotope	keV	I	T	A/O	T	A/O	T	A/O
Sb125	27.3	6.65E+05	4.27E+05	1.23780258	3.81E+05	1.30421408	4.22E+05	1.24456728
Eu154,155	42.9	8.55E+05	7.41E+05	1.07325633	6.83E+05	1.11650378	7.39E+05	1.0746727
Eu154,155	48.6	2.73E+05	2.46E+05	1.05297373	2.29E+05	1.09044757	2.45E+05	1.05508245
Eu155	86.4	3.48E+05	3.36E+05	1.01764827	3.29E+05	1.02833504	3.33E+05	1.02219176
Eu155	105	2.23E+05	2.17E+05	1.0136992	2.13E+05	1.02311521	2.16E+05	1.01603145
Eu154	123	1.82E+06	1.78E+06	1.01115272	1.75E+06	1.01973854	1.77E+06	1.01399314
Sb125	178	4.34E+04	4.30E+04	1.00463681	4.22E+04	1.01408513	4.20E+04	1.01648451
Eu154	248	1.05E+05	1.05E+05	#DIV/0!	1.04E+05	1.00479236	1.03E+05	1.0096465
Eu154	592	1.41E+04	1.45E+04	0.98607828	1.46E+04	0.98267782	1.53E+04	0.95971686
Sb125	600	1.11E+04	1.15E+04	0.98240348	1.16E+04	0.97813177	1.14E+04	0.98672514
Sb125	636	6.12E+03	6.26E+03	0.98873359	6.24E+03	0.99032238	6.41E+03	0.97703003

Sample correction factor (CF) relative to each normalization standard

CF= (A/O of sample)/(A/O of DP1B and DM1B)

Isotope	keV	CF (DP1B)	CF (DM1B)
Sb125	27.3	1.00546509	0.954266097
Eu154,155	42.9	1.0013197	0.962533865
Eu154,155	48.6	1.00200263	0.967568252
Eu155	86.4	1.00446469	0.994026
Eu155	105	1.00230073	0.993076281
Eu154	123	1.00280909	0.994365813
Sb125	178	1.01179302	1.002366056
Eu154	248	#DIV/0!	1.004830993
Eu154	592	0.9732664	0.976634296
Sb125	600	1.00439907	1.008785492
Sb125	636	0.98816308	0.986577751

Fit a polynomial curve through plot of CF versus keV for peaks < 200 keV using cricket graph.
Calculate CFs for natural series gamma peaks using polynomial equation.

CF (DP1B) equation = y =-0.002logx+1.005
CF (DM1B) equation = y =-0.070logx+0.852

Isotope	keV	CF (DP1B)	CF (DM1B)
231Th->235U	25.6	1.00318352	0.950576798
231Pa	27.4	1.0031245	0.952642539
210Pb	46.5	1.00266509	0.968721707
227Ac	50	1.00260206	0.9709279
234U+214Pb	53.2	1.00254818	0.972813814
234Th->238U	63.3	1.00239719	0.97809826
230Th	67.6	1.00234011	0.980096269
234Th->238U	92.6	1.00206678	0.989662769
228Ac->228Ra	129	1.00177882	0.99974128
235U+226Ra	186	1	1
227Th->227Ac	236	1	1
212Pb->228Th	239	1	1
214Pb->226Ra	242	1	1
214Pb->226Ra	295	1	1
214Pb->226Ra	352	1	1
208Tl->228Th	583	1	1
214Bi->226Ra	609	1	1

Sample activity calculations

As (Bq/g) = Is * CFs * An * Wn / In * Ws

As = radionuclide activity of sample (Bq/g)
Is = peak intensity (cps)
CFs = correction factor relative to normalization standard n
Ws = weight of sample (g)
An = nominal radionuclide activity of the normalization standard (Bq/g)
In = peak intensity (cps)
Wn = weight of normalization standard (g)
* note Is and In should be background-corrected values

Counting time (sec) =		80000		80000		80000	
Weight (g) =		3		3.001		2.994	
		Sample counts	Uncertainty	DP1B counts	Uncertainty	DM1B counts	Uncertainty
Isotope	keV	1/15/96		1/4/96		1/5/96	
231Th->235U	25.6	2.23E+02	9.43E+01	2.04E+03	1.18E+02	0	0
231Pa	27.4	1.52E+02	8.57E+01	1.74E+03	1.03E+02	0	0
210Pb	46.5	4.84E+03	8.58E+01	2.29E+04	1.86E+02	0	0
227Ac	50	2.83E+02	5.60E+01	2.15E+03	1.41E+02	0	0
234U+214Pb	53.2	8.47E+02	6.06E+01	5.39E+03	1.31E+02	0	0
234Th->238U	63.3	3.13E+03	8.42E+01	2.14E+04	2.96E+02	0	0
230Th	67.6	4.03E+02	7.47E+01	2.51E+03	1.28E+02	0	0
234Th->238U	92.6	4.11E+03	8.40E+01	2.58E+04	1.97E+02	0	0
228Ac->228Ra	129	4.26E+01	5.46E+01	0	0	4.77E+03	1.08E+02
235U+226Ra	186	2.59E+03	7.62E+01	1.92E+04	1.67E+02	0	0
227Th->227Ac	236	0.00E+00	0.00E+00	1.08E+03	1.02E+02	0	0
212Pb->228Th	239	1.64E+03	5.33E+01	0	0	5.35E+04	2.45E+02
214Pb->226Ra	242	1.87E+03	5.64E+01	1.33E+04	1.33E+02	0	0
214Pb->226Ra	295	3.47E+03	6.86E+01	2.48E+04	1.78E+02	0	0
214Pb->226Ra	352	2.09E+03	5.23E+01	3.48E+04	2.16E+02	0	0
208Tl->228Th	583	0	0	0	0	5.79E+03	1.03E+02
214Bi->226Ra	609	2.03E+02	2.07E+01	1.32E+04	1.54E+02	0	0

Isotope	keV	An (Bq/g)	Is	In (DP1B)	In (DM1B)		As (Bq/g)		Uncertainty
231Th->235U	25.6	0.044395	0.0027875	0.0255	0		0.0438305	±	0.01889114
231Pa	27.4	0.044395	0.0019	0.02175	0		0.03502438	±	0.01542397
210Pb	46.5	0.9361	0.05675	0.28625	0		1.67527367	±	0.10625952
227Ac	50	0.044395	0.0035375	0.026875	0		0.05274701	±	0.01144226
234U+214Pb	53.2	0.9361	0.0105875	0.067375	0		1.32772885	±	0.12810773
234Th->238U	63.3	0.9361	0.039125	0.2675	0		1.23560569	±	0.08302479
230Th	67.6	0.9361	0.0050375	0.031375	0		1.35630052	±	0.27314845
234Th->238U	92.6	0.9361	0.051375	0.3225	0		1.34532829	±	0.08598545
228Ac->228Ra	129	0.55494	0.0005325	0	0.059625		0.04450389	±	0.05708742
235U+226Ra	186	0.9361	0.032375	0.24	0		1.13686273	±	0.07661173
227Th->227Ac	236	0.044395	0	0.0135	0		0	±	#DIV/0!
212Pb->228Th	239	0.55494	0.0205	0	0.66875		0.152795	±	0.00875906
214Pb->226Ra	242	0.9361	0.023375	0.16625	0		1.18494846	±	0.08045138
214Pb->226Ra	295	0.9361	0.043375	0.31	0		1.17919951	±	0.07497286
214Pb->226Ra	352	0.9361	0.026125	0.435	0		0.50614685	±	0.03305384
208Tl->228Th	583	0.55494	0	0	0.072375		0	±	#DIV/0!
214Bi->226Ra	609	0.9361	0.0025375	0.165	0		0.12960794	±	0.01540868

U(ppb) = 99343.0358

Th(ppb) = 37521.3777

Interference Correction

Isotope	keV	An (Bq/g)	Is	In (DP1B)		As (Bq/g)		
234U(242)	53.2	0.9361	0.007138336	0.04284351		1.40775366	±	0.09557861
234U(295)	53.2	0.9361	0.008096373	0.04957098		1.37999576	±	0.08773937
234U(352)	53.2	0.9361	0.009811403	0.05445243		1.52239948	±	0.09942006
235U(63.3)	186	0.044395	0.001806025	0.0123479		0.05845907	±	0.00392807
235U(92.6)	186	0.044395	0.002365819	0.01485113		0.06367126	±	0.00406949
226Ra(63.3)	186	0.9361	0.030573294	0.22768163		1.13168026	±	0.07604167
226Ra(92.6)	186	0.9361	0.030009181	0.22514888		1.12329509	±	0.0717944

234U/238U	=	1.16276277	±	0.094689877
230Th/234U	=	0.944028073	±	0.195017944
226Ra/230Th	=	0.834387547	±	0.169924062

Gamma spectrometry calculations for Nopal I rock powders

Sample= **NOPI-471-GAM1**

Self attenuation correction

A/O = [ln(T/I)]/[(T/I)-1]

T = transmitted intensity through sample or standards

I = intensity through empty vial

Point source		Empty vial	Standard - DP1B		Standard - DM1B		Sample	
SRM 4275C		12/28/95	12/28/95		12/28/95		12/29/95	
Isotope	keV	I	T	A/O	T	A/O	T	A/O
Sb125	27.3	6.65E+05	4.27E+05	1.23780258	3.81E+05	1.30421408	3.87E+05	1.29498547
Eu154,155	42.9	8.55E+05	7.41E+05	1.07325633	6.83E+05	1.11650378	7.12E+05	1.09430169
Eu154,155	48.6	2.73E+05	2.46E+05	1.05297373	2.29E+05	1.09044757	2.38E+05	1.07016875
Eu155	86.4	3.48E+05	3.36E+05	1.01764827	3.29E+05	1.02833504	3.31E+05	1.02525108
Eu155	105	2.23E+05	2.17E+05	1.0136992	2.13E+05	1.02311521	2.14E+05	1.0207393
Eu154	123	1.82E+06	1.78E+06	1.01115272	1.75E+06	1.01973854	1.74E+06	1.02264407
Sb125	178	4.34E+04	4.30E+04	1.00463681	4.22E+04	1.01408513	4.21E+04	1.01528292
Eu154	248	1.05E+05	1.05E+05	#DIV/0!	1.04E+05	1.00479236	1.01E+05	1.01954562
Eu154	592	1.41E+04	1.45E+04	0.98607828	1.46E+04	0.98267782	1.48E+04	0.98267782
Sb125	600	1.11E+04	1.15E+04	0.98240348	1.16E+04	0.97813177	1.08E+04	1.01376204
Sb125	636	6.12E+03	6.26E+03	0.98873359	6.24E+03	0.99032238	6.34E+03	0.9824456

Sample correction factor (CF) relative to each normalization standard

CF= (A/O of sample)/(A/O of DP1B and DM1B)

Isotope	keV	CF (DP1B)	CF (DM1B)
Sb125	27.3	1.0461971	0.992924011
Eu154,155	42.9	1.01960889	0.980114626
Eu154,155	48.6	1.01632996	0.981403211
Eu155	86.4	1.00747095	0.997001018
Eu155	105	1.00694496	0.997677769
Eu154	123	1.0113646	1.002849291
Sb125	178	1.01059698	1.001181159
Eu154	248	#DIV/0!	1.014682902
Eu154	592	0.99655153	1
Sb125	600	1.03192025	1.036426862
Sb125	636	0.99364036	0.992046249

Fit a polynomial curve through plot of CF versus keV for peaks < 200 keV using cricket graph.
Calculate CFs for natural series gamma peaks using polynomial equation.

CF (DP1B) equation = y =-0.050logx+1.107

CF (DM1B) equation = y =-0.024logx+0.948

Isotope	keV	CF (DP1B)	CF (DM1B)
231Th->235U	25.6	1.036588	0.981797759
231Pa	27.4	1.03511247	0.982506014
210Pb	46.5	1.02362735	0.988018871
227Ac	50	1.0220515	0.98877528
234U+214Pb	53.2	1.02070442	0.989421879
234Th->238U	63.3	1.01692981	0.991233689
230Th	67.6	1.01550267	0.991918721
234Th->238U	92.6	1.00866945	0.995198664
228Ac->228Ra	129	1.00147051	0.998654153
235U+226Ra	186	1	1
227Th->227Ac	236	1	1
212Pb->228Th	239	1	1
214Pb->226Ra	242	1	1
214Pb->226Ra	295	1	1
214Pb->226Ra	352	1	1
208Tl->228Th	583	1	1
214Bi->226Ra	609	1	1

Sample activity calculations

As (Bq/g) = Is * CFs * An * Wn / In * Ws

As = radionuclide activity of sample (Bq/g)
Is = peak intensity (cps)
CFs = correction factor relative to normalization standard n
Ws = weight of sample (g)
An = nominal radionuclide activity of the normalization standard (Bq/g)
In = peak intensity (cps)
Wn = weight of normalization standard (g)
* note Is and In should be background-corrected values

Counting time (sec) =		80000		80000		80000	
Weight (g) =		3.002		3.001		2.994	
		Sample counts	Uncertainty	DP1B counts	Uncertainty	DM1B counts	Uncertainty
Isotope	keV	1/12/98		1/4/96		1/5/96	
231Th->235U	25.6	2.48E+04	5.49E+02	2.04E+03	1.18E+02	0	0
231Pa	27.4	2.03E+04	4.70E+02	1.74E+03	1.03E+02	0	0
210Pb	46.5	2.26E+05	6.04E+02	2.29E+04	1.86E+02	0	0
227Ac	50	2.57E+04	3.99E+02	2.15E+03	1.41E+02	0	0
234U+214Pb	53.2	5.84E+04	4.39E+02	5.39E+03	1.31E+02	0	0
234Th->238U	63.3	2.22E+05	6.73E+02	2.14E+04	2.96E+02	0	0
230Th	67.6	2.84E+04	4.24E+02	2.51E+03	1.28E+02	0	0
234Th->238U	92.6	2.71E+05	6.45E+02	2.58E+04	1.97E+02	0	0
228Ac->228Ra	129	0	0	0	0	4.77E+03	1.08E+02
235U+226Ra	186	1.94E+05	5.30E+02	1.92E+04	1.67E+02	0	0
227Th->227Ac	236	1.04E+04	2.27E+02	1.08E+03	1.02E+02	0	0
212Pb->228Th	239	7.32E+01	1.70E+02	0	0	5.35E+04	2.45E+02
214Pb->226Ra	242	1.38E+05	4.31E+02	1.33E+04	1.33E+02	0	0
214Pb->226Ra	295	2.56E+05	5.89E+02	2.48E+04	1.78E+02	0	0
214Pb->226Ra	352	2.14E+05	1.62E+04	3.48E+04	2.16E+02	0	0
208Tl->228Th	583	0	0	0	0	5.79E+03	1.03E+02
214Bi->226Ra	609	3.58E+04	2.52E+02	1.32E+04	1.54E+02	0	0

Isotope	keV	An (Bq/g)	Is	In (DP1B)	In (DM1B)	As (Bq/g)		Uncertainty
231Th->235U	25.6	0.044395	0.31	0.0255	0	5.04009166	±	0.4346149
231Pa	27.4	0.044395	0.25375	0.02175	0	4.82997713	±	0.42217823
210Pb	46.5	0.9361	2.85	0.28625	0	85.9488708	±	5.2089477
227Ac	50	0.044395	0.32125	0.026875	0	4.88627817	±	0.44090245
234U+214Pb	53.2	0.9361	0.73	0.067375	0	93.2659257	±	6.07819451
234Th->238U	63.3	0.9361	2.775	0.2675	0	88.9670335	±	5.48918814
230Th	67.6	0.9361	0.33	0.031375	0	90.0762301	±	7.23897818
234Th->238U	92.6	0.9361	3.3875	0.3225	0	89.3505811	±	5.40845499
228Ac->228Ra	129	0.55494	0	0	0.059625	0	±	#DIV/0!
235U+226Ra	186	0.9361	2.425	0.24	0	85.2117393	±	5.17138901
227Th->227Ac	236	0.044395	0.13	0.0135	0	3.85141509	±	0.43906415
212Pb->228Th	239	0.55494	0.000915	0	0.66875	0.00682442	±	0.01585234
214Pb->226Ra	242	0.9361	1.7	0.16625	0	86.2355219	±	5.2526164
214Pb->226Ra	295	0.9361	3.2	0.31	0	87.0536957	±	5.26401796
214Pb->226Ra	352	0.9361	2.675	0.435	0	51.8601129	±	5.40726467
208Tl->228Th	583	0.55494	0	0	0.072375	0	±	#DIV/0!
214Bi->226Ra	609	0.9361	0.4475	0.165	0	22.8722044	±	1.40727455

U(ppb) = 7152973.83

Th(ppb) = 1675.85115

Interference Correction

Isotope	keV	An (Bq/g)	Is	In (DP1B)	As (Bq/g)		
234U(242)	53.2	0.9361	0.479151683	0.04284351	96.2690965	±	5.86376268
234U(295)	53.2	0.9361	0.546216553	0.04957098	94.8497713	±	5.73543599
234U(352)	53.2	0.9361	0.650533593	0.05445243	102.837479	±	10.7224886
235U(63.3)	186	0.044395	0.12995219	0.01252692	4.14906219	±	0.25599351
235U(92.6)	186	0.044395	0.155994375	0.01485113	4.20107397	±	0.25429403
226Ra(63.3)	186	0.9361	2.29721125	0.22768163	85.0886985	±	5.24989826
226Ra(92.6)	186	0.9361	2.269005625	0.22514888	84.9893915	±	5.14446904

234U/238U	=	1.101368059	±	0.116790476
230Th/234U	=	0.919281699	±	0.108368096
226Ra/230Th	=	0.944629881	±	0.077120909

Gamma spectrometry calculations for Nopal I rock powders

Sample= **NOPI-472-GAM1**

Self attenuation correction

A/O = [ln(T/I)]/[(T/I)-1]

T = transmitted intensity through sample or standards

I = intensity through empty vial

Point source		Empty vial	Standard - DP1B		Standard - DM1B		Sample	
SRM 4275C		12/28/95	12/28/95		12/28/95		12/29/95	
Isotope	keV	I	T	A/O	T	A/O	T	A/O
Sb125	27.3	6.65E+05	4.27E+05	1.23780258	3.81E+05	1.30421408	2.96E+05	1.45872451
Eu154,155	42.9	8.55E+05	7.41E+05	1.07325633	6.83E+05	1.11650378	6.65E+05	1.13091493
Eu154,155	48.6	2.73E+05	2.46E+05	1.05297373	2.29E+05	1.09044757	2.28E+05	1.09276541
Eu155	86.4	3.48E+05	3.36E+05	1.01764827	3.29E+05	1.02833504	3.28E+05	1.02988636
Eu155	105	2.23E+05	2.17E+05	1.0136992	2.13E+05	1.02311521	2.12E+05	1.02550598
Eu154	123	1.82E+06	1.78E+06	1.01115272	1.75E+06	1.01973854	1.74E+06	1.02264407
Sb125	178	4.34E+04	4.30E+04	1.00463681	4.22E+04	1.01408513	4.27E+04	1.00815229
Eu154	248	1.05E+05	1.05E+05	#DIV/0!	1.04E+05	1.00479236	1.05E+05	#DIV/0!
Eu154	592	1.41E+04	1.45E+04	0.98607828	1.46E+04	0.98267782	1.42E+04	0.99647058
Sb125	600	1.11E+04	1.15E+04	0.98240348	1.16E+04	0.97813177	1.17E+04	0.97390907
Sb125	636	6.12E+03	6.26E+03	0.98873359	6.24E+03	0.99032238	6.12E+03	#DIV/0!

Sample correction factor (CF) relative to each normalization standard

CF= (A/O of sample)/(A/O of DP1B and DM1B)

Isotope	keV	CF (DP1B)	CF (DM1B)
Sb125	27.3	1.17847914	1.118470149
Eu154,155	42.9	1.05372305	1.012907383
Eu154,155	48.6	1.03778981	1.002125584
Eu155	86.4	1.01202585	1.00150858
Eu155	105	1.01164722	1.002336757
Eu154	123	1.0113646	1.002849291
Sb125	178	1.00349926	0.994149572
Eu154	248	#DIV/0!	#DIV/0!
Eu154	592	1.01053902	1.014035887
Sb125	600	0.99135344	0.995682888
Sb125	636	#DIV/0!	#DIV/0!

Fit a polynomial curve through plot of CF versus keV for peaks < 200 keV using cricket graph.
Calculate CFs for natural series gamma peaks using polynomial equation.

CF (DP1B) equation = y =-0.216logx+1.443
CF (DM1B) equation = y =-0.126logx+1.267

Isotope	keV	CF (DP1B)	CF (DM1B)
231Th->235U	25.6	1.13600369	1.075479365
231Pa	27.4	1.12957038	1.071465923
210Pb	46.5	1.07949526	1.040226398
227Ac	50	1.07262454	1.035940079
234U+214Pb	53.2	1.06675126	1.032276018
234Th->238U	63.3	1.05029399	1.022009095
230Th	67.6	1.04407162	1.018127249
234Th->238U	92.6	1.0142788	0.999540906
228Ac->228Ra	129	0.98289144	0.979959799
235U+226Ra	186	1	1
227Th->227Ac	236	1	1
212Pb->228Th	239	1	1
214Pb->226Ra	242	1	1
214Pb->226Ra	295	1	1
214Pb->226Ra	352	1	1
208Tl->228Th	583	1	1
214Bi->226Ra	609	1	1

Sample activity calculations

As (Bq/g) = Is * CFs * An * Wn / In * Ws

As = radionuclide activity of sample (Bq/g)
Is = peak intensity (cps)
CFs = correction factor relative to normalization standard n
Ws = weight of sample (g)
An = nominal radionuclide activity of the normalization standard (Bq/g)
In = peak intensity (cps)
Wn = weight of normalization standard (g)
* note Is and In should be background-corrected values

Counting time (sec) =		80000		80000		80000	
Weight (g) =		3.001		3.001		2.994	
		Sample counts	Uncertainty	DP1B counts	Uncertainty	DM1B counts	Uncertainty
Isotope	keV	1/11/96		1/4/96		1/5/96	
231Th->235U	25.6	1.17E+03	1.03E+02	2.04E+03	1.18E+02	0	0
231Pa	27.4	9.69E+02	8.74E+01	1.74E+03	1.03E+02	0	0
210Pb	46.5	1.61E+04	1.59E+02	2.29E+04	1.86E+02	0	0
227Ac	50	1.23E+03	1.01E+02	2.15E+03	1.41E+02	0	0
234U+214Pb	53.2	3.64E+03	1.14E+02	5.39E+03	1.31E+02	0	0
234Th->238U	63.3	1.17E+04	1.51E+02	2.14E+04	2.96E+02	0	0
230Th	67.6	2.17E+03	1.12E+02	2.51E+03	1.28E+02	0	0
234Th->238U	92.6	1.46E+04	1.55E+02	2.58E+04	1.97E+02	0	0
228Ac->228Ra	129	0	0	0	0	4.77E+03	1.08E+02
235U+226Ra	186	1.20E+04	1.39E+02	1.92E+04	1.67E+02	0	0
227Th->227Ac	236	5.28E+02	5.79E+01	1.08E+03	1.02E+02	0	0
212Pb->228Th	239	1.49E+03	6.71E+01	0	0	5.35E+04	2.45E+02
214Pb->226Ra	242	8.64E+03	1.12E+02	1.33E+04	1.33E+02	0	0
214Pb->226Ra	295	1.71E+04	1.45E+02	2.48E+04	1.78E+02	0	0
214Pb->226Ra	352	1.24E+04	7.09E+02	3.48E+04	2.16E+02	0	0
208Tl->228Th	583	0	0	0	0	5.79E+03	1.03E+02
214Bi->226Ra	609	2.47E+03	6.57E+01	1.32E+04	1.54E+02	0	0

Isotope	keV	An (Bq/g)	Is	In (DP1B)	In (DM1B)	As (Bq/g)		Uncertainty
231Th->235U	25.6	0.044395	0.014625	0.0255	0	0.26049626	±	0.03157903
231Pa	27.4	0.044395	0.0121125	0.02175	0	0.2515092	±	0.03104833
210Pb	46.5	0.9361	0.20125	0.28625	0	6.39831133	±	0.3925197
227Ac	50	0.044395	0.015375	0.026875	0	0.24534682	±	0.0296896
234U+214Pb	53.2	0.9361	0.0455	0.067375	0	6.07337393	±	0.43675782
234Th->238U	63.3	0.9361	0.14625	0.2675	0	4.84102366	±	0.30455704
230Th	67.6	0.9361	0.027125	0.031375	0	7.60975263	±	0.71646884
234Th->238U	92.6	0.9361	0.1825	0.3225	0	4.83887871	±	0.29714861
228Ac->228Ra	129	0.55494	0	0	0.059625	0	±	#DIV/0!
235U+226Ra	186	0.9361	0.15	0.24	0	5.26907346	±	0.32522723
227Th->227Ac	236	0.044395	0.0066	0.0135	0	0.19546825	±	0.03062362
212Pb->228Th	239	0.55494	0.018625	0	0.66875	0.13886612	±	0.00906147
214Pb->226Ra	242	0.9361	0.108	0.16625	0	5.47666703	±	0.3406134
214Pb->226Ra	295	0.9361	0.21375	0.31	0	5.81297782	±	0.35470683
214Pb->226Ra	352	0.9361	0.155	0.435	0	3.00397751	±	0.2496698
208Tl->228Th	583	0.55494	0	0	0.072375	0	±	#DIV/0!
214Bi->226Ra	609	0.9361	0.030875	0.165	0	1.57752866	±	0.10515892

U(ppb) = 389219.627

Th(ppb) = 34100.9075

Interference Correction

Isotope	keV	An (Bq/g)	Is	In (DP1B)	As (Bq/g)		
234U(242)	53.2	0.9361	0.029563754	0.04284351	6.20571657	±	0.38595558
234U(295)	53.2	0.9361	0.03322384	0.04957098	6.02753495	±	0.36779907
234U(352)	53.2	0.9361	0.040895404	0.05445243	6.75421189	±	0.5613633
235U(63.3)	186	0.044395	0.007073533	0.01293792	0.21859395	±	0.01375212
235U(92.6)	186	0.044395	0.008404125	0.01485113	0.22625553	±	0.01389403
226Ra(63.3)	186	0.9361	0.143265188	0.22768163	5.30477449	±	0.3337324
226Ra(92.6)	186	0.9361	0.141595875	0.22514888	5.30194302	±	0.32558472

234U/238U	=	1.307400028	±	0.114404013
230Th/234U	=	1.202333213	±	0.134767151
226Ra/230Th	=	0.697102093	±	0.066944917

Gamma spectrometry calculations for Nopal I rock powders

Sample= **NOPI-473-GAM1**

Self attenuation correction

A/O = [ln(T/I)]/[(T/I)-1]

T = transmitted intensity through sample or standards

I = intensity through empty vial

Point source		Empty vial	Standard - DP1B		Standard - DM1B		Sample	
SRM 4275C		12/28/95	12/28/95		12/28/95		12/29/95	
Isotope	keV	I	T	A/O	T	A/O	T	A/O
Sb125	27.3	6.65E+05	4.27E+05	1.23780258	3.81E+05	1.30421408	3.47E+05	1.36024341
Eu154,155	42.9	8.55E+05	7.41E+05	1.07325633	6.83E+05	1.11650378	6.94E+05	1.10793931
Eu154,155	48.6	2.73E+05	2.46E+05	1.05297373	2.29E+05	1.09044757	2.30E+05	1.08814299
Eu155	86.4	3.48E+05	3.36E+05	1.01764827	3.29E+05	1.02833504	3.30E+05	1.02678996
Eu155	105	2.23E+05	2.17E+05	1.0136992	2.13E+05	1.02311521	2.14E+05	1.0207393
Eu154	123	1.82E+06	1.78E+06	1.01115272	1.75E+06	1.01973854	1.76E+06	1.01973854
Sb125	178	4.34E+04	4.30E+04	1.00463681	4.22E+04	1.01408513	4.26E+04	1.01051428
Eu154	248	1.05E+05	1.05E+05	#DIV/0!	1.04E+05	1.00479236	1.05E+05	#DIV/0!
Eu154	592	1.41E+04	1.45E+04	0.98607828	1.46E+04	0.98267782	1.52E+04	0.9629099
Sb125	600	1.11E+04	1.15E+04	0.98240348	1.16E+04	0.97813177	1.14E+04	0.98672514
Sb125	636	6.12E+03	6.26E+03	0.98873359	6.24E+03	0.99032238	6.25E+03	0.98952713

Sample correction factor (CF) relative to each normalization standard

CF= (A/O of sample)/(A/O of DP1B and DM1B)

Isotope	keV	CF (DP1B)	CF (DM1B)
Sb125	27.3	1.0989179	1.042960226
Eu154,155	42.9	1.03231566	0.992329207
Eu154,155	48.6	1.03339994	0.997886577
Eu155	86.4	1.00898314	0.998497493
Eu155	105	1.00694496	0.997677769
Eu154	123	1.00849112	1
Sb125	178	1.00585034	0.996478748
Eu154	248	#DIV/0!	#DIV/0!
Eu154	592	0.97650452	0.979883617
Sb125	600	1.00439907	1.008785492
Sb125	636	1.00080259	0.999196984

Fit a polynomial curve through plot of CF versus keV for peaks < 200 keV using cricket graph.
Calculate CFs for natural series gamma peaks using polynomial equation.

CF (DP1B) equation = y = -0.123logx+1.253

CF (DM1B) equation = y =-0.046logx+1.087

Isotope	keV	CF (DP1B)	CF (DM1B)
231Th->235U	25.6	1.07978648	1.022220962
231Pa	27.4	1.07615668	1.020863474
210Pb	46.5	1.04790329	1.010297164
227Ac	50	1.04402669	1.00884738
234U+214Pb	53.2	1.04071287	1.007608065
234Th->238U	63.3	1.03142734	1.004135429
230Th	67.6	1.02791656	1.002822452
234Th->238U	92.6	1.01110685	0.996535895
228Ac->228Ra	129	0.99339747	0.989912873
235U+226Ra	186	1	1
227Th->227Ac	236	1	1
212Pb->228Th	239	1	1
214Pb->226Ra	242	1	1
214Pb->226Ra	295	1	1
214Pb->226Ra	352	1	1
208Tl->228Th	583	1	1
214Bi->226Ra	609	1	1

Sample activity calculations

As (Bq/g) = Is * CFs * An * Wn / In * Ws

As = radionuclide activity of sample (Bq/g)
Is = peak intensity (cps)
CFs = correction factor relative to normalization standard n
Ws = weight of sample (g)
An = nominal radionuclide activity of the normalization standard (Bq/g)
In = peak intensity (cps)
Wn = weight of normalization standard (g)
* note Is and In should be background-corrected values

Counting time (sec) =		80000		80000		80000		
Weight (g) =		3.001		3.001		2.994		
		Sample counts	Uncertainty	DP1B counts	Uncertainty	DM1B counts	Uncertainty	
Isotope	keV	1/9/96		1/4/96		1/5/96		
231Th->235U	25.6	1.28E+04	3.15E+02	2.04E+03	1.18E+02	0	0	
231Pa	27.4	1.31E+04	3.21E+02	1.74E+03	1.03E+02	0	0	
210Pb	46.5	1.25E+05	5.99E+02	2.29E+04	1.86E+02	0	0	
227Ac	50	1.88E+04	3.11E+02	2.15E+03	1.41E+02	0	0	
234U+214Pb	53.2	3.42E+04	3.35E+02	5.39E+03	1.31E+02	0	0	
234Th->238U	63.3	1.33E+05	4.74E+02	2.14E+04	2.96E+02	0	0	
230Th	67.6	1.91E+04	4.53E+02	2.51E+03	1.28E+02	0	0	
234Th->238U	92.6	1.60E+05	4.99E+02	2.58E+04	1.97E+02	0	0	
228Ac->228Ra	129	0	0	0	0	4.77E+03	1.08E+02	
235U+226Ra	186	1.18E+05	4.12E+02	1.92E+04	1.67E+02	0	0	
227Th->227Ac	236	7.58E+03	1.79E+02	1.08E+03	1.02E+02	0	0	
212Pb->228Th	239	1.18E+03	1.56E+02	0	0	5.35E+04	2.45E+02	
214Pb->226Ra	242	6.03E+04	3.29E+02	1.33E+04	1.33E+02	0	0	
214Pb->226Ra	295	1.51E+05	4.34E+02	2.48E+04	1.78E+02	0	0	
214Pb->226Ra	352	1.87E+05	1.10E+04	3.48E+04	2.16E+02	0	0	
208Tl->228Th	583	0.00E+00	0	0	0	5.79E+03	1.03E+02	
214Bi->226Ra	609	2.50E+04	2.11E+02	1.32E+04	1.54E+02	0	0	

Isotope	keV	An (Bq/g)	Is	In (DP1B)	In (DM1B)	As (Bq/g)		Uncertainty
231Th->235U	25.6	0.044395	0.16	0.0255	0	2.70884241	±	0.23539591
231Pa	27.4	0.044395	0.16375	0.02175	0	3.23939274	±	0.28433921
210Pb	46.5	0.9361	1.5625	0.28625	0	48.2225275	±	2.92887235
227Ac	50	0.044395	0.235	0.026875	0	3.65003511	±	0.33001193
234U+214Pb	53.2	0.9361	0.4275	0.067375	0	55.6701642	±	3.64486375
234Th->238U	63.3	0.9361	1.6625	0.2675	0	54.0419168	±	3.33312891
230Th	67.6	0.9361	0.23875	0.031375	0	65.9434619	±	5.42306413
234Th->238U	92.6	0.9361	2	0.3225	0	52.8629707	±	3.20160683
228Ac->228Ra	129	0.55494	0	0	0.059625	0	±	#DIV/0!
235U+226Ra	186	0.9361	1.475	0.24	0	51.8125557	±	3.14645348
227Th->227Ac	236	0.044395	0.09475	0.0135	0	2.806154	±	0.32090197
212Pb->228Th	239	0.55494	0.014375	0	0.66875	0.10717855	±	0.01539477
214Pb->226Ra	242	0.9361	1.00375	0.16625	0	50.900042	±	3.10314414
214Pb->226Ra	295	0.9361	1.8875	0.31	0	51.3309737	±	3.10532291
214Pb->226Ra	352	0.9361	2.3375	0.435	0	45.3019189	±	3.81686698
208Tl->228Th	583	0.55494	0	0	0.072375	0	±	#DIV/0!
214Bi->226Ra	609	0.9361	0.3125	0.165	0	15.9668893	±	0.9852159

U(ppb) = 4344984.89

Th(ppb) = 26319.4924

Interference Correction

Isotope	keV	An (Bq/g)	Is	In (DP1B)	As (Bq/g)		
234U(242)	53.2	0.9361	0.279388824	0.04284351	57.2149004	±	3.48813235
234U(295)	53.2	0.9361	0.319096483	0.04957098	56.478049	±	3.41670081
234U(352)	53.2	0.9361	0.358059729	0.05445243	57.6930382	±	4.8608681
235U(63.3)	186	0.044395	0.078964144	0.01270551	2.48487141	±	0.15325875
235U(92.6)	186	0.044395	0.0921	0.01485113	2.47951265	±	0.15016985
226Ra(63.3)	186	0.9361	1.398441875	0.22768163	51.7810287	±	3.19368471
226Ra(92.6)	186	0.9361	1.3829	0.22514888	51.7815721	±	3.13611272

234U/238U	=	1.057117622	±	0.091422741
230Th/234U	=	1.154297318	±	0.117932805
226Ra/230Th	=	0.785233701	±	0.065542899

Gamma spectrometry calculations for Nopal I rock powders

Sample= **NOPI-474-GAM1**

Self attenuation correction

A/O = [ln(T/I)]/[(T/I)-1]

T = transmitted intensity through sample or standards

I = intensity through empty vial

Point source		Empty vial	Standard - DP1B		Standard - DM1B		Sample	
SRM 4275C		12/28/95	12/28/95		12/28/95		12/29/95	
Isotope	keV	I	T	A/O	T	A/O	T	A/O
Sb125	27.3	6.65E+05	4.27E+05	1.23780258	3.81E+05	1.30421408	4.53E+05	1.20419867
Eu154,155	42.9	8.55E+05	7.41E+05	1.07325633	6.83E+05	1.11650378	7.56E+05	1.06279171
Eu154,155	48.6	2.73E+05	2.46E+05	1.05297373	2.29E+05	1.09044757	2.50E+05	1.04465085
Eu155	86.4	3.48E+05	3.36E+05	1.01764827	3.29E+05	1.02833504	3.36E+05	1.01764827
Eu155	105	2.23E+05	2.17E+05	1.0136992	2.13E+05	1.02311521	2.17E+05	1.0136992
Eu154	123	1.82E+06	1.78E+06	1.01115272	1.75E+06	1.01973854	1.78E+06	1.01115272
Sb125	178	4.34E+04	4.30E+04	1.00463681	4.22E+04	1.01408513	4.31E+04	1.00347223
Eu154	248	1.05E+05	1.05E+05	#DIV/0!	1.04E+05	1.00479236	1.05E+05	#DIV/0!
Eu154	592	1.41E+04	1.45E+04	0.98607828	1.46E+04	0.98267782	1.49E+04	0.97266057
Sb125	600	1.11E+04	1.15E+04	0.98240348	1.16E+04	0.97813177	1.14E+04	0.98672514
Sb125	636	6.12E+03	6.26E+03	0.98873359	6.24E+03	0.99032238	6.44E+03	0.97473323

Sample correction factor (CF) relative to each normalization standard

CF= (A/O of sample)/(A/O of DP1B and DM1B)

Isotope	keV	CF (DP1B)	CF (DM1B)
Sb125	27.3	0.97285197	0.923313661
Eu154,155	42.9	0.99024966	0.951892617
Eu154,155	48.6	0.99209583	0.958001903
Eu155	86.4	1	0.989607704
Eu155	105	1	0.990796727
Eu154	123	1	0.991580373
Sb125	178	0.9988408	0.989534514
Eu154	248	#DIV/0!	#DIV/0!
Eu154	592	0.98639286	0.989806172
Sb125	600	1.00439907	1.008785492
Sb125	636	0.98584012	0.984258515

Fit a polynomial curve through plot of CF versus keV for peaks < 200 keV using cricket graph.
Calculate CFs for natural series gamma peaks using polynomial equation.

CF (DP1B) equation = y = 0.038logx+0.924
CF (DM1B) equation = y =0.107logx+0.774

Isotope	keV	CF (DP1B)	CF (DM1B)
231Th->235U	25.6	0.97751312	0.924681676
231Pa	27.4	0.97863452	0.92783931
210Pb	46.5	0.98736321	0.952417466
227Ac	50	0.98856086	0.95578979
234U+214Pb	53.2	0.98958464	0.958672545
234Th->238U	63.3	0.99245334	0.966750197
230Th	67.6	0.99353797	0.969804296
234Th->238U	92.6	0.99873122	0.984427376
228Ac->228Ra	129	1.00420241	0.999833099
235U+226Ra	186	1	1
227Th->227Ac	236	1	1
212Pb->228Th	239	1	1
214Pb->226Ra	242	1	1
214Pb->226Ra	295	1	1
214Pb->226Ra	352	1	1
208Tl->228Th	583	1	1
214Bi->226Ra	609	1	1

Sample activity calculations

As (Bq/g) = Is * CFs * An * Wn / In * Ws

As = radionuclide activity of sample (Bq/g)
Is = peak intensity (cps)
CFs = correction factor relative to normalization standard n
Ws = weight of sample (g)
An = nominal radionuclide activity of the normalization standard (Bq/g)
In = peak intensity (cps)
Wn = weight of normalization standard (g)
* note Is and In should be background-corrected values

Counting time (sec) =		80000		80000		80000	
Weight (g) =		3.003		3.001		2.994	
		Sample counts	Uncertainty	DP1B counts	Uncertainty	DM1B counts	Uncertainty
Isotope	keV	1/2/96		1/4/96		1/5/96	
231Th->235U	25.6	1.42E+03	9.73E+01	2.04E+03	1.18E+02	0	0
231Pa	27.4	1.14E+03	8.24E+01	1.74E+03	1.03E+02	0	0
210Pb	46.5	1.84E+04	1.59E+02	2.29E+04	1.86E+02	0	0
227Ac	50	1.14E+03	8.71E+01	2.15E+03	1.41E+02	0	0
234U+214Pb	53.2	3.27E+03	9.98E+01	5.39E+03	1.31E+02	0	0
234Th->238U	63.3	1.05E+04	1.38E+02	2.14E+04	2.96E+02	0	0
230Th	67.6	1.35E+03	9.56E+01	2.51E+03	1.28E+02	0	0
234Th->238U	92.6	1.27E+04	1.43E+02	2.58E+04	1.97E+02	0	0
228Ac->228Ra	129	0	0	0	0	4.77E+03	1.08E+02
235U+226Ra	186	1.03E+04	1.25E+02	1.92E+04	1.67E+02	0	0
227Th->227Ac	236	0.00E+00	0.00E+00	1.08E+03	1.02E+02	0	0
212Pb->228Th	239	9.38E+02	5.49E+01	0	0	5.35E+04	2.45E+02
214Pb->226Ra	242	7.81E+03	1.01E+02	1.33E+04	1.33E+02	0	0
214Pb->226Ra	295	1.45E+04	1.53E+02	2.48E+04	1.78E+02	0	0
214Pb->226Ra	352	1.93E+04	1.61E+02	3.48E+04	2.16E+02	0	0
208Tl->228Th	583	0	0	0	0	5.79E+03	1.03E+02
214Bi->226Ra	609	7.42E+03	1.16E+02	1.32E+04	1.54E+02	0	0

Isotope	keV	An (Bq/g)	Is	In (DP1B)	In (DM1B)	As (Bq/g)		Uncertainty
231Th->235U	25.6	0.044395	0.01775	0.0255	0	0.27223011	±	0.02937182
231Pa	27.4	0.044395	0.01425	0.02175	0	0.25652608	±	0.02848317
210Pb	46.5	0.9361	0.23	0.28625	0	6.69272307	±	0.4093323
227Ac	50	0.044395	0.01425	0.026875	0	0.20971292	±	0.02458066
234U+214Pb	53.2	0.9361	0.040875	0.067375	0	5.06472077	±	0.36247837
234Th->238U	63.3	0.9361	0.13125	0.2675	0	4.10798829	±	0.25864191
230Th	67.6	0.9361	0.016875	0.031375	0	4.50804343	±	0.4774129
234Th->238U	92.6	0.9361	0.15875	0.3225	0	4.14740276	±	0.25516092
228Ac->228Ra	129	0.55494	0	0	0.059625	0	±	#DIV/0!
235U+226Ra	186	0.9361	0.12875	0.24	0	4.52563546	±	0.27981951
227Th->227Ac	236	0.044395	0	0.0135	0	0	±	#DIV/0!
212Pb->228Th	239	0.55494	0.0117	0	0.66875	0.08729216	±	0.00657319
214Pb->226Ra	242	0.9361	0.097625	0.16625	0	4.9538513	±	0.30806584
214Pb->226Ra	295	0.9361	0.18125	0.31	0	4.93241823	±	0.30146917
214Pb->226Ra	352	0.9361	0.24125	0.435	0	4.67866164	±	0.28490376
208Tl->228Th	583	0.55494	0	0	0.072375	0	±	#DIV/0!
214Bi->226Ra	609	0.9361	0.09275	0.165	0	4.742131	±	0.29918732

U(ppb) = 330283.382

Th(ppb) = 21436.0546

Interference Correction

Isotope	keV	An (Bq/g)	Is	In (DP1B)	As (Bq/g)		
234U(242)	53.2	0.9361	0.026469666	0.04284351	5.15774591	±	0.32074546
234U(295)	53.2	0.9361	0.030465391	0.04957098	5.13069005	±	0.31358753
234U(352)	53.2	0.9361	0.03370817	0.05445243	5.16790432	±	0.31469584
235U(63.3)	186	0.044395	0.00599845	0.01222541	0.1963048	±	0.01235949
235U(92.6)	186	0.044395	0.007310438	0.01485113	0.19694248	±	0.0121165
226Ra(63.3)	186	0.9361	0.122705938	0.22768163	4.54654159	±	0.28625355
226Ra(92.6)	186	0.9361	0.121439563	0.22514888	4.55023666	±	0.2799445

234U/238U	=	1.254169454	±	0.083898738
230Th/234U	=	0.874989165	±	0.094751002
226Ra/230Th	=	1.008539883	±	0.108526504

Gamma spectrometry calculations for Nopal I rock powders

Sample= **NOPI-475-GAM1**

Self attenuation correction

A/O = [ln(T/I)]/[(T/I)-1]
T = transmitted intensity through sample or standards
I = intensity through empty vial

Point source		Empty vial	Standard - DP1B		Standard - DM1B		Sample	
SRM 4275C		12/28/95	12/28/95		12/28/95		12/29/95	
Isotope	keV	I	T	A/O	T	A/O	T	A/O
Sb125	27.3	6.65E+05	4.27E+05	1.23780258	3.81E+05	1.30421408	4.53E+05	1.20419867
Eu154,155	42.9	8.55E+05	7.41E+05	1.07325633	6.83E+05	1.11650378	7.55E+05	1.0634808
Eu154,155	48.6	2.73E+05	2.46E+05	1.05297373	2.29E+05	1.09044757	2.49E+05	1.04671497
Eu155	86.4	3.48E+05	3.36E+05	1.01764827	3.29E+05	1.02833504	3.35E+05	1.01915676
Eu155	105	2.23E+05	2.17E+05	1.0136992	2.13E+05	1.02311521	2.16E+05	1.01603145
Eu154	123	1.82E+06	1.78E+06	1.01115272	1.75E+06	1.01973854	1.77E+06	1.01399314
Sb125	178	4.34E+04	4.30E+04	1.00463681	4.22E+04	1.01408513	4.30E+04	1.00463681
Eu154	248	1.05E+05	1.05E+05	#DIV/0!	1.04E+05	1.00479236	1.05E+05	#DIV/0!
Eu154	592	1.41E+04	1.45E+04	0.98607828	1.46E+04	0.98267782	1.49E+04	0.97266057
Sb125	600	1.11E+04	1.15E+04	0.98240348	1.16E+04	0.97813177	1.07E+04	1.01846293
Sb125	636	6.12E+03	6.26E+03	0.98873359	6.24E+03	0.99032238	6.35E+03	0.98166706

Sample correction factor (CF) relative to each normalization standard

CF= (A/O of sample)/(A/O of DP1B and DM1B)

Isotope	keV	CF (DP1B)	CF (DM1B)
Sb125	27.3	0.97285197	0.923313661
Eu154,155	42.9	0.99089172	0.952509806
Eu154,155	48.6	0.99405611	0.959894818
Eu155	86.4	1.00148233	0.991074625
Eu155	105	1.00230073	0.993076281
Eu154	123	1.00280909	0.994365813
Sb125	178	1	0.990682914
Eu154	248	#DIV/0!	#DIV/0!
Eu154	592	0.98639286	0.989806172
Sb125	600	1.03670534	1.041232846
Sb125	636	0.99285295	0.991260102

Fit a polynomial curve through plot of CF versus keV for peaks < 200 keV using cricket graph.
Calculate CFs for natural series gamma peaks using polynomial equation.

CF (DP1B) equation = y = 0.042logx+0.919
CF (DM1B) equation = y =0.111logx+0.769

Isotope	keV	CF (DP1B)	CF (DM1B)
231Th->235U	25.6	0.97814608	0.925314636
231Pa	27.4	0.97938552	0.928590312
210Pb	46.5	0.98903302	0.954087278
227Ac	50	0.99035674	0.95758567
234U+214Pb	53.2	0.99148829	0.960576191
234Th->238U	63.3	0.99465896	0.968955812
230Th	67.6	0.99585776	0.972124083
234Th->238U	92.6	1.00159766	0.98729382
228Ac->228Ra	129	1.00764477	1.003275458
235U+226Ra	186	1	1
227Th->227Ac	236	1	1
212Pb->228Th	239	1	1
214Pb->226Ra	242	1	1
214Pb->226Ra	295	1	1
214Pb->226Ra	352	1	1
208Tl->228Th	583	1	1
214Bi->226Ra	609	1	1

Sample activity calculations

As (Bq/g) = Is * CFs * An * Wn / In * Ws

As = radionuclide activity of sample (Bq/g)
Is = peak intensity (cps)
CFs = correction factor relative to normalization standard n
Ws = weight of sample (g)
An = nominal radionuclide activity of the normalization standard (Bq/g)
In = peak intensity (cps)
Wn = weight of normalization standard (g)
* note Is and In should be background-corrected values

Counting time (sec) =		80000		80000		80000	
Weight (g) =		2.999		3.001		2.994	
		Sample counts	Uncertainty	DP1B counts	Uncertainty	DM1B counts	Uncertainty
Isotope	keV	1/2/98		1/4/96		1/5/96	
231Th->235U	25.6	9.28E+02	5.51E+01	2.04E+03	1.18E+02	0	0
231Pa	27.4	5.21E+02	6.19E+01	1.74E+03	1.03E+02	0	0
210Pb	46.5	1.36E+04	1.38E+02	2.29E+04	1.86E+02	0	0
227Ac	50	8.19E+02	7.30E+01	2.15E+03	1.41E+02	0	0
234U+214Pb	53.2	2.25E+03	8.36E+01	5.39E+03	1.31E+02	0	0
234Th->238U	63.3	7.79E+03	1.19E+02	2.14E+04	2.96E+02	0	0
230Th	67.6	1.02E+03	8.28E+01	2.51E+03	1.28E+02	0	0
234Th->238U	92.6	9.60E+03	1.23E+02	2.58E+04	1.97E+02	0	0
228Ac->228Ra	129	0	0	0	0	4.77E+03	1.08E+02
235U+226Ra	186	7.21E+03	1.08E+02	1.92E+04	1.67E+02	0	0
227Th->227Ac	236	3.43E+02	4.29E+01	1.08E+03	1.02E+02	0	0
212Pb->228Th	239	9.12E+02	4.99E+01	0	0	5.35E+04	2.45E+02
214Pb->226Ra	242	5.15E+03	8.35E+01	1.33E+04	1.33E+02	0	0
214Pb->226Ra	295	9.80E+03	1.11E+02	2.48E+04	1.78E+02	0	0
214Pb->226Ra	352	1.38E+04	1.34E+02	3.48E+04	2.16E+02	0	0
208Tl->228Th	583	0	0	0	0	5.79E+03	1.03E+02
214Bi->226Ra	609	5.51E+03	9.60E+01	1.32E+04	1.54E+02	0	0

Isotope	keV	An (Bq/g)	Is	In (DP1B)	In (DM1B)		As (Bq/g)		Uncertainty
231Th->235U	25.6	0.044395	0.0116	0.0255	0		0.1777862	±	0.02203057
231Pa	27.4	0.044395	0.0077625	0.02175	0		0.13966017	±	0.01823075
210Pb	46.5	0.9361	0.17	0.28625	0		4.94856097	±	0.30368086
227Ac	50	0.044395	0.0102375	0.026875	0		0.15073483	±	0.01897441
234U+214Pb	53.2	0.9361	0.028125	0.067375	0		3.48695263	±	0.26026855
234Th->238U	63.3	0.9361	0.097375	0.2675	0		3.05044071	±	0.19352093
230Th	67.6	0.9361	0.01275	0.031375	0		3.40948253	±	0.38415439
234Th->238U	92.6	0.9361	0.12	0.3225	0		3.13985459	±	0.19412488
228Ac->228Ra	129	0.55494	0	0	0.059625		0	±	#DIV/0!
235U+226Ra	186	0.9361	0.090125	0.24	0		3.16372512	±	0.19757533
227Th->227Ac	236	0.044395	0.0042875	0.0135	0		0.12689569	±	0.02129542
212Pb->228Th	239	0.55494	0.0114	0	0.66875		0.0849406	±	0.00613909
214Pb->226Ra	242	0.9361	0.064375	0.16625	0		3.26227295	±	0.2053647
214Pb->226Ra	295	0.9361	0.1225	0.31	0		3.32919398	±	0.20467926
214Pb->226Ra	352	0.9361	0.1725	0.435	0		3.34090825	±	0.20411863
208Tl->228Th	583	0.55494	0	0	0.072375		0	±	#DIV/0!
214Bi->226Ra	609	0.9361	0.068875	0.165	0		3.51675711	±	0.22351938

U(ppb) = 245256.267

Th(ppb) = 20858.5914

Interference Correction

Isotope	keV	An (Bq/g)	Is	In (DP1B)		As (Bq/g)		
234U(242)	53.2	0.9361	0.018625964	0.04284351		3.63149976	±	0.22860805
234U(295)	53.2	0.9361	0.02108954	0.04957098		3.55379121	±	0.21848752
234U(352)	53.2	0.9361	0.023000531	0.05445243		3.52836028	±	0.21557133
235U(63.3)	186	0.044395	0.004460169	0.01225258		0.14544547	±	0.00922711
235U(92.6)	186	0.044395	0.005526	0.01485113		0.14867161	±	0.00919178
226Ra(63.3)	186	0.9361	0.085640881	0.22768163		3.16896798	±	0.20104034
226Ra(92.6)	186	0.9361	0.084599	0.22514888		3.16563001	±	0.19571848

234U/238U	=	1.170721683	±	0.08026211
230Th/234U	=	0.954711643	±	0.110394377
226Ra/230Th	=	0.929457171	±	0.106461322

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

Report Generated On              : 12-28-95  3:44:07 PM

Sample Title                     : Attenuation 4275C
Spectrum Description             : atten measure, emp vial + 4275C
Sample Identification            : JDPATT
Sample Type                      : empty vial
Sample Geometry                  : vial

Peak Locate Threshold            :  3.00
Peak Locate Range (in channels)  :     1 -  4096
Peak Area Range (in channels)    :     1 -  4096
Identification Energy Tolerance  :    1.000 keV

Sample Size                      :   0.000E+00 Unit

Sample Taken On                  :
Acquisition Started              : 12-28-95  2:48:26 PM

Live Time                        :     1800.0 seconds
Real Time                        :     1997.8 seconds
```

JDPATT.CNF

```
Energy Calibration Used Done On       : 12-19-95
Efficiency Calibration Used Done On   : ????????
```

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: Attenuation 4275C
Peak Locate Performed on: 12-28-95 3:43:09 PM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	32.00	<NA>	5.35	<NA>
2	46.65	0.2767	7.87	4.32
3	96.15	0.0993	16.41	9.90
4	102.53	0.0381	17.45	36.80
5	116.86	0.2522	19.95	3.87
6	123.40	0.0440	21.06	12.71
7	128.00	<NA>	21.76	<NA>
8	140.63	0.1623	25.75	3.72
9	149.38	0.2472	26.60	4.93
10	160.03	0.0041	27.34	205.57
11	180.78	0.0092	30.94	115.18
12	185.37	0.0260	31.68	23.07
13	193.44	0.0234	33.05	22.13
14	207.08	0.0113	35.45	85.79
15	226.14	0.1805	38.73	5.27
16	246.47	0.0037	42.26	132.36
17	250.74	0.0041	42.95	264.50
18	264.11	0.0309	45.26	32.75
19	283.53	0.0110	48.59	127.79
20	291.21	0.0139	49.92	66.55
21	318.88	0.1015	54.68	8.53
22	339.61	0.4181	58.25	4.24
23	349.57	0.0372	59.94	27.15
24	446.38	0.1927	76.60	3.04
25	503.87	0.0060	86.48	147.12
26	612.95	0.0080	105.24	104.47
27	658.98	0.2070	113.15	4.88
28	680.52	0.3957	116.85	3.41
29	716.17	0.0031	122.98	270.23
30	765.48	0.6668	131.46	3.64
31	849.75	0.2431	145.95	3.19
32	914.00	<NA>	157.00	<NA>
33	1025.89	0.0417	176.23	31.93
34	1059.00	<NA>	181.93	<NA>
35	1095.40	0.1424	188.18	8.01
36	1442.55	0.0276	247.87	36.22
37	2158.51	0.2628	370.96	4.89
38	2489.48	0.1216	427.87	11.58
39	2696.02	0.3155	463.38	8.26
40	3442.89	0.2821	591.79	5.04
41	3494.58	0.4230	600.68	5.44

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	3532.99	0.3215	607.28	3.94
43	3700.01	0.2851	636.00	3.76
44	4030.45	0.4292	692.81	9.27

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: Attenuation 4275C
Peak Analysis Performed on: 12-28-95 3:43:36 PM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	30-	34	32.00	5.35	-5.22E+02	139.87	1.22E+04
	2	43-	51	46.65	7.87	1.24E+03	214.70	2.09E+04
M	3	91-	107	96.33	16.41	6.41E+03	587.19	2.54E+04
m	4	91-	107	102.39	17.45	2.83E+04	666.20	2.52E+04
M	5	113-	130	116.90	19.95	3.95E+02	131.82	2.07E+04
m	6	113-	130	123.34	21.06	3.54E+03	333.14	1.84E+04
m	7	113-	130	127.43	21.76	6.05E+02	139.64	1.61E+04
M	8	135-	165	150.62	25.75	2.00E+04	4415.44	2.61E+04
m	9	135-	165	155.57	26.60	4.26E+04	7004.93	2.80E+04
m	10	135-	165	159.88	27.34	6.65E+05	8164.70	3.11E+04
M	11	175-	198	180.82	30.94	1.33E+05	2918.55	2.95E+04
m	12	175-	198	185.15	31.68	2.92E+04	2484.23	2.86E+04
	13	175-	198	193.10	33.05	1.19E+04	1846.56	2.80E+04
	14	202-	212	207.08	35.45	6.35E+04	390.55	3.71E+04
	15	221-	229	226.14	38.73	4.69E+03	339.74	5.09E+04
M	16	241-	255	246.65	42.26	4.96E+05	13199.1	6.02E+04
m	17	241-	255	250.66	42.95	8.55E+05	13215.1	4.51E+04
	18	259-	269	264.11	45.26	1.09E+04	304.52	3.42E+04
M	19	278-	296	283.50	48.59	2.73E+05	6486.69	2.35E+04
m	20	278-	296	291.24	49.92	7.38E+04	6465.39	1.89E+04
	21	313-	323	318.88	54.68	5.28E+03	212.87	1.68E+04
M	22	334-	354	339.66	58.25	2.64E+03	308.79	1.46E+04
m	23	334-	354	349.51	59.94	1.54E+04	431.73	1.43E+04
	24	441-	451	446.38	76.60	7.51E+02	220.41	2.01E+04
	25	498-	508	503.87	86.48	3.48E+05	645.76	2.92E+04
	26	607-	617	612.95	105.24	2.23E+05	533.24	2.58E+04
	27	654-	663	658.98	113.15	1.61E+03	232.14	2.31E+04
	28	675-	682	680.52	116.85	-1.26E+01	219.12	2.34E+04
	29	711-	721	716.17	122.98	1.82E+06	1377.36	3.23E+04
	30	760-	770	765.48	131.46	6.36E+02	197.88	1.62E+04
	31	844-	853	849.75	145.95	5.23E+02	177.31	1.37E+04
	32	912-	916	914.00	157.00	2.23E+01	101.68	6.25E+03
	33	1020-	1030	1025.89	176.23	4.34E+04	269.34	1.23E+04
	34	1056-	1061	1059.00	181.93	1.70E+02	106.80	6.35E+03
	35	1090-	1100	1095.40	188.18	5.74E+03	184.63	1.19E+04
	36	1438-	1446	1442.55	247.87	1.05E+05	366.63	1.39E+04
	37	2154-	2162	2158.51	370.96	3.70E+03	129.96	6.18E+03
	38	2485-	2493	2489.48	427.87	3.58E+04	244.22	1.11E+04
	39	2692-	2700	2696.02	463.38	1.22E+04	166.05	7.20E+03
	40	3438-	3446	3442.89	591.79	1.41E+04	180.66	8.64E+03
	41	3490-	3498	3494.58	600.68	1.11E+04	162.79	7.22E+03
	42	3528-	3536	3532.99	607.28	2.68E+03	113.89	4.74E+03

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
43	3696-	3704	3700.01	636.00	6.12E+03	138.48	6.12E+03
44	4026-	4034	4030.45	692.81	5.26E+03	105.99	2.02E+03

M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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

Report Generated On              : 12-28-95  4:59:13 PM

Sample Title                     : Attenuation DP1B
Spectrum Description             : DP1B Attenuation
Sample Identification            : DP1B
Sample Type                      :
Sample Geometry                  : vial

Peak Locate Threshold            :  3.00
Peak Locate Range (in channels)  :     1 -  4096
Peak Area Range (in channels)    :     1 -  4096
Identification Energy Tolerance  :    1.000 keV

Sample Size                      :   0.000E+00 Unit

Sample Taken On                  :
Acquisition Started              : 12-28-95  3:24:24 PM

Live Time                        :     1800.0 seconds
Real Time                        :     1989.8 seconds


          Energy Calibration Used Done On       : 12-19-95
          Efficiency Calibration Used Done On   : ????????
```

DP1BATT.CNF

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: Attenuation DP1B
Peak Locate Performed on: 12-28-95 4:58:29 PM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	32.37	0.4328	5.42	4.22
2	96.16	0.1298	16.41	7.70
3	102.56	0.0504	17.46	27.79
4	123.47	0.0530	21.08	9.26
5	149.44	0.1173	26.59	4.45
6	160.05	0.0052	27.34	162.01
7	180.77	0.0110	30.94	97.25
8	185.45	0.0339	31.68	14.92
9	189.00	<NA>	32.34	<NA>
10	193.41	0.0257	33.07	21.62
11	207.08	0.0129	35.45	76.23
12	226.07	0.1688	38.72	6.17
13	246.47	0.0040	42.26	120.06
14	250.75	0.0044	42.95	245.81
15	264.10	0.0345	45.26	27.74
16	283.53	0.0116	48.59	121.79
17	291.21	0.0148	49.92	62.85
18	319.11	0.2793	54.72	4.82
19	338.70	0.8655	58.17	3.10
20	349.53	0.0403	59.94	25.85
21	503.85	0.0062	86.48	141.79
22	612.94	0.0081	105.23	102.96
23	658.45	0.3730	113.06	3.81
24	669.00	<NA>	114.87	<NA>
25	672.00	<NA>	115.39	<NA>
26	680.44	0.1162	116.84	4.44
27	716.14	0.0031	122.98	268.62
28	765.91	0.4528	131.53	3.44
29	892.00	<NA>	153.21	<NA>
30	1005.36	0.1369	172.70	4.48
31	1025.78	0.0396	176.21	28.02
32	1095.22	0.1505	188.15	6.60
33	1187.21	0.6298	203.97	4.22
34	1211.26	0.9134	208.10	3.30
35	1442.42	0.0278	247.85	35.58
36	2158.49	0.3701	370.96	3.75
37	2213.49	0.5385	380.42	3.91
38	2489.27	0.0901	427.83	12.03
39	2695.63	0.2321	463.31	5.70
40	3386.22	0.2268	582.05	3.59
41	3442.66	0.3653	591.75	5.78

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	3494.09	0.2716	600.59	6.27
43	3529.48	0.4895	606.68	3.08
44	3699.71	0.4106	635.94	4.25
45	4030.04	0.4773	692.74	10.15

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: Attenuation DP1B
Peak Analysis Performed on: 12-28-95 4:58:43 PM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	29-	37	32.37	5.42	4.07E+02	207.16	1.99E+04
M	2	91-	107	96.31	16.41	4.44E+03	409.08	2.32E+04
m	3	91-	107	102.39	17.46	1.80E+04	498.64	2.32E+04
	4	118-	127	123.47	21.08	2.02E+03	230.51	2.26E+04
M	5	144-	165	155.52	26.59	2.86E+04	6352.10	3.16E+04
m	6	144-	165	159.90	27.34	4.27E+05	6400.89	3.21E+04
M	7	175-	197	180.82	30.94	9.31E+04	1391.61	2.86E+04
m	8	175-	197	185.11	31.68	2.08E+04	1020.06	2.83E+04
m	9	175-	197	188.98	32.34	6.12E+03	789.33	2.81E+04
m	10	175-	197	193.19	33.07	9.55E+03	812.15	2.80E+04
	11	202-	211	207.08	35.45	5.18E+04	355.64	3.31E+04
	12	221-	229	226.07	38.72	3.61E+03	339.62	5.14E+04
M	13	241-	255	246.66	42.26	4.32E+05	11575.1	6.35E+04
m	14	241-	255	250.67	42.95	7.41E+05	11591.3	4.62E+04
	15	259-	268	264.10	45.26	9.28E+03	283.36	3.14E+04
M	16	278-	296	283.50	48.59	2.46E+05	5630.50	2.42E+04
m	17	278-	296	291.24	49.92	6.62E+04	5607.52	1.90E+04
	18	314-	324	319.11	54.72	2.05E+03	202.35	1.63E+04
M	19	333-	354	339.23	58.17	1.57E+03	245.11	1.43E+04
m	20	333-	354	349.49	59.94	1.38E+04	408.30	1.43E+04
	21	498-	508	503.85	86.48	3.36E+05	639.18	3.06E+04
	22	607-	617	612.94	105.23	2.17E+05	534.95	2.89E+04
	23	653-	682	658.45	113.06	-8.76E+03	670.56	9.58E+04
	27	711-	721	716.14	122.98	1.78E+06	1363.33	3.43E+04
	28	760-	770	765.91	131.53	9.92E+02	195.67	1.56E+04
	29	889-	894	892.00	153.21	-4.65E+01	116.05	7.62E+03
	30	1001-	1010	1005.36	172.70	9.08E+02	164.96	1.16E+04
	31	1020-	1030	1025.78	176.21	4.30E+04	269.49	1.25E+04
	32	1090-	1100	1095.22	188.15	5.87E+03	185.64	1.20E+04
	33	1183-	1191	1187.21	203.97	1.40E+03	152.56	1.02E+04
	34	1207-	1215	1211.26	208.10	1.34E+03	153.63	1.04E+04
	35	1438-	1446	1442.42	247.85	1.05E+05	367.00	1.39E+04
	36	2154-	2162	2158.49	370.96	3.52E+03	130.40	6.30E+03
	37	2209-	2217	2213.49	380.42	2.44E+03	125.50	6.23E+03
	38	2485-	2493	2489.27	427.83	3.76E+04	248.59	1.13E+04
	39	2691-	2699	2695.63	463.31	1.18E+04	168.01	7.67E+03
	40	3382-	3390	3386.22	582.05	2.83E+03	115.38	4.91E+03
	41	3438-	3446	3442.66	591.75	1.45E+04	182.73	8.81E+03
	42	3490-	3498	3494.09	600.59	1.15E+04	164.85	7.34E+03

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
43	3525-	3533	3529.48	606.68	3.22E+03	115.80	4.77E+03
44	3695-	3703	3699.71	635.94	6.26E+03	139.07	6.13E+03
45	4026-	4034	4030.04	692.74	4.91E+03	108.40	2.18E+03

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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

Report Generated On              : 12-28-95  5:02:00 PM

Sample Title                     : Attenuation DM1B
Spectrum Description             : DM1B Attenuation
Sample Identification            : DM1B
Sample Type                      :
Sample Geometry                  : vial

Peak Locate Threshold            :  3.00
Peak Locate Range (in channels)  :     1 -  4096
Peak Area Range (in channels)    :     1 -  4096
Identification Energy Tolerance  :    1.000 keV

Sample Size                      :   0.000E+00 Unit

Sample Taken On                  :
Acquisition Started              : 12-28-95  4:04:21 PM

Live Time                        :     1800.0 seconds
Real Time                        :     1984.9 seconds


          Energy Calibration Used Done On       : 12-19-95
          Efficiency Calibration Used Done On   : ????????
```

DM1BATT.CNF

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: Attenuation DM1B
Peak Locate Performed on: 12-28-95 5:01:32 PM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	31.70	0.1907	5.30	3.63
2	47.52	0.1575	8.02	3.02
3	95.93	0.1373	16.37	5.75
4	102.51	0.0517	17.46	24.68
5	116.70	0.2054	19.89	3.39
6	123.45	0.0566	21.07	9.03
7	140.94	0.3292	25.75	3.18
8	149.55	0.1601	26.59	3.17
9	160.04	0.0055	27.34	153.88
10	180.78	0.0114	30.94	93.59
11	185.42	0.0323	31.70	16.57
12	193.49	0.0609	33.10	18.77
13	201.61	0.2268	34.60	7.78
14	207.12	0.0139	35.45	72.60
15	227.27	0.4892	38.93	3.30
16	233.63	0.1893	40.02	3.15
17	246.47	0.0042	42.26	116.58
18	250.75	0.0046	42.95	236.05
19	264.11	0.0366	45.26	27.00
20	283.54	0.0121	48.59	117.22
21	291.19	0.0152	49.92	61.57
22	349.53	0.0422	59.94	26.23
23	447.27	0.6563	76.75	3.06
24	503.87	0.0061	86.48	142.32
25	543.32	0.3135	93.26	3.58
26	612.95	0.0081	105.24	104.17
27	636.00	<NA>	109.20	<NA>
28	658.45	0.3508	113.06	4.22
29	681.13	0.3473	116.96	3.13
30	716.15	0.0031	122.98	266.29
31	784.96	0.5193	134.81	3.04
32	1005.01	0.6058	172.64	3.09
33	1025.83	0.0405	176.22	28.92
34	1095.37	0.1535	188.18	8.33
35	1442.46	0.0277	247.85	36.76
36	1810.00	0.0001	311.05	3.12
37	2158.37	0.3975	370.94	3.82
38	2213.36	0.2990	380.39	3.52
39	2489.28	0.0949	427.83	13.76
40	2585.60	0.5285	444.40	3.25
41	2695.81	0.1780	463.34	6.27

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	3386.51	0.5121	582.10	3.01
43	3443.03	0.2901	591.81	4.98
44	3494.30	0.2729	600.63	5.01
45	3626.00	<NA>	623.27	<NA>
46	3700.05	0.4475	636.00	3.42
47	4030.83	0.2024	692.87	9.66

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: Attenuation DM1B
Peak Analysis Performed on: 12-28-95 5:01:46 PM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	29-	36	31.70	5.30	3.72E+02	189.78	1.77E+04
	2	44-	50	47.52	8.02	3.92E+02	165.65	1.43E+04
M	3	90-	107	96.06	16.37	4.01E+03	344.31	2.30E+04
m	4	90-	107	102.40	17.46	1.66E+04	453.43	2.28E+04
M	5	111-	128	116.58	19.89	6.05E+02	111.27	1.85E+04
m	6	111-	128	123.42	21.07	2.88E+03	305.96	1.87E+04
M	7	135-	165	150.66	25.75	1.38E+04	2933.69	2.45E+04
m	8	135-	165	155.55	26.59	2.81E+04	4355.35	2.61E+04
m	9	135-	165	159.89	27.34	3.81E+05	5174.12	2.87E+04
M	10	175-	212	180.82	30.94	8.74E+04	2389.84	3.01E+04
m	11	175-	212	185.23	31.70	1.91E+04	1567.38	3.09E+04
m	12	175-	212	193.40	33.10	1.16E+04	1347.23	3.52E+04
[illegible]	13	175-	212	202.14	34.60	8.31E+03	1299.63	3.23E+04
[illegible]	14	175-	212	207.03	35.45	5.00E+04	2063.52	3.30E+04
	15	222-	235	227.27	38.93	4.29E+03	496.09	8.68E+04
M	17	241-	255	246.66	42.26	3.97E+05	10673.7	5.99E+04
m	18	241-	255	250.67	42.95	6.83E+05	10690.0	4.37E+04
	19	259-	268	264.11	45.26	8.45E+03	275.33	2.98E+04
M	20	278-	296	283.50	48.59	2.29E+05	5309.60	2.32E+04
m	21	278-	296	291.23	49.92	6.27E+04	5287.00	1.80E+04
	22	344-	354	349.53	59.94	1.18E+04	225.29	1.64E+04
	23	442-	452	447.27	76.75	1.60E+03	226.95	2.09E+04
	24	498-	508	503.87	86.48	3.29E+05	632.15	2.99E+04
	25	539-	546	543.32	93.26	4.36E+02	207.85	2.12E+04
	26	607-	617	612.95	105.24	2.13E+05	530.52	2.88E+04
	27	631-	641	636.00	109.20	5.99E+02	255.43	2.71E+04
	28	653-	663	658.45	113.06	1.49E+03	265.87	2.90E+04
	29	676-	683	681.13	116.96	4.77E+02	233.58	2.64E+04
	30	711-	721	716.15	122.98	1.75E+06	1352.91	3.35E+04
	31	782-	789	784.96	134.81	2.89E+02	148.34	1.08E+04
	32	1000-	1010	1005.01	172.64	9.72E+02	176.39	1.26E+04
	33	1020-	1030	1025.83	176.22	4.22E+04	267.20	1.23E+04
	34	1090-	1100	1095.37	188.18	5.65E+03	184.94	1.20E+04
	35	1438-	1446	1442.46	247.85	1.04E+05	365.69	1.39E+04
	36	1807-	1814	1810.00	311.05	7.60E+01	109.07	5.86E+03
	37	2154-	2162	2158.37	370.94	3.59E+03	129.52	6.17E+03
	38	2209-	2217	2213.36	380.39	2.35E+03	124.55	6.16E+03
	39	2485-	2493	2489.28	427.83	3.71E+04	247.63	1.13E+04
[illegible]	40	2581-	2589	2585.60	444.40	2.62E+03	126.66	6.29E+03
	41	2691-	2699	2695.81	463.34	1.17E+04	167.38	7.61E+03
	42	3382-	3390	3386.51	582.10	2.69E+03	114.32	4.86E+03

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
43	3439-	3447	3443.03	591.81	1.46E+04	179.65	8.28E+03
44	3490-	3498	3494.30	600.63	1.16E+04	164.70	7.27E+03
45	3623-	3628	3626.00	623.27	-9.15E+01	66.90	2.58E+03
46	3696-	3704	3700.05	636.00	6.24E+03	138.60	6.07E+03
47	4026-	4034	4030.83	692.87	5.07E+03	106.62	2.08E+03

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

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        *****
*************************************************************************

Report Generated On                : 12-29-95 10:38:52 AM

Sample Title                       : Attenuation BL5
Spectrum Description               : BL5 Attenuation
Sample Identification              : BL5
Sample Type                        :
Sample Geometry                    : vial

Peak Locate Threshold              :  3.00
Peak Locate Range (in channels)    :     1 -  4096
Peak Area Range (in channels)      :     1 -  4096
Identification Energy Tolerance    :    1.000 keV

Sample Size                        :   0.000E+00 Unit

Sample Taken On                    :
Acquisition Started                : 12-28-95  4:39:00 PM

Live Time                          :     1800.0 seconds
Real Time                          :     1993.6 seconds


            Energy Calibration Used Done On       : 12-19-95
            Efficiency Calibration Used Done On   : ????????
```

BL5ATT.CNF

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: Attenuation BL5
Peak Locate Performed on: 12-29-95 10:38:09 AM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	31.87	0.1503	5.40	6.56
2	37.80	0.5933	6.27	3.12
3	63.51	0.0552	10.77	8.45
4	76.20	0.1153	12.82	10.64
5	79.58	0.0744	13.40	7.24
6	89.48	0.0737	15.35	6.46
7	95.21	0.0687	16.28	15.85
8	101.76	0.0651	17.28	12.63
9	110.97	0.2131	19.00	3.95
10	118.08	0.1822	20.08	8.23
11	141.00	0.3112	24.29	3.74
12	149.48	0.0837	25.90	5.70
13	160.02	0.0088	27.33	96.47
14	180.71	0.0183	30.93	60.36
15	185.34	0.0593	31.67	10.67
16	189.00	0.0000	32.36	4.21
17	193.37	0.0348	33.06	17.17
18	207.05	0.0191	35.45	51.78
19	225.90	0.3839	38.69	3.45
20	246.45	0.0052	42.25	98.99
21	250.71	0.0056	42.94	196.73
22	264.02	0.0432	45.23	22.47
23	271.24	0.0272	46.48	36.00
24	283.47	0.0138	48.59	101.17
25	291.19	0.0171	49.92	52.86
26	310.09	0.0604	53.16	17.36
27	349.51	0.0213	59.94	22.20
28	368.53	0.0447	63.21	32.94
29	393.91	0.1377	67.58	6.22
30	424.00	0.0786	72.74	11.85
31	435.81	0.0214	74.76	40.91
32	448.91	0.0167	77.03	51.56
33	461.81	0.0899	79.23	9.53
34	472.12	0.0980	81.00	9.62
35	487.64	0.1291	83.69	9.91
36	503.81	0.0066	86.47	134.49
37	522.88	0.0927	89.75	9.35
38	538.72	0.0900	92.47	12.96
39	550.94	0.0384	94.57	21.42
40	572.92	0.0281	98.35	29.28
41	612.90	0.0085	105.23	98.34

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	642.13	0.2405	110.35	4.53
43	647.91	0.1035	111.21	9.63
44	657.94	0.2235	112.91	3.72
45	666.61	0.4054	114.45	3.66
46	716.10	0.0032	122.97	254.88
47	836.72	0.2831	143.71	4.75
48	951.28	0.2266	163.40	3.19
49	1004.79	0.5335	172.60	4.25
50	1025.75	0.0404	176.21	28.44
51	1082.25	0.1262	185.92	10.07
52	1095.08	0.1709	188.13	7.13
53	1407.75	0.1247	241.89	11.91
54	1430.80	0.2786	245.85	3.05
55	1442.35	0.0282	247.84	35.68
56	1717.60	0.0612	295.16	15.26
57	2047.38	0.0856	351.86	15.00
58	2157.88	0.5466	370.86	3.71
59	2213.23	0.6546	380.37	3.80
60	2488.95	0.1253	427.78	13.53
61	2695.54	0.2519	463.30	7.17
62	2923.97	0.3954	502.57	3.12
63	3442.80	0.3138	591.77	7.72
64	3493.62	0.2829	600.51	5.42
65	3544.56	0.2302	609.27	6.70
66	3699.19	0.2828	635.86	4.29
67	4030.03	0.3831	692.74	10.99

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: Attenuation BL5
Peak Analysis Performed on: 12-29-95 10:38:29 AM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	28-	41	32.25	5.40	1.07E+03	226.39	2.33E+04
m	2	28-	41	37.33	6.27	1.07E+03	226.01	2.31E+04
	3	58-	68	63.51	10.77	1.60E+03	263.48	2.83E+04
M	4	71-	121	75.46	12.82	7.16E+03	382.15	3.16E+04
m	5	71-	121	78.80	13.40	8.01E+03	387.19	3.44E+04
m	6	71-	121	90.16	15.35	7.07E+03	356.49	3.51E+04
m	7	71-	121	95.55	16.28	1.44E+04	481.50	3.82E+04
m	8	71-	121	101.38	17.28	1.26E+04	448.87	3.87E+04
m	9	71-	121	111.36	19.00	5.74E+02	306.34	3.94E+04
m	10	71-	121	117.66	20.08	1.74E+03	317.82	3.11E+04
M	11	135-	165	142.16	24.29	2.31E+03	2249.19	2.74E+04
m	12	135-	165	151.53	25.90	8.66E+03	2537.99	3.05E+04
[illegible]	13	135-	165	159.81	27.33	1.66E+05	3386.98	2.97E+04
M	14	175-	198	180.78	30.93	4.16E+04	675.40	2.71E+04
m	15	175-	198	185.08	31.67	9.78E+03	419.28	2.72E+04
m	16	175-	198	189.09	32.36	3.86E+03	361.42	2.72E+04
m	17	175-	198	193.16	33.06	6.41E+03	377.27	2.73E+04
	18	202-	211	207.05	35.45	2.74E+04	316.66	3.22E+04
	19	220-	229	225.90	38.69	2.93E+03	334.49	4.76E+04
M	20	241-	255	246.61	42.25	2.87E+05	7698.77	5.07E+04
m	21	241-	255	250.63	42.94	4.98E+05	7716.00	3.98E+04
M	22	259-	275	263.96	45.23	5.72E+03	615.13	3.01E+04
m	23	259-	275	271.22	46.48	1.38E+04	678.78	2.72E+04
M	24	278-	296	283.46	48.59	1.82E+05	4166.94	2.57E+04
m	25	278-	296	291.22	49.92	5.23E+04	4141.31	2.23E+04
	26	305-	315	310.09	53.16	5.67E+03	232.61	2.03E+04
	27	344-	354	349.51	59.94	1.09E+04	248.70	2.14E+04
	28	363-	373	368.53	63.21	2.02E+04	270.18	2.22E+04
	29	388-	398	393.91	67.58	2.56E+03	246.21	2.43E+04
M	30	418-	440	423.93	72.74	4.97E+03	606.49	2.79E+04
m	31	418-	440	435.70	74.76	4.02E+04	766.42	2.72E+04
	32	443-	453	448.91	77.03	5.82E+04	362.10	3.07E+04
M	33	457-	477	461.71	79.23	4.34E+03	295.48	2.70E+04
m	34	457-	477	472.02	81.00	3.38E+03	245.64	2.78E+04
	35	482-	492	487.64	83.69	7.81E+03	306.09	3.58E+04
	36	498-	508	503.81	86.47	3.16E+05	651.40	4.56E+04
	37	517-	527	522.88	89.75	6.91E+03	296.78	3.41E+04
	38	533-	543	538.72	92.47	2.52E+04	330.72	3.54E+04
[illegible]	39	546-	555	550.94	94.57	1.88E+04	306.84	3.34E+04
	40	567-	577	572.92	98.35	3.19E+04	329.39	3.23E+04
	41	607-	617	612.90	105.23	2.04E+05	527.78	3.13E+04
M	42	637-	671	642.73	110.35	3.37E+03	296.33	3.40E+04

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
m	43	637-	671	647.69	111.21	6.67E+03	434.37	3.42E+04
m	44	637-	671	657.59	112.91	2.36E+03	257.92	3.46E+04
m	45	637-	671	666.52	114.45	2.33E+03	261.82	3.20E+04
	46	711-	721	716.10	122.97	1.59E+06	1292.40	3.58E+04
	47	831-	841	836.72	143.71	3.24E+03	211.27	1.74E+04
	48	946-	956	951.28	163.40	6.12E+02	203.93	1.71E+04
	49	999-	1009	1004.79	172.60	9.24E+02	195.47	1.56E+04
	50	1020-	1030	1025.75	176.21	4.04E+04	278.75	1.57E+04
	51	1077-	1087	1082.25	185.92	1.93E+04	240.07	1.61E+04
	52	1090-	1100	1095.08	188.13	3.72E+03	209.18	1.68E+04
	53	1403-	1411	1407.75	241.89	1.44E+04	200.81	1.22E+04
	54	1426-	1432	1430.80	245.85	-3.82E+02	134.18	9.66E+03
	55	1438-	1446	1442.35	247.84	1.03E+05	368.40	1.52E+04
	56	1713-	1721	1717.60	295.16	2.69E+04	219.84	1.00E+04
	57	2043-	2051	2047.38	351.86	3.86E+04	249.00	1.10E+04
	58	2153-	2161	2157.88	370.86	2.82E+03	134.68	7.17E+03
	59	2209-	2217	2213.23	380.37	2.28E+03	132.62	7.15E+03
	60	2484-	2492	2488.95	427.78	3.59E+04	253.77	1.33E+04
	61	2691-	2699	2695.54	463.30	1.18E+04	169.86	7.98E+03
	62	2921-	2926	2923.97	502.57	5.52E-01	82.88	3.87E+03
	63	3438-	3446	3442.80	591.77	1.49E+04	184.56	8.97E+03
	64	3489-	3497	3493.62	600.51	1.09E+04	169.58	8.30E+03
	65	3540-	3548	3544.56	609.27	1.52E+04	187.59	9.32E+03
	66	3695-	3703	3699.19	635.86	6.45E+03	142.57	6.49E+03
	67	4026-	4034	4030.03	692.74	4.98E+03	111.39	2.29E+03

M = First peak in a multiplet region
m = Other peak in a multiplet region

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        *****
************************************************************************

Report Generated On                : 12-29-95 10:40:33 AM

Sample Title                       : BL5D Attenuation
Spectrum Description               : BL5D Attenuation
Sample Identification              : BL5D
Sample Type                        :
Sample Geometry                    : vial

Peak Locate Threshold              :  3.00
Peak Locate Range (in channels)    :     1 -  4096
Peak Area Range (in channels)      :     1 -  4096
Identification Energy Tolerance    :    1.000 keV

Sample Size                        :   0.000E+00 Unit

Sample Taken On                    :
Acquisition Started                : 12-28-95  5:22:13 PM

Live Time                          :     1800.0 seconds
Real Time                          :     1991.8 seconds


          Energy Calibration Used Done On       : 12-19-95
          Efficiency Calibration Used Done On   : ????????
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BL5DATT.CNF

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: BL5D Attenuation
Peak Locate Performed on: 12-29-95 10:40:05 AM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	31.89	0.3414	5.33	3.20
2	47.13	0.2407	7.95	4.11
3	63.60	0.1844	10.79	3.06
4	76.28	0.2612	12.89	3.97
5	79.89	0.1819	13.49	5.67
6	95.67	0.1069	16.33	8.80
7	102.25	0.0539	17.41	23.47
8	110.74	0.3405	18.89	3.13
9	117.53	0.1042	20.10	4.71
10	123.44	0.1231	21.05	8.40
11	140.85	0.3922	25.73	3.18
12	149.27	0.2114	26.59	5.22
13	160.04	0.0053	27.34	158.42
14	180.79	0.0112	30.94	95.31
15	185.42	0.0365	31.67	14.79
16	189.00	0.0000	32.36	3.29
17	193.40	0.0273	33.06	20.83
18	207.09	0.0134	35.46	74.74
19	225.96	0.1687	38.70	4.92
20	246.47	0.0041	42.26	120.28
21	250.75	0.0045	42.95	241.95
22	264.05	0.0349	45.25	28.25
23	271.35	0.0979	46.51	10.94
24	283.53	0.0117	48.59	118.68
25	291.20	0.0148	49.92	62.11
26	310.19	0.2475	53.19	3.16
27	319.15	0.5382	54.70	3.19
28	349.56	0.0405	59.95	26.72
29	368.86	0.1465	63.27	11.30
30	435.90	0.0655	74.79	12.25
31	448.92	0.0507	77.03	17.12
32	461.59	0.4547	79.21	3.57
33	503.85	0.0062	86.48	143.70
34	538.72	0.3623	92.47	3.77
35	551.24	0.3293	94.63	5.96
36	573.03	0.1166	98.37	7.29
37	612.96	0.0081	105.24	104.86
38	653.05	0.3688	112.13	3.18
39	658.53	0.3694	113.07	3.52
40	716.14	0.0031	122.98	267.66
41	1025.84	0.0399	176.22	31.60

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	1082.44	0.4673	185.96	4.14
43	1095.45	0.1480	188.19	6.66
44	1407.84	0.4138	241.90	3.43
45	1442.47	0.0280	247.86	34.60
46	1717.61	0.2082	295.16	5.46
47	2047.49	0.2690	351.88	5.77
48	2158.16	0.2858	370.90	5.95
49	2489.34	0.0954	427.85	14.03
50	2695.76	0.2602	463.33	5.91
51	3442.96	0.1778	591.80	6.32
52	3494.22	0.3616	600.61	5.19
53	3699.85	0.3996	635.97	4.56
54	3730.34	0.2050	641.21	3.09
55	4030.17	0.2947	692.76	10.69

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: BL5D Attenuation
Peak Analysis Performed on: 12-29-95 10:40:21 AM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	29-	36	31.89	5.33	3.31E+02	196.44	1.90E+04
	2	44-	50	47.13	7.95	2.22E+02	170.47	1.52E+04
	3	58-	68	63.60	10.79	3.52E+02	236.31	2.32E+04
M	4	71-	84	75.87	12.89	2.41E+03	250.20	2.45E+04
m	5	71-	84	79.36	13.49	2.01E+03	232.92	2.51E+04
M	6	90-	128	95.83	16.33	8.10E+03	678.81	2.92E+04
m	7	90-	128	102.13	17.41	2.01E+04	924.85	2.61E+04
m	9	90-	128	117.77	20.10	1.68E+03	559.78	2.73E+04
m	10	90-	128	123.29	21.05	3.42E+03	587.07	2.47E+04
M	11	135-	165	150.53	25.73	1.39E+04	2972.93	2.58E+04
m	12	135-	165	155.55	26.59	2.91E+04	4478.39	2.74E+04
m	13	135-	165	159.90	27.34	4.05E+05	5303.17	2.98E+04
[illegible]	14	175-	198	180.82	30.94	8.86E+04	1411.92	2.92E+04
[illegible]	15	175-	198	185.08	31.67	1.91E+04	1021.03	2.90E+04
m	16	175-	198	189.11	32.36	5.04E+03	789.68	2.90E+04
m	17	175-	198	193.17	33.06	8.83E+03	832.57	2.89E+04
	18	202-	211	207.09	35.46	5.03E+04	352.55	3.28E+04
	19	220-	229	225.96	38.70	4.58E+03	363.50	5.53E+04
M	20	241-	255	246.66	42.26	4.21E+05	11240.3	6.28E+04
m	21	241-	255	250.66	42.95	7.23E+05	11256.6	4.61E+04
M	22	259-	274	264.06	45.25	6.08E+03	583.13	2.40E+04
m	23	259-	274	271.39	46.51	1.44E+03	484.49	2.31E+04
M	24	278-	296	283.50	48.59	2.41E+05	5633.86	2.44E+04
m	25	278-	296	291.22	49.92	6.58E+04	5611.27	1.93E+04
M	26	305-	324	310.21	53.19	1.46E+03	176.53	1.84E+04
m	27	305-	324	319.00	54.70	2.12E+03	227.11	1.81E+04
	28	344-	354	349.56	59.95	1.20E+04	233.77	1.79E+04
	29	363-	373	368.86	63.27	3.45E+03	213.81	1.77E+04
	30	430-	440	435.90	74.79	7.04E+03	244.78	2.22E+04
	31	443-	453	448.92	77.03	1.06E+04	254.27	2.27E+04
	32	456-	466	461.59	79.21	6.33E+00	240.36	2.42E+04
	33	498-	508	503.85	86.48	3.33E+05	642.10	3.34E+04
	34	533-	543	538.72	92.47	4.06E+03	278.34	3.08E+04
	35	546-	556	551.24	94.63	2.95E+03	274.56	3.04E+04
	36	568-	578	573.03	98.37	4.85E+03	273.66	2.93E+04
	37	607-	617	612.96	105.24	2.16E+05	533.93	2.92E+04
	39	651-	663	658.53	113.07	8.18E+02	308.63	3.59E+04
	40	711-	721	716.14	122.98	1.75E+06	1352.73	3.45E+04
[illegible]	41	1020-	1030	1025.84	176.22	4.23E+04	270.04	1.29E+04
	42	1077-	1087	1082.44	185.96	3.27E+03	183.37	1.27E+04

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
43	1090-	1100	1095.45	188.19	5.32E+03	190.58	1.30E+04
44	1403-	1411	1407.84	241.90	2.17E+03	156.98	1.05E+04
45	1438-	1446	1442.47	247.86	1.04E+05	366.94	1.43E+04
46	1713-	1721	1717.61	295.16	4.13E+03	144.52	7.84E+03
47	2043-	2051	2047.49	351.88	6.53E+03	143.90	6.65E+03
48	2154-	2162	2158.16	370.90	3.68E+03	130.15	6.20E+03
49	2485-	2493	2489.34	427.85	3.74E+04	249.18	1.16E+04
50	2691-	2699	2695.76	463.33	1.17E+04	168.28	7.75E+03
51	3438-	3446	3442.96	591.80	1.45E+04	182.16	8.70E+03
52	3490-	3498	3494.22	600.61	1.15E+04	166.12	7.52E+03
53	3695-	3703	3699.85	635.97	6.05E+03	139.52	6.27E+03
54	3728-	3733	3730.34	641.21	-5.85E+01	66.98	2.57E+03
55	4026-	4034	4030.17	692.76	5.36E+03	107.51	2.05E+03

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

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        *****
************************************************************************

Report Generated On              : 12-29-95 10:42:11 AM

Sample Title                     : NOPI-466-GAM1 Attenuation
Spectrum Description             : NOPI-466-GAM1 attenuation
Sample Identification            : NP466ATT
Sample Type                      :
Sample Geometry                  : vial

Peak Locate Threshold            :  3.00
Peak Locate Range (in channels)  :     1 -  4096
Peak Area Range (in channels)    :     1 -  4096
Identification Energy Tolerance  :    1.000 keV

Sample Size                      :   0.000E+00 Unit

Sample Taken On                  :
Acquisition Started              : 12-29-95  8:51:18 AM

Live Time                        :     1800.0 seconds
Real Time                        :     1988.0 seconds


          Energy Calibration Used Done On       : 12-19-95
          Efficiency Calibration Used Done On   : ????????
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NP466ATT.CNF

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-466-GAM1 Attenuation
Peak Locate Performed on: 12-29-95 10:41:49 AM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	46.80	0.2464	7.90	5.14
2	95.94	0.1375	16.38	6.96
3	102.38	0.0339	17.43	28.46
4	123.16	0.1000	21.02	12.61
5	149.39	0.1399	26.60	4.10
6	159.90	0.0052	27.31	167.59
7	180.53	0.0054	30.90	90.49
8	185.17	0.0401	31.63	22.92
9	189.00	<NA>	32.33	<NA>
10	193.19	0.0492	33.04	24.30
11	206.82	0.0130	35.41	77.63
12	225.92	0.2072	38.69	4.49
13	246.22	0.0092	42.21	151.41
14	250.49	0.0021	42.90	220.41
15	263.71	0.0363	45.19	29.29
16	283.16	0.0067	48.54	136.63
17	290.89	0.0139	49.86	66.42
18	318.89	0.3534	54.68	3.06
19	349.15	0.0313	59.88	30.55
20	503.15	0.0060	86.36	144.66
21	612.10	0.0082	105.09	103.59
22	657.67	0.2014	112.92	4.83
23	680.23	0.4154	116.80	3.57
24	715.28	0.0048	122.83	262.78
25	1024.58	0.0382	176.01	28.01
26	1093.76	0.1018	187.90	8.03
27	1440.59	0.0283	247.53	34.06
28	1832.34	0.1987	314.89	3.24
29	2155.45	0.5855	370.44	3.22
30	2210.43	0.5074	379.89	3.87
31	2486.17	0.0955	427.30	12.06
32	2646.89	0.3196	454.93	3.21
33	2692.43	0.2509	462.76	5.37
34	3438.51	0.2515	591.04	6.76
35	3489.74	0.4937	599.84	5.45
36	3638.00	<NA>	625.33	<NA>
37	3695.52	0.5291	635.22	4.08
38	4031.71	0.0970	693.02	7.23

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: NOPI-466-GAM1 Attenuation
Peak Analysis Performed on: 12-29-95 10:42:00 AM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	43-	51	46.80	7.90	6.60E+02	198.46	1.81E+04
M	2	90-	107	96.14	16.38	4.44E+03	472.14	2.28E+04
m	3	90-	107	102.26	17.43	1.87E+04	558.40	2.27E+04
	4	119-	128	123.16	21.02	2.81E+03	227.24	2.16E+04
M	5	144-	164	155.57	26.60	2.83E+04	6293.96	2.89E+04
m	6	144-	164	159.71	27.31	4.34E+05	6342.97	2.91E+04
M	7	175-	197	180.60	30.90	9.38E+04	1184.09	2.88E+04
m	8	175-	197	184.85	31.63	2.10E+04	848.87	2.85E+04
m	9	175-	197	188.91	32.33	5.44E+03	635.71	2.83E+04
m	10	175-	197	193.01	33.04	9.38E+03	677.34	2.82E+04
	11	201-	211	206.82	35.41	5.28E+04	371.58	3.59E+04
	12	220-	228	225.92	38.69	4.21E+03	336.18	4.99E+04
M	13	241-	255	246.36	42.21	4.27E+05	9542.62	6.19E+04
m	14	241-	255	250.36	42.90	7.43E+05	9562.51	4.44E+04
	15	259-	268	263.71	45.19	9.97E+03	280.94	3.05E+04
M	16	278-	295	283.17	48.54	2.45E+05	5789.26	2.67E+04
m	17	278-	295	290.86	49.86	6.61E+04	5767.66	1.69E+04
	18	313-	323	318.89	54.68	2.12E+03	200.09	1.59E+04
	19	344-	354	349.15	59.88	1.22E+04	227.11	1.66E+04
	20	498-	508	503.15	86.36	3.32E+05	635.03	2.99E+04
	21	607-	617	612.10	105.09	2.14E+05	530.73	2.83E+04
	22	652-	662	657.67	112.92	1.99E+03	265.78	2.88E+04
	23	675-	683	680.23	116.80	8.48E+02	256.98	3.02E+04
	24	710-	720	715.28	122.83	1.76E+06	1353.44	3.13E+04
	25	1019-	1029	1024.58	176.01	4.18E+04	267.07	1.24E+04
	26	1088-	1098	1093.76	187.90	5.05E+03	185.05	1.23E+04
	27	1436-	1444	1440.59	247.53	1.03E+05	364.63	1.42E+04
	28	1829-	1834	1832.34	314.89	1.12E+02	86.26	4.13E+03
	29	2151-	2159	2155.45	370.44	3.60E+03	130.05	6.25E+03
	30	2206-	2214	2210.43	379.89	2.41E+03	124.64	6.14E+03
	31	2482-	2490	2486.17	427.30	3.64E+04	246.08	1.13E+04
	32	2642-	2650	2646.89	454.93	1.16E+03	114.79	5.62E+03
	33	2688-	2696	2692.43	462.76	1.13E+04	166.58	7.69E+03
	34	3434-	3442	3438.51	591.04	1.41E+04	181.12	8.73E+03
	35	3485-	3493	3489.74	599.84	1.00E+04	164.12	7.87E+03
	36	3636-	3641	3638.00	625.33	-9.33E+01	71.31	2.89E+03
	37	3691-	3699	3695.52	635.22	5.81E+03	137.89	6.19E+03
	38	4029-	4035	4031.71	693.02	8.10E+02	121.57	1.15E+03

M = First peak in a multiplet region
m = Other peak in a multiplet region

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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NP467ATT.CNF

Report Generated On	: 12-29-95 10:43:48 AM
Sample Title	: NOPI-467-GAM1 Attenuation
Spectrum Description	: NOPI-467-GAM1 attenuation
Sample Identification	: NP467ATT
Sample Type	:
Sample Geometry	: vial
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 1 - 4096
Peak Area Range (in channels)	: 1 - 4096
Identification Energy Tolerance	: 1.000 keV
Sample Size	: 0.000E+00 Unit
Sample Taken On	:
Acquisition Started	: 12-29-95 9:27:51 AM
Live Time	: 1800.0 seconds
Real Time	: 1985.5 seconds

Energy Calibration Used Done On	: 12-19-95
Efficiency Calibration Used Done On	: ????????

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-467-GAM1 Attenuation
Peak Locate Performed on: 12-29-95 10:43:24 AM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	96.15	0.1275	16.43	7.13
2	102.48	0.0498	17.45	25.87
3	123.22	0.1284	21.04	9.45
4	140.96	0.3094	25.75	3.89
5	149.14	0.3105	26.59	3.06
6	159.99	0.0053	27.33	163.11
7	180.62	0.0123	30.92	92.23
8	185.26	0.0370	31.65	20.27
9	189.00	<NA>	32.34	<NA>
10	193.31	0.0532	33.05	23.33
11	206.96	0.0129	35.43	76.51
12	225.98	0.3829	38.70	4.30
13	246.38	0.0043	42.23	135.76
14	250.55	0.0022	42.92	230.82
15	263.89	0.0345	45.22	28.58
16	283.31	0.0075	48.56	127.24
17	291.03	0.0138	49.89	65.48
18	319.37	0.2060	54.76	4.85
19	349.31	0.0359	59.91	28.26
20	503.42	0.0101	86.40	132.46
21	612.51	0.0131	105.16	93.58
22	657.99	0.2053	112.98	3.26
23	680.43	0.2295	116.84	4.56
24	715.81	0.0050	122.92	268.49
25	1004.19	0.2341	172.50	3.29
26	1025.20	0.0404	176.11	30.04
27	1073.80	0.2765	184.47	3.09
28	1094.90	0.1587	188.10	9.31
29	1187.36	0.1808	203.99	3.39
30	1210.05	0.8116	207.89	3.17
31	1441.45	0.0281	247.68	35.53
32	1928.03	0.3897	331.34	3.12
33	2156.88	0.4931	370.68	4.41
34	2487.66	0.1232	427.56	13.07
35	2584.69	0.3602	444.24	3.37
36	2693.96	0.2470	463.03	6.20
37	2855.00	0.0001	490.71	3.27
38	3440.01	0.2532	591.29	6.08
39	3491.77	0.4301	600.19	5.31
40	3697.53	0.4728	635.57	3.13
41	4028.78	0.5435	692.52	6.83

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: NOPI-467-GAM1 Attenuation
Peak Analysis Performed on: 12-29-95 10:43:36 AM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	91-	107	96.46	16.43	4.19E+03	382.45	2.07E+04
m	2	91-	107	102.37	17.45	1.75E+04	476.04	2.25E+04
	3	118-	128	123.22	21.04	2.96E+03	242.15	2.33E+04
M	4	135-	164	150.65	25.75	1.47E+04	3052.79	2.48E+04
m	5	135-	164	155.51	26.59	2.96E+04	4505.49	2.37E+04
m	6	135-	164	159.81	27.33	4.13E+05	5365.25	2.62E+04
M	7	175-	197	180.70	30.92	8.98E+04	1358.37	2.85E+04
m	8	175-	197	184.95	31.65	2.02E+04	992.71	2.85E+04
m	9	175-	197	188.95	32.34	5.16E+03	754.76	2.84E+04
m	10	175-	197	193.08	33.05	9.07E+03	797.46	2.84E+04
	11	201-	211	206.96	35.43	5.09E+04	368.69	3.58E+04
	12	220-	228	225.98	38.70	4.39E+03	334.09	4.92E+04
	13	241-	255	246.52	42.23	4.18E+05	10106.5	6.32E+04
m	14	241-	255	250.52	42.92	7.24E+05	10124.8	4.52E+04
	15	259-	268	263.89	45.22	9.59E+03	280.29	3.06E+04
M	16	278-	296	283.33	48.56	2.40E+05	5590.34	2.35E+04
m	17	278-	296	291.06	49.89	6.48E+04	5567.89	1.80E+04
	18	314-	323	319.37	54.76	1.96E+03	186.86	1.45E+04
	19	344-	354	349.31	59.91	1.18E+04	225.29	1.64E+04
	20	498-	508	503.42	86.40	3.27E+05	630.85	3.00E+04
	21	607-	617	612.51	105.16	2.11E+05	528.14	2.84E+04
	22	652-	662	657.99	112.98	2.45E+03	265.63	2.86E+04
	23	675-	683	680.43	116.84	7.43E+02	255.02	2.97E+04
	24	710-	720	715.81	122.92	1.74E+06	1346.55	3.25E+04
	25	1000-	1009	1004.19	172.50	9.50E+02	163.60	1.14E+04
	26	1020-	1030	1025.20	176.11	4.19E+04	266.80	1.23E+04
	27	1071-	1078	1073.80	184.47	4.58E+01	131.35	8.54E+03
	28	1089-	1099	1094.90	188.10	5.62E+03	184.85	1.20E+04
	29	1183-	1191	1187.36	203.99	1.22E+03	152.43	1.03E+04
	30	1206-	1214	1210.05	207.89	1.03E+03	152.75	1.04E+04
	31	1437-	1445	1441.45	247.68	1.03E+05	363.35	1.37E+04
	32	1925-	1930	1928.03	331.34	1.91E+01	83.60	3.94E+03
	33	2152-	2160	2156.88	370.68	3.51E+03	129.07	6.17E+03
	34	2483-	2491	2487.66	427.56	3.67E+04	245.81	1.11E+04
	35	2580-	2588	2584.69	444.24	2.88E+03	125.74	6.05E+03
	36	2689-	2697	2693.96	463.03	1.14E+04	166.18	7.58E+03
	37	2851-	2857	2855.00	490.71	9.46E+01	88.10	4.05E+03
	38	3436-	3444	3440.01	591.29	1.42E+04	179.24	8.37E+03
	39	3487-	3495	3491.77	600.19	1.09E+04	163.63	7.41E+03
	40	3693-	3701	3697.53	635.57	6.36E+03	138.56	6.02E+03
	41	4024-	4032	4028.78	692.52	5.44E+03	113.09	2.68E+03

M = First peak in a multiplet region

m = Other peak in a multiplet region

ors 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        *****
*************************************************************************

Report Generated On              : 12-29-95 10:45:18 AM

Sample Title                     : NOPI-468-GAM1 Attenuation
Spectrum Description             : NOPI-468-GAM1 attenuation
Sample Identification            : NP468ATT
Sample Type                      :
Sample Geometry                  : vial

Peak Locate Threshold            :  3.00
Peak Locate Range (in channels)  :     1 -  4096
Peak Area Range (in channels)    :     1 -  4096
Identification Energy Tolerance  :    1.000 keV

Sample Size                      :   0.000E+00 Unit

Sample Taken On                  :
Acquisition Started              : 12-29-95 10:02:13 AM

Live Time                        :     1800.0 seconds
Real Time                        :     1992.7 seconds


          Energy Calibration Used Done On       : 12-19-95
          Efficiency Calibration Used Done On   : ????????
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NP468ATT.CNF

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-468-GAM1 Attenuation
Peak Locate Performed on: 12-29-95 10:44:54 AM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	32.38	0.4675	5.42	3.80
2	77.00	<NA>	13.09	<NA>
3	96.13	0.1274	16.43	6.91
4	102.58	0.0482	17.46	29.13
5	123.50	0.1367	21.08	8.07
6	149.45	0.0981	26.58	5.15
7	160.03	0.0050	27.33	169.76
8	180.71	0.0110	30.93	98.52
9	185.34	0.0313	31.68	20.25
10	193.39	0.0250	33.03	23.15
11	207.02	0.0125	35.44	78.00
12	225.73	0.1996	38.66	4.37
13	233.01	0.3157	39.91	4.00
14	246.42	0.0041	42.24	133.89
15	250.61	0.0048	42.93	243.83
16	263.93	0.0329	45.23	28.73
17	283.37	0.0077	48.57	126.09
18	291.10	0.0139	49.90	65.04
19	318.77	0.2575	54.66	5.14
20	349.43	0.0381	59.93	26.99
21	503.60	0.0099	86.43	135.96
22	612.65	0.0130	105.18	98.74
23	658.23	0.6061	113.02	3.53
24	679.91	0.2658	116.75	3.11
25	715.91	0.0030	122.94	276.25
26	849.24	0.2491	145.86	3.14
27	1004.65	0.1185	172.58	5.23
28	1025.25	0.0383	176.12	31.16
29	1094.70	0.1640	188.06	8.39
30	1186.90	0.3948	203.91	3.96
31	1209.15	0.2476	207.74	3.84
32	1441.60	0.0277	247.71	36.72
33	1944.10	0.3525	334.10	3.03
34	2156.86	0.3529	370.68	5.03
35	2487.78	0.0957	427.58	13.34
36	2694.23	0.1780	463.07	6.95
37	2741.00	<NA>	471.11	<NA>
38	3440.93	0.3364	591.45	6.27
39	3492.07	0.3491	600.24	5.36
40	3527.68	0.8781	606.37	3.20
41	3695.00	<NA>	635.22	<NA>

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	3698.22	0.2711	635.87	5.05
43	4031.73	0.0797	693.03	9.28

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: NOPI-468-GAM1 Attenuation
Peak Analysis Performed on: 12-29-95 10:45:08 AM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	29-	37	32.38	5.42	5.81E+02	209.68	2.03E+04
	2	74-	79	77.00	13.09	1.28E+02	146.56	1.21E+04
M	3	91-	107	96.41	16.43	4.52E+03	435.60	2.37E+04
m	4	91-	107	102.41	17.46	1.94E+04	524.61	2.33E+04
	5	118-	128	123.50	21.08	2.98E+03	247.39	2.44E+04
M	6	144-	165	155.49	26.58	3.06E+04	6784.10	2.93E+04
m	7	144-	165	159.86	27.33	4.63E+05	6832.69	3.27E+04
M	8	175-	197	180.77	30.93	1.02E+05	2452.76	2.95E+04
m	9	175-	197	185.12	31.68	2.27E+04	2043.58	2.92E+04
m	10	175-	197	193.01	33.03	1.05E+04	1635.99	2.90E+04
	11	202-	211	207.02	35.44	5.48E+04	360.72	3.34E+04
	12	220-	235	225.73	38.66	5.51E+03	554.62	9.82E+04
M	14	241-	255	246.57	42.24	4.43E+05	11132.2	6.58E+04
m	15	241-	255	250.57	42.93	7.61E+05	11149.6	4.75E+04
	16	259-	268	263.93	45.23	9.66E+03	285.00	3.17E+04
M	17	278-	296	283.39	48.57	2.52E+05	5932.25	2.41E+04
m	18	278-	296	291.13	49.90	6.81E+04	5910.23	1.87E+04
	19	313-	323	318.77	54.66	2.60E+03	201.79	1.60E+04
	20	344-	354	349.43	59.93	1.25E+04	231.83	1.74E+04
	21	498-	508	503.60	86.43	3.40E+05	642.45	3.08E+04
	22	607-	617	612.65	105.18	2.19E+05	536.74	2.92E+04
	23	653-	663	658.23	113.02	1.88E+03	268.77	2.95E+04
	24	674-	682	679.91	116.75	-1.77E+02	252.45	2.95E+04
	25	710-	720	715.91	122.94	1.79E+06	1369.96	3.43E+04
	26	844-	853	849.24	145.86	5.03E+02	178.62	1.39E+04
	27	1001-	1009	1004.65	172.58	1.01E+03	153.41	1.05E+04
	28	1020-	1030	1025.25	176.12	4.35E+04	270.72	1.25E+04
	29	1089-	1099	1094.70	188.06	5.68E+03	187.36	1.24E+04
	30	1182-	1190	1186.90	203.91	1.51E+03	153.86	1.04E+04
	31	1205-	1213	1209.15	207.74	8.03E+02	152.96	1.06E+04
	32	1437-	1445	1441.60	247.71	1.05E+05	368.35	1.45E+04
	33	1941-	1946	1944.10	334.10	1.10E+01	85.44	4.12E+03
	34	2152-	2160	2156.86	370.68	3.67E+03	131.56	6.40E+03
	35	2483-	2491	2487.78	427.58	3.60E+04	249.05	1.21E+04
	36	2690-	2698	2694.23	463.07	1.24E+04	167.86	7.38E+03
	37	2738-	2743	2741.00	471.11	-3.73E+01	79.41	3.58E+03
	38	3436-	3444	3440.93	591.45	1.47E+04	182.77	8.69E+03
	39	3488-	3496	3492.07	600.24	1.15E+04	166.35	7.58E+03
	40	3523-	3531	3527.68	606.37	3.18E+03	116.68	4.88E+03
M	41	3691-	3702	3695.49	635.22	3.75E+03	306.47	6.95E+03
m	42	3691-	3702	3699.26	635.87	4.15E+03	308.54	6.40E+03

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
43	4029-	4035	4031.73	693.03	1.44E+03	133.32	1.49E+03

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

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        *****
*************************************************************************

Report Generated On              : 12-29-95 11:53:04 AM

Sample Title                     : NOPI-469-GAM1 Attenuation
Spectrum Description             : NOPI-469-GAM1 attenuation
Sample Identification            : NP469ATT
Sample Type                      :
Sample Geometry                  : vial

Peak Locate Threshold            :  3.00
Peak Locate Range (in channels)  :     1 -  4096
Peak Area Range (in channels)    :     1 -  4096
Identification Energy Tolerance  :    1.000 keV

Sample Size                      :   0.000E+00 Unit

Sample Taken On                  :
Acquisition Started              : 12-29-95 10:36:49 AM

Live Time                        :     1800.0 seconds
Real Time                        :     1984.0 seconds


          Energy Calibration Used Done On       : 12-19-95
          Efficiency Calibration Used Done On   : ????????
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NP469ATT.CHF

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-469-GAM1 Attenuation
Peak Locate Performed on: 12-29-95 11:52:41 AM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	32.41	0.1667	5.42	3.32
2	47.10	0.3500	7.95	4.20
3	95.92	0.1433	16.40	4.90
4	102.51	0.0516	17.45	26.60
5	123.38	0.1239	21.06	9.62
6	160.03	0.0053	27.36	158.90
7	180.76	0.0113	30.93	94.78
8	185.37	0.0308	31.67	19.59
9	189.00	0.0000	32.36	3.87
10	193.44	0.0252	33.07	20.60
11	207.03	0.0132	35.44	75.36
12	226.04	0.1988	38.71	3.78
13	246.42	0.0041	42.24	129.96
14	250.63	0.0048	42.93	236.40
15	264.02	0.0345	45.24	27.66
16	283.39	0.0081	48.58	122.61
17	291.10	0.0142	49.91	63.43
18	319.23	0.3031	54.74	3.41
19	349.37	0.0385	59.92	24.16
20	436.00	<NA>	74.81	<NA>
21	503.62	0.0101	86.44	132.39
22	612.70	0.0135	105.19	98.03
23	658.28	0.2152	113.03	4.62
24	680.04	0.2909	116.77	3.49
25	715.93	0.0030	122.94	271.64
26	1004.27	0.3493	172.52	3.53
27	1025.33	0.0390	176.14	30.25
28	1094.71	0.1512	188.06	6.67
29	1209.47	0.4106	207.80	3.27
30	1441.67	0.0278	247.72	36.61
31	1693.00	0.0001	290.93	3.04
32	2157.28	0.4647	370.75	3.16
33	2212.43	0.4616	380.23	4.07
34	2488.01	0.0949	427.62	13.57
35	2694.25	0.3047	463.08	6.08
36	3129.89	0.3425	537.98	3.06
37	3384.21	0.4834	581.70	3.02
38	3440.82	0.3041	591.43	8.40
39	3492.24	0.3391	600.27	5.44
40	3697.87	0.4155	635.63	3.98
41	4031.58	0.0854	693.00	6.35

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: NOPI-469-GAM1 Attenuation
Peak Analysis Performed on: 12-29-95 11:52:52 AM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	30-	37	32.41	5.42	1.31E+02	187.83	1.75E+04
	2	44-	51	47.10	7.95	3.67E+02	180.15	1.59E+04
M	3	90-	107	96.28	16.40	4.37E+03	408.60	2.23E+04
m	4	90-	107	102.35	17.45	1.73E+04	500.58	2.22E+04
	5	118-	128	123.38	21.06	3.08E+03	241.64	2.32E+04
	6	155-	165	160.03	27.36	4.00E+05	714.97	4.71E+04
M	7	175-	197	180.79	30.93	8.96E+04	1497.27	2.82E+04
m	8	175-	197	185.06	31.67	1.98E+04	1102.78	2.80E+04
m	9	175-	197	189.11	32.36	5.25E+03	842.74	2.79E+04
m	10	175-	197	193.24	33.07	8.99E+03	889.44	2.78E+04
	11	202-	211	207.03	35.44	5.09E+04	351.67	3.23E+04
	12	221-	229	226.04	38.71	3.74E+03	336.57	5.04E+04
M	13	241-	255	246.58	42.24	4.20E+05	11377.9	6.21E+04
m	14	241-	255	250.59	42.93	7.19E+05	11393.7	4.48E+04
	15	259-	268	264.02	45.24	8.73E+03	278.16	3.04E+04
M	16	278-	296	283.40	48.58	2.38E+05	5546.04	2.36E+04
m	17	278-	296	291.14	49.91	6.48E+04	5523.67	1.80E+04
	18	314-	324	319.23	54.74	2.06E+03	198.15	1.56E+04
	19	344-	354	349.37	59.92	1.21E+04	225.87	1.64E+04
	20	431-	441	436.00	74.81	-1.91E+02	222.19	2.07E+04
	21	498-	508	503.62	86.44	3.26E+05	629.05	2.95E+04
	22	607-	617	612.70	105.19	2.10E+05	526.34	2.81E+04
	23	653-	662	658.28	113.03	1.54E+03	245.61	2.60E+04
	24	675-	682	680.04	116.77	-4.55E+02	228.76	2.59E+04
	25	710-	720	715.93	122.94	1.73E+06	1345.30	3.37E+04
	26	999-	1009	1004.27	172.52	9.53E+02	174.41	1.24E+04
	27	1020-	1030	1025.33	176.14	4.13E+04	265.13	1.22E+04
	28	1089-	1099	1094.71	188.06	5.42E+03	184.20	1.20E+04
	29	1205-	1213	1209.47	207.80	9.93E+02	150.46	1.01E+04
	30	1437-	1445	1441.67	247.72	1.01E+05	362.47	1.42E+04
	31	1688-	1696	1693.00	290.93	1.30E+03	130.32	7.32E+03
	32	2153-	2161	2157.28	370.75	3.37E+03	128.63	6.17E+03
	33	2208-	2216	2212.43	380.23	2.43E+03	124.93	6.16E+03
	34	2484-	2492	2488.01	427.62	3.68E+04	244.88	1.08E+04
	35	2690-	2698	2694.25	463.08	1.16E+04	165.39	7.35E+03
	36	3127-	3132	3129.89	537.98	-3.48E+01	73.04	3.04E+03
	37	3380-	3388	3384.21	581.70	2.66E+03	113.79	4.80E+03
	38	3436-	3444	3440.82	591.43	1.42E+04	180.14	8.51E+03
	39	3488-	3496	3492.24	600.27	1.12E+04	162.79	7.17E+03
	40	3693-	3701	3697.87	635.63	6.20E+03	138.24	6.04E+03
	41	4029-	4035	4031.58	693.00	1.40E+03	132.04	1.41E+03

M = First peak in a multiplet region

m - Other peak in a multiplet region

ors 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        *****
*************************************************************************

Report Generated On                : 12-29-95 11:54:38 AM

Sample Title                       : NOPI-470-GAM1 Attenuation
Spectrum Description               : NOPI-470-GAM1 attenuation
Sample Identification              : NP470ATT
Sample Type                        :
Sample Geometry                    : vial

Peak Locate Threshold              :  3.00
Peak Locate Range (in channels)    :     1 -  4096
Peak Area Range (in channels)      :     1 -  4096
Identification Energy Tolerance    :    1.000 keV

Sample Size                        :   0.000E+00 Unit

Sample Taken On                    :
Acquisition Started                : 12-29-95 11:11:03 AM

Live Time                          :     1800.0 seconds
Real Time                          :     1989.0 seconds


          Energy Calibration Used Done On       : 12-19-95
          Efficiency Calibration Used Done On   : ????????
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NP470ATT.CNF

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-470-GAM1 Attenuation
Peak Locate Performed on: 12-29-95 11:54:14 AM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	31.94	0.2601	5.34	4.43
2	96.11	0.1569	16.45	7.06
3	102.60	0.0512	17.46	28.37
4	123.50	0.0514	21.08	9.01
5	140.84	0.3636	25.75	3.32
6	149.53	0.1489	26.60	3.28
7	160.04	0.0052	27.34	161.69
8	180.75	0.0112	30.93	94.65
9	185.42	0.0308	31.69	17.60
10	193.43	0.0263	33.04	19.99
11	207.06	0.0130	35.45	79.31
12	225.80	0.2012	38.67	3.73
13	246.44	0.0041	42.25	127.37
14	250.68	0.0046	42.94	243.44
15	263.98	0.0338	45.24	28.15
16	283.42	0.0083	48.58	120.98
17	291.13	0.0140	49.91	62.93
18	338.31	0.2024	58.11	3.37
19	349.49	0.0398	59.92	27.22
20	503.69	0.0068	86.45	138.10
21	612.77	0.0136	105.20	101.39
22	658.43	0.2691	113.05	3.91
23	680.05	0.2598	116.77	5.25
24	715.97	0.0030	122.95	274.44
25	1004.37	0.3235	172.53	3.18
26	1025.41	0.0380	176.15	28.29
27	1094.71	0.1567	188.06	7.83
28	1340.06	0.3025	230.25	3.82
29	1441.73	0.0400	247.73	35.75
30	2156.82	0.4627	370.67	3.54
31	2488.16	0.1248	427.64	13.02
32	2694.54	0.2408	463.12	6.52
33	3441.16	0.2335	591.49	5.68
34	3492.87	0.4236	600.38	5.12
35	3698.04	0.4606	635.66	3.59
36	4028.89	0.4718	692.54	7.71

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: NOPI-470-GAM1 Attenuation
Peak Analysis Performed on: 12-29-95 11:54:26 AM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	29-	36	31.94	5.34	5.05E+02	191.86	1.80E+04
M	2	91-	107	96.52	16.45	4.46E+03	440.37	2.10E+04
m	3	91-	107	102.44	17.46	1.82E+04	524.14	2.27E+04
	4	118-	128	123.50	21.08	2.81E+03	244.23	2.39E+04
M	5	135-	165	150.64	25.75	1.51E+04	3151.31	2.51E+04
m	6	135-	165	155.56	26.60	3.07E+04	4732.72	2.68E+04
m	7	135-	165	159.89	27.34	4.22E+05	5600.41	2.95E+04
M	8	175-	197	180.80	30.93	9.60E+04	2365.23	2.90E+04
m	9	175-	197	185.18	31.69	2.16E+04	1975.35	2.87E+04
m	10	175-	197	193.02	33.04	9.90E+03	1575.12	2.84E+04
	11	202-	212	207.06	35.45	5.13E+04	374.23	3.70E+04
	12	220-	229	225.80	38.67	4.68E+03	366.49	5.61E+04
[illegible]	13	241-	255	246.60	42.25	4.31E+05	11981.4	6.36E+04
[illegible]	14	241-	255	250.62	42.94	7.39E+05	11997.0	4.60E+04
	15	259-	268	263.98	45.24	9.21E+03	281.33	3.10E+04
M	16	278-	296	283.44	48.58	2.45E+05	5601.10	2.42E+04
m	17	278-	296	291.18	49.91	6.67E+04	5578.31	1.86E+04
M	18	333-	354	338.85	58.11	1.58E+03	281.62	1.44E+04
m	19	333-	354	349.41	59.92	1.43E+04	432.38	1.41E+04
	20	498-	508	503.69	86.45	3.33E+05	637.27	3.09E+04
	21	607-	617	612.77	105.20	2.16E+05	533.05	2.88E+04
	22	653-	663	658.43	113.05	1.77E+03	268.12	2.94E+04
	23	675-	682	680.05	116.77	1.97E+02	232.21	2.64E+04
	24	710-	720	715.97	122.95	1.77E+06	1360.33	3.50E+04
	25	1000-	1009	1004.37	172.53	6.60E+02	164.52	1.17E+04
	26	1020-	1030	1025.41	176.15	4.20E+04	267.39	1.24E+04
	27	1089-	1099	1094.71	188.06	5.42E+03	185.92	1.23E+04
	28	1337-	1342	1340.06	230.25	-8.15E+00	106.34	6.39E+03
	29	1437-	1445	1441.73	247.73	1.03E+05	366.28	1.48E+04
	30	2152-	2160	2156.82	370.67	3.30E+03	130.31	6.42E+03
	31	2484-	2492	2488.16	427.64	3.77E+04	247.99	1.11E+04
	32	2690-	2698	2694.54	463.12	1.19E+04	168.74	7.74E+03
	33	3437-	3445	3441.16	591.49	1.53E+04	181.75	8.30E+03
	34	3488-	3496	3492.87	600.38	1.14E+04	164.32	7.31E+03
	35	3694-	3702	3698.04	635.66	6.41E+03	139.20	6.08E+03
	36	4024-	4032	4028.89	692.54	6.27E+03	112.23	2.47E+03

M = First peak in a multiplet region
[illegible] = Other peak in a multiplet region

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        *****
*************************************************************************

Report Generated On              : 12-29-95  1:42:36 PM

Sample Title                     : NOPI-471-GAM1 Attenuation
Spectrum Description             : NOPI-471-GAM1 attenuation
Sample Identification            : NP471ATT
Sample Type                      :
Sample Geometry                  : vial

Peak Locate Threshold            :  3.00
Peak Locate Range (in channels)  :     1 -  4096
Peak Area Range (in channels)    :     1 -  4096
Identification Energy Tolerance  :    1.000 keV

Sample Size                      :   0.000E+00 Unit

Sample Taken On                  :
Acquisition Started              : 12-29-95 11:48:43 AM

Live Time                        :     1800.0 seconds
Real Time                        :     1988.4 seconds


          Energy Calibration Used Done On       : 12-19-95
          Efficiency Calibration Used Done On   : ????????
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NP471ATT.CNF

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-471-GAM1 Attenuation
Peak Locate Performed on: 12-29-95 1:42:11 PM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	32.04	0.2289	5.36	5.24
2	47.34	0.1506	7.99	4.21
3	80.07	0.2930	13.62	5.32
4	95.69	0.1037	16.33	8.38
5	102.33	0.0551	17.42	22.33
6	110.80	0.4507	18.90	3.24
7	117.53	0.1117	20.08	4.40
8	123.28	0.1270	21.01	6.80
9	149.42	0.1485	26.59	3.64
10	160.03	0.0055	27.34	154.09
11	180.75	0.0117	30.93	91.37
12	185.43	0.0324	31.71	16.44
13	193.42	0.0271	33.04	19.83
14	207.03	0.0135	35.45	73.81
15	225.51	0.1986	38.62	5.86
16	246.44	0.0042	42.25	123.46
17	250.67	0.0047	42.94	236.98
18	264.05	0.0343	45.25	27.69
19	271.21	0.1273	46.50	7.82
20	283.40	0.0083	48.58	118.10
21	291.13	0.0143	49.91	64.69
22	310.06	0.3221	53.11	3.10
23	318.25	0.3390	54.62	3.34
24	349.44	0.0396	59.93	26.49
25	368.26	0.1833	63.17	8.18
26	435.37	0.1572	74.70	9.40
27	448.79	0.1161	77.01	11.54
28	503.71	0.0067	86.45	137.56
29	538.82	0.3486	92.47	3.13
30	550.28	0.3059	94.50	3.40
31	572.70	0.1494	98.31	5.83
32	612.81	0.0086	105.21	100.41
33	658.22	0.3270	113.02	3.42
34	674.77	0.2586	115.86	3.12
35	687.18	0.4354	118.00	3.55
36	716.00	0.0030	122.95	273.10
37	938.51	0.1513	161.21	3.10
38	1025.49	0.0383	176.16	27.09
39	1094.88	0.1511	188.09	7.81
40	1230.00	<NA>	211.33	<NA>
41	1324.60	0.1729	227.59	3.27

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	1441.91	0.0394	247.76	38.05
43	1717.33	0.3916	295.11	3.97
44	2046.74	0.2410	351.75	4.90
45	2157.44	0.3715	370.78	5.64
46	2213.11	0.4407	380.35	3.23
47	2285.15	0.2607	392.74	3.63
48	2488.39	0.1207	427.68	13.06
49	2540.15	0.3110	436.58	3.08
50	2694.96	0.2361	463.20	5.47
51	3044.92	0.3374	523.37	3.26
52	3441.62	0.2070	591.57	6.72
53	3492.69	0.3511	600.35	4.74
54	3528.75	0.7565	606.55	4.16
55	3698.77	0.5737	635.78	4.12
56	4025.90	0.4316	691.87	3.14
57	4031.32	0.1349	692.62	7.38

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: NOPI-471-GAM1 Attenuation
Peak Analysis Performed on: 12-29-95 1:42:26 PM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	29-	37	32.04	5.36	3.89E+02	211.82	2.08E+04
	2	44-	50	47.34	7.99	1.56E+02	167.41	1.47E+04
	3	75-	83	80.07	13.62	2.78E+03	211.43	1.95E+04
M	4	90-	128	95.83	16.33	7.08E+03	546.41	2.76E+04
m	5	90-	128	102.18	17.42	1.86E+04	790.39	2.72E+04
m	7	90-	128	117.65	20.08	1.60E+03	456.41	2.66E+04
m	8	90-	128	123.05	21.01	3.21E+03	477.88	2.41E+04
M	9	144-	165	155.52	26.59	2.58E+04	5765.35	2.85E+04
m	10	144-	165	159.88	27.34	3.87E+05	5815.76	3.16E+04
M	11	175-	198	180.79	30.93	8.96E+04	2333.37	2.86E+04
m	12	175-	198	185.28	31.71	2.10E+04	1945.79	3.16E+04
m	13	175-	198	193.05	33.04	9.28E+03	1565.89	2.83E+04
	14	202-	211	207.03	35.45	4.84E+04	350.23	3.29E+04
	15	220-	228	225.51	38.62	4.00E+03	330.11	4.82E+04
M	16	241-	255	246.61	42.25	4.13E+05	11459.0	6.16E+04
m	17	241-	255	250.61	42.94	7.12E+05	11474.8	4.48E+04
M	18	259-	274	264.03	45.25	5.54E+03	608.38	2.36E+04
m	19	259-	274	271.32	46.50	5.59E+02	483.19	2.30E+04
M	20	278-	296	283.44	48.58	2.38E+05	5409.17	2.41E+04
m	21	278-	296	291.17	49.91	6.50E+04	5386.03	1.89E+04
M	22	305-	323	309.79	53.11	9.62E+02	144.74	1.64E+04
m	23	305-	323	318.54	54.62	1.75E+03	222.88	1.64E+04
	24	344-	354	349.44	59.93	1.24E+04	230.20	1.71E+04
	25	363-	373	368.26	63.17	2.38E+03	207.02	1.70E+04
	26	430-	440	435.37	74.70	4.37E+03	234.12	2.12E+04
	27	443-	453	448.79	77.01	7.21E+03	245.37	2.22E+04
	28	498-	508	503.71	86.45	3.31E+05	637.61	3.20E+04
M	29	533-	555	538.70	92.47	3.21E+03	303.66	3.82E+04
m	30	533-	555	550.52	94.50	2.65E+03	261.43	3.24E+04
	31	567-	577	572.70	98.31	3.99E+03	269.02	2.87E+04
	32	607-	617	612.81	105.21	2.14E+05	532.38	2.94E+04
	33	654-	662	658.22	113.02	1.34E+03	231.42	2.44E+04
	34	671-	676	674.77	115.86	-1.18E+03	175.51	1.79E+04
	35	682-	692	687.18	118.00	3.50E+03	299.01	3.60E+04
	36	710-	720	716.00	122.95	1.74E+06	1351.26	3.50E+04
	37	935-	940	938.51	161.21	-7.35E+01	115.99	7.65E+03
	38	1020-	1030	1025.49	176.16	4.21E+04	268.27	1.26E+04
	39	1089-	1099	1094.88	188.09	5.10E+03	187.96	1.27E+04
	40	1227-	1232	1230.00	211.33	-1.46E+02	109.28	6.83E+03
	41	1321-	1328	1324.60	227.59	7.23E+02	134.44	8.63E+03
	42	1437-	1445	1441.91	247.76	1.01E+05	366.04	1.54E+04

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	43	1713-	1721	1717.33	295.11	2.77E+03	136.84	7.45E+03
	44	2042-	2050	2046.74	351.75	4.16E+03	134.90	6.58E+03
	45	2153-	2161	2157.44	370.78	3.45E+03	130.00	6.30E+03
	46	2209-	2217	2213.11	380.35	2.44E+03	125.71	6.24E+03
	47	2282-	2287	2285.15	392.74	2.48E+01	84.92	4.06E+03
	48	2484-	2492	2488.39	427.68	3.70E+04	247.52	1.13E+04
	49	2537-	2542	2540.15	436.58	-1.69E+01	82.32	3.83E+03
	50	2690-	2698	2694.96	463.20	1.17E+04	166.84	7.53E+03
	51	3042-	3046	3044.92	523.37	2.00E+01	72.43	3.16E+03
	52	3437-	3445	3441.62	591.57	1.46E+04	181.66	8.60E+03
	53	3488-	3496	3492.69	600.35	1.08E+04	166.09	7.76E+03
	54	3524-	3532	3528.75	606.55	3.26E+03	115.61	4.73E+03
	55	3694-	3702	3698.77	635.78	6.34E+03	139.02	6.08E+03
M	56	4021-	4035	4024.99	691.87	3.74E+03	427.41	2.60E+03
m	57	4021-	4035	4029.37	692.62	4.53E+03	429.21	1.75E+03

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

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        *****
*************************************************************************

Report Generated On              : 12-29-95  1:44:14 PM

Sample Title                     : NOPI-472-GAM1 Attenuation
Spectrum Description             : NOPI-472-GAM1 attenuation
Sample Identification            : NP472ATT
Sample Type                      :
Sample Geometry                  : vial

Peak Locate Threshold            :  3.00
Peak Locate Range (in channels)  :     1 -  4096
Peak Area Range (in channels)    :     1 -  4096
Identification Energy Tolerance  :    1.000 keV

Sample Size                      :   0.000E+00 Unit

Sample Taken On                  :
Acquisition Started              : 12-29-95 12:22:58 PM

Live Time                        :     1800.0 seconds
Real Time                        :     1980.6 seconds


          Energy Calibration Used Done On       : 12-19-95
          Efficiency Calibration Used Done On   : ????????
```

NP472 ATT.CNF

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-472-GAM1 Attenuation
Peak Locate Performed on: 12-29-95 1:43:48 PM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	32.00	<NA>	5.35	<NA>
2	95.98	0.1452	16.40	6.18
3	102.63	0.0647	17.46	21.96
4	123.39	0.0662	21.06	8.74
5	148.87	0.2670	26.59	3.06
6	160.05	0.0063	27.34	135.62
7	180.75	0.0129	30.94	81.94
8	185.37	0.0369	31.67	16.34
9	189.00	<NA>	32.36	<NA>
10	193.42	0.0287	33.07	18.69
11	207.04	0.0143	35.45	67.59
12	225.99	0.2067	38.70	5.16
13	246.44	0.0043	42.25	119.68
14	250.69	0.0048	42.94	230.67
15	264.05	0.0361	45.25	27.22
16	283.45	0.0121	48.59	114.99
17	291.19	0.0150	49.92	62.24
18	318.99	0.3446	54.69	3.37
19	349.49	0.0184	59.94	25.50
20	446.35	0.1861	76.59	3.35
21	503.76	0.0065	86.46	138.44
22	612.84	0.0084	105.22	101.29
23	658.54	0.3616	113.07	3.07
24	680.49	0.4320	116.85	3.32
25	716.04	0.0030	122.96	273.18
26	784.00	0.0000	134.64	3.81
27	1004.76	0.5522	172.60	3.43
28	1025.60	0.0372	176.18	27.86
29	1095.09	0.2084	188.13	7.57
30	1122.00	<NA>	192.76	<NA>
31	1188.11	0.2422	204.12	4.24
32	1248.82	0.2832	214.56	3.15
33	1442.10	0.0390	247.79	36.68
34	1490.86	0.3085	256.17	3.13
35	1655.00	0.0000	284.40	3.19
36	1882.93	0.3273	323.58	3.43
37	2157.45	0.2448	370.78	3.93
38	2285.00	<NA>	392.71	<NA>
39	2488.61	0.1150	427.72	13.21
40	2585.50	0.4834	444.38	3.05
41	2695.00	0.2608	463.20	7.09

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	3441.89	0.2956	591.62	6.65
43	3493.38	0.3179	600.47	4.77
44	3528.22	0.4760	606.46	3.93
45	3698.83	0.3661	635.79	4.51
46	4029.49	0.5922	692.64	9.01

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: NOPI-472-GAM1 Attenuation
Peak Analysis Performed on: 12-29-95 1:44:02 PM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	29-	37	32.00	5.35	3.54E+02	206.53	1.98E+04
M	2	90-	107	96.26	16.40	3.21E+03	293.17	2.22E+04
m	3	90-	107	102.42	17.46	1.23E+04	405.10	2.21E+04
	4	118-	128	123.39	21.06	2.31E+03	237.30	2.26E+04
M	5	143-	165	155.55	26.59	2.02E+04	4487.17	2.86E+04
m	6	143-	165	159.89	27.34	2.96E+05	4541.90	2.92E+04
M	7	175-	197	180.80	30.94	7.06E+04	1059.35	2.67E+04
m	8	175-	197	185.06	31.67	1.61E+04	747.64	2.68E+04
m	9	175-	197	189.11	32.36	4.90E+03	593.79	2.68E+04
m	10	175-	197	193.19	33.07	8.25E+03	625.49	2.69E+04
	11	202-	212	207.04	35.45	4.24E+04	356.53	3.53E+04
	12	220-	229	225.99	38.70	4.62E+03	351.98	5.17E+04
M	13	241-	255	246.62	42.25	3.84E+05	10278.9	5.89E+04
m	14	241-	255	250.63	42.94	6.65E+05	10295.5	4.28E+04
	15	259-	269	264.05	45.25	8.06E+03	292.05	3.24E+04
M	16	278-	296	283.46	48.59	2.28E+05	5397.51	2.26E+04
m	17	278-	296	291.19	49.92	6.18E+04	5375.33	1.78E+04
	18	313-	323	318.99	54.69	8.89E+02	193.75	1.54E+04
	19	344-	354	349.49	59.94	1.19E+04	222.72	1.58E+04
	20	442-	451	446.35	76.59	8.39E+02	209.81	1.91E+04
	21	498-	508	503.76	86.46	3.28E+05	630.87	2.97E+04
	22	607-	617	612.84	105.22	2.12E+05	528.83	2.86E+04
	23	653-	663	658.54	113.07	2.00E+03	265.44	2.87E+04
	24	675-	682	680.49	116.85	-2.93E+02	228.11	2.57E+04
	25	711-	721	716.04	122.96	1.74E+06	1349.54	3.39E+04
	26	781-	787	784.00	134.64	2.45E+02	133.66	9.30E+03
	27	1001-	1009	1004.76	172.60	9.05E+02	152.00	1.04E+04
	28	1020-	1030	1025.60	176.18	4.27E+04	268.14	1.23E+04
	29	1090-	1100	1095.09	188.13	5.32E+03	185.71	1.22E+04
	30	1120-	1124	1122.00	192.76	-1.24E+02	94.84	5.54E+03
	31	1184-	1192	1188.11	204.12	1.38E+03	151.59	1.01E+04
	32	1246-	1251	1248.82	214.56	-4.71E+01	108.16	6.64E+03
	33	1438-	1446	1442.10	247.79	1.05E+05	365.53	1.34E+04
	34	1488-	1492	1490.86	256.17	-5.33E+01	87.69	4.70E+03
	35	1652-	1657	1655.00	284.40	3.44E+01	92.57	4.82E+03
	36	1880-	1886	1882.93	323.58	-2.03E+01	94.51	4.74E+03
	37	2153-	2161	2157.45	370.78	3.45E+03	129.32	6.22E+03
	38	2282-	2287	2285.00	392.71	1.51E+02	84.05	3.91E+03
	39	2484-	2492	2488.61	427.72	3.72E+04	249.28	1.16E+04
	40	2581-	2589	2585.50	444.38	2.60E+03	126.85	6.32E+03
	41	2690-	2698	2695.00	463.20	1.13E+04	166.96	7.72E+03
	42	3437-	3445	3441.89	591.62	1.42E+04	181.20	8.65E+03

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
43	3489-	3497	3493.38	600.47	1.17E+04	165.61	7.36E+03
44	3524-	3532	3528.22	606.46	3.20E+03	115.78	4.76E+03
45	3694-	3702	3698.83	635.79	6.12E+03	139.33	6.22E+03
46	4025-	4033	4029.49	692.64	5.40E+03	109.35	2.35E+03

M = First peak in a multiplet region
m = Other peak in a multiplet region

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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NP473ATT.CNF

Report Generated On	: 12-29-95 2:09:10 PM
Sample Title	: NOPI-473-GAM1 Attenuation
Spectrum Description	: NOPI-473-GAM1 attenuation
Sample Identification	: NP473ATT
Sample Type	:
Sample Geometry	: vial
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 1 - 4096
Peak Area Range (in channels)	: 1 - 4096
Identification Energy Tolerance	: 1.000 keV
Sample Size	: 0.000E+00 Unit
Sample Taken On	:
Acquisition Started	: 12-29-95 1:30:52 PM
Live Time	: 1800.0 seconds
Real Time	: 1985.5 seconds

Energy Calibration Used Done On	: 12-19-95
Efficiency Calibration Used Done On	: ????????

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-473-GAM1 Attenuation
Peak Locate Performed on: 12-29-95 2:08:47 PM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	32.28	0.1818	5.40	3.98
2	95.78	0.1418	16.34	5.48
3	102.40	0.0583	17.43	22.94
4	117.62	0.1777	20.08	3.30
5	123.35	0.0610	21.05	10.23
6	149.20	0.2428	26.59	5.96
7	160.01	0.0058	27.33	146.56
8	180.70	0.0125	30.93	86.90
9	185.38	0.0365	31.67	15.95
10	189.00	<NA>	32.34	<NA>
11	193.40	0.0274	33.06	20.71
12	207.03	0.0137	35.45	71.50
13	225.76	0.2629	38.67	4.30
14	246.43	0.0043	42.25	123.61
15	250.66	0.0048	42.94	233.94
16	264.00	0.0348	45.24	27.69
17	271.42	0.2557	46.52	3.94
18	283.42	0.0085	48.58	117.43
19	291.12	0.0147	49.91	61.85
20	318.43	0.5141	54.60	3.16
21	349.42	0.0396	59.93	25.71
22	368.63	0.3030	63.23	4.83
23	435.93	0.2407	74.80	6.63
24	448.99	0.1925	77.05	7.83
25	503.76	0.0065	86.46	140.20
26	551.10	0.3542	94.60	3.77
27	573.18	0.1925	98.40	5.32
28	612.86	0.0083	105.22	102.71
29	680.56	0.1208	116.91	4.31
30	686.05	0.3896	117.82	3.02
31	689.26	0.2466	118.51	3.09
32	716.05	0.0030	122.96	273.83
33	817.00	<NA>	140.32	<NA>
34	837.20	0.2642	143.79	3.25
35	1025.67	0.0378	176.20	28.53
36	1095.21	0.2232	188.15	6.68
37	1187.51	0.6253	204.02	4.07
38	1442.20	0.0400	247.81	37.44
39	1811.00	<NA>	311.22	<NA>
40	2047.20	0.3803	351.83	3.21
41	2157.86	0.2636	370.85	3.81

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	2488.74	0.1225	427.74	13.13
43	2695.27	0.2438	463.25	6.11
44	3385.36	0.5747	581.90	4.10
45	3442.22	0.2293	591.67	5.63
46	3493.45	0.3274	600.48	5.04
47	3699.41	0.4891	635.89	4.30
48	4030.02	0.3175	692.74	8.98

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: NOPI-473-GAM1 Attenuation
Peak Analysis Performed on: 12-29-95 2:08:58 PM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	29-	35	32.28	5.40	1.46E+02	174.40	1.60E+04
M	2	90-	107	95.94	16.34	4.68E+03	530.49	2.42E+04
m	3	90-	107	102.24	17.43	1.55E+04	600.87	2.39E+04
M	4	112-	128	117.68	20.08	9.13E+02	161.21	1.92E+04
m	5	112-	128	123.28	21.05	2.66E+03	288.20	1.91E+04
M	6	144-	165	155.52	26.59	2.41E+04	5228.83	2.74E+04
m	7	144-	165	159.85	27.33	3.47E+05	5279.74	3.05E+04
M	8	175-	198	180.76	30.93	7.94E+04	1098.92	2.82E+04
m	9	175-	198	185.05	31.67	1.76E+04	769.27	2.79E+04
m	10	175-	198	188.99	32.34	5.24E+03	608.06	2.77E+04
m	11	175-	198	193.15	33.06	8.67E+03	632.68	2.76E+04
	12	202-	211	207.03	35.45	4.69E+04	345.44	3.21E+04
	13	220-	229	225.76	38.67	4.22E+03	358.79	5.39E+04
M	14	241-	255	246.60	42.25	4.03E+05	11204.4	6.07E+04
m	15	241-	255	250.60	42.94	6.94E+05	11220.2	4.42E+04
M	16	259-	296	263.99	45.24	9.86E+03	2438.10	3.58E+04
m	18	259-	296	283.43	48.58	2.30E+05	4275.25	2.37E+04
m	19	259-	296	291.16	49.91	6.23E+04	3760.05	1.84E+04
	20	314-	323	318.43	54.60	1.05E+03	185.14	1.47E+04
	21	344-	354	349.42	59.93	1.20E+04	227.62	1.67E+04
	22	363-	373	368.63	63.23	1.86E+03	202.03	1.63E+04
	23	430-	440	435.93	74.80	2.32E+03	230.27	2.12E+04
	24	443-	453	448.99	77.05	4.29E+03	238.04	2.20E+04
	25	498-	508	503.76	86.46	3.30E+05	635.12	3.07E+04
	26	546-	556	551.10	94.60	1.56E+03	266.42	2.91E+04
	27	568-	578	573.18	98.40	2.24E+03	264.95	2.85E+04
	28	607-	617	612.86	105.22	2.14E+05	531.55	2.89E+04
M	29	675-	694	680.88	116.91	3.66E+03	296.34	3.73E+04
m	30	675-	694	686.17	117.82	3.36E+03	299.83	4.17E+04
m	31	675-	694	690.19	118.51	2.73E+03	287.34	3.33E+04
	32	711-	721	716.05	122.96	1.75E+06	1351.31	3.41E+04
	33	815-	819	817.00	140.32	-3.40E+02	103.94	6.76E+03
	34	832-	842	837.20	143.79	3.06E+02	187.91	1.47E+04
	35	1020-	1030	1025.67	176.20	4.25E+04	268.29	1.24E+04
	36	1090-	1100	1095.21	188.15	5.68E+03	186.74	1.22E+04
	37	1183-	1191	1187.51	204.02	1.76E+03	153.82	1.03E+04
	38	1438-	1446	1442.20	247.81	1.05E+05	365.89	1.37E+04
	39	1809-	1813	1811.00	311.22	-6.10E+01	78.93	3.81E+03
	40	2043-	2051	2047.20	351.83	2.67E+03	126.11	6.18E+03
	41	2153-	2161	2157.86	370.85	3.66E+03	130.79	6.31E+03
	42	2484-	2492	2488.74	427.74	3.62E+04	248.80	1.20E+04

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
43	2691-	2699	2695.27	463.25	1.22E+04	166.24	7.23E+03
44	3381-	3389	3385.36	581.90	2.82E+03	115.59	4.93E+03
45	3438-	3446	3442.22	591.67	1.52E+04	181.49	8.32E+03
46	3489-	3497	3493.45	600.48	1.14E+04	166.12	7.54E+03
47	3695-	3703	3699.41	635.89	6.25E+03	139.62	6.20E+03
48	4026-	4034	4030.02	692.74	4.90E+03	109.51	2.16E+03

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

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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NP474 ATT.CNF

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Report Generated On              : 12-29-95  2:43:42 PM

Sample Title                     : NOPI-474-GAM1 Attenuation
Spectrum Description             : NOPI-474-GAM1 attenuation
Sample Identification            : NP474ATT
Sample Type                      :
Sample Geometry                  : vial

Peak Locate Threshold            :  3.00
Peak Locate Range (in channels)  :     1 -  4096
Peak Area Range (in channels)    :     1 -  4096
Identification Energy Tolerance  :    1.000 keV

Sample Size                      :   0.000E+00 Unit

Sample Taken On                  :
Acquisition Started              : 12-29-95  2:07:40 PM

Live Time                        :     1800.0 seconds
Real Time                        :     1990.9 seconds


          Energy Calibration Used Done On       : 12-19-95
          Efficiency Calibration Used Done On   : ????????
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****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-474-GAM1 Attenuation
Peak Locate Performed on: 12-29-95 2:43:21 PM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	47.46	0.1515	8.01	3.28
2	96.04	0.1438	16.41	6.50
3	102.60	0.0489	17.46	28.77
4	123.35	0.1091	21.06	10.26
5	149.34	0.2702	26.59	3.55
6	160.03	0.0051	27.34	167.75
7	180.73	0.0110	30.93	98.55
8	185.40	0.0314	31.69	18.10
9	193.40	0.0264	33.03	21.47
10	207.03	0.0126	35.45	78.15
11	226.04	0.2260	38.71	3.20
12	246.45	0.0040	42.25	126.26
13	250.68	0.0046	42.94	245.36
14	263.98	0.0332	45.24	29.21
15	283.44	0.0116	48.58	121.88
16	291.16	0.0142	49.92	64.79
17	319.02	0.1585	54.70	5.70
18	349.43	0.0388	59.93	27.10
19	503.78	0.0064	86.47	142.08
20	612.87	0.0082	105.22	104.17
21	658.68	0.2349	113.10	4.99
22	687.01	0.3910	117.97	3.65
23	716.07	0.0030	122.96	274.38
24	766.12	0.2969	131.57	3.42
25	798.00	0.0000	137.05	4.59
26	1025.66	0.0376	176.19	29.42
27	1095.09	0.1549	188.13	9.01
28	1442.28	0.0404	247.82	37.11
29	1497.00	<NA>	257.23	<NA>
30	2157.38	0.2559	370.77	5.31
31	2213.30	0.6513	380.39	3.40
32	2488.99	0.0918	427.78	13.10
33	2585.94	0.4514	444.45	3.26
34	2695.34	0.2819	463.26	6.63
35	3108.98	0.3851	534.38	3.21
36	3442.40	0.2960	591.70	6.51
37	3493.63	0.3497	600.51	5.25
38	3699.19	0.5068	635.85	4.42
39	4029.99	0.5154	692.73	8.40

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: NOPI-474-GAM1 Attenuation
Peak Analysis Performed on: 12-29-95 2:43:32 PM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	44-	50	47.46	8.01	2.63E+02	165.98	1.44E+04
M	2	91-	107	96.32	16.41	4.51E+03	437.62	2.42E+04
m	3	91-	107	102.40	17.46	1.90E+04	526.64	2.37E+04
	4	119-	128	123.35	21.06	2.49E+03	230.41	2.24E+04
M	5	144-	165	155.55	26.59	3.12E+04	6917.93	3.21E+04
m	6	144-	165	159.87	27.34	4.53E+05	6964.67	3.25E+04
M	7	175-	198	180.79	30.93	1.01E+05	2410.97	2.92E+04
m	8	175-	198	185.18	31.69	2.24E+04	2012.51	2.91E+04
m	9	175-	198	193.01	33.03	9.65E+03	1589.33	2.90E+04
	10	202-	212	207.03	35.45	5.28E+04	377.19	3.73E+04
	11	221-	229	226.04	38.71	3.35E+03	341.30	5.20E+04
M	12	241-	255	246.62	42.25	4.40E+05	12269.8	6.43E+04
	13	241-	255	250.63	42.94	7.56E+05	12285.3	4.67E+04
	14	259-	268	263.98	45.24	9.74E+03	284.47	3.15E+04
M	15	278-	296	283.45	48.58	2.50E+05	5855.89	2.42E+04
m	16	278-	296	291.20	49.92	6.78E+04	5833.72	1.87E+04
	17	314-	324	319.02	54.70	2.31E+03	201.80	1.61E+04
	18	344-	354	349.43	59.93	1.23E+04	229.76	1.70E+04
	19	498-	508	503.78	86.47	3.36E+05	639.37	3.06E+04
	20	607-	617	612.87	105.22	2.17E+05	534.50	2.89E+04
	21	653-	663	658.68	113.10	2.20E+03	267.56	2.91E+04
	22	682-	692	687.01	117.97	3.52E+03	300.59	3.64E+04
	23	711-	721	716.07	122.96	1.78E+06	1363.75	3.41E+04
	24	761-	771	766.12	131.57	5.74E+02	195.75	1.58E+04
	25	795-	800	798.00	137.05	1.43E+02	119.69	8.01E+03
	26	1020-	1030	1025.66	176.19	4.31E+04	269.57	1.24E+04
	27	1090-	1100	1095.09	188.13	5.52E+03	187.12	1.24E+04
	28	1438-	1446	1442.28	247.82	1.05E+05	365.82	1.36E+04
	29	1493-	1499	1497.00	257.23	-1.29E+02	112.47	6.74E+03
	30	2153-	2161	2157.38	370.77	3.42E+03	130.61	6.39E+03
	31	2209-	2217	2213.30	380.39	2.64E+03	125.11	6.09E+03
	32	2484-	2492	2488.99	427.78	3.60E+04	247.63	1.18E+04
	33	2581-	2589	2585.94	444.45	2.75E+03	127.94	6.39E+03
	34	2691-	2699	2695.34	463.26	1.20E+04	167.26	7.50E+03
	35	3106-	3111	3108.98	534.38	3.52E+01	79.16	3.52E+03
	36	3438-	3446	3442.40	591.70	1.49E+04	180.37	8.27E+03
	37	3489-	3497	3493.63	600.51	1.14E+04	166.01	7.54E+03
	38	3695-	3703	3699.19	635.85	6.44E+03	140.15	6.19E+03
	39	4025-	4033	4029.99	692.73	5.86E+03	109.19	2.29E+03

M = First peak in a multiplet region
m = Other peak in a multiplet region

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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NP475ATT.CNF

Report Generated On	: 12-29-95 3:25:45 PM
Sample Title	: NOPI-475-GAM1 Attenuation
Spectrum Description	: NOPI-475-GAM1 attenuation
Sample Identification	: NP475ATT
Sample Type	:
Sample Geometry	: vial
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 1 - 4096
Peak Area Range (in channels)	: 1 - 4096
Identification Energy Tolerance	: 1.000 keV
Sample Size	: 0.000E+00 Unit
Sample Taken On	:
Acquisition Started	: 12-29-95 2:42:16 PM
Live Time	: 1800.0 seconds
Real Time	: 1990.6 seconds

Energy Calibration Used Done On	: 12-19-95
Efficiency Calibration Used Done On	: ????????

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-475-GAM1 Attenuation
Peak Locate Performed on: 12-29-95 3:25:23 PM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	32.24	0.2344	5.39	3.34
2	95.99	0.1267	16.41	6.30
3	102.45	0.0470	17.45	29.62
4	123.37	0.0561	21.06	10.65
5	141.39	0.3713	25.76	3.19
6	149.47	0.1244	26.60	3.89
7	160.02	0.0050	27.33	168.15
8	180.74	0.0110	30.93	97.56
9	185.34	0.0309	31.69	20.65
10	193.41	0.0248	33.04	22.36
11	207.05	0.0126	35.45	78.50
12	226.10	0.2002	38.72	3.58
13	246.44	0.0040	42.25	129.60
14	250.69	0.0045	42.94	245.79
15	264.04	0.0339	45.25	29.18
16	283.45	0.0116	48.59	121.45
17	291.14	0.0142	49.91	64.08
18	319.08	0.3211	54.71	4.40
19	349.55	0.0407	59.95	24.93
20	503.80	0.0063	86.47	142.73
21	522.18	0.2651	89.63	3.36
22	612.89	0.0082	105.22	103.59
23	658.57	0.3270	113.08	3.63
24	681.22	0.2426	116.91	5.06
25	687.78	0.7495	118.02	3.03
26	716.08	0.0030	122.97	273.49
27	1025.76	0.0389	176.21	30.63
28	1095.18	0.1518	188.15	7.85
29	1209.74	0.3435	207.84	3.18
30	1442.31	0.0283	247.83	37.45
31	1865.00	<NA>	320.50	<NA>
32	2060.81	0.2454	354.17	3.55
33	2157.95	0.4995	370.87	3.61
34	2489.05	0.0914	427.79	13.62
35	2695.54	0.2325	463.30	6.25
36	2763.00	<NA>	474.90	<NA>
37	3385.43	0.5450	581.91	3.12
38	3442.37	0.2948	591.70	6.19
39	3493.55	0.3612	600.50	5.15
40	3699.56	0.5213	635.92	3.43
41	4027.44	0.3214	692.07	3.30

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	4031.46	0.1176	692.73	9.78

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: NOPI-475-GAM1 Attenuation
Peak Analysis Performed on: 12-29-95 3:25:35 PM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	29-	37	32.24	5.39	3.62E+02	208.49	2.02E+04
M	2	90-	107	96.33	16.41	4.86E+03	471.50	2.32E+04
m	3	90-	107	102.35	17.45	1.97E+04	558.49	2.33E+04
	4	118-	128	123.37	21.06	2.62E+03	245.03	2.41E+04
M	5	136-	165	150.67	25.76	1.58E+04	3274.50	2.52E+04
m	6	136-	165	155.57	26.60	3.30E+04	5010.80	2.69E+04
m	7	136-	165	159.85	27.33	4.53E+05	5893.85	2.95E+04
M	8	175-	198	180.78	30.93	1.00E+05	2425.55	2.94E+04
m	9	175-	198	185.18	31.69	2.24E+04	2025.68	2.91E+04
m	10	175-	198	193.01	33.04	1.01E+04	1606.67	2.89E+04
	11	202-	212	207.05	35.45	5.37E+04	378.22	3.72E+04
	12	221-	229	226.10	38.72	3.46E+03	341.67	5.21E+04
	13	241-	255	246.61	42.25	4.41E+05	11878.5	6.42E+04
	14	241-	255	250.62	42.94	7.55E+05	11894.5	4.66E+04
	15	259-	268	264.04	45.25	9.44E+03	283.08	3.13E+04
M	16	278-	296	283.46	48.59	2.49E+05	5764.99	2.46E+04
m	17	278-	296	291.18	49.91	6.77E+04	5742.40	1.89E+04
	18	314-	324	319.08	54.71	2.27E+03	202.83	1.63E+04
	19	344-	354	349.55	59.95	1.19E+04	230.87	1.74E+04
	20	498-	508	503.80	86.47	3.35E+05	638.39	3.06E+04
	21	519-	527	522.18	89.63	-1.95E+02	226.04	2.40E+04
	22	607-	617	612.89	105.22	2.16E+05	534.65	2.92E+04
	23	653-	663	658.57	113.08	2.11E+03	265.43	2.86E+04
M	24	676-	692	680.85	116.91	4.47E+03	383.14	4.08E+04
m	25	676-	692	687.33	118.02	4.43E+03	382.24	4.21E+04
	26	711-	721	716.08	122.97	1.77E+06	1361.46	3.43E+04
	27	1020-	1030	1025.76	176.21	4.30E+04	268.84	1.23E+04
	28	1090-	1100	1095.18	188.15	5.50E+03	186.24	1.22E+04
	29	1205-	1213	1209.74	207.84	9.47E+02	151.93	1.04E+04
	30	1438-	1446	1442.31	247.83	1.05E+05	366.69	1.37E+04
	31	1861-	1867	1865.00	320.50	-1.92E+02	101.52	5.50E+03
	32	2057-	2063	2060.81	354.17	6.19E+01	93.66	4.60E+03
	33	2153-	2161	2157.95	370.87	3.47E+03	131.83	6.53E+03
	34	2485-	2493	2489.05	427.79	3.74E+04	247.62	1.12E+04
	35	2691-	2699	2695.54	463.30	1.20E+04	167.64	7.51E+03
	36	2760-	2765	2763.00	474.90	-6.26E+01	78.72	3.53E+03
	37	3381-	3389	3385.43	581.91	2.63E+03	115.54	5.01E+03
	38	3438-	3446	3442.37	591.70	1.49E+04	182.27	8.53E+03
	39	3489-	3497	3493.55	600.50	1.07E+04	164.80	7.65E+03
	40	3695-	3703	3699.56	635.92	6.35E+03	139.78	6.18E+03
M	41	4023-	4035	4026.17	692.07	3.20E+03	519.76	2.34E+03
m	42	4023-	4035	4030.00	692.73	4.03E+03	521.33	1.86E+03

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts

M = First peak in a multiplet region
m = Other peak in a multiplet region

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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DP1B.CNF

Report Generated On	:	1-04-96 9:24:46 AM
Sample Title	:	DP1B
Spectrum Description	:	DP1B standard
Sample Identification	:	DP1B
Sample Type	:	
Sample Geometry	:	
Peak Locate Threshold	:	2.00
Peak Locate Range (in channels)	:	1 - 4096
Peak Area Range (in channels)	:	1 - 4096
Identification Energy Tolerance	:	1.000 keV
Sample Size	:	0.000E+00 Unit
Sample Taken On	:	
Acquisition Started	:	1-03-96 8:39:54 AM
Live Time	:	80000.0 seconds
Real Time	:	80026.9 seconds

Energy Calibration Used Done On	:	12-19-95
Efficiency Calibration Used Done On	:	????????

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: DP1B
Peak Locate Performed on: 1-04-96 9:23:52 AM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 2.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	26.17	0.4127	4.35	2.24
2	31.59	0.1102	5.39	5.03
3	37.35	0.0740	6.24	8.43
4	46.96	0.4353	7.92	2.66
5	53.54	0.2122	9.06	2.36
6	63.61	0.0523	10.80	22.82
7	76.42	0.0617	12.99	24.72
8	89.38	0.0412	15.35	14.16
9	94.73	0.0398	16.15	32.26
10	104.35	0.0777	17.79	8.06
11	110.96	0.0731	18.94	18.52
12	114.84	0.1298	19.64	7.18
13	149.77	0.0788	25.60	13.67
14	159.86	0.0880	27.35	13.38
15	191.69	0.3346	32.81	2.01
16	198.58	0.2536	33.99	2.14
17	213.68	0.3507	36.59	2.50
18	258.15	0.4428	44.23	2.17
19	271.42	0.0229	46.52	47.85
20	292.36	0.1060	50.12	10.71
21	298.09	0.5182	51.10	2.11
22	310.24	0.0482	53.19	21.20
23	354.00	0.0000	60.60	2.90
24	357.00	<NA>	61.68	<NA>
25	368.83	0.0211	63.26	45.27
26	394.18	0.0860	67.62	11.55
27	424.65	0.2163	72.83	2.89
28	435.91	0.0196	74.78	44.72
29	449.14	0.0154	77.07	57.04
30	461.93	0.0624	79.30	14.64
31	472.25	0.0644	81.07	14.09
32	488.14	0.0864	83.82	15.59
33	497.41	0.2308	85.37	2.40
34	508.56	0.1569	87.20	17.11
35	523.14	0.1078	89.79	12.74
36	539.08	0.0684	92.53	15.85
37	552.04	0.1405	94.76	6.90
38	568.38	0.2009	97.64	2.95
39	573.42	0.1449	98.41	6.97
40	595.74	0.8022	102.28	2.47
41	615.03	0.4975	105.59	2.48

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	636.05	0.8038	109.18	3.07
43	648.05	0.7095	111.34	2.41
44	656.94	0.1361	112.80	6.91
45	712.68	0.1970	122.38	3.41
46	758.58	0.2639	130.27	2.05
47	810.00	<NA>	139.11	<NA>
48	828.86	0.3793	142.36	2.55
49	837.48	0.1788	143.84	8.08
50	898.10	0.1740	154.26	5.38
51	919.00	<NA>	157.85	<NA>
52	950.50	0.3399	163.27	2.99
53	998.00	<NA>	171.44	<NA>
54	1020.19	0.4214	175.25	2.07
55	1083.12	0.1084	186.07	9.48
56	1116.00	<NA>	191.73	<NA>
57	1135.41	0.2477	195.06	2.24
58	1195.77	0.5156	205.44	3.44
59	1205.02	0.7492	207.03	2.25
60	1270.00	<NA>	218.20	<NA>
61	1363.07	0.4955	234.20	2.27
62	1373.91	0.3800	236.07	3.04
63	1389.04	0.5804	238.67	2.84
64	1408.97	0.1089	242.10	14.13
65	1454.19	0.2747	249.87	3.16
66	1492.13	0.5026	256.39	2.88
67	1507.98	0.4162	259.12	3.51
68	1522.94	0.5486	261.69	2.11
69	1527.11	0.4091	262.41	2.54
70	1569.06	0.5241	269.68	3.01
71	1579.03	0.5521	271.41	3.35
72	1649.96	0.4020	283.53	2.97
73	1665.51	0.5623	286.20	2.10
74	1718.82	0.0637	295.37	15.83
75	1746.66	0.6275	300.15	2.86
76	1762.28	0.3134	302.84	2.29
77	1896.79	0.3117	325.97	2.71
78	2016.00	0.0001	346.46	2.28
79	2032.16	0.6321	349.24	2.14
80	2048.97	0.0804	352.13	17.25
81	2068.14	0.3689	355.43	2.67
82	2103.00	<NA>	361.42	<NA>
83	2273.00	<NA>	390.65	<NA>
84	2336.00	0.0002	401.48	2.04
85	2438.00	<NA>	419.02	<NA>
86	2562.00	<NA>	440.34	<NA>
87	2625.80	0.3340	451.31	2.58
88	2638.00	<NA>	453.40	<NA>
89	2826.00	<NA>	485.73	<NA>
90	2920.00	<NA>	501.89	<NA>
91	2940.40	0.2694	505.40	2.10

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
92	3018.00	0.0001	518.74	2.20
93	3030.00	0.0001	520.80	2.52
94	3301.00	<NA>	567.39	<NA>
95	3310.00	<NA>	568.94	<NA>
96	3355.64	0.3057	576.79	2.01
97	3375.00	<NA>	580.12	<NA>
98	3488.06	0.4899	599.59	2.36
99	3498.95	0.5593	601.41	2.09
100	3547.57	0.2293	609.79	5.26
101	3635.00	0.0002	624.82	2.06
102	3843.84	0.4391	660.73	2.13
103	3849.88	0.4444	661.76	2.31
104	3863.45	0.6850	664.10	2.00
105	3929.00	<NA>	675.37	<NA>
106	3957.00	<NA>	680.18	<NA>
107	3979.82	0.4407	684.10	2.04
108	4031.74	0.1552	693.03	4.88

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: DP1B
Peak Analysis Performed on: 1-04-96 9:24:15 AM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	2	24-	67	32.22	5.39	-4.86E+01	70.90	5.94E+03
m	3	24-	67	37.19	6.24	-1.28E+02	98.17	5.88E+03
m	6	24-	67	63.71	10.80	-6.81E+02	395.80	5.62E+03
	7	71-	81	76.42	12.99	1.59E+04	193.64	9.00E+03
M	8	84-	119	90.15	15.35	1.09E+04	1338.59	1.02E+04
m	9	84-	119	94.83	16.15	1.80E+04	1541.21	9.46E+03
m	10	84-	119	104.34	17.79	1.77E+03	848.94	8.30E+03
m	11	84-	119	111.02	18.94	4.32E+03	1037.46	7.20E+03
m	12	84-	119	115.07	19.64	2.61E+03	925.21	6.33E+03
M	13	145-	164	149.79	25.60	2.04E+03	117.65	4.31E+03
m	14	145-	164	159.92	27.35	1.74E+03	103.32	4.53E+03
	16	189-	200	198.58	33.99	-2.57E+02	120.03	5.84E+03
	17	210-	218	213.68	36.59	2.92E+02	95.51	4.13E+03
	18	253-	262	258.15	44.23	1.13E+02	105.43	4.85E+03
	19	266-	276	271.42	46.52	2.29E+04	185.96	4.91E+03
	20	287-	300	292.36	50.12	2.15E+03	140.91	6.34E+03
	22	305-	315	310.24	53.19	5.39E+03	131.17	4.97E+03
M	23	349-	373	353.34	60.60	5.68E+01	64.49	5.17E+03
m	24	349-	373	359.59	61.68	6.62E+01	63.51	5.16E+03
m	25	349-	373	368.80	63.26	2.14E+04	294.47	4.59E+03
	26	389-	399	394.18	67.62	2.51E+03	127.73	5.80E+03
M	27	419-	440	424.46	72.83	5.69E+02	327.54	5.31E+03
m	28	419-	440	435.84	74.78	3.16E+04	431.61	6.08E+03
	29	444-	454	449.14	77.07	5.58E+04	267.30	6.59E+03
M	30	457-	477	462.12	79.30	3.34E+03	231.34	6.31E+03
m	31	457-	477	472.38	81.07	3.83E+03	238.85	5.09E+03
M	32	483-	513	488.38	83.82	9.65E+03	631.52	6.27E+03
m	34	483-	513	508.06	87.20	1.67E+04	653.09	6.95E+03
	35	518-	528	523.14	89.79	7.00E+03	141.16	5.43E+03
	36	534-	544	539.08	92.53	2.58E+04	197.13	5.45E+03
	37	547-	557	552.04	94.76	1.47E+03	129.29	6.16E+03
M	38	563-	578	568.78	97.64	5.01E+02	50.87	3.59E+03
m	39	563-	578	573.25	98.41	1.47E+03	109.40	3.55E+03
	40	591-	600	595.74	102.28	2.35E+02	85.92	3.16E+03
	41	611-	620	615.03	105.59	1.18E+02	86.18	3.23E+03
M	42	631-	661	635.87	109.18	4.00E+02	71.93	3.57E+03

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
m	43	631-	661	648.44	111.34	3.92E+02	70.55	3.23E+03
m	44	631-	661	656.96	112.80	1.47E+03	162.85	3.21E+03
	45	709-	717	712.68	122.38	2.31E+02	76.74	2.64E+03
	46	754-	762	758.58	130.27	1.60E+02	77.96	2.77E+03
	47	807-	812	810.00	139.11	3.89E+01	57.27	1.83E+03
	49	825-	842	837.48	143.84	2.95E+03	147.39	5.73E+03
	50	893-	903	898.10	154.26	1.16E+03	96.97	3.45E+03
	51	917-	921	919.00	157.85	-1.43E+02	50.80	1.65E+03
	52	945-	955	950.50	163.27	7.75E+02	91.39	3.19E+03
	53	993-	1000	998.00	171.44	6.41E+01	64.97	2.06E+03
	54	1015-	1022	1020.19	175.25	-2.38E+01	65.31	2.13E+03
	55	1078-	1088	1083.12	186.07	1.93E+04	163.94	3.18E+03
	56	1113-	1118	1116.00	191.73	2.72E+00	51.44	1.49E+03
	57	1132-	1138	1135.41	195.06	1.97E+01	59.19	1.84E+03
	58	1191-	1207	1195.77	205.44	7.08E+02	109.27	3.55E+03
	60	1268-	1274	1270.00	218.20	-3.18E+01	48.65	1.27E+03
	62	1361-	1377	1373.91	236.07	1.08E+03	101.57	2.94E+03
	63	1385-	1393	1389.04	238.67	5.10E+02	61.35	1.52E+03
	64	1404-	1412	1408.97	242.10	1.33E+04	132.95	2.07E+03
	65	1452-	1457	1454.19	249.87	-1.24E+01	39.56	8.92E+02
	66	1488-	1496	1492.13	256.39	4.35E+02	58.70	1.41E+03
	67	1503-	1511	1507.98	259.12	7.37E+02	60.28	1.36E+03
M	70	1565-	1583	1569.43	269.68	1.01E+03	73.19	1.70E+03
	71	1565-	1583	1579.45	271.41	8.60E+02	66.95	2.66E+03
	72	1645-	1652	1649.96	283.53	7.83E+01	48.89	1.14E+03
	73	1661-	1669	1665.51	286.20	2.59E+02	54.10	1.25E+03
	74	1714-	1722	1718.82	295.37	2.48E+04	177.53	3.15E+03
	75	1742-	1750	1746.66	300.15	3.24E+02	52.63	1.15E+03
	76	1759-	1766	1762.28	302.84	7.99E+01	46.62	1.04E+03
	77	1894-	1900	1896.79	325.97	-1.41E+01	39.09	8.14E+02
	78	2014-	2018	2016.00	346.46	-2.53E+01	34.94	7.56E+02
	79	2028-	2034	2032.16	349.24	8.73E+01	45.11	1.02E+03
	80	2044-	2052	2048.97	352.13	3.48E+04	215.87	5.55E+03
	81	2064-	2070	2068.14	355.43	-1.12E+01	38.68	7.96E+02
	82	2100-	2105	2103.00	361.42	-6.75E+00	33.86	6.53E+02
	83	2271-	2275	2273.00	390.65	-1.99E+01	31.97	6.29E+02
	84	2332-	2337	2336.00	401.48	-7.55E+01	38.67	8.69E+02
	85	2434-	2440	2438.00	419.02	5.80E+01	40.45	8.33E+02
	86	2559-	2564	2562.00	440.34	-1.91E+01	31.20	5.57E+02
	87	2622-	2628	2625.80	451.31	-1.78E+01	33.96	6.20E+02
	88	2635-	2642	2638.00	453.40	-5.99E+01	38.71	7.70E+02
	89	2823-	2828	2826.00	485.73	-4.69E+01	28.73	4.94E+02
	90	2916-	2922	2920.00	501.89	3.17E+01	31.39	5.01E+02
	91	2938-	2944	2940.40	505.40	-5.14E+00	30.41	4.94E+02
	92	3015-	3020	3018.00	518.74	-2.75E+01	26.38	4.07E+02

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	93	3027-	3033	3030.00	520.80	-1.56E+01	30.30	4.95E+02
	94	3298-	3312	3301.00	567.39	-4.26E+01	54.50	1.04E+03
	96	3352-	3359	3355.64	576.79	4.37E+01	31.84	4.83E+02
	97	3371-	3377	3375.00	580.12	-3.98E+01	31.72	5.42E+02
M	98	3485-	3501	3488.23	599.59	1.63E+00	39.29	2.19E+02
m	99	3485-	3501	3498.86	601.41	9.67E-01	23.37	2.23E+02
	100	3543-	3551	3547.57	609.79	1.32E+04	153.67	4.83E+03
	101	3630-	3638	3635.00	624.82	4.51E+01	33.31	4.98E+02
	104	3860-	3865	3863.45	664.10	-3.16E+01	24.20	3.50E+02
	105	3925-	3931	3929.00	675.37	7.71E+00	27.04	3.66E+02
	106	3953-	3961	3957.00	680.18	1.83E+00	31.65	4.68E+02
	107	3977-	3982	3979.82	684.10	-6.43E+00	24.88	3.54E+02
	108	4029-	4035	4031.74	693.03	1.46E+02	24.14	7.70E+01

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

****
***** B A C K G R O U N D S U B T R A C T R E P O R T *****
****

Detector Name: DET01
Sample Title: DP1B
Peak Analysis Performed on: 1-04-96 9:23:52 AM

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
m	1	4.35	0.00E+00	0.00			0.00E+00	0.00E+00
M	2	5.39	-4.86E+01	70.90			-4.86E+01	7.09E+01
m	3	6.24	-1.28E+02	98.17			-1.28E+02	9.82E+01
m	4	7.92	0.00E+00	0.00			0.00E+00	0.00E+00
m	5	9.06	0.00E+00	0.00			0.00E+00	0.00E+00
m	6	10.80	-6.81E+02	395.80	1.54E+02	3.60E+01	-8.35E+02	3.97E+02
	7	12.99	1.59E+04	193.64	4.47E+01	2.75E+01	1.59E+04	1.96E+02
M	8	15.35	1.09E+04	1338.59			1.09E+04	1.34E+03
m	9	16.15	1.80E+04	1541.21			1.80E+04	1.54E+03
m	10	17.79	1.77E+03	848.94			1.77E+03	8.49E+02
m	11	18.94	4.32E+03	1037.46			4.32E+03	1.04E+03
m	12	19.64	2.61E+03	925.21			2.61E+03	9.25E+02
M	13	25.60	2.04E+03	117.65			2.04E+03	1.18E+02
m	14	27.35	1.74E+03	103.32			1.74E+03	1.03E+02
	15	32.81	0.00E+00	0.00	1.06E+01	1.70E+01	-1.06E+01	1.70E+01
	16	33.99	-2.57E+02	120.03	1.06E+01	1.70E+01	-2.68E+02	1.21E+02
	17	36.59	2.92E+02	95.51			2.92E+02	9.55E+01
	18	44.23	1.13E+02	105.43			1.13E+02	1.05E+02
	19	46.52	2.29E+04	185.96			2.29E+04	1.86E+02
	20	50.12	2.15E+03	140.91			2.15E+03	1.41E+02
	21	51.10	0.00E+00	0.00			0.00E+00	0.00E+00
	22	53.19	5.39E+03	131.17			5.39E+03	1.31E+02
M	23	60.60	5.68E+01	64.49	1.06E+01	1.52E+01	4.61E+01	6.63E+01
m	24	61.68	6.62E+01	63.51	1.06E+01	1.52E+01	5.55E+01	6.53E+01
m	25	63.26	2.14E+04	294.47	5.19E+01	2.82E+01	2.14E+04	2.96E+02
	26	67.62	2.51E+03	127.73			2.51E+03	1.28E+02
M	27	72.83	5.69E+02	327.54			5.69E+02	3.28E+02
m	28	74.78	3.16E+04	431.61			3.16E+04	4.32E+02
	29	77.07	5.58E+04	267.30			5.58E+04	2.67E+02
M	30	79.30	3.34E+03	231.34			3.34E+03	2.31E+02
m	31	81.07	3.83E+03	238.85			3.83E+03	2.39E+02
M	32	83.82	9.65E+03	631.52			9.65E+03	6.32E+02
m	33	85.37	0.00E+00	0.00			0.00E+00	0.00E+00
m	34	87.20	1.67E+04	653.09			1.67E+04	6.53E+02
	35	89.79	7.00E+03	141.16			7.00E+03	1.41E+02
	36	92.53	2.58E+04	197.13			2.58E+04	1.97E+02
	37	94.76	1.47E+03	129.29			1.47E+03	1.29E+02
M	38	97.64	5.01E+02	50.87			5.01E+02	5.09E+01
m	39	98.41	1.47E+03	109.40			1.47E+03	1.09E+02
	40	102.28	2.35E+02	85.92			2.35E+02	8.59E+01
	41	105.59	1.18E+02	86.18			1.18E+02	8.62E+01
	42	109.18	4.00E+02	71.93			4.00E+02	7.19E+01

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
m	43	111.34	3.92E+02	70.55	-1.31E+01	1.36E+01	4.05E+02	7.18E+01
m	44	112.80	1.47E+03	162.85	-1.31E+01	1.36E+01	1.48E+03	1.63E+02
	45	122.38	2.31E+02	76.74			2.31E+02	7.67E+01
	46	130.27	1.60E+02	77.96	0.00E+00	0.00E+00	1.60E+02	7.80E+01
	47	139.11	3.89E+01	57.27			3.89E+01	5.73E+01
	48	142.36	0.00E+00	0.00			0.00E+00	0.00E+00
	49	143.84	2.95E+03	147.39			2.95E+03	1.47E+02
	50	154.26	1.16E+03	96.97			1.16E+03	9.70E+01
	51	157.85	-1.43E+02	50.80			-1.43E+02	5.08E+01
	52	163.27	7.75E+02	91.39			7.75E+02	9.14E+01
	53	171.44	6.41E+01	64.97			6.41E+01	6.50E+01
	54	175.25	-2.38E+01	65.31	-1.36E+01	1.56E+01	-1.02E+01	6.72E+01
	55	186.07	1.93E+04	163.94	1.49E+02	3.34E+01	1.92E+04	1.67E+02
	56	191.73	2.72E+00	51.44			2.72E+00	5.14E+01
	57	195.06	1.97E+01	59.19	6.97E+00	1.22E+01	1.27E+01	6.04E+01
	58	205.44	7.08E+02	109.27	5.26E+00	1.33E+01	7.03E+02	1.10E+02
	59	207.03	0.00E+00	0.00			0.00E+00	0.00E+00
	60	218.20	-3.18E+01	48.65			-3.18E+01	4.86E+01
	61	234.20	0.00E+00	0.00			0.00E+00	0.00E+00
	62	236.07	1.08E+03	101.57			1.08E+03	1.02E+02
	63	238.67	5.10E+02	61.35			5.10E+02	6.13E+01
	64	242.10	1.33E+04	132.95			1.33E+04	1.33E+02
	65	249.87	-1.24E+01	39.56	3.89E+00	8.81E+00	-1.63E+01	4.05E+01
	66	256.39	4.35E+02	58.70			4.35E+02	5.87E+01
	67	259.12	7.37E+02	60.28			7.37E+02	6.03E+01
	68	261.69	0.00E+00	0.00			0.00E+00	0.00E+00
	69	262.41	0.00E+00	0.00			0.00E+00	0.00E+00
M	70	269.68	1.01E+03	73.19			1.01E+03	7.32E+01
m	71	271.41	8.60E+02	66.95			8.60E+02	6.69E+01
	72	283.53	7.83E+01	48.89			7.83E+01	4.89E+01
	73	286.20	2.59E+02	54.10			2.59E+02	5.41E+01
	74	295.37	2.48E+04	177.53			2.48E+04	1.78E+02
	75	300.15	3.24E+02	52.63			3.24E+02	5.26E+01
	76	302.84	7.99E+01	46.62			7.99E+01	4.66E+01
	77	325.97	-1.41E+01	39.09			-1.41E+01	3.91E+01
	78	346.46	-2.53E+01	34.94			-2.53E+01	3.49E+01
	79	349.24	8.73E+01	45.11	-1.23E+01	7.07E+00	9.96E+01	4.57E+01
	80	352.13	3.48E+04	215.87			3.48E+04	2.16E+02
	81	355.43	-1.12E+01	38.68			-1.12E+01	3.87E+01
	82	361.42	-6.75E+00	33.86			-6.75E+00	3.39E+01
	83	390.65	-1.99E+01	31.97			-1.99E+01	3.20E+01
	84	401.48	-7.55E+01	38.67			-7.55E+01	3.87E+01
	85	419.02	5.80E+01	40.45			5.80E+01	4.05E+01
	86	440.34	-1.91E+01	31.20			-1.91E+01	3.12E+01
	87	451.31	-1.78E+01	33.96			-1.78E+01	3.40E+01
	88	453.40	-5.99E+01	38.71			-5.99E+01	3.87E+01
	89	485.73	-4.69E+01	28.73			-4.69E+01	2.87E+01
	90	501.89	3.17E+01	31.39			3.17E+01	3.14E+01
	91	505.40	-5.14E+00	30.41			-5.14E+00	3.04E+01
	92	518.74	-2.75E+01	26.38			-2.75E+01	2.64E+01

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
	93	520.80	-1.56E+01	30.30			-1.56E+01	3.03E+01
	94	567.39	-4.26E+01	54.50			-4.26E+01	5.45E+01
	95	568.94	0.00E+00	0.00	2.31E+00	5.89E+00	-2.31E+00	5.89E+00
	96	576.79	4.37E+01	31.84			4.37E+01	3.18E+01
	97	580.12	-3.98E+01	31.72			-3.98E+01	3.17E+01
M	98	599.59	1.63E+00	39.29			1.63E+00	3.93E+01
m	99	601.41	9.67E-01	23.37			9.67E-01	2.34E+01
	100	609.79	1.32E+04	153.67			1.32E+04	1.54E+02
	101	624.82	4.51E+01	33.31			4.51E+01	3.33E+01
	102	660.73	0.00E+00	0.00			0.00E+00	0.00E+00
	103	661.76	0.00E+00	0.00			0.00E+00	0.00E+00
	104	664.10	-3.16E+01	24.20			-3.16E+01	2.42E+01
	105	675.37	7.71E+00	27.04			7.71E+00	2.70E+01
	106	680.18	1.83E+00	31.65			1.83E+00	3.17E+01
	107	684.10	-6.43E+00	24.88			-6.43E+00	2.49E+01
	108	693.03	1.46E+02	24.14			1.46E+02	2.41E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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*************************************************************************
*****          A R E A   C O R R E C T I O N   R E P O R T          *****
*****      R E F E R E N C E   P E A K / B K G . S U B T R A C T    *****
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Detector Name: DET01
Sample Title: DP1B
Peak Analysis Performed on: 1-04-96 9:23:52 AM

Ref. Peak Energy: 0.00; Reference Date:
Peak Ratio: 0.00; Uncertainty: 0.00
Background File : E:\GENIEPC\CAMFILES\BG122895.CNF

Corrected area is: Original * Peak Ratio - Background

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
m	1	4.35	0.00E+00	0.00			0.00E+00	0.00E+00
M	2	5.39	-4.86E+01	70.90			-4.86E+01	7.09E+01
m	3	6.24	-1.28E+02	98.17			-1.28E+02	9.82E+01
m	4	7.92	0.00E+00	0.00			0.00E+00	0.00E+00
m	5	9.06	0.00E+00	0.00			0.00E+00	0.00E+00
m	6	10.80	-6.81E+02	395.80	1.54E+02	3.60E+01	-8.35E+02	3.97E+02
	7	12.99	1.59E+04	193.64	4.47E+01	2.75E+01	1.59E+04	1.96E+02
M	8	15.35	1.09E+04	1338.59			1.09E+04	1.34E+03
m	9	16.15	1.80E+04	1541.21			1.80E+04	1.54E+03
	10	17.79	1.77E+03	848.94			1.77E+03	8.49E+02
m	11	18.94	4.32E+03	1037.46			4.32E+03	1.04E+03
m	12	19.64	2.61E+03	925.21			2.61E+03	9.25E+02
M	13	25.60	2.04E+03	117.65			2.04E+03	1.18E+02
m	14	27.35	1.74E+03	103.32			1.74E+03	1.03E+02
	15	32.81	0.00E+00	0.00	1.06E+01	1.70E+01	-1.06E+01	1.70E+01
	16	33.99	-2.57E+02	120.03	1.06E+01	1.70E+01	-2.68E+02	1.21E+02
	17	36.59	2.92E+02	95.51			2.92E+02	9.55E+01
	18	44.23	1.13E+02	105.43			1.13E+02	1.05E+02
	19	46.52	2.29E+04	185.96			2.29E+04	1.86E+02
	20	50.12	2.15E+03	140.91			2.15E+03	1.41E+02
	21	51.10	0.00E+00	0.00			0.00E+00	0.00E+00
	22	53.19	5.39E+03	131.17			5.39E+03	1.31E+02
M	23	60.60	5.68E+01	64.49	1.06E+01	1.52E+01	4.61E+01	6.63E+01
m	24	61.68	6.62E+01	63.51	1.06E+01	1.52E+01	5.55E+01	6.53E+01
m	25	63.26	2.14E+04	294.47	5.19E+01	2.82E+01	2.14E+04	2.96E+02
	26	67.62	2.51E+03	127.73			2.51E+03	1.28E+02
M	27	72.83	5.69E+02	327.54			5.69E+02	3.28E+02
m	28	74.78	3.16E+04	431.61			3.16E+04	4.32E+02
	29	77.07	5.58E+04	267.30			5.58E+04	2.67E+02
M	30	79.30	3.34E+03	231.34			3.34E+03	2.31E+02
m	31	81.07	3.83E+03	238.85			3.83E+03	2.39E+02
M	32	83.82	9.65E+03	631.52			9.65E+03	6.32E+02
m	33	85.37	0.00E+00	0.00			0.00E+00	0.00E+00
m	34	87.20	1.67E+04	653.09			1.67E+04	6.53E+02
	35	89.79	7.00E+03	141.16			7.00E+03	1.41E+02
	36	92.53	2.58E+04	197.13			2.58E+04	1.97E+02
	37	94.76	1.47E+03	129.29			1.47E+03	1.29E+02
M	38	97.64	5.01E+02	50.87			5.01E+02	5.09E+01
m	39	98.41	1.47E+03	109.40			1.47E+03	1.09E+02
	40	102.28	2.35E+02	85.92			2.35E+02	8.59E+01

41	105.59	1.18E+02	86.18		1.18E+02	8.62E+01
M 42	109.18	4.00E+02	71.93		4.00E+02	7.19E+01

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
m	43	111.34	3.92E+02	70.55	-1.31E+01	1.36E+01	4.05E+02	7.18E+01
m	44	112.80	1.47E+03	162.85	-1.31E+01	1.36E+01	1.48E+03	1.63E+02
	45	122.38	2.31E+02	76.74			2.31E+02	7.67E+01
	46	130.27	1.60E+02	77.96	0.00E+00	0.00E+00	1.60E+02	7.80E+01
	47	139.11	3.89E+01	57.27			3.89E+01	5.73E+01
	48	142.36	0.00E+00	0.00			0.00E+00	0.00E+00
	49	143.84	2.95E+03	147.39			2.95E+03	1.47E+02
	50	154.26	1.16E+03	96.97			1.16E+03	9.70E+01
	51	157.85	-1.43E+02	50.80			-1.43E+02	5.08E+01
	52	163.27	7.75E+02	91.39			7.75E+02	9.14E+01
	53	171.44	6.41E+01	64.97			6.41E+01	6.50E+01
	54	175.25	-2.38E+01	65.31	-1.36E+01	1.56E+01	-1.02E+01	6.72E+01
	55	186.07	1.93E+04	163.94	1.49E+02	3.34E+01	1.92E+04	1.67E+02
	56	191.73	2.72E+00	51.44			2.72E+00	5.14E+01
	57	195.06	1.97E+01	59.19	6.97E+00	1.22E+01	1.27E+01	6.04E+01
	58	205.44	7.08E+02	109.27	5.26E+00	1.33E+01	7.03E+02	1.10E+02
	59	207.03	0.00E+00	0.00			0.00E+00	0.00E+00
	60	218.20	-3.18E+01	48.65			-3.18E+01	4.86E+01
	61	234.20	0.00E+00	0.00			0.00E+00	0.00E+00
	62	236.07	1.08E+03	101.57			1.08E+03	1.02E+02
	63	238.67	5.10E+02	61.35			5.10E+02	6.13E+01
	64	242.10	1.33E+04	132.95			1.33E+04	1.33E+02
	65	249.87	-1.24E+01	39.56	3.89E+00	8.81E+00	-1.63E+01	4.05E+01
	66	256.39	4.35E+02	58.70			4.35E+02	5.87E+01
	67	259.12	7.37E+02	60.28			7.37E+02	6.03E+01
	68	261.69	0.00E+00	0.00			0.00E+00	0.00E+00
	69	262.41	0.00E+00	0.00			0.00E+00	0.00E+00
M	70	269.68	1.01E+03	73.19			1.01E+03	7.32E+01
m	71	271.41	8.60E+02	66.95			8.60E+02	6.69E+01
	72	283.53	7.83E+01	48.89			7.83E+01	4.89E+01
	73	286.20	2.59E+02	54.10			2.59E+02	5.41E+01
	74	295.37	2.48E+04	177.53			2.48E+04	1.78E+02
	75	300.15	3.24E+02	52.63			3.24E+02	5.26E+01
	76	302.84	7.99E+01	46.62			7.99E+01	4.66E+01
	77	325.97	-1.41E+01	39.09			-1.41E+01	3.91E+01
	78	346.46	-2.53E+01	34.94			-2.53E+01	3.49E+01
	79	349.24	8.73E+01	45.11	-1.23E+01	7.07E+00	9.96E+01	4.57E+01
	80	352.13	3.48E+04	215.87			3.48E+04	2.16E+02
	81	355.43	-1.12E+01	38.68			-1.12E+01	3.87E+01
	82	361.42	-6.75E+00	33.86			-6.75E+00	3.39E+01
	83	390.65	-1.99E+01	31.97			-1.99E+01	3.20E+01
	84	401.48	-7.55E+01	38.67			-7.55E+01	3.87E+01
	85	419.02	5.80E+01	40.45			5.80E+01	4.05E+01
	86	440.34	-1.91E+01	31.20			-1.91E+01	3.12E+01
	87	451.31	-1.78E+01	33.96			-1.78E+01	3.40E+01
	88	453.40	-5.99E+01	38.71			-5.99E+01	3.87E+01
	89	485.73	-4.69E+01	28.73			-4.69E+01	2.87E+01
	90	501.89	3.17E+01	31.39			3.17E+01	3.14E+01
	91	505.40	-5.14E+00	30.41			-5.14E+00	3.04E+01
	92	518.74	-2.75E+01	26.38			-2.75E+01	2.64E+01

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
	93	520.80	-1.56E+01	30.30			-1.56E+01	3.03E+01
	94	567.39	-4.26E+01	54.50			-4.26E+01	5.45E+01
	95	568.94	0.00E+00	0.00	2.31E+00	5.89E+00	-2.31E+00	5.89E+00
	96	576.79	4.37E+01	31.84			4.37E+01	3.18E+01
	97	580.12	-3.98E+01	31.72			-3.98E+01	3.17E+01
M	98	599.59	1.63E+00	39.29			1.63E+00	3.93E+01
m	99	601.41	9.67E-01	23.37			9.67E-01	2.34E+01
	100	609.79	1.32E+04	153.67			1.32E+04	1.54E+02
	101	624.82	4.51E+01	33.31			4.51E+01	3.33E+01
	102	660.73	0.00E+00	0.00			0.00E+00	0.00E+00
	103	661.76	0.00E+00	0.00			0.00E+00	0.00E+00
	104	664.10	-3.16E+01	24.20			-3.16E+01	2.42E+01
	105	675.37	7.71E+00	27.04			7.71E+00	2.70E+01
	106	680.18	1.83E+00	31.65			1.83E+00	3.17E+01
	107	684.10	-6.43E+00	24.88			-6.43E+00	2.49E+01
	108	693.03	1.46E+02	24.14			1.46E+02	2.41E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

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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Report Generated On : 1-05-96 3:56:48 PM

Sample Title : DM1B
Spectrum Description : DM1B standard
Sample Identification : DM1B
Sample Type :
Sample Geometry :

DM1B.CNF

Peak Locate Threshold : 3.00
Peak Locate Range (in channels) : 1 - 4096
Peak Area Range (in channels) : 1 - 4096
Identification Energy Tolerance : 1.000 keV

Sample Size : 0.000E+00 Unit

Sample Taken On :
Acquisition Started : 1-04-96 5:28:56 PM

Live Time : 80000.0 seconds
Real Time : 80019.1 seconds

Energy Calibration Used Done On : 12-19-95
Efficiency Calibration Used Done On : ????????

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: DM1B
Peak Locate Performed on: 1-05-96 3:56:02 PM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	31.51	0.0738	5.28	6.33
2	37.41	0.0629	6.27	8.83
3	46.94	0.2794	7.92	4.08
4	63.57	0.0727	10.73	7.27
5	71.94	0.1411	12.27	8.24
6	76.16	0.0593	12.93	20.46
7	89.44	0.0326	15.24	15.74
8	94.92	0.0319	16.15	35.21
9	104.48	0.0523	17.85	9.18
10	111.09	0.0689	18.94	18.77
11	115.00	<NA>	19.56	<NA>
12	194.75	0.4922	33.26	3.25
13	202.60	0.0813	34.57	6.85
14	215.01	0.3977	36.87	3.18
15	218.28	0.2083	37.38	3.45
16	232.59	0.0692	39.84	15.81
17	271.30	0.1443	46.50	7.73
18	336.76	0.1137	57.75	9.56
19	368.61	0.1203	63.26	4.73
20	372.48	0.1446	63.83	3.33
21	424.34	0.1133	72.80	8.55
22	435.96	0.0187	74.80	45.22
23	449.17	0.0153	77.08	57.59
24	472.22	0.2974	81.04	3.09
25	491.55	0.0903	84.36	13.70
26	508.45	0.1441	87.27	17.50
27	523.79	0.0684	89.91	19.07
28	543.80	0.0425	93.35	20.25
29	579.25	0.0866	99.44	10.17
30	615.12	0.1268	105.61	7.53
31	670.94	0.2353	115.21	5.40
32	751.49	0.0969	129.05	13.07
33	896.52	0.2123	153.99	4.58
34	1218.37	0.1229	209.33	7.74
35	1389.42	0.0357	238.73	27.26
36	1403.09	0.1404	241.09	9.56
37	1573.42	0.2657	270.37	6.13
38	1614.82	0.3564	277.49	3.25
39	1747.22	0.3526	300.25	3.58
40	1909.84	0.3688	328.21	3.93
41	1969.71	0.1786	338.50	7.97

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	2048.87	0.3423	352.11	3.52
43	3395.31	0.3536	583.61	3.82
44	3547.02	0.4109	609.69	3.02
45	4031.44	0.3395	692.98	3.00

Errors quoted at 1.000 sigma

****
** P E A K A N A L Y S I S R E P O R T *****
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Detector Name: DET01
Sample Title: DM1B
Peak Analysis Performed on: 1-05-96 3:56:16 PM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	27-	49	31.59	5.28	5.12E+02	110.19	2.90E+03
m	2	27-	49	37.32	6.27	6.25E+02	127.93	2.79E+03
M	4	58-	81	63.28	10.73	9.84E+02	148.41	4.07E+03
m	5	58-	81	72.23	12.27	1.82E+03	182.05	4.38E+03
m	6	58-	81	76.10	12.93	4.54E+03	240.32	4.63E+03
M	7	84-	120	89.52	15.24	6.33E+03	353.09	5.11E+03
m	8	84-	120	94.82	16.15	9.80E+03	412.27	4.12E+03
m	9	84-	120	104.68	17.85	1.83E+03	233.60	4.12E+03
m	10	84-	120	111.04	18.94	3.36E+03	288.24	3.46E+03
m	11	84-	120	114.65	19.56	9.22E+02	227.68	3.71E+03
M	12	189-	207	194.34	33.26	5.55E+02	87.75	4.06E+03
m	13	189-	207	201.92	34.57	1.45E+03	135.23	4.09E+03
[illegible]	14	211-	223	215.33	36.87	3.21E+02	61.86	2.58E+03
m	15	211-	223	218.31	37.38	4.14E+02	72.85	2.51E+03
	16	227-	237	232.59	39.84	3.63E+03	106.06	3.21E+03
	17	266-	276	271.30	46.50	7.78E+02	88.17	2.93E+03
	18	331-	341	336.76	57.75	1.37E+03	94.27	3.14E+03
M	19	363-	376	368.80	63.26	8.11E+02	83.54	3.37E+03
m	20	363-	376	372.13	63.83	6.50E+02	72.34	3.39E+03
M	21	419-	440	424.27	72.80	2.20E+03	474.84	4.31E+03
m	22	419-	440	435.93	74.80	3.50E+04	539.48	4.58E+03
	23	444-	454	449.17	77.08	5.44E+04	256.72	4.87E+03
	24	467-	477	472.22	81.04	3.61E+02	93.04	3.48E+03
	25	486-	496	491.55	84.36	5.65E+03	118.89	3.55E+03
	26	503-	513	508.45	87.27	1.87E+04	168.12	4.02E+03
	27	518-	528	523.79	89.91	1.18E+04	143.27	3.66E+03
	28	538-	548	543.80	93.35	1.11E+04	140.17	3.61E+03
	29	574-	584	579.25	99.44	2.30E+03	97.15	3.00E+03
	30	610-	620	615.12	105.61	3.16E+03	104.31	3.22E+03
	31	665-	675	670.94	115.21	1.38E+03	84.58	2.43E+03
	32	746-	756	751.49	129.05	4.77E+03	102.33	2.40E+03
	33	891-	901	896.52	153.99	1.59E+03	78.55	1.93E+03
	34	1214-	1222	1218.37	209.33	4.83E+03	87.04	1.29E+03
	35	1385-	1393	1389.42	238.73	5.35E+04	244.61	2.96E+03
	36	1399-	1407	1403.09	241.09	4.46E+03	91.14	1.80E+03
	37	1569-	1577	1573.42	270.37	2.77E+03	69.77	9.84E+02
	38	1610-	1618	1614.82	277.49	1.61E+03	60.57	9.68E+02
	39	1743-	1751	1747.22	300.25	1.99E+03	63.44	9.55E+02
	40	1905-	1913	1909.84	328.21	1.75E+03	62.85	1.03E+03
	41	1965-	1973	1969.71	338.50	7.01E+03	100.02	1.40E+03
	42	2044-	2052	2048.87	352.11	1.37E+03	58.01	9.37E+02

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
43	3391-	3399	3395.31	583.61	5.79E+03	103.00	2.25E+03
44	3543-	3551	3547.02	609.69	4.99E+02	43.50	6.52E+02
45	4027-	4035	4031.44	692.98	1.63E+02	25.72	1.21E+02

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

****
***** B A C K G R O U N D S U B T R A C T R E P O R T *****
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Detector Name: DET01
Sample Title: DM1B
Peak Analysis Performed on: 1-05-96 3:56:02 PM

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
M	1	5.28	5.12E+02	110.19			5.12E+02	1.10E+02
m	2	6.27	6.25E+02	127.93			6.25E+02	1.28E+02
m	3	7.92	0.00E+00	0.00			0.00E+00	0.00E+00
M	4	10.73	9.84E+02	148.41	1.54E+02	3.60E+01	8.30E+02	1.53E+02
m	5	12.27	1.82E+03	182.05			1.82E+03	1.82E+02
m	6	12.93	4.54E+03	240.32	4.47E+01	2.75E+01	4.49E+03	2.42E+02
M	7	15.24	6.33E+03	353.09			6.33E+03	3.53E+02
m	8	16.15	9.80E+03	412.27			9.80E+03	4.12E+02
m	9	17.85	1.83E+03	233.60			1.83E+03	2.34E+02
m	10	18.94	3.36E+03	288.24			3.36E+03	2.88E+02
m	11	19.56	9.22E+02	227.68			9.22E+02	2.28E+02
M	12	33.26	5.55E+02	87.75	1.06E+01	1.70E+01	5.44E+02	8.94E+01
m	13	34.57	1.45E+03	135.23			1.45E+03	1.35E+02
M	14	36.87	3.21E+02	61.86			3.21E+02	6.19E+01
m	15	37.38	4.14E+02	72.85			4.14E+02	7.28E+01
	16	39.84	3.63E+03	106.06			3.63E+03	1.06E+02
	17	46.50	7.78E+02	88.17			7.78E+02	8.82E+01
	18	57.75	1.37E+03	94.27			1.37E+03	9.43E+01
M	19	63.26	8.11E+02	83.54	5.19E+01	2.82E+01	7.59E+02	8.82E+01
m	20	63.83	6.50E+02	72.34	5.19E+01	2.82E+01	5.98E+02	7.76E+01
M	21	72.80	2.20E+03	474.84			2.20E+03	4.75E+02
m	22	74.80	3.50E+04	539.48			3.50E+04	5.39E+02
	23	77.08	5.44E+04	256.72			5.44E+04	2.57E+02
	24	81.04	3.61E+02	93.04			3.61E+02	9.30E+01
	25	84.36	5.65E+03	118.89			5.65E+03	1.19E+02
	26	87.27	1.87E+04	168.12			1.87E+04	1.68E+02
	27	89.91	1.18E+04	143.27			1.18E+04	1.43E+02
	28	93.35	1.11E+04	140.17			1.11E+04	1.40E+02
	29	99.44	2.30E+03	97.15			2.30E+03	9.72E+01
	30	105.61	3.16E+03	104.31			3.16E+03	1.04E+02
	31	115.21	1.38E+03	84.58			1.38E+03	8.46E+01
	32	129.05	4.77E+03	102.33	-2.79E-01	3.33E+01	4.77E+03	1.08E+02
	33	153.99	1.59E+03	78.55			1.59E+03	7.85E+01
	34	209.33	4.83E+03	87.04			4.83E+03	8.70E+01
	35	238.73	5.35E+04	244.61	-1.27E+01	1.27E+01	5.35E+04	2.45E+02
	36	241.09	4.46E+03	91.14			4.46E+03	9.11E+01
	37	270.37	2.77E+03	69.77			2.77E+03	6.98E+01
	38	277.49	1.61E+03	60.57			1.61E+03	6.06E+01
	39	300.25	1.99E+03	63.44			1.99E+03	6.34E+01
	40	328.21	1.75E+03	62.85			1.75E+03	6.28E+01
	41	338.50	7.01E+03	100.02			7.01E+03	1.00E+02
	42	352.11	1.37E+03	58.01			1.37E+03	5.80E+01

Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
43	583.61	5.79E+03	103.00			5.79E+03	1.03E+02
44	609.69	4.99E+02	43.50			4.99E+02	4.35E+01
45	692.98	1.63E+02	25.72			1.63E+02	2.57E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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*************************************************************************
*****          A R E A   C O R R E C T I O N   R E P O R T          *****
*****      R E F E R E N C E   P E A K / B K G . S U B T R A C T    *****
*************************************************************************
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Detector Name: DET01
Sample Title: DM1B
Peak Analysis Performed on: 1-05-96 3:56:02 PM

Ref. Peak Energy: 0.00; Reference Date:
Peak Ratio: 0.00; Uncertainty: 0.00
Background File : E:\GENIEPC\CAMFILES\BG122895.CNF

Corrected area is: Original * Peak Ratio - Background

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
M	1	5.28	5.12E+02	110.19			5.12E+02	1.10E+02
m	2	6.27	6.25E+02	127.93			6.25E+02	1.28E+02
m	3	7.92	0.00E+00	0.00			0.00E+00	0.00E+00
M	4	10.73	9.84E+02	148.41	1.54E+02	3.60E+01	8.30E+02	1.53E+02
m	5	12.27	1.82E+03	182.05			1.82E+03	1.82E+02
m	6	12.93	4.54E+03	240.32	4.47E+01	2.75E+01	4.49E+03	2.42E+02
M	7	15.24	6.33E+03	353.09			6.33E+03	3.53E+02
m	8	16.15	9.80E+03	412.27			9.80E+03	4.12E+02
m	9	17.85	1.83E+03	233.60			1.83E+03	2.34E+02
	10	18.94	3.36E+03	288.24			3.36E+03	2.88E+02
m	11	19.56	9.22E+02	227.68			9.22E+02	2.28E+02
M	12	33.26	5.55E+02	87.75	1.06E+01	1.70E+01	5.44E+02	8.94E+01
m	13	34.57	1.45E+03	135.23			1.45E+03	1.35E+02
M	14	36.87	3.21E+02	61.86			3.21E+02	6.19E+01
m	15	37.38	4.14E+02	72.85			4.14E+02	7.28E+01
	16	39.84	3.63E+03	106.06			3.63E+03	1.06E+02
	17	46.50	7.78E+02	88.17			7.78E+02	8.82E+01
	18	57.75	1.37E+03	94.27			1.37E+03	9.43E+01
M	19	63.26	8.11E+02	83.54	5.19E+01	2.82E+01	7.59E+02	8.82E+01
m	20	63.83	6.50E+02	72.34	5.19E+01	2.82E+01	5.98E+02	7.76E+01
M	21	72.80	2.20E+03	474.84			2.20E+03	4.75E+02
m	22	74.80	3.50E+04	539.48			3.50E+04	5.39E+02
	23	77.08	5.44E+04	256.72			5.44E+04	2.57E+02
	24	81.04	3.61E+02	93.04			3.61E+02	9.30E+01
	25	84.36	5.65E+03	118.89			5.65E+03	1.19E+02
	26	87.27	1.87E+04	168.12			1.87E+04	1.68E+02
	27	89.91	1.18E+04	143.27			1.18E+04	1.43E+02
	28	93.35	1.11E+04	140.17			1.11E+04	1.40E+02
	29	99.44	2.30E+03	97.15			2.30E+03	9.72E+01
	30	105.61	3.16E+03	104.31			3.16E+03	1.04E+02
	31	115.21	1.38E+03	84.58			1.38E+03	8.46E+01
	32	129.05	4.77E+03	102.33	-2.79E-01	3.33E+01	4.77E+03	1.08E+02
	33	153.99	1.59E+03	78.55			1.59E+03	7.85E+01
	34	209.33	4.83E+03	87.04			4.83E+03	8.70E+01
	35	238.73	5.35E+04	244.61	-1.27E+01	1.27E+01	5.35E+04	2.45E+02
	36	241.09	4.46E+03	91.14			4.46E+03	9.11E+01
	37	270.37	2.77E+03	69.77			2.77E+03	6.98E+01
	38	277.49	1.61E+03	60.57			1.61E+03	6.06E+01
	39	300.25	1.99E+03	63.44			1.99E+03	6.34E+01
	40	328.21	1.75E+03	62.85			1.75E+03	6.28E+01

41	338.50	7.01E+03	100.02		7.01E+03	1.00E+02
42	352.11	1.37E+03	58.01		1.37E+03	5.80E+01

Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
43	583.61	5.79E+03	103.00			5.79E+03	1.03E+02
44	609.69	4.99E+02	43.50			4.99E+02	4.35E+01
45	692.98	1.63E+02	25.72			1.63E+02	2.57E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

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        *****
*************************************************************************

Report Generated On              :  1-08-96  8:53:38 AM

Sample Title                     : BL5
Spectrum Description             : BL5a standard
Sample Identification            : BL5
Sample Type                      :
Sample Geometry                  :

Peak Locate Threshold            :  2.00
Peak Locate Range (in channels)  :     1 -  4096
Peak Area Range (in channels)    :     1 -  4096
Identification Energy Tolerance  :    1.000 keV

Sample Size                      :   0.000E+00 Unit

Sample Taken On                  :
Acquisition Started              :  1-05-96  4:30:14 PM

Live Time                        :    80000.0 seconds
Real Time                        :    82089.9 seconds


          Energy Calibration Used Done On       : 12-19-95
          Efficiency Calibration Used Done On   : ????????
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BL5.CNF

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: BL5
Peak Locate Performed on: 1-08-96 8:52:21 AM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 2.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	31.55	0.0138	5.35	36.92
2	37.43	0.0106	6.26	50.02
3	47.27	0.0697	7.98	10.68
4	53.59	0.0602	9.06	9.07
5	63.59	0.0077	10.79	154.15
6	76.38	0.0068	12.98	151.33
7	89.38	0.0061	15.32	96.23
8	94.87	0.0059	16.14	205.84
9	101.00	<NA>	16.80	<NA>
10	104.65	0.0264	17.58	23.55
11	111.05	0.0139	18.96	92.89
12	115.00	<NA>	19.64	<NA>
13	118.17	0.0300	20.19	30.72
14	122.31	0.0722	20.88	9.45
15	140.86	0.2410	24.09	3.97
16	149.88	0.0147	25.62	73.44
17	159.95	0.0155	27.35	68.41
18	174.88	0.3937	29.91	2.51
19	185.66	0.2819	31.97	2.27
20	194.96	0.4918	33.30	2.08
21	207.25	0.2297	35.50	3.48
22	214.00	0.0488	36.63	21.54
23	233.70	0.1795	40.03	3.83
24	252.64	0.1292	43.29	4.74
25	271.45	0.0029	46.52	378.34
26	288.00	0.0000	49.48	3.76
27	292.21	0.0128	50.08	79.78
28	310.32	0.0058	53.20	177.58
29	341.50	0.0703	58.64	6.58
30	348.16	0.3391	59.94	2.73
31	358.00	0.0000	61.25	2.50
32	368.83	0.0025	63.25	377.45
33	378.47	0.2635	64.91	4.91
34	394.31	0.0113	67.64	86.82
35	412.73	0.2175	70.81	5.53
36	424.22	0.0194	72.80	47.93
37	435.93	0.0022	74.79	403.37
38	449.13	0.0017	77.07	512.12
39	461.96	0.0071	79.30	123.44
40	472.24	0.0073	81.06	124.71
41	488.10	0.0099	83.81	145.03

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	497.60	0.0602	84.91	9.37
43	508.45	0.0163	87.19	160.21
44	523.13	0.0071	89.79	121.45
45	539.10	0.0076	92.54	139.63
46	551.68	0.0142	94.69	84.40
47	558.63	0.0594	95.90	10.10
48	567.69	0.0956	97.45	7.14
49	573.20	0.0077	98.42	114.44
50	583.24	0.1972	100.13	6.55
51	595.28	0.2027	102.27	5.56
52	599.04	0.4053	102.91	2.76
53	610.18	0.2595	104.87	4.67
54	615.29	0.1506	105.63	6.67
55	635.79	0.0629	109.13	15.62
56	642.60	0.0328	110.45	17.16
57	648.18	0.0259	111.30	34.45
58	656.98	0.0175	112.81	49.21
59	666.68	0.0901	114.48	13.11
60	672.70	0.2037	115.27	3.42
61	704.11	0.1110	120.89	7.04
62	712.22	0.0991	122.31	13.37
63	730.72	0.3249	125.48	2.24
64	745.48	0.1828	128.02	5.83
65	758.92	0.0881	130.35	9.20
66	764.63	0.2441	131.27	3.99
67	789.58	0.6546	135.60	2.61
68	805.52	0.5493	138.34	2.84
69	818.93	0.6953	140.65	2.89
70	837.29	0.0213	143.81	54.25
71	850.00	0.0000	145.99	2.01
72	889.80	0.4229	152.83	2.01
73	897.90	0.0368	154.23	35.51
74	923.82	0.1339	158.68	6.43
75	951.06	0.0279	163.37	28.59
76	1015.92	0.5242	174.52	2.12
77	1083.15	0.0118	186.08	93.64
78	1104.06	0.5447	189.67	2.12
79	1115.00	0.0001	191.55	2.37
80	1134.45	0.1195	194.99	4.24
81	1142.35	0.2148	196.27	4.77
82	1157.61	0.2249	198.88	2.53
83	1176.94	0.2994	202.20	4.28
84	1195.49	0.0575	205.39	18.91
85	1226.49	0.2882	210.72	4.05
86	1263.26	0.3331	217.04	2.24
87	1288.60	0.2184	221.40	2.56
88	1319.00	<NA>	226.63	<NA>
89	1346.00	<NA>	231.27	<NA>
90	1373.88	0.0556	236.06	30.13
91	1390.83	0.4214	238.98	2.34

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
92	1408.74	0.0081	242.06	131.95
93	1426.00	<NA>	245.02	<NA>
94	1440.96	0.4808	247.60	2.48
95	1491.84	0.0656	256.34	18.32
96	1507.08	0.0708	258.96	20.58
97	1541.54	0.2321	264.89	2.13
98	1568.70	0.0410	269.60	24.93
99	1579.10	0.0667	271.38	21.87
100	1594.00	0.0000	273.65	3.50
101	1600.01	0.1168	274.94	12.67
102	1614.20	0.3209	277.38	2.69
103	1623.38	0.7506	278.96	2.18
104	1635.77	0.4067	281.09	2.46
105	1651.00	0.1631	283.71	5.61
106	1665.76	0.2067	286.25	10.18
107	1686.76	0.3202	289.86	2.47
108	1718.72	0.0091	295.35	152.63
109	1746.75	0.1563	300.17	9.54
110	1762.07	0.2630	302.79	4.96
111	1772.28	0.4370	304.57	4.25
112	1809.12	0.3770	310.89	2.70
113	1830.22	0.8288	314.52	3.36
114	1885.63	0.2154	324.05	7.37
115	1920.51	0.2116	329.82	7.27
116	1928.00	0.0001	330.28	2.16
117	1940.74	0.4640	333.56	2.23
118	1945.66	0.3148	334.40	2.00
119	1969.39	0.4438	338.45	4.97
120	1978.00	<NA>	339.93	<NA>
121	2014.96	0.4877	346.28	2.47
122	2031.80	0.2170	349.18	3.62
123	2048.81	0.0084	352.10	151.88
124	2109.00	<NA>	362.45	<NA>
125	2163.93	0.4178	371.90	2.71
126	2175.14	0.3798	373.82	2.58
127	2227.00	0.0001	382.74	2.18
128	2230.04	0.4090	383.26	2.95
129	2251.55	0.1835	386.96	6.78
130	2264.28	0.2906	389.15	7.16
131	2281.00	<NA>	392.02	<NA>
132	2303.00	<NA>	395.81	<NA>
133	2339.49	0.2103	402.08	5.91
134	2356.59	0.6400	405.03	3.54
135	2360.18	0.4356	405.82	2.06
136	2424.89	0.4268	416.76	2.45
137	2429.00	<NA>	417.47	<NA>
138	2487.69	0.9770	427.56	2.23
139	2513.00	<NA>	431.91	<NA>
140	2543.00	<NA>	437.07	<NA>
141	2628.00	<NA>	451.68	<NA>

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
142	2648.11	0.4718	455.14	3.91
143	2657.18	0.3640	456.70	2.48
144	2723.14	0.4560	468.04	2.12
145	2734.70	0.1638	470.03	4.26
146	2757.90	0.5259	474.02	2.03
147	2797.17	0.3570	480.77	5.87
148	2835.94	0.2744	487.44	3.97
149	2993.00	<NA>	514.44	<NA>
150	3042.03	0.4549	522.87	2.67
151	3083.00	0.0001	529.91	2.50
152	3106.83	0.5391	534.01	2.82
153	3126.26	0.3153	537.35	2.41
154	3224.00	<NA>	554.16	<NA>
155	3251.12	0.3908	558.82	2.58
156	3254.24	0.3284	559.35	2.40
157	3266.00	<NA>	561.38	<NA>
158	3278.09	0.3186	563.46	3.37
159	3299.25	0.2804	567.09	2.73
160	3315.59	0.7942	569.90	2.03
161	3333.65	0.3101	573.01	2.03
162	3377.01	0.5586	580.46	2.72
163	3495.03	0.4005	600.75	3.08
164	3547.29	0.0309	609.74	50.90
165	3654.00	<NA>	628.09	<NA>
166	3657.00	<NA>	628.60	<NA>
167	3714.00	<NA>	638.40	<NA>
168	3785.81	0.3506	650.75	2.51
169	3812.28	0.8425	655.30	2.19
170	3873.91	0.2766	665.89	6.23
171	4031.58	0.1234	693.00	31.39

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: BL5
Peak Analysis Performed on: 1-08-96 8:53:02 AM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	26-	67	31.99	5.35	1.83E+04	5809.78	3.05E+05
m	2	26-	67	37.29	6.26	2.69E+04	6014.24	3.65E+05
m	5	26-	67	63.64	10.79	1.11E+05	7742.84	4.36E+05
	6	71-	81	76.38	12.98	9.49E+05	1553.51	6.14E+05
M	7	84-	127	89.98	15.32	3.94E+05	24598.6	7.14E+05
m	8	84-	127	94.76	16.14	7.24E+05	30788.8	6.36E+05
m	9	84-	127	98.59	16.80	2.25E+05	21755.1	5.83E+05
m	10	84-	127	103.11	17.58	5.92E+04	15480.4	5.48E+05
m	11	84-	127	111.13	18.96	1.46E+05	17915.3	4.99E+05
m	12	84-	127	115.11	19.64	7.88E+04	19626.1	4.74E+05
m	13	84-	127	118.30	20.19	5.82E+04	20629.1	4.57E+05
m	14	84-	127	122.32	20.88	1.84E+04	14574.0	4.38E+05
	15	135-	164	140.97	24.09	4.91E+03	572.80	3.39E+05
m	16	135-	164	149.88	25.62	8.37E+04	1356.72	3.37E+05
m	17	135-	164	159.95	27.35	7.52E+04	1243.56	3.34E+05
M	18	169-	198	174.84	29.91	1.76E+03	908.29	4.06E+05
m	19	169-	198	186.82	31.97	2.42E+03	1212.05	4.06E+05
m	20	169-	198	194.56	33.30	6.21E+02	462.47	3.32E+05
M	21	203-	218	207.37	35.50	3.06E+03	581.17	3.32E+05
m	22	203-	218	213.91	36.63	2.05E+04	1291.30	3.32E+05
	23	228-	238	233.70	40.03	6.50E+03	995.69	4.13E+05
	24	249-	257	252.64	43.29	1.37E+03	868.64	3.52E+05
	25	266-	276	271.45	46.52	1.53E+06	1586.81	4.15E+05
M	26	283-	297	288.68	49.48	2.80E+04	1023.86	3.27E+05
m	27	283-	297	292.12	50.08	1.26E+05	1466.14	3.30E+05
	28	305-	315	310.32	53.20	4.18E+05	1177.70	4.07E+05
M	29	336-	382	341.94	58.64	1.81E+04	8015.45	3.77E+05
m	30	336-	382	349.47	59.94	2.18E+04	7988.31	3.83E+05
m	31	336-	382	357.10	61.25	2.65E+04	8017.07	3.88E+05
m	32	336-	382	368.78	63.25	1.73E+06	16180.5	4.10E+05
m	33	336-	382	378.41	64.91	7.63E+03	8425.48	3.86E+05
	34	389-	399	394.31	67.64	1.98E+05	1160.92	4.82E+05
M	36	407-	440	424.30	72.80	1.04E+05	25526.4	5.25E+05
m	37	407-	440	435.88	74.79	2.75E+06	25752.7	5.51E+05
	38	444-	454	449.13	77.07	4.68E+06	2461.20	5.81E+05
M	39	457-	477	462.11	79.30	2.83E+05	15699.1	5.40E+05
m	40	457-	477	472.35	81.06	3.10E+05	15705.4	4.39E+05
	41	483-	513	488.35	83.81	7.90E+05	58978.4	5.44E+05
m	42	483-	513	494.71	84.91	2.07E+04	35864.5	6.49E+05

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
m	43	483-	513	508.01	87.19	1.45E+06	62112.4	6.08E+05
	44	518-	528	523.13	89.79	5.67E+05	1303.98	4.76E+05
	45	534-	544	539.10	92.54	2.11E+06	1807.42	4.84E+05
M	46	547-	588	551.59	94.69	1.55E+05	19772.6	6.37E+05
m	49	547-	588	573.30	98.42	2.23E+05	19826.4	4.23E+05
M	51	591-	620	595.71	102.27	8.40E+03	793.58	3.00E+05
m	52	591-	620	599.44	102.91	7.44E+03	758.25	3.28E+05
m	53	591-	620	610.84	104.87	6.68E+03	717.32	3.01E+05
m	54	591-	620	615.23	105.63	1.58E+04	1080.69	3.01E+05
M	55	630-	677	635.59	109.13	3.35E+04	5046.49	3.58E+05
m	56	630-	677	643.29	110.45	5.47E+04	5315.84	3.55E+05
m	57	630-	677	648.24	111.30	1.01E+05	6116.98	3.53E+05
m	58	630-	677	657.00	112.81	1.23E+05	6437.71	3.49E+05
m	59	630-	677	666.70	114.48	3.83E+04	5046.52	3.45E+05
m	60	630-	677	671.32	115.27	1.40E+04	4882.38	3.44E+05
M	61	699-	717	703.98	120.89	1.25E+04	570.12	2.76E+05
m	62	699-	717	712.24	122.31	2.31E+04	902.46	2.75E+05
	63	725-	733	730.72	125.48	1.56E+03	695.12	2.25E+05
	64	740-	750	745.48	128.02	1.07E+04	818.75	2.76E+05
M	65	753-	769	759.04	130.35	1.79E+04	789.55	3.27E+05
m	66	753-	769	764.35	131.27	9.63E+03	462.86	2.76E+05
	67	786-	792	789.58	135.60	-3.89E+02	582.12	1.79E+05
	68	800-	808	805.52	138.34	2.20E+03	707.65	2.33E+05
	69	813-	823	818.93	140.65	1.12E+04	835.19	2.88E+05
	70	832-	842	837.29	143.81	2.41E+05	967.56	2.92E+05
	71	847-	854	850.00	145.99	-2.40E+03	653.06	2.13E+05
	73	887-	902	897.90	154.23	9.24E+04	1184.91	4.37E+05
	74	919-	928	923.82	158.68	1.11E+04	764.85	2.54E+05
	75	946-	956	951.06	163.37	7.03E+04	834.08	2.62E+05
	76	1013-	1018	1015.92	174.52	-4.89E+02	484.43	1.33E+05
	77	1078-	1088	1083.15	186.08	1.61E+06	1504.39	2.75E+05
	78	1101-	1117	1104.06	189.67	-1.95E+03	1074.34	3.69E+05
M	80	1130-	1146	1134.99	194.99	5.77E+03	626.86	2.60E+05
m	81	1130-	1146	1142.41	196.27	1.24E+04	904.45	2.37E+05
	82	1153-	1161	1157.61	198.88	3.23E+03	640.14	1.90E+05
	83	1172-	1180	1176.94	202.20	8.80E+03	634.09	1.84E+05
	84	1191-	1199	1195.49	205.39	5.51E+04	641.38	1.67E+05
	85	1222-	1230	1226.49	210.72	9.43E+03	568.10	1.47E+05
	86	1259-	1266	1263.26	217.04	1.05E+03	497.54	1.22E+05
	87	1284-	1292	1288.60	221.40	3.07E+03	536.76	1.33E+05
	88	1315-	1321	1319.00	226.63	2.96E+02	440.65	1.02E+05
	89	1342-	1348	1346.00	231.27	-1.87E+02	440.88	1.03E+05
	90	1369-	1377	1373.88	236.06	8.58E+04	609.99	1.35E+05
	91	1386-	1394	1390.83	238.98	2.70E+03	521.82	1.26E+05
	92	1404-	1412	1408.74	242.06	1.20E+06	1253.45	1.72E+05

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	93	1423-	1428	1426.00	245.02	7.69E+01	365.78	7.55E+04
	94	1438-	1443	1440.96	247.60	1.69E+02	363.62	7.46E+04
	95	1487-	1495	1491.84	256.34	4.23E+04	533.79	1.14E+05
	96	1503-	1511	1507.08	258.96	7.00E+04	556.72	1.12E+05
	97	1538-	1544	1541.54	264.89	1.78E+02	387.11	7.91E+04
M	98	1564-	1583	1568.97	269.60	9.22E+04	5199.27	1.38E+05
m	99	1564-	1583	1579.32	271.38	7.15E+04	5187.43	2.31E+05
M	100	1589-	1604	1592.47	273.65	5.21E+03	1855.21	1.25E+05
m	101	1589-	1604	1600.03	274.94	4.81E+04	1980.70	1.82E+05
	103	1611-	1627	1623.38	278.96	4.48E+02	768.91	1.89E+05
	104	1631-	1639	1635.77	281.09	3.78E+03	477.32	1.05E+05
	105	1646-	1654	1651.00	283.71	8.58E+03	488.92	1.08E+05
	106	1661-	1669	1665.76	286.25	1.91E+04	501.57	1.09E+05
	107	1683-	1690	1686.76	289.86	1.38E+03	452.28	1.01E+05
	108	1714-	1722	1718.72	295.35	2.26E+06	1677.59	2.59E+05
	109	1742-	1750	1746.75	300.17	2.59E+04	475.27	9.38E+04
M	110	1758-	1776	1761.99	302.79	1.21E+04	616.96	1.24E+05
m	111	1758-	1776	1772.33	304.57	6.53E+03	417.12	1.87E+05
	112	1806-	1811	1809.12	310.89	-1.94E+02	325.27	5.99E+04
	113	1826-	1834	1830.22	314.52	6.71E+03	449.02	9.12E+04
	114	1881-	1889	1885.63	324.05	1.99E+04	458.06	8.89E+04
M	115	1916-	1930	1919.18	329.82	1.04E+04	1132.74	9.97E+04
	116	1916-	1930	1921.90	330.28	9.69E+03	1125.63	1.30E+05
	117	1936-	1949	1940.95	333.56	4.93E+03	402.87	1.34E+05
m	118	1936-	1949	1945.83	334.40	4.76E+03	393.90	1.35E+05
	119	1965-	1980	1969.39	338.45	1.05E+04	744.04	1.80E+05
	121	2012-	2018	2014.96	346.28	1.15E+03	414.51	9.02E+04
	122	2027-	2035	2031.80	349.18	1.04E+03	506.23	1.19E+05
	123	2044-	2052	2048.81	352.10	3.18E+06	2038.20	4.58E+05
	124	2105-	2113	2109.00	362.45	1.39E+03	427.58	8.48E+04
	125	2159-	2167	2163.93	371.90	9.39E+02	428.89	8.55E+04
	126	2173-	2177	2175.14	373.82	-3.57E+02	279.44	4.75E+04
	128	2224-	2232	2230.04	383.26	-4.24E+02	430.45	8.68E+04
	129	2247-	2255	2251.55	386.96	1.46E+04	459.15	9.17E+04
	130	2260-	2268	2264.28	389.15	2.21E+04	468.67	9.25E+04
	131	2277-	2283	2281.00	392.02	2.42E+02	359.81	6.83E+04
	132	2300-	2307	2303.00	395.81	4.54E+02	400.57	7.94E+04
	133	2335-	2343	2339.49	402.08	2.28E+04	468.90	9.22E+04
M	134	2352-	2364	2356.62	405.03	1.11E+04	824.08	1.35E+05
m	135	2352-	2364	2361.25	405.82	7.76E+03	782.73	1.24E+05
	136	2421-	2431	2424.89	416.76	-3.43E+02	522.61	1.15E+05
	138	2483-	2491	2487.69	427.56	4.73E+03	447.35	9.14E+04
	139	2511-	2517	2513.00	431.91	2.23E+02	338.84	6.06E+04
	140	2540-	2545	2543.00	437.07	3.97E+02	292.29	4.80E+04
	141	2626-	2630	2628.00	451.68	-2.63E+02	247.18	3.72E+04
	142	2644-	2661	2648.11	455.14	1.12E+04	669.67	1.34E+05

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
144	2720-	2725	2723.14	468.04	1.29E+02	272.90	4.20E+04
145	2730-	2738	2734.70	470.03	5.39E+03	375.30	6.34E+04
146	2753-	2759	2757.90	474.02	-1.02E+03	307.02	5.02E+04
147	2793-	2801	2797.17	480.77	1.59E+04	385.89	6.22E+04
148	2831-	2839	2835.94	487.44	1.52E+04	382.84	6.15E+04
149	2991-	2995	2993.00	514.44	-3.41E+02	217.06	2.88E+04
150	3040-	3044	3042.03	522.87	-2.85E+02	214.49	2.80E+04
151	3080-	3085	3083.00	529.91	-1.48E+01	242.78	3.33E+04
152	3102-	3110	3106.83	534.01	8.79E+03	346.53	5.21E+04
153	3122-	3130	3126.26	537.35	1.37E+03	330.59	5.04E+04
154	3220-	3226	3224.00	554.16	2.27E+02	267.28	3.76E+04
155	3248-	3256	3251.12	558.82	2.04E+02	322.34	4.85E+04
157	3263-	3268	3266.00	561.38	-2.58E+02	240.10	3.27E+04
158	3275-	3280	3278.09	563.46	-1.84E+02	239.48	3.25E+04
159	3296-	3303	3299.25	567.09	3.41E+01	295.45	4.33E+04
160	3312-	3319	3315.59	569.90	5.93E+02	295.78	4.31E+04
161	3329-	3337	3333.65	573.01	1.86E+03	326.69	4.90E+04
162	3373-	3381	3377.01	580.46	1.11E+04	345.99	5.08E+04
163	3492-	3497	3495.03	600.75	-4.29E+02	256.20	3.73E+04
164	3543-	3551	3547.29	609.74	1.23E+06	1452.11	4.11E+05
165	3651-	3659	3654.00	628.09	-2.39E+02	303.01	4.30E+04
167	3711-	3716	3714.00	638.40	-3.42E+02	223.47	2.84E+04
168	3783-	3789	3785.81	650.75	-2.79E+01	246.66	3.22E+04
169	3808-	3816	3812.28	655.30	4.75E+02	297.28	4.11E+04
170	3869-	3877	3873.91	665.89	2.80E+04	371.34	5.13E+04
171	4029-	4035	4031.58	693.00	1.09E+04	229.74	6.54E+03

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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***** B A C K G R O U N D S U B T R A C T R E P O R T *****
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Detector Name: DET01
Sample Title: BL5
Peak Analysis Performed on: 1-08-96 8:52:21 AM

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
M	1	5.35	1.83E+04	5809.78			1.83E+04	5.81E+03
m	2	6.26	2.69E+04	6014.24			2.69E+04	6.01E+03
m	3	7.98	0.00E+00	0.00			0.00E+00	0.00E+00
m	4	9.06	0.00E+00	0.00			0.00E+00	0.00E+00
m	5	10.79	1.11E+05	7742.84	1.54E+02	3.60E+01	1.11E+05	7.74E+03
	6	12.98	9.49E+05	1553.51	4.47E+01	2.75E+01	9.49E+05	1.55E+03
M	7	15.32	3.94E+05	24598.6			3.94E+05	2.46E+04
m	8	16.14	7.24E+05	30788.8			7.24E+05	3.08E+04
m	9	16.80	2.25E+05	21755.1			2.25E+05	2.18E+04
m	10	17.58	5.92E+04	15480.4			5.92E+04	1.55E+04
m	11	18.96	1.46E+05	17915.3			1.46E+05	1.79E+04
m	12	19.64	7.88E+04	19626.1			7.88E+04	1.96E+04
m	13	20.19	5.82E+04	20629.1			5.82E+04	2.06E+04
m	14	20.88	1.84E+04	14574.0			1.84E+04	1.46E+04
M	15	24.09	4.91E+03	572.80			4.91E+03	5.73E+02
[illegible]	16	25.62	8.37E+04	1356.72			8.37E+04	1.36E+03
m	17	27.35	7.52E+04	1243.56			7.52E+04	1.24E+03
M	18	29.91	1.76E+03	908.29			1.76E+03	9.08E+02
m	19	31.97	2.42E+03	1212.05			2.42E+03	1.21E+03
m	20	33.30	6.21E+02	462.47	1.06E+01	1.70E+01	6.10E+02	4.63E+02
M	21	35.50	3.06E+03	581.17			3.06E+03	5.81E+02
m	22	36.63	2.05E+04	1291.30			2.05E+04	1.29E+03
	23	40.03	6.50E+03	995.69			6.50E+03	9.96E+02
	24	43.29	1.37E+03	868.64			1.37E+03	8.69E+02
	25	46.52	1.53E+06	1586.81			1.53E+06	1.59E+03
M	26	49.48	2.80E+04	1023.86			2.80E+04	1.02E+03
m	27	50.08	1.26E+05	1466.14			1.26E+05	1.47E+03
	28	53.20	4.18E+05	1177.70			4.18E+05	1.18E+03
M	29	58.64	1.81E+04	8015.45			1.81E+04	8.02E+03
m	30	59.94	2.18E+04	7988.31			2.18E+04	7.99E+03
m	31	61.25	2.65E+04	8017.07	1.06E+01	1.52E+01	2.64E+04	8.02E+03
m	32	63.25	1.73E+06	16180.5	5.19E+01	2.82E+01	1.73E+06	1.62E+04
m	33	64.91	7.63E+03	8425.48	7.10E+00	4.38E+00	7.62E+03	8.43E+03
	34	67.64	1.98E+05	1160.92			1.98E+05	1.16E+03
m	35	70.81	0.00E+00	0.00			0.00E+00	0.00E+00
M	36	72.80	1.04E+05	25526.4			1.04E+05	2.55E+04
m	37	74.79	2.75E+06	25752.7			2.75E+06	2.58E+04
	38	77.07	4.68E+06	2461.20			4.68E+06	2.46E+03
M	39	79.30	2.83E+05	15699.1			2.83E+05	1.57E+04
m	40	81.06	3.10E+05	15705.4			3.10E+05	1.57E+04
[illegible]	41	83.81	7.90E+05	58978.4			7.90E+05	5.90E+04
[illegible]	42	84.91	2.07E+04	35864.5			2.07E+04	3.59E+04

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
m	43	87.19	1.45E+06	62112.4			1.45E+06	6.21E+04
	44	89.79	5.67E+05	1303.98			5.67E+05	1.30E+03
	45	92.54	2.11E+06	1807.42			2.11E+06	1.81E+03
M	46	94.69	1.55E+05	19772.6			1.55E+05	1.98E+04
m	47	95.90	0.00E+00	0.00			0.00E+00	0.00E+00
m	48	97.45	0.00E+00	0.00			0.00E+00	0.00E+00
m	49	98.42	2.23E+05	19826.4			2.23E+05	1.98E+04
m	50	100.13	0.00E+00	0.00			0.00E+00	0.00E+00
M	51	102.27	8.40E+03	793.58			8.40E+03	7.94E+02
m	52	102.91	7.44E+03	758.25			7.44E+03	7.58E+02
m	53	104.87	6.68E+03	717.32			6.68E+03	7.17E+02
m	54	105.63	1.58E+04	1080.69			1.58E+04	1.08E+03
M	55	109.13	3.35E+04	5046.49			3.35E+04	5.05E+03
m	56	110.45	5.47E+04	5315.84			5.47E+04	5.32E+03
m	57	111.30	1.01E+05	6116.98	-1.31E+01	1.36E+01	1.01E+05	6.12E+03
m	58	112.81	1.23E+05	6437.71	-1.31E+01	1.36E+01	1.23E+05	6.44E+03
m	59	114.48	3.83E+04	5046.52			3.83E+04	5.05E+03
m	60	115.27	1.40E+04	4882.38			1.40E+04	4.88E+03
M	61	120.89	1.25E+04	570.12			1.25E+04	5.70E+02
m	62	122.31	2.31E+04	902.46			2.31E+04	9.02E+02
	63	125.48	1.56E+03	695.12			1.56E+03	6.95E+02
	64	128.02	1.07E+04	818.75	-2.79E-01	3.33E+01	1.07E+04	8.19E+02
M	65	130.35	1.79E+04	789.55	0.00E+00	0.00E+00	1.79E+04	7.90E+02
	66	131.27	9.63E+03	462.86	0.00E+00	0.00E+00	9.63E+03	4.63E+02
	67	135.60	-3.89E+02	582.12			-3.89E+02	5.82E+02
	68	138.34	2.20E+03	707.65			2.20E+03	7.08E+02
	69	140.65	1.12E+04	835.19			1.12E+04	8.35E+02
	70	143.81	2.41E+05	967.56			2.41E+05	9.68E+02
	71	145.99	-2.40E+03	653.06			-2.40E+03	6.53E+02
	72	152.83	0.00E+00	0.00			0.00E+00	0.00E+00
	73	154.23	9.24E+04	1184.91			9.24E+04	1.18E+03
	74	158.68	1.11E+04	764.85			1.11E+04	7.65E+02
	75	163.37	7.03E+04	834.08			7.03E+04	8.34E+02
	76	174.52	-4.89E+02	484.43	-1.36E+01	1.56E+01	-4.76E+02	4.85E+02
	77	186.08	1.61E+06	1504.39	1.49E+02	3.34E+01	1.61E+06	1.50E+03
	78	189.67	-1.95E+03	1074.34			-1.95E+03	1.07E+03
	79	191.55	0.00E+00	0.00			0.00E+00	0.00E+00
M	80	194.99	5.77E+03	626.86	6.97E+00	1.22E+01	5.76E+03	6.27E+02
m	81	196.27	1.24E+04	904.45	3.28E+01	1.88E+01	1.24E+04	9.05E+02
	82	198.88	3.23E+03	640.14			3.23E+03	6.40E+02
	83	202.20	8.80E+03	634.09			8.80E+03	6.34E+02
	84	205.39	5.51E+04	641.38	5.26E+00	1.33E+01	5.50E+04	6.42E+02
	85	210.72	9.43E+03	568.10			9.43E+03	5.68E+02
	86	217.04	1.05E+03	497.54			1.05E+03	4.98E+02
	87	221.40	3.07E+03	536.76			3.07E+03	5.37E+02
	88	226.63	2.96E+02	440.65			2.96E+02	4.41E+02
	89	231.27	-1.87E+02	440.88			-1.87E+02	4.41E+02
	90	236.06	8.58E+04	609.99			8.58E+04	6.10E+02
	91	238.98	2.70E+03	521.82	-1.27E+01	1.27E+01	2.72E+03	5.22E+02
	92	242.06	1.20E+06	1253.45			1.20E+06	1.25E+03

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
	93	245.02	7.69E+01	365.78			7.69E+01	3.66E+02
	94	247.60	1.69E+02	363.62			1.69E+02	3.64E+02
	95	256.34	4.23E+04	533.79			4.23E+04	5.34E+02
	96	258.96	7.00E+04	556.72			7.00E+04	5.57E+02
	97	264.89	1.78E+02	387.11			1.78E+02	3.87E+02
M	98	269.60	9.22E+04	5199.27			9.22E+04	5.20E+03
m	99	271.38	7.15E+04	5187.43			7.15E+04	5.19E+03
M	100	273.65	5.21E+03	1855.21			5.21E+03	1.86E+03
m	101	274.94	4.81E+04	1980.70			4.81E+04	1.98E+03
	102	277.38	0.00E+00	0.00			0.00E+00	0.00E+00
	103	278.96	4.48E+02	768.91			4.48E+02	7.69E+02
	104	281.09	3.78E+03	477.32			3.78E+03	4.77E+02
	105	283.71	8.58E+03	488.92			8.58E+03	4.89E+02
	106	286.25	1.91E+04	501.57			1.91E+04	5.02E+02
	107	289.86	1.38E+03	452.28			1.38E+03	4.52E+02
	108	295.35	2.26E+06	1677.59			2.26E+06	1.68E+03
	109	300.17	2.59E+04	475.27			2.59E+04	4.75E+02
M	110	302.79	1.21E+04	616.96			1.21E+04	6.17E+02
m	111	304.57	6.53E+03	417.12			6.53E+03	4.17E+02
	112	310.89	-1.94E+02	325.27			-1.94E+02	3.25E+02
	113	314.52	6.71E+03	449.02			6.71E+03	4.49E+02
	114	324.05	1.99E+04	458.06			1.99E+04	4.58E+02
M	115	329.82	1.04E+04	1132.74			1.04E+04	1.13E+03
	116	330.28	9.69E+03	1125.63			9.69E+03	1.13E+03
M	117	333.56	4.93E+03	402.87			4.93E+03	4.03E+02
m	118	334.40	4.76E+03	393.90			4.76E+03	3.94E+02
	119	338.45	1.05E+04	744.04			1.05E+04	7.44E+02
	120	339.93	0.00E+00	0.00			0.00E+00	0.00E+00
	121	346.28	1.15E+03	414.51			1.15E+03	4.15E+02
	122	349.18	1.04E+03	506.23	-1.23E+01	7.07E+00	1.05E+03	5.06E+02
	123	352.10	3.18E+06	2038.20			3.18E+06	2.04E+03
	124	362.45	1.39E+03	427.58			1.39E+03	4.28E+02
	125	371.90	9.39E+02	428.89			9.39E+02	4.29E+02
	126	373.82	-3.57E+02	279.44			-3.57E+02	2.79E+02
	127	382.74	0.00E+00	0.00			0.00E+00	0.00E+00
	128	383.26	-4.24E+02	430.45			-4.24E+02	4.30E+02
	129	386.96	1.46E+04	459.15			1.46E+04	4.59E+02
	130	389.15	2.21E+04	468.67			2.21E+04	4.69E+02
	131	392.02	2.42E+02	359.81	4.02E+00	1.38E+01	2.38E+02	3.60E+02
	132	395.81	4.54E+02	400.57			4.54E+02	4.01E+02
	133	402.08	2.28E+04	468.90			2.28E+04	4.69E+02
M	134	405.03	1.11E+04	824.08			1.11E+04	8.24E+02
m	135	405.82	7.76E+03	782.73			7.76E+03	7.83E+02
	136	416.76	-3.43E+02	522.61			-3.43E+02	5.23E+02
	137	417.47	0.00E+00	0.00			0.00E+00	0.00E+00
	138	427.56	4.73E+03	447.35			4.73E+03	4.47E+02
	139	431.91	2.23E+02	338.84			2.23E+02	3.39E+02
	140	437.07	3.97E+02	292.29			3.97E+02	2.92E+02
	141	451.68	-2.63E+02	247.18			-2.63E+02	2.47E+02
	142	455.14	1.12E+04	669.67			1.12E+04	6.70E+02

Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
143	456.70	0.00E+00	0.00			0.00E+00	0.00E+00
144	468.04	1.29E+02	272.90			1.29E+02	2.73E+02
145	470.03	5.39E+03	375.30			5.39E+03	3.75E+02
146	474.02	-1.02E+03	307.02			-1.02E+03	3.07E+02
147	480.77	1.59E+04	385.89			1.59E+04	3.86E+02
148	487.44	1.52E+04	382.84			1.52E+04	3.83E+02
149	514.44	-3.41E+02	217.06	-3.13E+00	8.49E+00	-3.38E+02	2.17E+02
150	522.87	-2.85E+02	214.49			-2.85E+02	2.14E+02
151	529.91	-1.48E+01	242.78			-1.48E+01	2.43E+02
152	534.01	8.79E+03	346.53			8.79E+03	3.47E+02
153	537.35	1.37E+03	330.59			1.37E+03	3.31E+02
154	554.16	2.27E+02	267.28			2.27E+02	2.67E+02
155	558.82	2.04E+02	322.34			2.04E+02	3.22E+02
156	559.35	0.00E+00	0.00			0.00E+00	0.00E+00
157	561.38	-2.58E+02	240.10			-2.58E+02	2.40E+02
158	563.46	-1.84E+02	239.48			-1.84E+02	2.39E+02
159	567.09	3.41E+01	295.45			3.41E+01	2.95E+02
160	569.90	5.93E+02	295.78	2.31E+00	5.89E+00	5.90E+02	2.96E+02
161	573.01	1.86E+03	326.69			1.86E+03	3.27E+02
162	580.46	1.11E+04	345.99			1.11E+04	3.46E+02
163	600.75	-4.29E+02	256.20			-4.29E+02	2.56E+02
164	609.74	1.23E+06	1452.11			1.23E+06	1.45E+03
165	628.09	-2.39E+02	303.01			-2.39E+02	3.03E+02
166	628.60	0.00E+00	0.00			0.00E+00	0.00E+00
167	638.40	-3.42E+02	223.47			-3.42E+02	2.23E+02
168	650.75	-2.79E+01	246.66			-2.79E+01	2.47E+02
169	655.30	4.75E+02	297.28			4.75E+02	2.97E+02
170	665.89	2.80E+04	371.34			2.80E+04	3.71E+02
171	693.00	1.09E+04	229.74			1.09E+04	2.30E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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*************************************************************************
*****        A R E A   C O R R E C T I O N   R E P O R T          *****
*****     R E F E R E N C E   P E A K / B K G . S U B T R A C T   *****
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Detector Name: DET01
Sample Title: BL5
Peak Analysis Performed on: 1-08-96 8:52:21 AM

Ref. Peak Energy: 0.00; Reference Date:
Peak Ratio: 0.00; Uncertainty: 0.00
Background File : E:\GENIEPC\CAMFILES\BG122895.CNF

Corrected area is: Original * Peak Ratio - Background

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
M	1	5.35	1.83E+04	5809.78			1.83E+04	5.81E+03
m	2	6.26	2.69E+04	6014.24			2.69E+04	6.01E+03
m	3	7.98	0.00E+00	0.00			0.00E+00	0.00E+00
m	4	9.06	0.00E+00	0.00			0.00E+00	0.00E+00
m	5	10.79	1.11E+05	7742.84	1.54E+02	3.60E+01	1.11E+05	7.74E+03
	6	12.98	9.49E+05	1553.51	4.47E+01	2.75E+01	9.49E+05	1.55E+03
M	7	15.32	3.94E+05	24598.6			3.94E+05	2.46E+04
m	8	16.14	7.24E+05	30788.8			7.24E+05	3.08E+04
	9	16.80	2.25E+05	21755.1			2.25E+05	2.18E+04
	10	17.58	5.92E+04	15480.4			5.92E+04	1.55E+04
m	11	18.96	1.46E+05	17915.3			1.46E+05	1.79E+04
m	12	19.64	7.88E+04	19626.1			7.88E+04	1.96E+04
m	13	20.19	5.82E+04	20629.1			5.82E+04	2.06E+04
m	14	20.88	1.84E+04	14574.0			1.84E+04	1.46E+04
M	15	24.09	4.91E+03	572.80			4.91E+03	5.73E+02
m	16	25.62	8.37E+04	1356.72			8.37E+04	1.36E+03
m	17	27.35	7.52E+04	1243.56			7.52E+04	1.24E+03
M	18	29.91	1.76E+03	908.29			1.76E+03	9.08E+02
m	19	31.97	2.42E+03	1212.05			2.42E+03	1.21E+03
m	20	33.30	6.21E+02	462.47	1.06E+01	1.70E+01	6.10E+02	4.63E+02
M	21	35.50	3.06E+03	581.17			3.06E+03	5.81E+02
m	22	36.63	2.05E+04	1291.30			2.05E+04	1.29E+03
	23	40.03	6.50E+03	995.69			6.50E+03	9.96E+02
	24	43.29	1.37E+03	868.64			1.37E+03	8.69E+02
	25	46.52	1.53E+06	1586.81			1.53E+06	1.59E+03
M	26	49.48	2.80E+04	1023.86			2.80E+04	1.02E+03
m	27	50.08	1.26E+05	1466.14			1.26E+05	1.47E+03
	28	53.20	4.18E+05	1177.70			4.18E+05	1.18E+03
M	29	58.64	1.81E+04	8015.45			1.81E+04	8.02E+03
m	30	59.94	2.18E+04	7988.31			2.18E+04	7.99E+03
m	31	61.25	2.65E+04	8017.07	1.06E+01	1.52E+01	2.64E+04	8.02E+03
m	32	63.25	1.73E+06	16180.5	5.19E+01	2.82E+01	1.73E+06	1.62E+04
m	33	64.91	7.63E+03	8425.48	7.10E+00	4.38E+00	7.62E+03	8.43E+03
	34	67.64	1.98E+05	1160.92			1.98E+05	1.16E+03
	35	70.81	0.00E+00	0.00			0.00E+00	0.00E+00
M	36	72.80	1.04E+05	25526.4			1.04E+05	2.55E+04
m	37	74.79	2.75E+06	25752.7			2.75E+06	2.58E+04
	38	77.07	4.68E+06	2461.20			4.68E+06	2.46E+03
M	39	79.30	2.83E+05	15699.1			2.83E+05	1.57E+04
m	40	81.06	3.10E+05	15705.4			3.10E+05	1.57E+04

M 41	83.81	7.90E+05	58978.4	7.90E+05	5.90E+04
42	84.91	2.07E+04	35864.5	2.07E+04	3.59E+04

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
m	43	87.19	1.45E+06	62112.4			1.45E+06	6.21E+04
	44	89.79	5.67E+05	1303.98			5.67E+05	1.30E+03
	45	92.54	2.11E+06	1807.42			2.11E+06	1.81E+03
M	46	94.69	1.55E+05	19772.6			1.55E+05	1.98E+04
m	47	95.90	0.00E+00	0.00			0.00E+00	0.00E+00
m	48	97.45	0.00E+00	0.00			0.00E+00	0.00E+00
m	49	98.42	2.23E+05	19826.4			2.23E+05	1.98E+04
m	50	100.13	0.00E+00	0.00			0.00E+00	0.00E+00
M	51	102.27	8.40E+03	793.58			8.40E+03	7.94E+02
m	52	102.91	7.44E+03	758.25			7.44E+03	7.58E+02
m	53	104.87	6.68E+03	717.32			6.68E+03	7.17E+02
m	54	105.63	1.58E+04	1080.69			1.58E+04	1.08E+03
M	55	109.13	3.35E+04	5046.49			3.35E+04	5.05E+03
m	56	110.45	5.47E+04	5315.84			5.47E+04	5.32E+03
m	57	111.30	1.01E+05	6116.98	-1.31E+01	1.36E+01	1.01E+05	6.12E+03
m	58	112.81	1.23E+05	6437.71	-1.31E+01	1.36E+01	1.23E+05	6.44E+03
m	59	114.48	3.83E+04	5046.52			3.83E+04	5.05E+03
m	60	115.27	1.40E+04	4882.38			1.40E+04	4.88E+03
M	61	120.89	1.25E+04	570.12			1.25E+04	5.70E+02
m	62	122.31	2.31E+04	902.46			2.31E+04	9.02E+02
	63	125.48	1.56E+03	695.12			1.56E+03	6.95E+02
	64	128.02	1.07E+04	818.75	-2.79E-01	3.33E+01	1.07E+04	8.19E+02
M	65	130.35	1.79E+04	789.55	0.00E+00	0.00E+00	1.79E+04	7.90E+02
	66	131.27	9.63E+03	462.86	0.00E+00	0.00E+00	9.63E+03	4.63E+02
	67	135.60	-3.89E+02	582.12			-3.89E+02	5.82E+02
	68	138.34	2.20E+03	707.65			2.20E+03	7.08E+02
	69	140.65	1.12E+04	835.19			1.12E+04	8.35E+02
	70	143.81	2.41E+05	967.56			2.41E+05	9.68E+02
	71	145.99	-2.40E+03	653.06			-2.40E+03	6.53E+02
	72	152.83	0.00E+00	0.00			0.00E+00	0.00E+00
	73	154.23	9.24E+04	1184.91			9.24E+04	1.18E+03
	74	158.68	1.11E+04	764.85			1.11E+04	7.65E+02
	75	163.37	7.03E+04	834.08			7.03E+04	8.34E+02
	76	174.52	-4.89E+02	484.43	-1.36E+01	1.56E+01	-4.76E+02	4.85E+02
	77	186.08	1.61E+06	1504.39	1.49E+02	3.34E+01	1.61E+06	1.50E+03
	78	189.67	-1.95E+03	1074.34			-1.95E+03	1.07E+03
	79	191.55	0.00E+00	0.00			0.00E+00	0.00E+00
M	80	194.99	5.77E+03	626.86	6.97E+00	1.22E+01	5.76E+03	6.27E+02
m	81	196.27	1.24E+04	904.45	3.28E+01	1.88E+01	1.24E+04	9.05E+02
	82	198.88	3.23E+03	640.14			3.23E+03	6.40E+02
	83	202.20	8.80E+03	634.09			8.80E+03	6.34E+02
	84	205.39	5.51E+04	641.38	5.26E+00	1.33E+01	5.50E+04	6.42E+02
	85	210.72	9.43E+03	568.10			9.43E+03	5.68E+02
	86	217.04	1.05E+03	497.54			1.05E+03	4.98E+02
	87	221.40	3.07E+03	536.76			3.07E+03	5.37E+02
	88	226.63	2.96E+02	440.65			2.96E+02	4.41E+02
	89	231.27	-1.87E+02	440.88			-1.87E+02	4.41E+02
	90	236.06	8.58E+04	609.99			8.58E+04	6.10E+02
	91	238.98	2.70E+03	521.82	-1.27E+01	1.27E+01	2.72E+03	5.22E+02
	92	242.06	1.20E+06	1253.45			1.20E+06	1.25E+03

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
	93	245.02	7.69E+01	365.78			7.69E+01	3.66E+02
	94	247.60	1.69E+02	363.62			1.69E+02	3.64E+02
	95	256.34	4.23E+04	533.79			4.23E+04	5.34E+02
	96	258.96	7.00E+04	556.72			7.00E+04	5.57E+02
	97	264.89	1.78E+02	387.11			1.78E+02	3.87E+02
M	98	269.60	9.22E+04	5199.27			9.22E+04	5.20E+03
m	99	271.38	7.15E+04	5187.43			7.15E+04	5.19E+03
M	100	273.65	5.21E+03	1855.21			5.21E+03	1.86E+03
m	101	274.94	4.81E+04	1980.70			4.81E+04	1.98E+03
	102	277.38	0.00E+00	0.00			0.00E+00	0.00E+00
	103	278.96	4.48E+02	768.91			4.48E+02	7.69E+02
	104	281.09	3.78E+03	477.32			3.78E+03	4.77E+02
	105	283.71	8.58E+03	488.92			8.58E+03	4.89E+02
	106	286.25	1.91E+04	501.57			1.91E+04	5.02E+02
	107	289.86	1.38E+03	452.28			1.38E+03	4.52E+02
	108	295.35	2.26E+06	1677.59			2.26E+06	1.68E+03
	109	300.17	2.59E+04	475.27			2.59E+04	4.75E+02
M	110	302.79	1.21E+04	616.96			1.21E+04	6.17E+02
m	111	304.57	6.53E+03	417.12			6.53E+03	4.17E+02
	112	310.89	-1.94E+02	325.27			-1.94E+02	3.25E+02
	113	314.52	6.71E+03	449.02			6.71E+03	4.49E+02
	114	324.05	1.99E+04	458.06			1.99E+04	4.58E+02
M	115	329.82	1.04E+04	1132.74			1.04E+04	1.13E+03
	116	330.28	9.69E+03	1125.63			9.69E+03	1.13E+03
M	117	333.56	4.93E+03	402.87			4.93E+03	4.03E+02
m	118	334.40	4.76E+03	393.90			4.76E+03	3.94E+02
	119	338.45	1.05E+04	744.04			1.05E+04	7.44E+02
	120	339.93	0.00E+00	0.00			0.00E+00	0.00E+00
	121	346.28	1.15E+03	414.51			1.15E+03	4.15E+02
	122	349.18	1.04E+03	506.23	-1.23E+01	7.07E+00	1.05E+03	5.06E+02
	123	352.10	3.18E+06	2038.20			3.18E+06	2.04E+03
	124	362.45	1.39E+03	427.58			1.39E+03	4.28E+02
	125	371.90	9.39E+02	428.89			9.39E+02	4.29E+02
	126	373.82	-3.57E+02	279.44			-3.57E+02	2.79E+02
	127	382.74	0.00E+00	0.00			0.00E+00	0.00E+00
	128	383.26	-4.24E+02	430.45			-4.24E+02	4.30E+02
	129	386.96	1.46E+04	459.15			1.46E+04	4.59E+02
	130	389.15	2.21E+04	468.67			2.21E+04	4.69E+02
	131	392.02	2.42E+02	359.81	4.02E+00	1.38E+01	2.38E+02	3.60E+02
	132	395.81	4.54E+02	400.57			4.54E+02	4.01E+02
	133	402.08	2.28E+04	468.90			2.28E+04	4.69E+02
M	134	405.03	1.11E+04	824.08			1.11E+04	8.24E+02
m	135	405.82	7.76E+03	782.73			7.76E+03	7.83E+02
	136	416.76	-3.43E+02	522.61			-3.43E+02	5.23E+02
	137	417.47	0.00E+00	0.00			0.00E+00	0.00E+00
	138	427.56	4.73E+03	447.35			4.73E+03	4.47E+02
	139	431.91	2.23E+02	338.84			2.23E+02	3.39E+02
	140	437.07	3.97E+02	292.29			3.97E+02	2.92E+02
	141	451.68	-2.63E+02	247.18			-2.63E+02	2.47E+02
	142	455.14	1.12E+04	669.67			1.12E+04	6.70E+02

Pk No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
143	456.70	0.00E+00	0.00			0.00E+00	0.00E+00
144	468.04	1.29E+02	272.90			1.29E+02	2.73E+02
145	470.03	5.39E+03	375.30			5.39E+03	3.75E+02
146	474.02	-1.02E+03	307.02			-1.02E+03	3.07E+02
147	480.77	1.59E+04	385.89			1.59E+04	3.86E+02
148	487.44	1.52E+04	382.84			1.52E+04	3.83E+02
149	514.44	-3.41E+02	217.06	-3.13E+00	8.49E+00	-3.38E+02	2.17E+02
150	522.87	-2.85E+02	214.49			-2.85E+02	2.14E+02
151	529.91	-1.48E+01	242.78			-1.48E+01	2.43E+02
152	534.01	8.79E+03	346.53			8.79E+03	3.47E+02
153	537.35	1.37E+03	330.59			1.37E+03	3.31E+02
154	554.16	2.27E+02	267.28			2.27E+02	2.67E+02
155	558.82	2.04E+02	322.34			2.04E+02	3.22E+02
156	559.35	0.00E+00	0.00			0.00E+00	0.00E+00
157	561.38	-2.58E+02	240.10			-2.58E+02	2.40E+02
158	563.46	-1.84E+02	239.48			-1.84E+02	2.39E+02
159	567.09	3.41E+01	295.45			3.41E+01	2.95E+02
160	569.90	5.93E+02	295.78	2.31E+00	5.89E+00	5.90E+02	2.96E+02
161	573.01	1.86E+03	326.69			1.86E+03	3.27E+02
162	580.46	1.11E+04	345.99			1.11E+04	3.46E+02
163	600.75	-4.29E+02	256.20			-4.29E+02	2.56E+02
164	609.74	1.23E+06	1452.11			1.23E+06	1.45E+03
165	628.09	-2.39E+02	303.01			-2.39E+02	3.03E+02
166	628.60	0.00E+00	0.00			0.00E+00	0.00E+00
167	638.40	-3.42E+02	223.47			-3.42E+02	2.23E+02
168	650.75	-2.79E+01	246.66			-2.79E+01	2.47E+02
169	655.30	4.75E+02	297.28			4.75E+02	2.97E+02
170	665.89	2.80E+04	371.34			2.80E+04	3.71E+02
171	693.00	1.09E+04	229.74			1.09E+04	2.30E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region

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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BL5D.CNF

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Report Generated On              :  1-10-96  9:23:53 AM

Sample Title                     : BL5D
Spectrum Description             : BL5D standard
Sample Identification            : BL5D
Sample Type                      :
Sample Geometry                  :

Peak Locate Threshold            :  2.00
Peak Locate Range (in channels)  :     1 -  4096
Peak Area Range (in channels)    :     1 -  4096
Identification Energy Tolerance  :    1.000 keV

Sample Size                      :   0.000E+00 Unit

Sample Taken On                  :
Acquisition Started              :  1-09-96  8:45:22 AM

Live Time                        :    80000.0 seconds
Real Time                        :    80365.2 seconds


          Energy Calibration Used Done On       : 12-19-95
          Efficiency Calibration Used Done On   : ????????
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****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: BL5D
Peak Locate Performed on: 1-10-96 9:22:48 AM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 2.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	19.34	0.0070	3.35	91.61
2	26.13	0.2965	4.31	3.38
3	31.54	0.0212	5.33	23.28
4	37.44	0.0155	6.26	33.71
5	47.10	0.1587	7.85	9.62
6	53.67	0.1342	9.13	7.50
7	63.65	0.0109	10.80	105.96
8	76.55	0.0144	13.01	97.31
9	89.41	0.0089	15.36	61.39
10	94.87	0.0094	16.16	133.60
11	104.55	0.0203	17.78	24.90
12	111.15	0.0196	18.95	68.40
13	115.00	0.0000	19.61	22.51
14	118.12	0.0810	20.18	12.43
15	122.57	0.0857	20.88	6.13
16	141.57	0.1453	24.21	3.68
17	149.97	0.0203	25.63	52.77
18	160.04	0.0233	27.36	45.37
19	207.94	0.2842	35.43	4.05
20	214.12	0.0920	36.67	10.68
21	234.75	0.6072	40.21	2.38
22	246.84	0.2518	42.29	3.67
23	271.52	0.0027	46.53	174.39
24	292.31	0.0283	50.11	36.20
25	310.48	0.0147	53.23	74.89
26	341.95	0.4429	58.64	3.25
27	369.00	0.0055	63.29	168.23
28	378.48	0.4634	64.98	3.30
29	394.53	0.0293	67.68	36.53
30	413.13	0.3960	70.85	2.92
31	424.79	0.1100	72.88	8.39
32	436.07	0.0051	74.82	171.91
33	449.30	0.0044	77.10	207.96
34	462.13	0.0178	79.35	51.70
35	472.55	0.0262	81.10	50.10
36	488.40	0.0216	83.85	59.22
37	497.87	0.1508	85.45	7.58
38	508.74	0.0437	87.24	64.95
39	523.50	0.0259	89.86	47.90
40	539.37	0.0193	92.58	58.11
41	552.24	0.0349	94.79	23.53

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	559.12	0.2907	95.98	3.51
43	568.22	0.1428	97.55	7.04
44	573.50	0.0498	98.46	25.31
45	583.72	0.5214	100.21	3.47
46	601.00	<NA>	102.95	<NA>
47	610.76	0.2153	104.90	3.68
48	615.39	0.2185	105.69	4.53
49	635.79	0.2917	109.14	4.18
50	643.12	0.2708	110.47	4.44
51	648.44	0.0642	111.36	8.06
52	657.24	0.0692	112.86	19.64
53	667.79	0.3358	114.61	2.65
54	704.34	0.2981	120.95	3.89
55	712.99	0.1480	122.40	6.80
56	745.93	0.7390	128.10	3.09
57	759.36	0.4327	130.41	4.16
58	765.21	0.4417	131.33	2.87
59	816.21	0.3910	140.18	2.13
60	820.38	0.5175	140.65	2.08
61	826.22	0.3636	141.90	2.25
62	837.62	0.0518	143.91	21.33
63	862.76	0.3860	148.19	2.05
64	866.77	0.3700	148.84	2.17
65	874.00	<NA>	150.11	<NA>
66	898.28	0.0787	154.29	15.89
67	924.10	0.5194	158.73	2.20
68	951.61	0.1047	163.46	12.09
69	965.06	0.5688	165.75	2.03
70	971.87	0.4267	166.98	2.33
71	994.00	0.0000	170.75	2.40
72	1064.71	0.3396	182.91	2.10
73	1073.00	<NA>	184.33	<NA>
74	1083.60	0.0376	186.15	39.91
75	1143.09	0.3437	196.38	2.37
76	1171.00	<NA>	201.33	<NA>
77	1176.63	0.4033	202.19	3.06
78	1196.11	0.1568	205.50	8.04
79	1227.60	0.2311	210.91	2.42
80	1244.00	<NA>	213.73	<NA>
81	1250.06	0.5399	214.77	2.14
82	1280.00	<NA>	219.92	<NA>
83	1299.66	0.2486	223.30	2.56
84	1328.09	0.4543	228.22	2.36
85	1333.23	0.3095	229.10	2.57
86	1374.69	0.1002	236.20	11.24
87	1393.00	<NA>	239.35	<NA>
88	1409.50	0.0190	242.19	53.07
89	1461.00	0.0001	251.04	2.50
90	1478.00	<NA>	253.96	<NA>
91	1500.23	0.1675	257.91	10.14

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
92	1508.04	0.4268	258.79	2.80
93	1552.56	1.0045	266.78	2.70
94	1569.50	0.0999	269.74	11.33
95	1579.89	0.1658	271.52	8.44
96	1600.84	0.2283	275.08	6.21
97	1652.63	0.1868	283.99	3.17
98	1666.39	0.4356	286.35	3.59
99	1684.00	0.0000	289.38	3.79
100	1687.00	<NA>	289.85	<NA>
101	1719.54	0.0157	295.49	58.98
102	1747.39	0.3704	300.28	4.31
103	1762.64	0.7395	302.90	2.64
104	1800.00	<NA>	309.33	<NA>
105	1859.00	<NA>	319.47	<NA>
106	1867.12	0.4708	320.87	2.16
107	1886.56	0.2994	324.21	3.76
108	1921.83	0.4888	330.27	2.42
109	1968.61	0.2678	338.41	2.14
110	1971.18	0.4176	338.89	2.15
111	1983.63	0.2034	340.90	2.96
112	2003.90	0.3884	344.38	2.73
113	2032.74	0.4372	349.34	2.26
114	2049.05	0.0295	352.15	79.88
115	2121.00	<NA>	364.52	<NA>
116	2252.63	0.7840	387.15	2.48
117	2265.33	0.4635	389.33	3.26
118	2340.42	0.4289	402.24	2.89
119	2359.31	0.2877	405.49	2.36
120	2506.21	0.4004	430.74	2.11
121	2521.00	<NA>	433.29	<NA>
122	2733.75	0.3090	469.86	2.47
123	2737.40	0.2687	470.48	2.10
124	2798.07	0.3908	480.93	2.82
125	2885.23	0.3687	495.91	2.20
126	2925.80	0.3681	502.89	2.33
127	2996.00	0.0001	514.96	3.09
128	3035.64	0.2962	521.77	2.07
129	3159.00	<NA>	542.98	<NA>
130	3162.78	0.3033	543.63	2.69
131	3206.30	0.3024	551.11	2.30
132	3243.00	0.0001	557.42	2.64
133	3387.00	0.0001	582.18	2.67
134	3519.68	0.3150	604.99	2.09
135	3549.24	0.0913	610.07	16.92
136	3608.55	1.2164	620.27	2.14
137	3661.04	0.5889	629.30	2.04
138	3693.00	0.0001	634.79	2.56
139	3809.33	0.2326	654.79	2.78
140	3830.00	0.0001	658.35	2.80
141	3876.67	0.5302	666.37	2.66

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
142	3896.00	0.0001	669.69	2.99
143	3910.12	0.4972	672.12	2.03
144	3931.04	0.5294	675.72	2.28
145	3943.00	0.0001	677.77	2.18
146	3994.19	0.3244	686.57	2.72
147	4029.00	0.0001	692.35	2.23
148	4031.68	0.0595	692.89	11.25

Errors quoted at 1.000 sigma

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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: DET01
Sample Title: BL5D
Peak Analysis Performed on: 1-10-96 9:23:18 AM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	15-	67	20.38	3.35	5.73E+04	6943.30	1.72E+04
m	2	15-	67	25.94	4.31	3.19E+04	5485.97	2.81E+04
m	3	15-	67	31.88	5.33	4.89E+04	6768.12	4.28E+04
m	4	15-	67	37.25	6.26	4.93E+04	7163.07	5.76E+04
m	5	15-	67	46.50	7.85	7.06E+03	5693.43	8.73E+04
m	6	15-	67	54.00	9.13	6.28E+03	6173.04	9.54E+04
m	7	15-	67	63.67	10.80	9.51E+04	9726.71	1.03E+05
	8	71-	81	76.55	13.01	3.15E+05	811.55	1.44E+05
M	9	84-	127	90.21	15.36	1.76E+05	16252.3	1.68E+05
m	10	84-	127	94.88	16.16	2.95E+05	18798.0	1.51E+05
m	11	84-	127	104.30	17.78	2.93E+04	10191.3	1.23E+05
m	12	84-	127	111.10	18.95	6.46E+04	12037.5	1.12E+05
[illegible]	13	84-	127	114.94	19.61	3.59E+04	11230.9	1.08E+05
[illegible]	14	84-	127	118.23	20.18	1.80E+04	10066.2	1.02E+05
m	15	84-	127	122.30	20.88	5.93E+03	8544.06	9.05E+04
M	16	138-	165	141.66	24.21	1.13E+03	223.46	6.30E+04
m	17	138-	165	149.97	25.63	2.96E+04	602.74	6.94E+04
m	18	138-	165	160.02	27.36	2.47E+04	518.88	6.76E+04
M	19	202-	219	206.97	35.43	1.70E+03	300.47	6.36E+04
m	20	202-	219	214.14	36.67	6.03E+03	571.65	6.36E+04
	21	229-	238	234.75	40.21	1.96E+03	408.57	7.29E+04
	22	241-	249	246.84	42.29	-1.33E+02	380.94	6.79E+04
	23	266-	276	271.52	46.53	3.28E+05	716.80	7.81E+04
	24	287-	297	292.31	50.11	3.18E+04	458.19	7.44E+04
	25	305-	315	310.48	53.23	8.18E+04	512.44	7.60E+04
	26	336-	345	341.95	58.64	5.88E+02	411.56	7.44E+04
M	27	363-	382	368.98	63.29	3.03E+05	1141.32	7.41E+04
m	28	363-	382	378.81	64.98	9.89E+02	633.48	7.28E+04
	29	389-	399	394.53	67.68	3.69E+04	500.30	8.95E+04
M	30	408-	441	412.95	70.85	2.08E+03	4124.55	9.35E+04
m	31	408-	441	424.78	72.88	6.73E+03	4298.50	9.84E+04
m	32	408-	441	436.07	74.82	4.58E+05	6085.23	1.15E+05
	33	444-	454	449.30	77.10	8.26E+05	1036.81	1.05E+05
M	34	457-	477	462.37	79.35	4.42E+04	3482.34	1.03E+05
m	35	457-	477	472.60	81.10	5.08E+04	3490.42	8.05E+04
M	36	483-	513	488.58	83.85	1.36E+05	8273.39	1.05E+05
m	38	483-	513	508.26	87.24	2.51E+05	8301.93	1.10E+05
	39	518-	528	523.50	89.86	1.00E+05	554.08	8.67E+04
[illegible]	40	534-	544	539.37	92.58	3.76E+05	755.39	8.16E+04
M	41	547-	588	552.17	94.79	-9.12E+03	3411.40	1.01E+05

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
m	44	547-	588	573.55	98.46	-1.30E+04	3466.40	5.62E+04
M	46	596-	620	599.65	102.95	1.81E+03	397.58	4.95E+04
m	47	596-	620	610.99	104.90	1.02E+03	366.49	6.37E+04
m	48	596-	620	615.58	105.69	3.53E+03	550.10	5.37E+04
M	49	630-	672	635.64	109.14	5.73E+03	576.38	5.92E+04
m	50	630-	672	643.42	110.47	4.10E+03	553.06	5.90E+04
m	51	630-	672	648.56	111.36	7.57E+03	602.79	5.89E+04
m	52	630-	672	657.28	112.86	2.11E+04	954.69	6.36E+04
m	53	630-	672	667.45	114.61	2.58E+03	546.58	5.36E+04
M	54	699-	717	704.37	120.95	2.08E+03	257.41	5.48E+04
m	55	699-	717	712.77	122.40	4.29E+03	412.39	5.00E+04
	56	740-	750	745.93	128.10	2.58E+03	351.00	5.06E+04
M	57	754-	769	759.40	130.41	3.35E+03	367.11	5.57E+04
m	58	754-	769	764.75	131.33	1.36E+03	196.79	5.06E+04
M	60	812-	842	818.95	140.65	1.78E+03	682.61	7.05E+04
m	62	812-	842	837.89	143.91	3.99E+04	1080.58	5.80E+04
M	64	858-	877	866.60	148.84	-9.43E+01	332.84	1.95E+04
m	65	858-	877	873.96	150.11	-7.14E+01	252.08	2.47E+04
	66	893-	903	898.28	154.29	1.65E+04	378.76	5.33E+04
	67	919-	929	924.10	158.73	1.94E+03	350.11	5.06E+04
	68	946-	956	951.61	163.46	1.24E+04	352.79	4.71E+04
M	69	961-	976	964.92	165.75	2.65E+02	286.50	4.17E+03
m	70	961-	976	972.06	166.98	1.51E+02	165.50	4.10E+03
	71	991-	996	994.00	170.75	2.01E+02	207.48	2.42E+04
	74	1059-	1088	1083.60	186.15	2.79E+05	978.31	1.27E+05
	75	1139-	1147	1143.09	196.38	1.19E+03	280.71	3.63E+04
M	76	1167-	1180	1171.85	201.33	6.97E+02	184.51	4.48E+04
m	77	1167-	1180	1176.89	202.19	2.20E+03	331.75	3.70E+04
	78	1192-	1200	1196.11	205.50	9.25E+03	273.28	3.06E+04
	79	1223-	1231	1227.60	210.91	1.86E+03	244.94	2.72E+04
	81	1241-	1252	1250.06	214.77	-2.86E+02	298.63	3.56E+04
	82	1278-	1282	1280.00	219.92	-2.52E+02	151.94	1.41E+04
	83	1296-	1303	1299.66	223.30	1.08E+02	210.89	2.20E+04
M	84	1325-	1336	1328.29	228.22	1.32E+02	99.10	1.09E+04
m	85	1325-	1336	1333.39	229.10	2.63E+02	192.29	1.08E+04
	86	1370-	1378	1374.69	236.20	1.38E+04	260.87	2.55E+04
	87	1390-	1397	1393.00	239.35	6.65E+00	208.84	2.16E+04
	88	1405-	1413	1409.50	242.19	2.04E+05	518.90	3.06E+04
	89	1458-	1462	1461.00	251.04	-9.39E+01	140.90	1.21E+04
	90	1476-	1480	1478.00	253.96	-3.21E+02	142.95	1.26E+04
M	91	1496-	1512	1500.92	257.91	5.38E+04	3320.65	4.92E+04
m	92	1496-	1512	1506.08	258.79	2.68E+04	3307.14	5.88E+04

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	93	1550-	1556	1552.56	266.78	2.38E+02	169.44	1.51E+04
M	94	1565-	1583	1569.74	269.74	1.50E+04	740.02	2.48E+04
m	95	1565-	1583	1580.10	271.52	1.15E+04	724.46	4.31E+04
	96	1596-	1604	1600.84	275.08	5.82E+03	225.19	2.11E+04
	97	1648-	1656	1652.63	283.99	1.77E+03	212.93	2.04E+04
	98	1662-	1670	1666.39	286.35	3.55E+03	219.23	2.08E+04
M	99	1681-	1691	1683.97	289.38	6.85E+01	61.42	2.40E+03
m	100	1681-	1691	1686.71	289.85	2.15E+02	190.45	4.76E+03
	101	1715-	1723	1719.54	295.49	3.87E+05	692.21	4.32E+04
	102	1743-	1751	1747.39	300.28	4.03E+03	206.99	1.82E+04
	103	1758-	1766	1762.64	302.90	1.64E+03	200.67	1.81E+04
	104	1797-	1802	1800.00	309.33	6.72E+01	142.88	1.15E+04
	106	1856-	1869	1867.12	320.87	-1.88E+02	271.65	2.68E+04
	107	1882-	1890	1886.56	324.21	3.20E+03	201.49	1.75E+04
	108	1917-	1925	1921.83	330.27	3.47E+03	201.72	1.74E+04
M	109	1965-	1975	1969.13	338.41	1.07E+03	168.11	2.14E+04
m	110	1965-	1975	1971.96	338.89	9.04E+02	152.74	1.92E+04
	111	1980-	1986	1983.63	340.90	1.42E+02	165.01	1.43E+04
	112	2000-	2006	2003.90	344.38	5.50E+01	170.15	1.53E+04
	113	2028-	2036	2032.74	349.34	2.94E+02	208.11	2.01E+04
	114	2045-	2053	2049.05	352.15	4.27E+05	754.58	6.65E+04
	115	2119-	2123	2121.00	364.52	-9.07E+01	95.82	5.62E+03
	116	2248-	2256	2252.63	387.15	1.66E+03	158.48	1.10E+04
	117	2261-	2269	2265.33	389.33	2.37E+03	161.65	1.11E+04
	118	2336-	2344	2340.42	402.24	2.29E+03	162.55	1.13E+04
	119	2355-	2363	2359.31	405.49	1.42E+03	161.15	1.15E+04
	120	2504-	2508	2506.21	430.74	-1.39E+02	94.05	5.45E+03
	121	2518-	2523	2521.00	433.29	5.36E+01	104.71	6.15E+03
M	122	2729-	2741	2733.74	469.86	5.25E+02	125.59	7.57E+03
m	123	2729-	2741	2737.30	470.48	5.77E+02	131.15	7.63E+03
	124	2794-	2802	2798.07	480.93	2.05E+03	134.09	7.47E+03
	125	2883-	2887	2885.23	495.91	-1.71E+02	78.75	3.86E+03
	126	2921-	2928	2925.80	502.89	1.28E+02	108.96	5.82E+03
	127	2993-	2998	2996.00	514.96	-6.92E+01	86.59	4.27E+03
	128	3033-	3038	3035.64	521.77	-8.79E+01	84.69	4.10E+03
	130	3156-	3165	3162.78	543.63	8.80E+01	126.79	7.06E+03
	131	3203-	3209	3206.30	551.11	-5.10E+01	94.69	4.76E+03
	132	3240-	3245	3243.00	557.42	-1.04E+02	83.58	3.99E+03
	133	3384-	3390	3387.00	582.18	-3.02E+02	97.61	5.18E+03
	134	3517-	3522	3519.68	604.99	7.87E+00	91.90	4.77E+03
	135	3545-	3553	3549.24	610.07	1.42E+05	495.67	4.85E+04
	136	3605-	3612	3608.55	620.27	-3.33E+00	98.06	4.77E+03
	137	3659-	3663	3661.04	629.30	-5.70E+01	68.02	2.84E+03
	138	3690-	3696	3693.00	634.79	-1.10E+02	88.99	4.26E+03
	139	3806-	3812	3809.33	654.79	2.15E+01	87.24	4.01E+03
	140	3827-	3834	3830.00	658.35	5.24E+01	95.85	4.53E+03
	141	3872-	3880	3876.67	666.37	3.40E+03	128.94	6.19E+03
	142	3893-	3899	3896.00	669.69	1.32E+02	85.70	3.81E+03

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	143	3906-	3913	3910.12	672.12	-5.70E+01	93.94	4.40E+03
	144	3928-	3935	3931.04	675.72	4.85E+01	93.81	4.34E+03
	145	3941-	3945	3943.00	677.77	-8.78E+01	67.11	2.78E+03
	146	3991-	3996	3994.19	686.57	-4.66E+01	76.96	3.36E+03
M	147	4024-	4035	4027.78	692.35	1.03E+03	255.01	2.17E+03
m	148	4024-	4035	4030.90	692.89	1.66E+03	259.98	9.04E+02

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

****
***** B A C K G R O U N D S U B T R A C T R E P O R T *****
****

Detector Name: DET01
Sample Title: BL5D
Peak Analysis Performed on: 1-10-96 9:22:48 AM

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
M	1	3.35	5.73E+04	6943.30			5.73E+04	6.94E+03
m	2	4.31	3.19E+04	5485.97			3.19E+04	5.49E+03
m	3	5.33	4.89E+04	6768.12			4.89E+04	6.77E+03
m	4	6.26	4.93E+04	7163.07			4.93E+04	7.16E+03
m	5	7.85	7.06E+03	5693.43			7.06E+03	5.69E+03
m	6	9.13	6.28E+03	6173.04			6.28E+03	6.17E+03
m	7	10.80	9.51E+04	9726.71	1.54E+02	3.60E+01	9.50E+04	9.73E+03
	8	13.01	3.15E+05	811.55	4.47E+01	2.75E+01	3.14E+05	8.12E+02
M	9	15.36	1.76E+05	16252.3			1.76E+05	1.63E+04
m	10	16.16	2.95E+05	18798.0			2.95E+05	1.88E+04
m	11	17.78	2.93E+04	10191.3			2.93E+04	1.02E+04
m	12	18.95	6.46E+04	12037.5			6.46E+04	1.20E+04
m	13	19.61	3.59E+04	11230.9			3.59E+04	1.12E+04
m	14	20.18	1.80E+04	10066.2			1.80E+04	1.01E+04
m	15	20.88	5.93E+03	8544.06			5.93E+03	8.54E+03
[illegible]	16	24.21	1.13E+03	223.46			1.13E+03	2.23E+02
[illegible]	17	25.63	2.96E+04	602.74			2.96E+04	6.03E+02
m	18	27.36	2.47E+04	518.88			2.47E+04	5.19E+02
M	19	35.43	1.70E+03	300.47			1.70E+03	3.00E+02
m	20	36.67	6.03E+03	571.65			6.03E+03	5.72E+02
	21	40.21	1.96E+03	408.57			1.96E+03	4.09E+02
	22	42.29	-1.33E+02	380.94			-1.33E+02	3.81E+02
	23	46.53	3.28E+05	716.80			3.28E+05	7.17E+02
	24	50.11	3.18E+04	458.19			3.18E+04	4.58E+02
	25	53.23	8.18E+04	512.44			8.18E+04	5.12E+02
	26	58.64	5.88E+02	411.56			5.88E+02	4.12E+02
M	27	63.29	3.03E+05	1141.32	5.19E+01	2.82E+01	3.03E+05	1.14E+03
m	28	64.98	9.89E+02	633.48	7.10E+00	4.38E+00	9.82E+02	6.33E+02
	29	67.68	3.69E+04	500.30			3.69E+04	5.00E+02
M	30	70.85	2.08E+03	4124.55			2.08E+03	4.12E+03
m	31	72.88	6.73E+03	4298.50			6.73E+03	4.30E+03
m	32	74.82	4.58E+05	6085.23			4.58E+05	6.09E+03
	33	77.10	8.26E+05	1036.81			8.26E+05	1.04E+03
M	34	79.35	4.42E+04	3482.34			4.42E+04	3.48E+03
m	35	81.10	5.08E+04	3490.42			5.08E+04	3.49E+03
M	36	83.85	1.36E+05	8273.39			1.36E+05	8.27E+03
m	37	85.45	0.00E+00	0.00			0.00E+00	0.00E+00
m	38	87.24	2.51E+05	8301.93			2.51E+05	8.30E+03
	39	89.86	1.00E+05	554.08			1.00E+05	5.54E+02
	40	92.58	3.76E+05	755.39			3.76E+05	7.55E+02
M	41	94.79	-9.12E+03	3411.40			-9.12E+03	3.41E+03
[illegible]	42	95.98	0.00E+00	0.00			0.00E+00	0.00E+00

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
m	43	97.55	0.00E+00	0.00			0.00E+00	0.00E+00
m	44	98.46	-1.30E+04	3466.40			-1.30E+04	3.47E+03
m	45	100.21	0.00E+00	0.00			0.00E+00	0.00E+00
M	46	102.95	1.81E+03	397.58			1.81E+03	3.98E+02
m	47	104.90	1.02E+03	366.49			1.02E+03	3.66E+02
m	48	105.69	3.53E+03	550.10			3.53E+03	5.50E+02
M	49	109.14	5.73E+03	576.38			5.73E+03	5.76E+02
m	50	110.47	4.10E+03	553.06			4.10E+03	5.53E+02
m	51	111.36	7.57E+03	602.79	-1.31E+01	1.36E+01	7.59E+03	6.03E+02
m	52	112.86	2.11E+04	954.69	-1.31E+01	1.36E+01	2.12E+04	9.55E+02
m	53	114.61	2.58E+03	546.58			2.58E+03	5.47E+02
M	54	120.95	2.08E+03	257.41			2.08E+03	2.57E+02
m	55	122.40	4.29E+03	412.39			4.29E+03	4.12E+02
	56	128.10	2.58E+03	351.00	-2.79E-01	3.33E+01	2.58E+03	3.53E+02
M	57	130.41	3.35E+03	367.11	0.00E+00	0.00E+00	3.35E+03	3.67E+02
m	58	131.33	1.36E+03	196.79	0.00E+00	0.00E+00	1.36E+03	1.97E+02
m	59	140.18	0.00E+00	0.00			0.00E+00	0.00E+00
M	60	140.65	1.78E+03	682.61			1.78E+03	6.83E+02
m	61	141.90	0.00E+00	0.00			0.00E+00	0.00E+00
m	62	143.91	3.99E+04	1080.58			3.99E+04	1.08E+03
m	63	148.19	0.00E+00	0.00			0.00E+00	0.00E+00
M	64	148.84	-9.43E+01	332.84			-9.43E+01	3.33E+02
m	65	150.11	-7.14E+01	252.08			-7.14E+01	2.52E+02
	66	154.29	1.65E+04	378.76			1.65E+04	3.79E+02
	67	158.73	1.94E+03	350.11			1.94E+03	3.50E+02
	68	163.46	1.24E+04	352.79			1.24E+04	3.53E+02
M	69	165.75	2.65E+02	286.50	2.01E+01	1.53E+01	2.45E+02	2.87E+02
m	70	166.98	1.51E+02	165.50			1.51E+02	1.66E+02
	71	170.75	2.01E+02	207.48			2.01E+02	2.07E+02
	72	182.91	0.00E+00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	73	184.33	0.00E+00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	74	186.15	2.79E+05	978.31	1.49E+02	3.34E+01	2.79E+05	9.79E+02
	75	196.38	1.19E+03	280.71	3.28E+01	1.88E+01	1.16E+03	2.81E+02
M	76	201.33	6.97E+02	184.51			6.97E+02	1.85E+02
m	77	202.19	2.20E+03	331.75			2.20E+03	3.32E+02
	78	205.50	9.25E+03	273.28	5.26E+00	1.33E+01	9.24E+03	2.74E+02
	79	210.91	1.86E+03	244.94			1.86E+03	2.45E+02
	80	213.73	0.00E+00	0.00			0.00E+00	0.00E+00
	81	214.77	-2.86E+02	298.63			-2.86E+02	2.99E+02
	82	219.92	-2.52E+02	151.94			-2.52E+02	1.52E+02
	83	223.30	1.08E+02	210.89			1.08E+02	2.11E+02
M	84	228.22	1.32E+02	99.10			1.32E+02	9.91E+01
m	85	229.10	2.63E+02	192.29			2.63E+02	1.92E+02
	86	236.20	1.38E+04	260.87			1.38E+04	2.61E+02
	87	239.35	6.65E+00	208.84	-1.27E+01	1.27E+01	1.93E+01	2.09E+02
	88	242.19	2.04E+05	518.90			2.04E+05	5.19E+02
	89	251.04	-9.39E+01	140.90			-9.39E+01	1.41E+02
	90	253.96	-3.21E+02	142.95			-3.21E+02	1.43E+02
M	91	257.91	5.38E+04	3320.65			5.38E+04	3.32E+03
	92	258.79	2.68E+04	3307.14			2.68E+04	3.31E+03

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
	93	266.78	2.38E+02	169.44			2.38E+02	1.69E+02
M	94	269.74	1.50E+04	740.02			1.50E+04	7.40E+02
m	95	271.52	1.15E+04	724.46			1.15E+04	7.24E+02
	96	275.08	5.82E+03	225.19			5.82E+03	2.25E+02
	97	283.99	1.77E+03	212.93			1.77E+03	2.13E+02
	98	286.35	3.55E+03	219.23			3.55E+03	2.19E+02
M	99	289.38	6.85E+01	61.42			6.85E+01	6.14E+01
m	100	289.85	2.15E+02	190.45			2.15E+02	1.90E+02
	101	295.49	3.87E+05	692.21			3.87E+05	6.92E+02
	102	300.28	4.03E+03	206.99			4.03E+03	2.07E+02
	103	302.90	1.64E+03	200.67			1.64E+03	2.01E+02
	104	309.33	6.72E+01	142.88			6.72E+01	1.43E+02
	105	319.47	0.00E+00	0.00			0.00E+00	0.00E+00
	106	320.87	-1.88E+02	271.65			-1.88E+02	2.72E+02
	107	324.21	3.20E+03	201.49			3.20E+03	2.01E+02
	108	330.27	3.47E+03	201.72			3.47E+03	2.02E+02
M	109	338.41	1.07E+03	168.11			1.07E+03	1.68E+02
m	110	338.89	9.04E+02	152.74			9.04E+02	1.53E+02
	111	340.90	1.42E+02	165.01			1.42E+02	1.65E+02
	112	344.38	5.50E+01	170.15			5.50E+01	1.70E+02
	113	349.34	2.94E+02	208.11	-1.23E+01	7.07E+00	3.07E+02	2.08E+02
	114	352.15	4.27E+05	754.58			4.27E+05	7.55E+02
	115	364.52	-9.07E+01	95.82			-9.07E+01	9.58E+01
	116	387.15	1.66E+03	158.48			1.66E+03	1.58E+02
	117	389.33	2.37E+03	161.65			2.37E+03	1.62E+02
	118	402.24	2.29E+03	162.55			2.29E+03	1.63E+02
	119	405.49	1.42E+03	161.15			1.42E+03	1.61E+02
	120	430.74	-1.39E+02	94.05			-1.39E+02	9.41E+01
	121	433.29	5.36E+01	104.71			5.36E+01	1.05E+02
M	122	469.86	5.25E+02	125.59			5.25E+02	1.26E+02
m	123	470.48	5.77E+02	131.15			5.77E+02	1.31E+02
	124	480.93	2.05E+03	134.09			2.05E+03	1.34E+02
	125	495.91	-1.71E+02	78.75			-1.71E+02	7.87E+01
	126	502.89	1.28E+02	108.96			1.28E+02	1.09E+02
	127	514.96	-6.92E+01	86.59			-6.92E+01	8.66E+01
	128	521.77	-8.79E+01	84.69			-8.79E+01	8.47E+01
	129	542.98	0.00E+00	0.00			0.00E+00	0.00E+00
	130	543.63	8.80E+01	126.79			8.80E+01	1.27E+02
	131	551.11	-5.10E+01	94.69			-5.10E+01	9.47E+01
	132	557.42	-1.04E+02	83.58			-1.04E+02	8.36E+01
	133	582.18	-3.02E+02	97.61			-3.02E+02	9.76E+01
	134	604.99	7.87E+00	91.90			7.87E+00	9.19E+01
	135	610.07	1.42E+05	495.67			1.42E+05	4.96E+02
	136	620.27	-3.33E+00	98.06			-3.33E+00	9.81E+01
	137	629.30	-5.70E+01	68.02			-5.70E+01	6.80E+01
	138	634.79	-1.10E+02	88.99			-1.10E+02	8.90E+01
	139	654.79	2.15E+01	87.24			2.15E+01	8.72E+01
	140	658.35	5.24E+01	95.85			5.24E+01	9.58E+01
	141	666.37	3.40E+03	128.94			3.40E+03	1.29E+02
	142	669.69	1.32E+02	85.70			1.32E+02	8.57E+01

Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
143	672.12	-5.70E+01	93.94			-5.70E+01	9.39E+01
144	675.72	4.85E+01	93.81			4.85E+01	9.38E+01
145	677.77	-8.78E+01	67.11			-8.78E+01	6.71E+01
146	686.57	-4.66E+01	76.96			-4.66E+01	7.70E+01
M 147	692.35	1.03E+03	255.01			1.03E+03	2.55E+02
m 148	692.89	1.66E+03	259.98			1.66E+03	2.60E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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*************************************************************************
*****          A R E A   C O R R E C T I O N   R E P O R T          *****
*****      R E F E R E N C E   P E A K / B K G . S U B T R A C T    *****
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Detector Name: DET01
Sample Title: BL5D
Peak Analysis Performed on: 1-10-96 9:22:48 AM

Ref. Peak Energy: 0.00; Reference Date:
Peak Ratio: 0.00; Uncertainty: 0.00
Background File : E:\GENIEPC\CAMFILES\BG122895.CNF

Corrected area is: Original * Peak Ratio - Background

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
M	1	3.35	5.73E+04	6943.30			5.73E+04	6.94E+03
m	2	4.31	3.19E+04	5485.97			3.19E+04	5.49E+03
m	3	5.33	4.89E+04	6768.12			4.89E+04	6.77E+03
m	4	6.26	4.93E+04	7163.07			4.93E+04	7.16E+03
m	5	7.85	7.06E+03	5693.43			7.06E+03	5.69E+03
m	6	9.13	6.28E+03	6173.04			6.28E+03	6.17E+03
m	7	10.80	9.51E+04	9726.71	1.54E+02	3.60E+01	9.50E+04	9.73E+03
	8	13.01	3.15E+05	811.55	4.47E+01	2.75E+01	3.14E+05	8.12E+02
M	9	15.36	1.76E+05	16252.3			1.76E+05	1.63E+04
[illegible]	10	16.16	2.95E+05	18798.0			2.95E+05	1.88E+04
[illegible]	11	17.78	2.93E+04	10191.3			2.93E+04	1.02E+04
m	12	18.95	6.46E+04	12037.5			6.46E+04	1.20E+04
m	13	19.61	3.59E+04	11230.9			3.59E+04	1.12E+04
m	14	20.18	1.80E+04	10066.2			1.80E+04	1.01E+04
m	15	20.88	5.93E+03	8544.06			5.93E+03	8.54E+03
M	16	24.21	1.13E+03	223.46			1.13E+03	2.23E+02
m	17	25.63	2.96E+04	602.74			2.96E+04	6.03E+02
m	18	27.36	2.47E+04	518.88			2.47E+04	5.19E+02
M	19	35.43	1.70E+03	300.47			1.70E+03	3.00E+02
m	20	36.67	6.03E+03	571.65			6.03E+03	5.72E+02
	21	40.21	1.96E+03	408.57			1.96E+03	4.09E+02
	22	42.29	-1.33E+02	380.94			-1.33E+02	3.81E+02
	23	46.53	3.28E+05	716.80			3.28E+05	7.17E+02
	24	50.11	3.18E+04	458.19			3.18E+04	4.58E+02
	25	53.23	8.18E+04	512.44			8.18E+04	5.12E+02
	26	58.64	5.88E+02	411.56			5.88E+02	4.12E+02
M	27	63.29	3.03E+05	1141.32	5.19E+01	2.82E+01	3.03E+05	1.14E+03
m	28	64.98	9.89E+02	633.48	7.10E+00	4.38E+00	9.82E+02	6.33E+02
	29	67.68	3.69E+04	500.30			3.69E+04	5.00E+02
M	30	70.85	2.08E+03	4124.55			2.08E+03	4.12E+03
m	31	72.88	6.73E+03	4298.50			6.73E+03	4.30E+03
m	32	74.82	4.58E+05	6085.23			4.58E+05	6.09E+03
	33	77.10	8.26E+05	1036.81			8.26E+05	1.04E+03
M	34	79.35	4.42E+04	3482.34			4.42E+04	3.48E+03
m	35	81.10	5.08E+04	3490.42			5.08E+04	3.49E+03
[illegible]	36	83.85	1.36E+05	8273.39			1.36E+05	8.27E+03
m	37	85.45	0.00E+00	0.00			0.00E+00	0.00E+00
m	38	87.24	2.51E+05	8301.93			2.51E+05	8.30E+03
	39	89.86	1.00E+05	554.08			1.00E+05	5.54E+02
	40	92.58	3.76E+05	755.39			3.76E+05	7.55E+02

M	41	94.79	-9.12E+03	3411.40	-9.12E+03	3.41E+03
m	42	95.98	0.00E+00	0.00	0.00E+00	0.00E+00

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
m	43	97.55	0.00E+00	0.00			0.00E+00	0.00E+00
m	44	98.46	-1.30E+04	3466.40			-1.30E+04	3.47E+03
m	45	100.21	0.00E+00	0.00			0.00E+00	0.00E+00
M	46	102.95	1.81E+03	397.58			1.81E+03	3.98E+02
m	47	104.90	1.02E+03	366.49			1.02E+03	3.66E+02
m	48	105.69	3.53E+03	550.10			3.53E+03	5.50E+02
M	49	109.14	5.73E+03	576.38			5.73E+03	5.76E+02
m	50	110.47	4.10E+03	553.06			4.10E+03	5.53E+02
m	51	111.36	7.57E+03	602.79	-1.31E+01	1.36E+01	7.59E+03	6.03E+02
m	52	112.86	2.11E+04	954.69	-1.31E+01	1.36E+01	2.12E+04	9.55E+02
m	53	114.61	2.58E+03	546.58			2.58E+03	5.47E+02
M	54	120.95	2.08E+03	257.41			2.08E+03	2.57E+02
m	55	122.40	4.29E+03	412.39			4.29E+03	4.12E+02
	56	128.10	2.58E+03	351.00	-2.79E-01	3.33E+01	2.58E+03	3.53E+02
M	57	130.41	3.35E+03	367.11	0.00E+00	0.00E+00	3.35E+03	3.67E+02
m	58	131.33	1.36E+03	196.79	0.00E+00	0.00E+00	1.36E+03	1.97E+02
m	59	140.18	0.00E+00	0.00			0.00E+00	0.00E+00
M	60	140.65	1.78E+03	682.61			1.78E+03	6.83E+02
m	61	141.90	0.00E+00	0.00			0.00E+00	0.00E+00
m	62	143.91	3.99E+04	1080.58			3.99E+04	1.08E+03
m	63	148.19	0.00E+00	0.00			0.00E+00	0.00E+00
M	64	148.84	-9.43E+01	332.84			-9.43E+01	3.33E+02
m	65	150.11	-7.14E+01	252.08			-7.14E+01	2.52E+02
	66	154.29	1.65E+04	378.76			1.65E+04	3.79E+02
	67	158.73	1.94E+03	350.11			1.94E+03	3.50E+02
	68	163.46	1.24E+04	352.79			1.24E+04	3.53E+02
M	69	165.75	2.65E+02	286.50	2.01E+01	1.53E+01	2.45E+02	2.87E+02
m	70	166.98	1.51E+02	165.50			1.51E+02	1.66E+02
	71	170.75	2.01E+02	207.48			2.01E+02	2.07E+02
	72	182.91	0.00E+00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	73	184.33	0.00E+00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	74	186.15	2.79E+05	978.31	1.49E+02	3.34E+01	2.79E+05	9.79E+02
	75	196.38	1.19E+03	280.71	3.28E+01	1.88E+01	1.16E+03	2.81E+02
M	76	201.33	6.97E+02	184.51			6.97E+02	1.85E+02
m	77	202.19	2.20E+03	331.75			2.20E+03	3.32E+02
	78	205.50	9.25E+03	273.28	5.26E+00	1.33E+01	9.24E+03	2.74E+02
	79	210.91	1.86E+03	244.94			1.86E+03	2.45E+02
	80	213.73	0.00E+00	0.00			0.00E+00	0.00E+00
	81	214.77	-2.86E+02	298.63			-2.86E+02	2.99E+02
	82	219.92	-2.52E+02	151.94			-2.52E+02	1.52E+02
	83	223.30	1.08E+02	210.89			1.08E+02	2.11E+02
M	84	228.22	1.32E+02	99.10			1.32E+02	9.91E+01
m	85	229.10	2.63E+02	192.29			2.63E+02	1.92E+02
	86	236.20	1.38E+04	260.87			1.38E+04	2.61E+02
	87	239.35	6.65E+00	208.84	-1.27E+01	1.27E+01	1.93E+01	2.09E+02
	88	242.19	2.04E+05	518.90			2.04E+05	5.19E+02
	89	251.04	-9.39E+01	140.90			-9.39E+01	1.41E+02
	90	253.96	-3.21E+02	142.95			-3.21E+02	1.43E+02
M	91	257.91	5.38E+04	3320.65			5.38E+04	3.32E+03
	92	258.79	2.68E+04	3307.14			2.68E+04	3.31E+03

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
	93	266.78	2.38E+02	169.44			2.38E+02	1.69E+02
M	94	269.74	1.50E+04	740.02			1.50E+04	7.40E+02
m	95	271.52	1.15E+04	724.46			1.15E+04	7.24E+02
	96	275.08	5.82E+03	225.19			5.82E+03	2.25E+02
	97	283.99	1.77E+03	212.93			1.77E+03	2.13E+02
	98	286.35	3.55E+03	219.23			3.55E+03	2.19E+02
M	99	289.38	6.85E+01	61.42			6.85E+01	6.14E+01
m	100	289.85	2.15E+02	190.45			2.15E+02	1.90E+02
	101	295.49	3.87E+05	692.21			3.87E+05	6.92E+02
	102	300.28	4.03E+03	206.99			4.03E+03	2.07E+02
	103	302.90	1.64E+03	200.67			1.64E+03	2.01E+02
	104	309.33	6.72E+01	142.88			6.72E+01	1.43E+02
	105	319.47	0.00E+00	0.00			0.00E+00	0.00E+00
	106	320.87	-1.88E+02	271.65			-1.88E+02	2.72E+02
	107	324.21	3.20E+03	201.49			3.20E+03	2.01E+02
	108	330.27	3.47E+03	201.72			3.47E+03	2.02E+02
M	109	338.41	1.07E+03	168.11			1.07E+03	1.68E+02
m	110	338.89	9.04E+02	152.74			9.04E+02	1.53E+02
	111	340.90	1.42E+02	165.01			1.42E+02	1.65E+02
	112	344.38	5.50E+01	170.15			5.50E+01	1.70E+02
	113	349.34	2.94E+02	208.11	-1.23E+01	7.07E+00	3.07E+02	2.08E+02
	114	352.15	4.27E+05	754.58			4.27E+05	7.55E+02
	115	364.52	-9.07E+01	95.82			-9.07E+01	9.58E+01
	116	387.15	1.66E+03	158.48			1.66E+03	1.58E+02
	117	389.33	2.37E+03	161.65			2.37E+03	1.62E+02
	118	402.24	2.29E+03	162.55			2.29E+03	1.63E+02
	119	405.49	1.42E+03	161.15			1.42E+03	1.61E+02
	120	430.74	-1.39E+02	94.05			-1.39E+02	9.41E+01
	121	433.29	5.36E+01	104.71			5.36E+01	1.05E+02
M	122	469.86	5.25E+02	125.59			5.25E+02	1.26E+02
m	123	470.48	5.77E+02	131.15			5.77E+02	1.31E+02
	124	480.93	2.05E+03	134.09			2.05E+03	1.34E+02
	125	495.91	-1.71E+02	78.75			-1.71E+02	7.87E+01
	126	502.89	1.28E+02	108.96			1.28E+02	1.09E+02
	127	514.96	-6.92E+01	86.59			-6.92E+01	8.66E+01
	128	521.77	-8.79E+01	84.69			-8.79E+01	8.47E+01
	129	542.98	0.00E+00	0.00			0.00E+00	0.00E+00
	130	543.63	8.80E+01	126.79			8.80E+01	1.27E+02
	131	551.11	-5.10E+01	94.69			-5.10E+01	9.47E+01
	132	557.42	-1.04E+02	83.58			-1.04E+02	8.36E+01
	133	582.18	-3.02E+02	97.61			-3.02E+02	9.76E+01
	134	604.99	7.87E+00	91.90			7.87E+00	9.19E+01
	135	610.07	1.42E+05	495.67			1.42E+05	4.96E+02
	136	620.27	-3.33E+00	98.06			-3.33E+00	9.81E+01
	137	629.30	-5.70E+01	68.02			-5.70E+01	6.80E+01
	138	634.79	-1.10E+02	88.99			-1.10E+02	8.90E+01
	139	654.79	2.15E+01	87.24			2.15E+01	8.72E+01
	140	658.35	5.24E+01	95.85			5.24E+01	9.58E+01
	141	666.37	3.40E+03	128.94			3.40E+03	1.29E+02
	142	669.69	1.32E+02	85.70			1.32E+02	8.57E+01

Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
143	672.12	-5.70E+01	93.94			-5.70E+01	9.39E+01
144	675.72	4.85E+01	93.81			4.85E+01	9.38E+01
145	677.77	-8.78E+01	67.11			-8.78E+01	6.71E+01
146	686.57	-4.66E+01	76.96			-4.66E+01	7.70E+01
M 147	692.35	1.03E+03	255.01			1.03E+03	2.55E+02
m 148	692.89	1.66E+03	259.98			1.66E+03	2.60E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region

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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Report Generated On : 1-16-96 2:42:53 PM

Sample Title : BL5D
Spectrum Description : BL5D standard
Sample Identification : BL5D
Sample Type :
Sample Geometry :

BL5Db.CNF

Peak Locate Threshold : 3.00
Peak Locate Range (in channels) : 1 - 4096
Peak Area Range (in channels) : 1 - 4096
Identification Energy Tolerance : 1.000 keV

Sample Size : 0.000E+00 Unit

Sample Taken On :
Acquisition Started : 1-15-96 3:00:55 PM

Live Time : 80000.0 seconds
Real Time : 80374.2 seconds

Energy Calibration Used Done On : 1-16-96
Efficiency Calibration Used Done On : ????????

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: BL5D
Peak Locate Performed on: 1-16-96 2:40:52 PM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	26.00	0.0000	4.42	3.10
2	31.28	0.0513	5.40	13.99
3	37.05	0.0404	6.33	28.95
4	40.23	0.2517	6.89	3.19
5	46.63	0.0959	8.00	6.27
6	53.18	0.1418	9.14	6.27
7	63.25	0.0203	10.88	68.24
8	75.71	0.0186	13.04	56.51
9	83.00	<NA>	15.27	<NA>
10	88.46	0.0142	15.76	34.94
11	94.09	0.0119	16.24	90.90
12	97.31	0.0960	16.80	7.05
13	103.57	0.0321	17.87	16.31
14	110.15	0.0216	19.01	44.25
15	113.82	0.0527	19.59	17.13
16	117.00	<NA>	20.15	<NA>
17	121.41	0.0874	20.82	6.30
18	148.52	0.0098	25.68	48.58
19	158.48	0.0113	27.40	42.14
20	211.95	0.0819	36.67	12.66
21	268.93	0.0032	46.55	280.14
22	289.46	0.0225	50.12	45.69
23	307.43	0.0130	53.23	108.18
24	338.24	0.2724	58.58	4.43
25	365.38	0.0048	63.29	264.53
26	374.84	0.2692	64.94	3.60
27	390.73	0.0205	67.68	65.35
28	409.04	0.1296	70.89	7.06
29	420.43	0.0754	72.89	15.90
30	431.93	0.0023	74.81	337.90
31	445.02	0.0018	77.09	442.62
32	457.80	0.0124	79.32	100.22
33	467.97	0.0074	81.07	108.01
34	483.74	0.0093	83.84	122.52
35	493.05	0.0827	85.36	12.46
36	503.63	0.0120	87.21	131.16
37	518.49	0.0100	89.85	103.92
38	534.12	0.0064	92.57	186.95
39	546.70	0.0184	94.65	58.90
40	554.00	<NA>	95.68	<NA>
41	562.30	0.1396	97.48	5.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	567.96	0.0218	98.38	61.20
43	578.00	0.1533	99.98	5.42
44	591.95	0.7069	102.71	3.40
45	609.39	0.1650	105.60	6.25
46	629.54	0.0792	109.06	14.06
47	642.10	0.0906	111.23	14.07
48	650.94	0.0329	112.81	49.67
49	660.67	0.2345	114.55	6.30
50	675.86	0.2354	117.25	3.72
51	697.23	0.2495	120.84	6.00
52	705.74	0.0906	122.30	12.51
53	738.87	0.1320	128.05	9.41
54	751.50	0.0901	130.27	12.02
55	757.60	0.2880	131.20	3.59
56	811.37	0.2774	140.63	4.16
57	829.71	0.0184	143.81	69.42
58	889.56	0.0217	154.19	45.35
59	915.16	0.1682	158.63	6.75
60	942.25	0.0387	163.33	36.00
61	980.52	0.3332	169.96	3.56
62	1072.93	0.0077	185.99	187.58
63	1102.12	0.3779	191.05	3.25
64	1124.62	0.3028	195.04	3.89
65	1131.70	0.1270	196.16	8.53
66	1165.69	0.1935	202.06	7.54
67	1184.26	0.0418	205.29	30.80
68	1214.91	0.2561	210.61	5.39
69	1264.98	0.5130	219.30	3.22
70	1275.36	0.4330	221.10	3.02
71	1361.11	0.0248	235.97	48.28
72	1395.79	0.0062	241.98	249.43
73	1457.84	0.4161	252.97	3.12
74	1478.03	0.0405	256.23	29.48
75	1492.98	0.0403	258.82	38.94
76	1554.03	0.0229	269.44	51.46
77	1564.58	0.0382	271.23	41.56
78	1585.17	0.0538	274.77	22.16
79	1621.15	0.5708	281.01	3.19
80	1635.99	0.1410	283.70	8.66
81	1649.88	0.0871	286.03	17.37
82	1702.74	0.0040	295.22	349.59
83	1730.47	0.0668	300.02	20.84
84	1745.21	0.1568	302.64	9.41
85	1755.72	0.2394	304.41	5.09
86	1814.17	0.2649	314.54	6.32
87	1868.13	0.0838	323.90	17.80
88	1902.77	0.1185	329.91	14.10
89	1925.77	0.5059	333.92	5.11
90	1951.21	0.1628	338.31	10.49
91	2012.69	0.1422	349.06	7.22

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
92	2029.81	0.0038	351.93	424.62
93	2145.35	0.3780	371.98	3.65
94	2230.89	0.1092	386.86	13.36
95	2243.67	0.0964	388.99	16.71
96	2282.95	0.4178	395.84	3.08
97	2317.75	0.0872	401.86	17.81
98	2336.01	0.2017	405.13	8.43
99	2424.34	0.4257	420.36	3.50
100	2567.48	0.5222	445.19	3.62
101	2623.63	0.1699	454.93	10.34
102	2664.65	0.3073	462.04	5.06
103	2709.81	0.2326	469.86	6.92
104	2736.70	0.4132	474.50	4.41
105	2771.08	0.0984	480.50	14.58
106	2809.20	0.1281	487.11	12.83
107	3078.01	0.1575	533.73	11.74
108	3346.46	0.1385	580.29	10.94
109	3514.42	0.0056	609.41	265.41
110	3775.25	0.4872	654.65	3.32
111	3838.05	0.0584	665.54	30.18
112	3937.31	0.4535	682.76	3.06
113	3970.92	0.4029	688.58	4.32
114	4028.44	0.1130	698.56	28.98

Errors quoted at 1.000 sigma

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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: DET01
Sample Title: BL5D
Peak Analysis Performed on: 1-16-96 2:41:18 PM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	2	24-	55	31.60	5.40	-3.07E+02	423.16	8.44E+04
m	3	24-	55	36.99	6.33	-6.40E+02	861.21	7.08E+04
	7	60-	66	63.25	10.88	8.78E+04	482.93	7.60E+04
M	8	72-	124	75.69	13.04	2.45E+05	8639.22	1.23E+05
m	9	72-	124	88.56	15.27	1.29E+05	7137.35	1.18E+05
m	10	72-	124	91.39	15.76	1.10E+05	7143.10	1.11E+05
m	11	72-	124	94.12	16.24	2.39E+05	9015.71	1.03E+05
m	12	72-	124	97.35	16.80	7.98E+04	6060.10	9.69E+04
m	13	72-	124	103.50	17.87	2.88E+04	4541.35	9.04E+04
m	14	72-	124	110.11	19.01	6.51E+04	5550.61	9.35E+04
m	15	72-	124	113.44	19.59	3.73E+04	4862.16	8.19E+04
m	16	72-	124	116.67	20.15	2.17E+04	4361.80	7.97E+04
m	17	72-	124	120.56	20.82	6.58E+03	3732.81	7.00E+04
M	18	143-	163	148.55	25.68	2.80E+04	488.60	5.99E+04
m	19	143-	163	158.50	27.40	2.40E+04	437.94	5.72E+04
	20	208-	217	211.95	36.67	3.95E+03	394.91	6.72E+04
	21	262-	274	268.93	46.55	3.30E+05	747.12	8.69E+04
	22	283-	294	289.46	50.12	3.21E+04	470.93	7.56E+04
	23	301-	313	307.43	53.23	8.26E+04	548.27	8.30E+04
	24	332-	341	338.24	58.58	5.85E+02	398.51	6.97E+04
M	25	358-	379	365.42	63.29	3.03E+05	1082.32	7.75E+04
m	26	358-	379	374.94	64.94	7.31E+02	461.30	6.86E+04
	27	383-	396	390.73	67.68	3.65E+04	576.31	1.07E+05
M	28	402-	474	409.24	70.89	3.48E+03	2521.75	8.54E+04
m	29	402-	474	420.76	72.89	1.05E+04	2671.43	8.49E+04
m	30	402-	474	431.87	74.81	4.89E+05	7580.37	8.30E+04
m	31	402-	474	445.01	77.09	8.54E+05	8377.28	7.89E+04
m	32	402-	474	457.84	79.32	7.20E+04	3765.25	7.63E+04
m	33	402-	474	467.94	81.07	6.68E+04	3717.31	7.56E+04
M	34	476-	598	483.92	83.84	1.44E+05	6733.43	9.82E+04
m	35	476-	598	492.70	85.36	5.52E+03	3682.16	9.58E+04
m	36	476-	598	503.38	87.21	2.78E+05	8472.62	9.18E+04
m	37	476-	598	518.59	89.85	1.21E+05	6175.28	9.18E+04
m	38	476-	598	534.24	92.57	4.10E+05	9873.49	7.93E+04
m	39	476-	598	546.23	94.65	5.74E+04	4866.79	7.38E+04
m	40	476-	598	552.18	95.68	7.29E+03	3496.59	7.28E+04
m	41	476-	598	562.55	97.48	9.31E+03	3969.48	7.62E+04
m	42	476-	598	567.77	98.38	3.71E+04	4772.37	7.07E+04

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
m	43	476-	598	576.98	99.98	2.71E+03	3167.32	6.95E+04
m	44	476-	598	592.74	102.71	2.28E+03	3155.94	6.37E+04
	45	601-	616	609.39	105.60	2.85E+03	473.69	7.37E+04
M	46	621-	683	629.35	109.06	7.33E+03	752.85	6.38E+04
m	47	621-	683	641.85	111.23	1.03E+04	800.89	6.28E+04
m	48	621-	683	650.95	112.81	2.51E+04	1244.73	6.20E+04
m	49	621-	683	661.00	114.55	4.72E+03	697.22	6.10E+04
m	50	621-	683	676.54	117.25	1.34E+03	691.46	5.99E+04
M	51	689-	711	697.24	120.84	2.30E+03	273.35	5.09E+04
m	52	689-	711	705.66	122.30	3.76E+03	409.10	5.09E+04
M	53	731-	762	738.85	128.05	2.32E+03	256.97	4.66E+04
m	54	731-	762	751.65	130.27	4.03E+03	424.36	5.10E+04
m	55	731-	762	757.00	131.20	1.83E+03	214.77	4.68E+04
	56	803-	818	811.37	140.63	1.69E+03	464.51	7.12E+04
	57	821-	837	829.71	143.81	4.32E+04	527.84	7.53E+04
	58	883-	898	889.56	154.19	1.58E+04	488.24	7.39E+04
	59	910-	920	915.16	158.63	1.55E+03	339.93	4.78E+04
	60	935-	949	942.25	163.33	1.22E+04	432.44	6.06E+04
	61	974-	988	980.52	169.96	5.27E+02	404.82	5.67E+04
	62	1063-	1081	1072.93	185.99	2.86E+05	728.42	7.24E+04
	63	1096-	1111	1102.12	191.05	1.23E+02	420.29	5.87E+04
M	64	1118-	1137	1125.09	195.04	1.10E+03	197.33	4.04E+04
m	65	1118-	1137	1131.57	196.16	1.98E+03	336.64	4.38E+04
M	66	1155-	1193	1165.60	202.06	2.96E+03	292.40	5.39E+04
m	67	1155-	1193	1184.23	205.29	1.24E+04	741.06	4.58E+04
	68	1205-	1221	1214.91	210.61	1.79E+03	387.59	4.74E+04
	70	1258-	1283	1275.36	221.10	-5.14E+02	532.38	6.67E+04
	71	1351-	1371	1361.11	235.97	1.59E+04	448.94	5.11E+04
	72	1386-	1405	1395.79	241.98	2.21E+05	617.13	4.57E+04
M	73	1450-	1502	1459.11	252.97	6.87E+02	275.72	3.56E+04
m	74	1450-	1502	1477.96	256.23	9.61E+03	464.92	3.48E+04
m	75	1450-	1502	1492.85	258.82	1.45E+04	628.60	3.41E+04
M	76	1546-	1594	1554.12	269.44	1.80E+04	621.39	3.27E+04
m	77	1546-	1594	1564.40	271.23	1.41E+04	557.90	3.05E+04
m	78	1546-	1594	1584.84	274.77	8.03E+03	463.55	3.20E+04
M	79	1614-	1656	1620.81	281.01	5.44E+02	148.72	2.91E+04
m	80	1614-	1656	1636.30	283.70	1.30E+03	209.93	3.17E+04
m	81	1614-	1656	1649.76	286.03	3.91E+03	525.61	3.02E+04
	82	1691-	1713	1702.74	295.22	4.38E+05	782.69	4.51E+04
M	83	1722-	1766	1730.45	300.02	4.75E+03	429.28	2.87E+04
m	84	1722-	1766	1745.53	302.64	2.25E+03	236.86	2.80E+04
m	85	1722-	1766	1755.73	304.41	1.70E+03	201.02	2.76E+04
	86	1806-	1822	1814.17	314.54	1.17E+03	307.17	2.98E+04
	87	1857-	1876	1868.13	323.90	3.87E+03	348.26	3.35E+04
M	88	1890-	1933	1902.76	329.91	3.97E+03	513.34	3.52E+04
m	89	1890-	1933	1925.92	333.92	1.64E+03	243.25	3.12E+04
	90	1942-	1960	1951.21	338.31	1.63E+03	344.55	3.46E+04
M	91	2000-	2041	2013.18	349.06	1.45E+03	721.42	4.13E+04
m	92	2000-	2041	2029.77	351.93	6.60E+05	1335.54	3.64E+04

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	93	2136-	2154	2145.35	371.98	3.40E+02	323.38	3.08E+04
M	94	2220-	2252	2231.15	386.86	3.62E+03	252.22	3.67E+04
m	95	2220-	2252	2243.42	388.99	4.89E+03	326.89	3.33E+04
	96	2273-	2292	2282.95	395.84	5.42E+01	345.48	3.40E+04
M	97	2308-	2347	2317.65	401.86	4.63E+03	425.69	3.47E+04
m	98	2308-	2347	2336.49	405.13	3.03E+03	303.47	3.69E+04
	99	2413-	2435	2424.34	420.36	1.44E+02	401.28	4.14E+04
	100	2555-	2576	2567.48	445.19	1.21E+02	332.21	2.94E+04
	101	2610-	2633	2623.63	454.93	2.33E+03	353.98	3.07E+04
	102	2651-	2677	2664.65	462.04	2.24E+03	384.51	3.33E+04
M	103	2696-	2746	2709.71	469.86	1.32E+03	412.28	2.55E+04
m	104	2696-	2746	2736.51	474.50	8.74E+02	278.90	2.51E+04
	105	2761-	2781	2771.08	480.50	3.38E+03	303.75	2.45E+04
	106	2796-	2822	2809.20	487.11	4.48E+03	367.40	2.98E+04
	107	3064-	3090	3078.01	533.73	2.49E+03	342.76	2.63E+04
	108	3335-	3357	3346.46	580.29	2.33E+03	292.03	2.14E+04
	109	3499-	3529	3514.42	609.41	3.26E+05	688.61	3.05E+04
	110	3763-	3790	3775.25	654.65	8.11E+00	320.30	2.28E+04
	111	3825-	3852	3838.05	665.54	8.10E+03	328.98	2.22E+04
	112	3925-	3951	3937.31	682.76	5.98E+02	304.37	2.10E+04
	113	3955-	3982	3970.92	688.58	8.08E+02	316.75	2.21E+04
	114	4016-	4044	4028.44	698.56	7.43E+03	209.75	6.10E+03

[illegible]or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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***** B A C K G R O U N D S U B T R A C T R E P O R T *****
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Detector Name: DET01
Sample Title: BL5D
Peak Analysis Performed on: 1-16-96 2:40:52 PM

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
m	1	4.42	0.00E+00	0.00			0.00E+00	0.00E+00
M	2	5.40	-3.07E+02	423.16			-3.07E+02	4.23E+02
m	3	6.33	-6.40E+02	861.21			-6.40E+02	8.61E+02
m	4	6.89	0.00E+00	0.00			0.00E+00	0.00E+00
m	5	8.00	0.00E+00	0.00			0.00E+00	0.00E+00
m	6	9.14	0.00E+00	0.00			0.00E+00	0.00E+00
	7	10.88	8.78E+04	482.93	1.54E+02	3.60E+01	8.76E+04	4.84E+02
M	8	13.04	2.45E+05	8639.22	4.47E+01	2.75E+01	2.45E+05	8.64E+03
m	9	15.27	1.29E+05	7137.35			1.29E+05	7.14E+03
m	10	15.76	1.10E+05	7143.10			1.10E+05	7.14E+03
m	11	16.24	2.39E+05	9015.71			2.39E+05	9.02E+03
m	12	16.80	7.98E+04	6060.10			7.98E+04	6.06E+03
m	13	17.87	2.88E+04	4541.35			2.88E+04	4.54E+03
m	14	19.01	6.51E+04	5550.61			6.51E+04	5.55E+03
m	15	19.59	3.73E+04	4862.16			3.73E+04	4.86E+03
m	16	20.15	2.17E+04	4361.80			2.17E+04	4.36E+03
m	17	20.82	6.58E+03	3732.81			6.58E+03	3.73E+03
M	18	25.68	2.80E+04	488.60			2.80E+04	4.89E+02
m	19	27.40	2.40E+04	437.94			2.40E+04	4.38E+02
	20	36.67	3.95E+03	394.91			3.95E+03	3.95E+02
	21	46.55	3.30E+05	747.12			3.30E+05	7.47E+02
	22	50.12	3.21E+04	470.93			3.21E+04	4.71E+02
	23	53.23	8.26E+04	548.27			8.26E+04	5.48E+02
	24	58.58	5.85E+02	398.51			5.85E+02	3.99E+02
M	25	63.29	3.03E+05	1082.32	5.19E+01	2.82E+01	3.03E+05	1.08E+03
m	26	64.94	7.31E+02	461.30	7.10E+00	4.38E+00	7.24E+02	4.61E+02
	27	67.68	3.65E+04	576.31			3.65E+04	5.76E+02
M	28	70.89	3.48E+03	2521.75			3.48E+03	2.52E+03
m	29	72.89	1.05E+04	2671.43			1.05E+04	2.67E+03
m	30	74.81	4.89E+05	7580.37			4.89E+05	7.58E+03
m	31	77.09	8.54E+05	8377.28			8.54E+05	8.38E+03
m	32	79.32	7.20E+04	3765.25			7.20E+04	3.77E+03
m	33	81.07	6.68E+04	3717.31			6.68E+04	3.72E+03
M	34	83.84	1.44E+05	6733.43			1.44E+05	6.73E+03
m	35	85.36	5.52E+03	3682.16			5.52E+03	3.68E+03
m	36	87.21	2.78E+05	8472.62			2.78E+05	8.47E+03
m	37	89.85	1.21E+05	6175.28			1.21E+05	6.18E+03
m	38	92.57	4.10E+05	9873.49			4.10E+05	9.87E+03
m	39	94.65	5.74E+04	4866.79			5.74E+04	4.87E+03
m	40	95.68	7.29E+03	3496.59			7.29E+03	3.50E+03
m	41	97.48	9.31E+03	3969.48			9.31E+03	3.97E+03
m	42	98.38	3.71E+04	4772.37			3.71E+04	4.77E+03

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
m	43	99.98	2.71E+03	3167.32			2.71E+03	3.17E+03
m	44	102.71	2.28E+03	3155.94			2.28E+03	3.16E+03
	45	105.60	2.85E+03	473.69			2.85E+03	4.74E+02
M	46	109.06	7.33E+03	752.85			7.33E+03	7.53E+02
m	47	111.23	1.03E+04	800.89	-1.31E+01	1.36E+01	1.03E+04	8.01E+02
m	48	112.81	2.51E+04	1244.73	-1.31E+01	1.36E+01	2.51E+04	1.24E+03
m	49	114.55	4.72E+03	697.22			4.72E+03	6.97E+02
m	50	117.25	1.34E+03	691.46			1.34E+03	6.91E+02
M	51	120.84	2.30E+03	273.35			2.30E+03	2.73E+02
m	52	122.30	3.76E+03	409.10			3.76E+03	4.09E+02
M	53	128.05	2.32E+03	256.97	-2.79E-01	3.33E+01	2.32E+03	2.59E+02
m	54	130.27	4.03E+03	424.36	0.00E+00	0.00E+00	4.03E+03	4.24E+02
m	55	131.20	1.83E+03	214.77	0.00E+00	0.00E+00	1.83E+03	2.15E+02
	56	140.63	1.69E+03	464.51			1.69E+03	4.65E+02
	57	143.81	4.32E+04	527.84			4.32E+04	5.28E+02
	58	154.19	1.58E+04	488.24			1.58E+04	4.88E+02
	59	158.63	1.55E+03	339.93			1.55E+03	3.40E+02
	60	163.33	1.22E+04	432.44			1.22E+04	4.32E+02
	61	169.96	5.27E+02	404.82			5.27E+02	4.05E+02
	62	185.99	2.86E+05	728.42	1.49E+02	3.34E+01	2.86E+05	7.29E+02
	63	191.05	1.23E+02	420.29			1.23E+02	4.20E+02
M	64	195.04	1.10E+03	197.33	6.97E+00	1.22E+01	1.09E+03	1.98E+02
m	65	196.16	1.98E+03	336.64			1.98E+03	3.37E+02
M	66	202.06	2.96E+03	292.40			2.96E+03	2.92E+02
m	67	205.29	1.24E+04	741.06	5.26E+00	1.33E+01	1.24E+04	7.41E+02
	68	210.61	1.79E+03	387.59			1.79E+03	3.88E+02
	69	219.30	0.00E+00	0.00			0.00E+00	0.00E+00
	70	221.10	-5.14E+02	532.38			-5.14E+02	5.32E+02
	71	235.97	1.59E+04	448.94			1.59E+04	4.49E+02
	72	241.98	2.21E+05	617.13			2.21E+05	6.17E+02
M	73	252.97	6.87E+02	275.72			6.87E+02	2.76E+02
m	74	256.23	9.61E+03	464.92			9.61E+03	4.65E+02
m	75	258.82	1.45E+04	628.60			1.45E+04	6.29E+02
M	76	269.44	1.80E+04	621.39			1.80E+04	6.21E+02
m	77	271.23	1.41E+04	557.90			1.41E+04	5.58E+02
m	78	274.77	8.03E+03	463.55			8.03E+03	4.64E+02
M	79	281.01	5.44E+02	148.72			5.44E+02	1.49E+02
m	80	283.70	1.30E+03	209.93			1.30E+03	2.10E+02
m	81	286.03	3.91E+03	525.61			3.91E+03	5.26E+02
	82	295.22	4.38E+05	782.69			4.38E+05	7.83E+02
M	83	300.02	4.75E+03	429.28			4.75E+03	4.29E+02
m	84	302.64	2.25E+03	236.86			2.25E+03	2.37E+02
m	85	304.41	1.70E+03	201.02			1.70E+03	2.01E+02
	86	314.54	1.17E+03	307.17			1.17E+03	3.07E+02
	87	323.90	3.87E+03	348.26			3.87E+03	3.48E+02
M	88	329.91	3.97E+03	513.34			3.97E+03	5.13E+02
m	89	333.92	1.64E+03	243.25			1.64E+03	2.43E+02
	90	338.31	1.63E+03	344.55			1.63E+03	3.45E+02
M	91	349.06	1.45E+03	721.42	-1.23E+01	7.07E+00	1.46E+03	7.21E+02
m	92	351.93	6.60E+05	1335.54			6.60E+05	1.34E+03

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
	93	371.98	3.40E+02	323.38			3.40E+02	3.23E+02
M	94	386.86	3.62E+03	252.22			3.62E+03	2.52E+02
m	95	388.99	4.89E+03	326.89			4.89E+03	3.27E+02
	96	395.84	5.42E+01	345.48			5.42E+01	3.45E+02
M	97	401.86	4.63E+03	425.69			4.63E+03	4.26E+02
m	98	405.13	3.03E+03	303.47			3.03E+03	3.03E+02
	99	420.36	1.44E+02	401.28			1.44E+02	4.01E+02
	100	445.19	1.21E+02	332.21			1.21E+02	3.32E+02
	101	454.93	2.33E+03	353.98			2.33E+03	3.54E+02
	102	462.04	2.24E+03	384.51			2.24E+03	3.85E+02
M	103	469.86	1.32E+03	412.28			1.32E+03	4.12E+02
m	104	474.50	8.74E+02	278.90			8.74E+02	2.79E+02
	105	480.50	3.38E+03	303.75			3.38E+03	3.04E+02
	106	487.11	4.48E+03	367.40			4.48E+03	3.67E+02
	107	533.73	2.49E+03	342.76			2.49E+03	3.43E+02
	108	580.29	2.33E+03	292.03			2.33E+03	2.92E+02
	109	609.41	3.26E+05	688.61			3.26E+05	6.89E+02
	110	654.65	8.11E+00	320.30			8.11E+00	3.20E+02
	111	665.54	8.10E+03	328.98			8.10E+03	3.29E+02
	112	682.76	5.98E+02	304.37			5.98E+02	3.04E+02
	113	688.58	8.08E+02	316.75			8.08E+02	3.17E+02
	114	698.56	7.43E+03	209.75			7.43E+03	2.10E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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*************************************************************************
*****          A R E A   C O R R E C T I O N   R E P O R T          *****
*****      R E F E R E N C E   P E A K / B K G . S U B T R A C T    *****
*************************************************************************
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Detector Name: DET01
Sample Title: BL5D
Peak Analysis Performed on: 1-16-96 2:40:52 PM

Ref. Peak Energy: 0.00; Reference Date:
Peak Ratio: 0.00; Uncertainty: 0.00
Background File : E:\GENIEPC\CAMFILES\BG122895.CNF

Corrected area is: Original * Peak Ratio - Background

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
m	1	4.42	0.00E+00	0.00			0.00E+00	0.00E+00
M	2	5.40	-3.07E+02	423.16			-3.07E+02	4.23E+02
m	3	6.33	-6.40E+02	861.21			-6.40E+02	8.61E+02
m	4	6.89	0.00E+00	0.00			0.00E+00	0.00E+00
m	5	8.00	0.00E+00	0.00			0.00E+00	0.00E+00
m	6	9.14	0.00E+00	0.00			0.00E+00	0.00E+00
	7	10.88	8.78E+04	482.93	1.54E+02	3.60E+01	8.76E+04	4.84E+02
M	8	13.04	2.45E+05	8639.22	4.47E+01	2.75E+01	2.45E+05	8.64E+03
m	9	15.27	1.29E+05	7137.35			1.29E+05	7.14E+03
m	10	15.76	1.10E+05	7143.10			1.10E+05	7.14E+03
m	11	16.24	2.39E+05	9015.71			2.39E+05	9.02E+03
m	12	16.80	7.98E+04	6060.10			7.98E+04	6.06E+03
m	13	17.87	2.88E+04	4541.35			2.88E+04	4.54E+03
m	14	19.01	6.51E+04	5550.61			6.51E+04	5.55E+03
m	15	19.59	3.73E+04	4862.16			3.73E+04	4.86E+03
m	16	20.15	2.17E+04	4361.80			2.17E+04	4.36E+03
m	17	20.82	6.58E+03	3732.81			6.58E+03	3.73E+03
M	18	25.68	2.80E+04	488.60			2.80E+04	4.89E+02
m	19	27.40	2.40E+04	437.94			2.40E+04	4.38E+02
	20	36.67	3.95E+03	394.91			3.95E+03	3.95E+02
	21	46.55	3.30E+05	747.12			3.30E+05	7.47E+02
	22	50.12	3.21E+04	470.93			3.21E+04	4.71E+02
	23	53.23	8.26E+04	548.27			8.26E+04	5.48E+02
	24	58.58	5.85E+02	398.51			5.85E+02	3.99E+02
M	25	63.29	3.03E+05	1082.32	5.19E+01	2.82E+01	3.03E+05	1.08E+03
m	26	64.94	7.31E+02	461.30	7.10E+00	4.38E+00	7.24E+02	4.61E+02
	27	67.68	3.65E+04	576.31			3.65E+04	5.76E+02
M	28	70.89	3.48E+03	2521.75			3.48E+03	2.52E+03
m	29	72.89	1.05E+04	2671.43			1.05E+04	2.67E+03
m	30	74.81	4.89E+05	7580.37			4.89E+05	7.58E+03
m	31	77.09	8.54E+05	8377.28			8.54E+05	8.38E+03
m	32	79.32	7.20E+04	3765.25			7.20E+04	3.77E+03
m	33	81.07	6.68E+04	3717.31			6.68E+04	3.72E+03
M	34	83.84	1.44E+05	6733.43			1.44E+05	6.73E+03
m	35	85.36	5.52E+03	3682.16			5.52E+03	3.68E+03
m	36	87.21	2.78E+05	8472.62			2.78E+05	8.47E+03
m	37	89.85	1.21E+05	6175.28			1.21E+05	6.18E+03
m	38	92.57	4.10E+05	9873.49			4.10E+05	9.87E+03
m	39	94.65	5.74E+04	4866.79			5.74E+04	4.87E+03
m	40	95.68	7.29E+03	3496.59			7.29E+03	3.50E+03

m 41	97.48	9.31E+03	3969.48	9.31E+03	3.97E+03
m 42	98.38	3.71E+04	4772.37	3.71E+04	4.77E+03

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
m	43	99.98	2.71E+03	3167.32			2.71E+03	3.17E+03
m	44	102.71	2.28E+03	3155.94			2.28E+03	3.16E+03
	45	105.60	2.85E+03	473.69			2.85E+03	4.74E+02
M	46	109.06	7.33E+03	752.85			7.33E+03	7.53E+02
m	47	111.23	1.03E+04	800.89	-1.31E+01	1.36E+01	1.03E+04	8.01E+02
m	48	112.81	2.51E+04	1244.73	-1.31E+01	1.36E+01	2.51E+04	1.24E+03
m	49	114.55	4.72E+03	697.22			4.72E+03	6.97E+02
m	50	117.25	1.34E+03	691.46			1.34E+03	6.91E+02
M	51	120.84	2.30E+03	273.35			2.30E+03	2.73E+02
m	52	122.30	3.76E+03	409.10			3.76E+03	4.09E+02
M	53	128.05	2.32E+03	256.97	-2.79E-01	3.33E+01	2.32E+03	2.59E+02
m	54	130.27	4.03E+03	424.36	0.00E+00	0.00E+00	4.03E+03	4.24E+02
m	55	131.20	1.83E+03	214.77	0.00E+00	0.00E+00	1.83E+03	2.15E+02
	56	140.63	1.69E+03	464.51			1.69E+03	4.65E+02
	57	143.81	4.32E+04	527.84			4.32E+04	5.28E+02
	58	154.19	1.58E+04	488.24			1.58E+04	4.88E+02
	59	158.63	1.55E+03	339.93			1.55E+03	3.40E+02
	60	163.33	1.22E+04	432.44			1.22E+04	4.32E+02
	61	169.96	5.27E+02	404.82			5.27E+02	4.05E+02
	62	185.99	2.86E+05	728.42	1.49E+02	3.34E+01	2.86E+05	7.29E+02
	63	191.05	1.23E+02	420.29			1.23E+02	4.20E+02
M	64	195.04	1.10E+03	197.33	6.97E+00	1.22E+01	1.09E+03	1.98E+02
m	65	196.16	1.98E+03	336.64			1.98E+03	3.37E+02
M	66	202.06	2.96E+03	292.40			2.96E+03	2.92E+02
m	67	205.29	1.24E+04	741.06	5.26E+00	1.33E+01	1.24E+04	7.41E+02
	68	210.61	1.79E+03	387.59			1.79E+03	3.88E+02
	69	219.30	0.00E+00	0.00			0.00E+00	0.00E+00
	70	221.10	-5.14E+02	532.38			-5.14E+02	5.32E+02
	71	235.97	1.59E+04	448.94			1.59E+04	4.49E+02
	72	241.98	2.21E+05	617.13			2.21E+05	6.17E+02
M	73	252.97	6.87E+02	275.72			6.87E+02	2.76E+02
m	74	256.23	9.61E+03	464.92			9.61E+03	4.65E+02
m	75	258.82	1.45E+04	628.60			1.45E+04	6.29E+02
M	76	269.44	1.80E+04	621.39			1.80E+04	6.21E+02
m	77	271.23	1.41E+04	557.90			1.41E+04	5.58E+02
m	78	274.77	8.03E+03	463.55			8.03E+03	4.64E+02
M	79	281.01	5.44E+02	148.72			5.44E+02	1.49E+02
m	80	283.70	1.30E+03	209.93			1.30E+03	2.10E+02
m	81	286.03	3.91E+03	525.61			3.91E+03	5.26E+02
	82	295.22	4.38E+05	782.69			4.38E+05	7.83E+02
M	83	300.02	4.75E+03	429.28			4.75E+03	4.29E+02
m	84	302.64	2.25E+03	236.86			2.25E+03	2.37E+02
m	85	304.41	1.70E+03	201.02			1.70E+03	2.01E+02
	86	314.54	1.17E+03	307.17			1.17E+03	3.07E+02
	87	323.90	3.87E+03	348.26			3.87E+03	3.48E+02
M	88	329.91	3.97E+03	513.34			3.97E+03	5.13E+02
m	89	333.92	1.64E+03	243.25			1.64E+03	2.43E+02
	90	338.31	1.63E+03	344.55			1.63E+03	3.45E+02
M	91	349.06	1.45E+03	721.42	-1.23E+01	7.07E+00	1.46E+03	7.21E+02
m	92	351.93	6.60E+05	1335.54			6.60E+05	1.34E+03

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
	93	371.98	3.40E+02	323.38			3.40E+02	3.23E+02
M	94	386.86	3.62E+03	252.22			3.62E+03	2.52E+02
m	95	388.99	4.89E+03	326.89			4.89E+03	3.27E+02
	96	395.84	5.42E+01	345.48			5.42E+01	3.45E+02
M	97	401.86	4.63E+03	425.69			4.63E+03	4.26E+02
m	98	405.13	3.03E+03	303.47			3.03E+03	3.03E+02
	99	420.36	1.44E+02	401.28			1.44E+02	4.01E+02
	100	445.19	1.21E+02	332.21			1.21E+02	3.32E+02
	101	454.93	2.33E+03	353.98			2.33E+03	3.54E+02
	102	462.04	2.24E+03	384.51			2.24E+03	3.85E+02
M	103	469.86	1.32E+03	412.28			1.32E+03	4.12E+02
m	104	474.50	8.74E+02	278.90			8.74E+02	2.79E+02
	105	480.50	3.38E+03	303.75			3.38E+03	3.04E+02
	106	487.11	4.48E+03	367.40			4.48E+03	3.67E+02
	107	533.73	2.49E+03	342.76			2.49E+03	3.43E+02
	108	580.29	2.33E+03	292.03			2.33E+03	2.92E+02
	109	609.41	3.26E+05	688.61			3.26E+05	6.89E+02
	110	654.65	8.11E+00	320.30			8.11E+00	3.20E+02
	111	665.54	8.10E+03	328.98			8.10E+03	3.29E+02
	112	682.76	5.98E+02	304.37			5.98E+02	3.04E+02
	113	688.58	8.08E+02	316.75			8.08E+02	3.17E+02
	114	698.56	7.43E+03	209.75			7.43E+03	2.10E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region

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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Report Generated On : 1-22-96 10:18:06 AM

Sample Title : NOPI-466-GAM1
Spectrum Description : NOPI-466-GAM1
Sample Identification : NP466
Sample Type :
Sample Geometry :

NP466.CNF

Peak Locate Threshold : 3.00
Peak Locate Range (in channels) : 1 - 4096
Peak Area Range (in channels) : 1 - 4096
Identification Energy Tolerance : 1.000 keV

Sample Size : 0.000E+00 Unit

Sample Taken On :
Acquisition Started : 1-20-96 11:41:06 AM

Live Time : 80000.0 seconds
Real Time : 80005.4 seconds

Energy Calibration Used Done On : 1-16-96
Efficiency Calibration Used Done On : ????????

0.021 log x + 0.965
0.091 log x + 0.813

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-466-GAM1
Peak Locate Performed on: 1-22-96 10:17:33 AM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	63.52	0.1180	10.93	4.05
2	75.83	0.2193	13.07	4.93
3	88.90	0.2309	15.41	4.63
4	94.33	0.0984	16.23	6.55
5	103.00	<NA>	17.87	<NA>
6	110.59	0.1501	19.07	3.67
7	148.56	0.1594	25.68	3.28
8	230.79	0.2964	39.94	3.55
9	269.27	0.0426	46.61	22.36
10	308.06	0.1231	53.34	7.29
11	365.94	0.0495	63.38	16.98
12	421.00	0.2427	72.94	3.19
13	432.37	0.0438	74.91	26.56
14	445.56	0.0326	77.19	34.18
15	458.33	0.1614	79.41	6.69
16	468.86	0.2111	81.17	6.34
17	484.44	0.2293	83.93	6.95
18	504.26	0.1235	87.30	11.19
19	519.31	0.1132	89.97	10.27
20	534.62	0.1231	92.71	10.26
21	547.97	0.1978	94.84	4.04
22	744.83	0.6173	129.09	3.42
23	830.72	0.4759	143.98	3.98
24	889.27	0.3131	154.14	3.54
25	1074.06	0.1140	186.19	12.95
26	1137.62	0.3244	197.21	3.19
27	1362.50	0.3020	236.27	3.30
28	1377.78	0.0734	238.85	20.90
29	1397.22	0.0771	242.18	15.41
30	1600.82	0.3526	277.54	3.42
31	1664.65	0.4128	288.61	3.36
32	1704.51	0.0557	295.53	24.13
33	1952.97	0.2995	338.61	5.55
34	2031.71	0.0549	352.27	29.04
35	2949.06	0.8494	511.37	3.75
36	3366.79	0.2724	583.81	6.58
37	3517.36	0.0986	609.92	17.20
38	3954.65	0.4997	685.76	3.23

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: NOPI-466-GAM1
Peak Analysis Performed on: 1-22-96 10:17:43 AM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	60-	66	63.52	10.93	6.55E+02	49.56	9.50E+02
	2	72-	78	75.83	13.07	1.79E+03	60.39	9.92E+02
M	3	84-	114	89.35	15.41	1.24E+03	102.10	1.40E+03
m	4	84-	114	94.08	16.23	1.81E+03	122.58	1.38E+03
m	5	84-	114	103.52	17.87	7.64E+01	63.21	1.49E+03
m	6	84-	114	110.44	19.07	4.00E+02	74.84	1.23E+03
	7	143-	153	148.56	25.68	1.37E+02	46.98	8.68E+02
	8	224-	234	230.79	39.94	1.18E+02	40.61	6.43E+02
	9	263-	275	269.27	46.61	2.23E+03	64.96	7.60E+02
	10	302-	313	308.06	53.34	4.48E+02	46.97	7.00E+02
	11	359-	372	365.94	63.38	1.32E+03	61.74	9.07E+02
M	12	417-	472	421.04	72.94	6.05E+01	30.26	7.77E+02
	13	417-	472	432.40	74.91	3.40E+03	101.94	8.20E+02
m	14	417-	472	445.57	77.19	5.77E+03	142.80	8.08E+02
m	15	417-	472	458.35	79.41	3.51E+02	36.14	7.53E+02
m	16	417-	472	468.54	81.17	2.41E+02	33.47	6.17E+02
	17	479-	491	484.44	83.93	6.83E+02	54.50	8.67E+02
M	18	497-	552	503.85	87.30	2.05E+03	120.14	1.00E+03
m	19	497-	552	519.28	89.97	9.75E+02	86.34	9.15E+02
m	20	497-	552	535.06	92.71	2.06E+03	119.49	8.80E+02
m	21	497-	552	547.34	94.84	2.48E+02	57.15	6.20E+02
	22	739-	750	744.83	129.09	1.07E+02	39.12	5.69E+02
	23	823-	838	830.72	143.98	2.15E+02	48.56	7.13E+02
	24	884-	897	889.27	154.14	1.17E+02	42.46	6.08E+02
	25	1066-	1083	1074.06	186.19	1.44E+03	61.00	6.99E+02
	26	1129-	1143	1137.62	197.21	5.13E+01	41.77	5.88E+02
M	27	1355-	1404	1362.82	236.27	6.41E+01	23.85	4.34E+02
m	28	1355-	1404	1377.72	238.85	1.73E+03	80.77	4.24E+02
m	29	1355-	1404	1396.94	242.18	1.14E+03	62.63	3.84E+02
	30	1592-	1610	1600.82	277.54	6.68E+01	36.95	3.84E+02
	31	1657-	1671	1664.65	288.61	8.69E+00	31.08	3.32E+02
	32	1695-	1712	1704.51	295.53	2.15E+03	58.80	4.01E+02
	33	1944-	1960	1952.97	338.61	2.11E+02	35.87	3.44E+02
	34	2021-	2043	2031.71	352.27	3.31E+03	69.95	4.10E+02
	35	2925-	2997	2949.06	511.37	5.70E+02	85.09	6.58E+02
	36	3352-	3380	3366.79	583.81	2.88E+02	40.08	2.85E+02
	37	3504-	3532	3517.36	609.92	1.71E+03	52.38	2.26E+02
	38	3942-	3966	3954.65	685.76	-2.61E+01	29.70	2.19E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

****
***** B A C K G R O U N D S U B T R A C T R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-466-GAM1
Peak Analysis Performed on: 1-22-96 10:17:33 AM

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
	1	10.93	6.55E+02	49.56	1.54E+02	3.60E+01	5.01E+02	6.13E+01
	2	13.07	1.79E+03	60.39	4.47E+01	2.75E+01	1.74E+03	6.63E+01
M	3	15.41	1.24E+03	102.10			1.24E+03	1.02E+02
m	4	16.23	1.81E+03	122.58			1.81E+03	1.23E+02
m	5	17.87	7.64E+01	63.21			7.64E+01	6.32E+01
m	6	19.07	4.00E+02	74.84			4.00E+02	7.48E+01
	7	25.68	1.37E+02	46.98			1.37E+02	4.70E+01
	8	39.94	1.18E+02	40.61			1.18E+02	4.06E+01
	9	46.61	2.23E+03	64.96			2.23E+03	6.50E+01
	10	53.34	4.48E+02	46.97			4.48E+02	4.70E+01
	11	63.38	1.32E+03	61.74	5.19E+01	2.82E+01	1.27E+03	6.79E+01
M	12	72.94	6.05E+01	30.26			6.05E+01	3.03E+01
m	13	74.91	3.40E+03	101.94			3.40E+03	1.02E+02
m	14	77.19	5.77E+03	142.80			5.77E+03	1.43E+02
m	15	79.41	3.51E+02	36.14			3.51E+02	3.61E+01
	16	81.17	2.41E+02	33.47			2.41E+02	3.35E+01
	17	83.93	6.83E+02	54.50			6.83E+02	5.45E+01
M	18	87.30	2.05E+03	120.14			2.05E+03	1.20E+02
m	19	89.97	9.75E+02	86.34			9.75E+02	8.63E+01
m	20	92.71	2.06E+03	119.49			2.06E+03	1.19E+02
m	21	94.84	2.48E+02	57.15			2.48E+02	5.72E+01
	22	129.09	1.07E+02	39.12	-2.79E-01	3.33E+01	1.08E+02	5.14E+01
	23	143.98	2.15E+02	48.56			2.15E+02	4.86E+01
	24	154.14	1.17E+02	42.46			1.17E+02	4.25E+01
	25	186.19	1.44E+03	61.00	1.49E+02	3.34E+01	1.29E+03	6.95E+01
	26	197.21	5.13E+01	41.77	3.28E+01	1.88E+01	1.85E+01	4.58E+01
M	27	236.27	6.41E+01	23.85			6.41E+01	2.39E+01
m	28	238.85	1.73E+03	80.77	-1.27E+01	1.27E+01	1.74E+03	8.18E+01
m	29	242.18	1.14E+03	62.63			1.14E+03	6.26E+01
	30	277.54	6.68E+01	36.95			6.68E+01	3.69E+01
	31	288.61	8.69E+00	31.08			8.69E+00	3.11E+01
	32	295.53	2.15E+03	58.80			2.15E+03	5.88E+01
	33	338.61	2.11E+02	35.87			2.11E+02	3.59E+01
	34	352.27	3.31E+03	69.95			3.31E+03	6.99E+01
	35	511.37	5.70E+02	85.09			5.70E+02	8.51E+01
	36	583.81	2.88E+02	40.08			2.88E+02	4.01E+01
	37	609.92	1.71E+03	52.38			1.71E+03	5.24E+01
	38	685.76	-2.61E+01	29.70			-2.61E+01	2.97E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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*************************************************************************
*****          A R E A   C O R R E C T I O N   R E P O R T          *****
*****      R E F E R E N C E   P E A K / B K G . S U B T R A C T    *****
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Detector Name: DET01
Sample Title: NOPI-466-GAM1
Peak Analysis Performed on: 1-22-96 10:17:33 AM

Ref. Peak Energy: 0.00; Reference Date:
Peak Ratio: 0.00; Uncertainty: 0.00
Background File : E:\GENIEPC\CAMFILES\BG122895.CNF

Corrected area is: Original * Peak Ratio - Background

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
	1	10.93	6.55E+02	49.56	1.54E+02	3.60E+01	5.01E+02	6.13E+01
	2	13.07	1.79E+03	60.39	4.47E+01	2.75E+01	1.74E+03	6.63E+01
M	3	15.41	1.24E+03	102.10			1.24E+03	1.02E+02
m	4	16.23	1.81E+03	122.58			1.81E+03	1.23E+02
m	5	17.87	7.64E+01	63.21			7.64E+01	6.32E+01
m	6	19.07	4.00E+02	74.84			4.00E+02	7.48E+01
	7	25.68	1.37E+02	46.98			1.37E+02	4.70E+01
	8	39.94	1.18E+02	40.61			1.18E+02	4.06E+01
	9	46.61	2.23E+03	64.96			2.23E+03	6.50E+01
	10	53.34	4.48E+02	46.97			4.48E+02	4.70E+01
	11	63.38	1.32E+03	61.74	5.19E+01	2.82E+01	1.27E+03	6.79E+01
M	12	72.94	6.05E+01	30.26			6.05E+01	3.03E+01
m	13	74.91	3.40E+03	101.94			3.40E+03	1.02E+02
m	14	77.19	5.77E+03	142.80			5.77E+03	1.43E+02
m	15	79.41	3.51E+02	36.14			3.51E+02	3.61E+01
m	16	81.17	2.41E+02	33.47			2.41E+02	3.35E+01
	17	83.93	6.83E+02	54.50			6.83E+02	5.45E+01
M	18	87.30	2.05E+03	120.14			2.05E+03	1.20E+02
m	19	89.97	9.75E+02	86.34			9.75E+02	8.63E+01
m	20	92.71	2.06E+03	119.49			2.06E+03	1.19E+02
m	21	94.84	2.48E+02	57.15			2.48E+02	5.72E+01
	22	129.09	1.07E+02	39.12	-2.79E-01	3.33E+01	1.08E+02	5.14E+01
	23	143.98	2.15E+02	48.56			2.15E+02	4.86E+01
	24	154.14	1.17E+02	42.46			1.17E+02	4.25E+01
	25	186.19	1.44E+03	61.00	1.49E+02	3.34E+01	1.29E+03	6.95E+01
	26	197.21	5.13E+01	41.77	3.28E+01	1.88E+01	1.85E+01	4.58E+01
M	27	236.27	6.41E+01	23.85			6.41E+01	2.39E+01
m	28	238.85	1.73E+03	80.77	-1.27E+01	1.27E+01	1.74E+03	8.18E+01
m	29	242.18	1.14E+03	62.63			1.14E+03	6.26E+01
	30	277.54	6.68E+01	36.95			6.68E+01	3.69E+01
	31	288.61	8.69E+00	31.08			8.69E+00	3.11E+01
	32	295.53	2.15E+03	58.80			2.15E+03	5.88E+01
	33	338.61	2.11E+02	35.87			2.11E+02	3.59E+01
	34	352.27	3.31E+03	69.95			3.31E+03	6.99E+01
	35	511.37	5.70E+02	85.09			5.70E+02	8.51E+01
	36	583.81	2.88E+02	40.08			2.88E+02	4.01E+01
	37	609.92	1.71E+03	52.38			1.71E+03	5.24E+01
	38	685.76	-2.61E+01	29.70			-2.61E+01	2.97E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

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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Report Generated On : 1-22-96 10:14:52 AM

Sample Title : NOPI-467-GAM1
Spectrum Description : NOPI-467-GAM1
Sample Identification : NP467
Sample Type :
Sample Geometry :

NP467.CNF

Peak Locate Threshold : 2.00
Peak Locate Range (in channels) : 1 - 4096
Peak Area Range (in channels) : 1 - 4096
Identification Energy Tolerance : 1.000 keV

Sample Size : 0.000E+00 Unit

Sample Taken On :
Acquisition Started : 1-19-96 8:58:11 AM

Live Time : 80000.0 seconds
Real Time : 80005.1 seconds

Energy Calibration Used Done On : 1-16-96
Efficiency Calibration Used Done On : ????????

-.002log+ +1.017
0.070log+ + 0.842

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-467-GAM1
Peak Locate Performed on: 1-22-96 10:13:36 AM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 2.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	37.57	0.2300	6.43	2.30
2	63.31	0.1767	10.90	3.82
3	72.00	<NA>	12.50	<NA>
4	76.21	0.2613	13.11	5.14
5	88.69	0.2422	15.43	2.79
6	94.28	0.1142	16.28	6.27
7	110.39	0.1898	19.06	3.03
8	114.00	0.0000	19.70	2.06
9	148.94	0.3538	25.75	2.35
10	200.81	0.4132	34.74	2.13
11	211.00	<NA>	36.51	<NA>
12	240.30	0.5065	41.59	2.07
13	269.27	0.0521	46.61	17.51
14	290.29	1.0009	50.26	2.06
15	307.74	0.1539	53.29	5.85
16	365.96	0.0477	63.38	17.65
17	384.24	0.5784	66.55	2.27
18	390.83	0.2803	67.72	2.78
19	403.87	0.7023	70.04	2.30
20	420.99	0.2891	72.96	2.76
21	432.51	0.0470	74.92	23.36
22	445.64	0.0365	77.19	31.68
23	458.38	0.2579	79.45	5.49
24	468.81	0.2299	81.21	5.04
25	484.82	0.4295	84.00	4.62
26	504.29	0.1507	87.32	8.88
27	519.29	0.1056	89.99	10.66
28	535.05	0.1213	92.76	10.15
29	547.64	0.3993	94.85	3.14
30	568.66	0.3605	98.54	2.82
31	634.59	0.3281	109.97	3.63
32	652.02	0.2717	112.99	3.28
33	672.74	0.4141	116.59	2.26
34	698.64	0.6037	121.08	2.36
35	745.30	0.3944	129.17	3.39
36	829.09	0.4026	143.73	3.08
37	842.59	0.6125	145.99	2.14
38	854.83	0.3739	148.17	2.25
39	870.11	0.6750	150.83	2.25
40	971.05	0.4503	168.32	2.13
41	977.43	0.4978	169.43	2.16

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	1073.87	0.1017	186.16	11.82
43	1087.04	0.3561	188.11	2.39
44	1187.39	0.4957	205.70	2.16
45	1208.27	0.3664	209.45	4.25
46	1237.22	0.4366	214.48	2.16
47	1305.83	0.4218	226.38	2.98
48	1315.17	0.5063	228.00	3.13
49	1348.64	0.4661	233.81	2.45
50	1363.05	1.0857	236.32	2.25
51	1377.74	0.0723	238.83	20.84
52	1396.89	0.1286	242.12	11.79
53	1417.06	0.3423	245.67	2.45
54	1423.13	0.5976	246.76	2.32
55	1543.68	0.4953	267.63	2.16
56	1600.95	0.4818	277.56	2.79
57	1626.55	0.4418	282.00	2.29
58	1704.21	0.0738	295.48	19.34
59	1723.21	0.5569	298.88	2.13
60	1732.54	0.2937	300.39	4.72
61	1838.72	0.5007	318.80	2.15
62	1952.67	0.1951	338.56	7.56
63	1982.71	0.4899	343.77	2.12
64	2031.52	0.0530	352.24	23.32
65	2320.91	0.4971	402.43	2.38
66	2379.23	0.7822	412.62	2.08
67	2394.32	0.7440	415.19	2.26
68	2448.46	0.6594	424.55	2.19
69	2616.01	0.5712	453.60	2.09
70	2773.08	0.3615	480.85	3.10
71	2921.07	0.5020	506.51	2.50
72	2949.54	0.4923	511.45	4.19
73	3070.21	0.6292	532.38	2.27
74	3291.76	0.6345	570.80	2.52
75	3332.62	0.8098	577.89	2.07
76	3366.64	0.3371	583.79	4.74
77	3517.46	0.0959	609.94	15.74
78	3548.73	0.7261	615.37	2.24
79	3577.28	0.6458	620.32	2.45
80	3758.86	0.5896	651.81	2.56
81	3799.48	0.7133	658.85	2.34
82	3843.28	0.9970	666.45	2.31
83	3864.37	0.5086	670.11	2.63
84	4018.50	0.6469	696.86	2.11
85	4029.58	0.3249	698.58	3.84

Errors quoted at 1.000 sigma

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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: DET01
Sample Title: NOPI-467-GAM1
Peak Analysis Performed on: 1-22-96 10:14:00 AM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	35-	39	37.57	6.43	1.02E+02	38.19	8.04E+02
M	2	60-	79	63.36	10.90	4.47E+02	58.09	1.05E+03
m	3	60-	79	72.58	12.50	2.92E+02	55.07	1.15E+03
m	4	60-	79	76.07	13.11	1.21E+03	89.03	9.05E+02
M	5	84-	98	89.46	15.43	8.69E+02	83.39	1.35E+03
m	6	84-	98	94.35	16.28	1.44E+03	93.41	1.13E+03
M	7	106-	118	110.41	19.06	3.16E+02	51.22	8.12E+02
m	8	106-	118	114.08	19.70	1.17E+02	30.00	6.96E+02
	9	144-	153	148.94	25.75	1.02E+02	40.52	6.81E+02
	10	198-	216	200.81	34.74	-4.11E+01	60.26	1.09E+03
	12	237-	243	240.30	41.59	-8.47E-01	27.30	3.96E+02
	13	264-	275	269.27	46.61	1.54E+03	56.16	6.47E+02
	14	284-	294	290.29	50.26	9.75E+01	36.81	5.28E+02
	15	303-	313	307.74	53.29	2.72E+02	41.17	5.96E+02
	16	359-	370	365.96	63.38	1.17E+03	54.38	7.14E+02
M	18	381-	406	390.97	67.72	3.26E+01	74.91	5.45E+02
m	19	381-	406	404.32	70.04	3.09E+00	8.17	4.15E+02
M	20	416-	472	421.17	72.96	6.26E+01	24.45	6.68E+02
m	21	416-	472	432.48	74.92	2.77E+03	88.87	5.92E+02
m	22	416-	472	445.59	77.19	4.66E+03	127.14	6.16E+02
m	23	416-	472	458.63	79.45	2.10E+02	28.14	5.96E+02
m	24	416-	472	468.73	81.21	1.87E+02	27.68	4.83E+02
	25	477-	491	484.82	84.00	4.73E+02	54.01	8.50E+02
M	26	497-	554	504.01	87.32	1.53E+03	89.54	8.85E+02
m	27	497-	554	519.40	89.99	8.68E+02	67.28	8.18E+02
m	28	497-	554	535.36	92.76	1.90E+03	101.12	7.40E+02
m	29	497-	554	547.39	94.85	1.69E+02	39.79	6.43E+02
	30	563-	572	568.66	98.54	2.16E+01	34.43	5.15E+02
	31	630-	639	634.59	109.97	5.70E+01	33.82	4.80E+02
	32	647-	658	652.02	112.99	6.62E+01	36.30	4.98E+02
	33	668-	677	672.74	116.59	1.29E+01	30.16	3.95E+02
	34	693-	702	698.64	121.08	1.17E+01	31.10	4.20E+02
	35	739-	750	745.30	129.17	1.12E+02	38.19	5.37E+02
M	36	823-	878	829.27	143.73	-6.59E+00	94.22	4.59E+02
m	37	823-	878	842.30	145.99	-2.00E+00	28.69	4.58E+02
m	39	823-	878	870.16	150.83	-9.69E-01	13.92	4.57E+02
M	42	1064-	1095	1073.91	186.16	1.12E+03	76.61	5.75E+02

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
m	43	1064-	1095	1085.12	188.11	3.64E+01	15.94	5.33E+02
M	44	1179-	1214	1186.55	205.70	2.39E+01	15.30	4.78E+02
m	45	1179-	1214	1208.22	209.45	1.75E+02	68.15	3.68E+02
	46	1231-	1247	1237.22	214.48	4.64E+00	39.23	4.90E+02
	47	1295-	1325	1305.83	226.38	1.09E+02	59.63	7.02E+02
M	50	1339-	1432	1363.11	236.32	5.94E+01	20.19	4.04E+02
m	51	1339-	1432	1377.61	238.83	1.77E+03	119.42	3.80E+02
m	52	1339-	1432	1396.59	242.12	8.64E+02	65.43	3.47E+02
m	53	1339-	1432	1417.06	245.67	1.96E+01	18.69	3.51E+02
m	54	1339-	1432	1423.35	246.76	2.76E+01	18.94	3.28E+02
	55	1532-	1550	1543.68	267.63	-1.38E+01	36.83	3.97E+02
	56	1593-	1607	1600.95	277.56	-3.04E+01	31.78	3.61E+02
	57	1615-	1634	1626.55	282.00	3.03E+01	36.19	3.64E+02
M	58	1695-	1741	1704.22	295.48	1.48E+03	79.44	3.12E+02
m	59	1695-	1741	1723.88	298.88	3.73E+01	13.67	2.71E+02
m	60	1695-	1741	1732.58	300.39	1.45E+02	18.09	2.78E+02
	61	1830-	1846	1838.72	318.80	-7.49E+00	30.82	3.03E+02
	62	1940-	1964	1952.67	338.56	2.86E+02	43.57	3.91E+02
	63	1974-	1990	1982.71	343.77	-4.26E+01	30.84	3.16E+02
	64	2019-	2043	2031.52	352.24	2.31E+03	62.01	3.71E+02
	65	2311-	2329	2320.91	402.43	-3.75E+00	32.23	3.09E+02
M	66	2370-	2405	2379.71	412.62	2.72E+01	28.62	1.94E+02
m	67	2370-	2405	2394.53	415.19	2.21E+01	23.29	2.21E+02
	68	2435-	2457	2448.46	424.55	-4.22E+01	37.07	3.65E+02
	69	2603-	2627	2616.01	453.60	-1.19E+01	36.73	3.27E+02
	70	2761-	2784	2773.08	480.85	4.67E+01	31.04	2.28E+02
	72	2911-	2972	2949.54	511.45	2.50E+02	85.86	8.04E+02
	73	3059-	3084	3070.21	532.38	-3.82E+01	34.47	2.88E+02
	74	3279-	3302	3291.76	570.80	5.96E+00	31.23	2.37E+02
	75	3319-	3343	3332.62	577.89	-2.26E+00	31.13	2.30E+02
	76	3355-	3380	3366.64	583.79	2.29E+02	37.32	2.74E+02
	77	3504-	3531	3517.46	609.94	1.14E+03	47.76	2.54E+02
	78	3537-	3588	3548.73	615.37	-3.28E+01	58.38	4.59E+02
	80	3744-	3770	3758.86	651.81	-1.91E+01	29.42	2.02E+02
	81	3785-	3812	3799.48	658.85	4.20E+01	29.58	1.85E+02
	82	3831-	3879	3843.28	666.45	1.13E+01	52.45	3.85E+02
M	84	4002-	4045	4018.64	696.86	7.41E+01	17.98	1.01E+02
m	85	4002-	4045	4028.57	698.58	7.45E+01	18.03	4.48E+01

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

****
***** B A C K G R O U N D S U B T R A C T R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-467-GAM1
Peak Analysis Performed on: 1-22-96 10:13:36 AM

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
	1	6.43	1.02E+02	38.19			1.02E+02	3.82E+01
M	2	10.90	4.47E+02	58.09	1.54E+02	3.60E+01	2.92E+02	6.84E+01
m	3	12.50	2.92E+02	55.07	4.47E+01	2.75E+01	2.47E+02	6.15E+01
m	4	13.11	1.21E+03	89.03	4.47E+01	2.75E+01	1.16E+03	9.32E+01
M	5	15.43	8.69E+02	83.39			8.69E+02	8.34E+01
m	6	16.28	1.44E+03	93.41			1.44E+03	9.34E+01
M	7	19.06	3.16E+02	51.22			3.16E+02	5.12E+01
m	8	19.70	1.17E+02	30.00			1.17E+02	3.00E+01
	9	25.75	1.02E+02	40.52			1.02E+02	4.05E+01
	10	34.74	-4.11E+01	60.26			-4.11E+01	6.03E+01
	11	36.51	0.00E+00	0.00			0.00E+00	0.00E+00
	12	41.59	-8.47E-01	27.30			-8.47E-01	2.73E+01
	13	46.61	1.54E+03	56.16			1.54E+03	5.62E+01
	14	50.26	9.75E+01	36.81			9.75E+01	3.68E+01
	15	53.29	2.72E+02	41.17			2.72E+02	4.12E+01
	16	63.38	1.17E+03	54.38	5.19E+01	2.82E+01	1.12E+03	6.13E+01
m	17	66.55	0.00E+00	0.00			0.00E+00	0.00E+00
M	18	67.72	3.26E+01	74.91			3.26E+01	7.49E+01
m	19	70.04	3.09E+00	8.17			3.09E+00	8.17E+00
M	20	72.96	6.26E+01	24.45			6.26E+01	2.45E+01
m	21	74.92	2.77E+03	88.87			2.77E+03	8.89E+01
m	22	77.19	4.66E+03	127.14			4.66E+03	1.27E+02
m	23	79.45	2.10E+02	28.14			2.10E+02	2.81E+01
m	24	81.21	1.87E+02	27.68			1.87E+02	2.77E+01
	25	84.00	4.73E+02	54.01			4.73E+02	5.40E+01
M	26	87.32	1.53E+03	89.54			1.53E+03	8.95E+01
m	27	89.99	8.68E+02	67.28			8.68E+02	6.73E+01
m	28	92.76	1.90E+03	101.12			1.90E+03	1.01E+02
m	29	94.85	1.69E+02	39.79			1.69E+02	3.98E+01
	30	98.54	2.16E+01	34.43			2.16E+01	3.44E+01
	31	109.97	5.70E+01	33.82			5.70E+01	3.38E+01
	32	112.99	6.62E+01	36.30			6.62E+01	3.63E+01
	33	116.59	1.29E+01	30.16			1.29E+01	3.02E+01
	34	121.08	1.17E+01	31.10			1.17E+01	3.11E+01
	35	129.17	1.12E+02	38.19	-2.79E-01	3.33E+01	1.13E+02	5.06E+01
M	36	143.73	-6.59E+00	94.22			-6.59E+00	9.42E+01
m	37	145.99	-2.00E+00	28.69			-2.00E+00	2.87E+01
m	38	148.17	0.00E+00	0.00			0.00E+00	0.00E+00
m	39	150.83	-9.69E-01	13.92			-9.69E-01	1.39E+01
	40	168.32	0.00E+00	0.00			0.00E+00	0.00E+00
	41	169.43	0.00E+00	0.00			0.00E+00	0.00E+00
M	42	186.16	1.12E+03	76.61	1.49E+02	3.34E+01	9.75E+02	8.36E+01

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
m	43	188.11	3.64E+01	15.94			3.64E+01	1.59E+01
M	44	205.70	2.39E+01	15.30	5.26E+00	1.33E+01	1.87E+01	2.03E+01
m	45	209.45	1.75E+02	68.15			1.75E+02	6.81E+01
	46	214.48	4.64E+00	39.23			4.64E+00	3.92E+01
	47	226.38	1.09E+02	59.63			1.09E+02	5.96E+01
	48	228.00	0.00E+00	0.00			0.00E+00	0.00E+00
m	49	233.81	0.00E+00	0.00			0.00E+00	0.00E+00
M	50	236.32	5.94E+01	20.19			5.94E+01	2.02E+01
m	51	238.83	1.77E+03	119.42	-1.27E+01	1.27E+01	1.78E+03	1.20E+02
m	52	242.12	8.64E+02	65.43			8.64E+02	6.54E+01
m	53	245.67	1.96E+01	18.69			1.96E+01	1.87E+01
m	54	246.76	2.76E+01	18.94			2.76E+01	1.89E+01
	55	267.63	-1.38E+01	36.83			-1.38E+01	3.68E+01
	56	277.56	-3.04E+01	31.78			-3.04E+01	3.18E+01
	57	282.00	3.03E+01	36.19			3.03E+01	3.62E+01
M	58	295.48	1.48E+03	79.44			1.48E+03	7.94E+01
m	59	298.88	3.73E+01	13.67			3.73E+01	1.37E+01
m	60	300.39	1.45E+02	18.09			1.45E+02	1.81E+01
	61	318.80	-7.49E+00	30.82	-8.83E-01	9.47E+00	-6.61E+00	3.22E+01
	62	338.56	2.86E+02	43.57			2.86E+02	4.36E+01
	63	343.77	-4.26E+01	30.84			-4.26E+01	3.08E+01
	64	352.24	2.31E+03	62.01			2.31E+03	6.20E+01
	65	402.43	-3.75E+00	32.23			-3.75E+00	3.22E+01
M	66	412.62	2.72E+01	28.62			2.72E+01	2.86E+01
m	67	415.19	2.21E+01	23.29			2.21E+01	2.33E+01
	68	424.55	-4.22E+01	37.07			-4.22E+01	3.71E+01
	69	453.60	-1.19E+01	36.73			-1.19E+01	3.67E+01
	70	480.85	4.67E+01	31.04			4.67E+01	3.10E+01
	71	506.51	0.00E+00	0.00			0.00E+00	0.00E+00
	72	511.45	2.50E+02	85.86			2.50E+02	8.59E+01
	73	532.38	-3.82E+01	34.47			-3.82E+01	3.45E+01
	74	570.80	5.96E+00	31.23			5.96E+00	3.12E+01
	75	577.89	-2.26E+00	31.13			-2.26E+00	3.11E+01
	76	583.79	2.29E+02	37.32			2.29E+02	3.73E+01
	77	609.94	1.14E+03	47.76			1.14E+03	4.78E+01
	78	615.37	-3.28E+01	58.38			-3.28E+01	5.84E+01
	79	620.32	0.00E+00	0.00			0.00E+00	0.00E+00
	80	651.81	-1.91E+01	29.42			-1.91E+01	2.94E+01
	81	658.85	4.20E+01	29.58			4.20E+01	2.96E+01
	82	666.45	1.13E+01	52.45			1.13E+01	5.25E+01
	83	670.11	0.00E+00	0.00			0.00E+00	0.00E+00
M	84	696.86	7.41E+01	17.98			7.41E+01	1.80E+01
m	85	698.58	7.45E+01	18.03			7.45E+01	1.80E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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*************************************************************************
*****        A R E A   C O R R E C T I O N   R E P O R T          *****
*****     R E F E R E N C E   P E A K / B K G . S U B T R A C T   *****
*************************************************************************
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Detector Name: DET01
Sample Title: NOPI-467-GAM1
Peak Analysis Performed on: 1-22-96 10:13:36 AM

Ref. Peak Energy: 0.00; Reference Date:
Peak Ratio: 0.00; Uncertainty: 0.00
Background File : E:\GENIEPC\CAMFILES\BG122895.CNF

Corrected area is: Original * Peak Ratio - Background

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
	1	6.43	1.02E+02	38.19			1.02E+02	3.82E+01
M	2	10.90	4.47E+02	58.09	1.54E+02	3.60E+01	2.92E+02	6.84E+01
m	3	12.50	2.92E+02	55.07	4.47E+01	2.75E+01	2.47E+02	6.15E+01
m	4	13.11	1.21E+03	89.03	4.47E+01	2.75E+01	1.16E+03	9.32E+01
M	5	15.43	8.69E+02	83.39			8.69E+02	8.34E+01
m	6	16.28	1.44E+03	93.41			1.44E+03	9.34E+01
M	7	19.06	3.16E+02	51.22			3.16E+02	5.12E+01
m	8	19.70	1.17E+02	30.00			1.17E+02	3.00E+01
	9	25.75	1.02E+02	40.52			1.02E+02	4.05E+01
	10	34.74	-4.11E+01	60.26			-4.11E+01	6.03E+01
	11	36.51	0.00E+00	0.00			0.00E+00	0.00E+00
	12	41.59	-8.47E-01	27.30			-8.47E-01	2.73E+01
	13	46.61	1.54E+03	56.16			1.54E+03	5.62E+01
	14	50.26	9.75E+01	36.81			9.75E+01	3.68E+01
	15	53.29	2.72E+02	41.17			2.72E+02	4.12E+01
	16	63.38	1.17E+03	54.38	5.19E+01	2.82E+01	1.12E+03	6.13E+01
m	17	66.55	0.00E+00	0.00			0.00E+00	0.00E+00
M	18	67.72	3.26E+01	74.91			3.26E+01	7.49E+01
m	19	70.04	3.09E+00	8.17			3.09E+00	8.17E+00
M	20	72.96	6.26E+01	24.45			6.26E+01	2.45E+01
m	21	74.92	2.77E+03	88.87			2.77E+03	8.89E+01
m	22	77.19	4.66E+03	127.14			4.66E+03	1.27E+02
m	23	79.45	2.10E+02	28.14			2.10E+02	2.81E+01
m	24	81.21	1.87E+02	27.68			1.87E+02	2.77E+01
	25	84.00	4.73E+02	54.01			4.73E+02	5.40E+01
M	26	87.32	1.53E+03	89.54			1.53E+03	8.95E+01
m	27	89.99	8.68E+02	67.28			8.68E+02	6.73E+01
m	28	92.76	1.90E+03	101.12			1.90E+03	1.01E+02
m	29	94.85	1.69E+02	39.79			1.69E+02	3.98E+01
	30	98.54	2.16E+01	34.43			2.16E+01	3.44E+01
	31	109.97	5.70E+01	33.82			5.70E+01	3.38E+01
	32	112.99	6.62E+01	36.30			6.62E+01	3.63E+01
	33	116.59	1.29E+01	30.16			1.29E+01	3.02E+01
	34	121.08	1.17E+01	31.10			1.17E+01	3.11E+01
	35	129.17	1.12E+02	38.19	-2.79E-01	3.33E+01	1.13E+02	5.06E+01
M	36	143.73	-6.59E+00	94.22			-6.59E+00	9.42E+01
m	37	145.99	-2.00E+00	28.69			-2.00E+00	2.87E+01
m	38	148.17	0.00E+00	0.00			0.00E+00	0.00E+00
m	39	150.83	-9.69E-01	13.92			-9.69E-01	1.39E+01
	40	168.32	0.00E+00	0.00			0.00E+00	0.00E+00

41	169.43	0.00E+00	0.00			0.00E+00	0.00E+00
M 42	186.16	1.12E+03	76.61	1.49E+02	3.34E+01	9.75E+02	8.36E+01

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
m	43	188.11	3.64E+01	15.94			3.64E+01	1.59E+01
M	44	205.70	2.39E+01	15.30	5.26E+00	1.33E+01	1.87E+01	2.03E+01
m	45	209.45	1.75E+02	68.15			1.75E+02	6.81E+01
	46	214.48	4.64E+00	39.23			4.64E+00	3.92E+01
	47	226.38	1.09E+02	59.63			1.09E+02	5.96E+01
	48	228.00	0.00E+00	0.00			0.00E+00	0.00E+00
m	49	233.81	0.00E+00	0.00			0.00E+00	0.00E+00
M	50	236.32	5.94E+01	20.19			5.94E+01	2.02E+01
m	51	238.83	1.77E+03	119.42	-1.27E+01	1.27E+01	1.78E+03	1.20E+02
m	52	242.12	8.64E+02	65.43			8.64E+02	6.54E+01
m	53	245.67	1.96E+01	18.69			1.96E+01	1.87E+01
m	54	246.76	2.76E+01	18.94			2.76E+01	1.89E+01
	55	267.63	-1.38E+01	36.83			-1.38E+01	3.68E+01
	56	277.56	-3.04E+01	31.78			-3.04E+01	3.18E+01
	57	282.00	3.03E+01	36.19			3.03E+01	3.62E+01
M	58	295.48	1.48E+03	79.44			1.48E+03	7.94E+01
m	59	298.88	3.73E+01	13.67			3.73E+01	1.37E+01
m	60	300.39	1.45E+02	18.09			1.45E+02	1.81E+01
	61	318.80	-7.49E+00	30.82	-8.83E-01	9.47E+00	-6.61E+00	3.22E+01
	62	338.56	2.86E+02	43.57			2.86E+02	4.36E+01
	63	343.77	-4.26E+01	30.84			-4.26E+01	3.08E+01
	64	352.24	2.31E+03	62.01			2.31E+03	6.20E+01
	65	402.43	-3.75E+00	32.23			-3.75E+00	3.22E+01
	66	412.62	2.72E+01	28.62			2.72E+01	2.86E+01
m	67	415.19	2.21E+01	23.29			2.21E+01	2.33E+01
	68	424.55	-4.22E+01	37.07			-4.22E+01	3.71E+01
	69	453.60	-1.19E+01	36.73			-1.19E+01	3.67E+01
	70	480.85	4.67E+01	31.04			4.67E+01	3.10E+01
	71	506.51	0.00E+00	0.00			0.00E+00	0.00E+00
	72	511.45	2.50E+02	85.86			2.50E+02	8.59E+01
	73	532.38	-3.82E+01	34.47			-3.82E+01	3.45E+01
	74	570.80	5.96E+00	31.23			5.96E+00	3.12E+01
	75	577.89	-2.26E+00	31.13			-2.26E+00	3.11E+01
	76	583.79	2.29E+02	37.32			2.29E+02	3.73E+01
	77	609.94	1.14E+03	47.76			1.14E+03	4.78E+01
	78	615.37	-3.28E+01	58.38			-3.28E+01	5.84E+01
	79	620.32	0.00E+00	0.00			0.00E+00	0.00E+00
	80	651.81	-1.91E+01	29.42			-1.91E+01	2.94E+01
	81	658.85	4.20E+01	29.58			4.20E+01	2.96E+01
	82	666.45	1.13E+01	52.45			1.13E+01	5.25E+01
	83	670.11	0.00E+00	0.00			0.00E+00	0.00E+00
M	84	696.86	7.41E+01	17.98			7.41E+01	1.80E+01
m	85	698.58	7.45E+01	18.03			7.45E+01	1.80E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

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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Report Generated On : 1-19-96 8:59:54 AM

Sample Title : NOPI-468-GAM1
Spectrum Description : NOPI-468-GAM1
Sample Identification : NP468
Sample Type :
Sample Geometry :

NP468.CNE

Peak Locate Threshold : 2.00
Peak Locate Range (in channels) : 1 - 4096
Peak Area Range (in channels) : 1 - 4096
Identification Energy Tolerance : 1.000 keV

Sample Size : 0.000E+00 Unit

Sample Taken On :
Acquisition Started : 1-17-96 1:39:34 PM

Live Time : 80000.0 seconds
Real Time : 80005.0 seconds

Energy Calibration Used Done On : 1-16-96
Efficiency Calibration Used Done On : ????????

0.044 log x + 0.908
6.113 log x + 6.759

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-468-GAM1
Peak Locate Performed on: 1-19-96 8:59:12 AM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 2.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	36.00	<NA>	6.16	<NA>
2	53.00	0.0000	9.11	2.07
3	57.00	0.0000	9.80	2.70
4	63.23	0.1624	10.88	4.91
5	75.77	0.2527	13.06	3.47
6	88.47	0.1970	15.41	2.50
7	94.30	0.1005	16.21	6.85
8	110.54	0.1589	19.09	3.14
9	126.67	0.9484	21.88	2.33
10	148.74	0.3975	25.71	2.87
11	164.83	0.3863	28.50	2.35
12	173.84	0.3538	30.06	2.62
13	201.00	<NA>	34.77	<NA>
14	230.39	0.3043	39.87	3.79
15	269.14	0.0517	46.59	17.13
16	289.48	0.1600	50.12	2.97
17	307.83	0.1444	53.30	6.10
18	337.40	0.2702	58.43	2.06
19	365.80	0.0602	63.34	14.39
20	373.23	0.4513	64.63	2.28
21	385.42	0.2396	66.76	2.25
22	391.15	0.2044	67.74	4.97
23	432.31	0.0480	74.89	24.09
24	445.39	0.0368	77.16	31.04
25	458.26	0.1937	79.38	6.16
26	468.31	0.2969	81.14	4.08
27	484.01	0.2212	83.86	6.38
28	503.91	0.2040	87.25	9.27
29	519.22	0.1674	89.94	8.86
30	534.67	0.1378	92.70	10.19
31	547.41	0.4149	94.74	2.50
32	568.14	0.3158	98.44	2.43
33	574.53	0.3678	99.54	3.61
34	609.63	0.4107	105.64	2.75
35	634.81	0.3158	109.99	3.94
36	651.14	0.3791	112.83	3.03
37	681.96	0.4956	118.19	2.01
38	689.34	0.4405	119.47	2.18
39	706.20	0.3151	122.39	2.86
40	712.10	0.6325	123.41	2.04
41	745.02	0.4002	129.12	3.57

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	830.08	0.5412	143.87	2.88
43	889.98	0.4689	154.26	3.56
44	914.10	0.3672	158.45	2.35
45	1018.60	0.3927	176.57	2.55
46	1058.03	0.3282	183.41	2.59
47	1073.86	0.1339	186.15	10.52
48	1097.03	0.3238	190.17	2.61
49	1124.14	0.5580	194.83	2.15
50	1137.36	0.3190	197.14	3.25
51	1185.09	0.4875	205.44	2.61
52	1207.75	0.2755	209.39	5.12
53	1216.57	0.4243	210.85	2.55
54	1234.43	0.7579	214.07	2.06
55	1331.08	0.5600	230.76	2.31
56	1362.38	0.6111	236.21	2.31
57	1377.37	0.0706	238.79	21.31
58	1396.90	0.0900	242.14	13.30
59	1479.44	0.4261	256.47	2.26
60	1490.54	0.5516	258.51	2.51
61	1522.35	0.5372	263.93	2.25
62	1555.93	0.6299	269.85	2.12
63	1564.45	0.6173	271.09	2.17
64	1601.87	0.6765	277.72	2.42
65	1624.71	0.3987	281.69	3.08
66	1647.93	1.0872	285.71	2.08
67	1666.06	0.5250	288.86	2.78
68	1704.00	0.0878	295.44	19.44
69	1731.57	0.7532	300.22	2.57
70	1819.83	0.4961	315.52	2.26
71	1892.15	0.6836	328.07	2.51
72	1925.88	0.5833	333.92	2.62
73	1952.48	0.2067	338.53	6.41
74	2031.37	0.0649	352.21	24.89
75	2083.50	0.4948	361.25	2.01
76	2172.82	0.4885	376.74	2.38
77	2266.36	0.6640	392.97	2.03
78	2465.72	0.6276	427.54	2.34
79	2713.21	0.6035	470.46	2.41
80	2814.37	0.4668	488.01	2.19
81	2903.30	0.5263	503.43	2.05
82	2948.81	0.3724	511.32	4.55
83	3246.02	0.5763	562.87	3.05
84	3366.09	0.2626	583.69	6.56
85	3473.55	0.5395	602.33	2.24
86	3516.76	0.1176	609.82	15.30
87	3553.10	0.6117	616.12	2.38
88	3613.78	0.5716	626.65	2.51
89	3653.54	0.7028	633.54	2.26
90	3716.51	0.6455	644.46	2.02
91	3751.98	0.6347	650.61	2.73

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
92	3821.53	0.7560	662.68	2.04
93	3868.95	0.8268	670.90	2.10
94	3903.19	0.7496	676.84	2.12
95	3962.61	0.5244	687.14	2.54
96	4028.61	0.5982	698.59	3.42

Errors quoted at 1.000 sigma

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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: DET01
Sample Title: NOPI-468-GAM1
Peak Analysis Performed on: 1-19-96 8:59:31 AM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	34-	38	36.00	6.16	9.36E+01	40.01	9.07E+02
	4	51-	66	63.23	10.88	5.23E+02	82.79	2.09E+03
	5	72-	78	75.77	13.06	1.38E+03	54.86	8.70E+02
M	6	84-	98	89.35	15.41	8.57E+02	109.17	1.14E+03
m	7	84-	98	93.98	16.21	1.28E+03	115.31	1.13E+03
	8	107-	114	110.54	19.09	3.45E+02	45.27	8.49E+02
	9	122-	130	126.67	21.88	1.81E+01	37.32	6.45E+02
	10	144-	152	148.74	25.71	8.19E+01	36.40	5.82E+02
	12	162-	177	173.84	30.06	-5.48E+01	56.40	1.07E+03
	13	198-	203	201.00	34.77	1.11E+00	24.37	3.34E+02
	14	224-	234	230.39	39.87	1.27E+02	39.16	5.90E+02
	15	263-	275	269.14	46.59	1.65E+03	57.90	6.47E+02
	16	283-	295	289.48	50.12	1.65E+02	40.63	5.65E+02
	17	303-	313	307.83	53.30	3.16E+02	39.81	5.33E+02
	18	331-	340	337.40	58.43	3.06E+01	35.15	5.29E+02
M	19	360-	394	365.73	63.34	8.39E+02	100.84	5.56E+02
m	20	360-	394	373.13	64.63	3.34E+01	19.57	5.16E+02
m	22	360-	394	391.08	67.74	8.48E+01	24.12	4.74E+02
M	23	426-	474	432.31	74.89	2.81E+03	83.75	7.39E+02
m	24	426-	474	445.41	77.16	4.51E+03	116.08	6.65E+02
m	25	426-	474	458.18	79.38	2.69E+02	27.76	6.15E+02
m	26	426-	474	468.37	81.14	1.52E+02	24.56	6.03E+02
	27	477-	491	484.01	83.86	4.87E+02	53.17	8.13E+02
M	28	496-	552	503.61	87.25	1.51E+03	96.99	8.86E+02
m	29	496-	552	519.09	89.94	7.33E+02	66.40	8.45E+02
m	30	496-	552	535.02	92.70	1.40E+03	93.04	8.57E+02
m	31	496-	552	546.75	94.74	1.21E+02	41.11	6.82E+02
M	32	561-	579	568.08	98.44	9.72E+01	30.79	4.33E+02
m	33	561-	579	574.46	99.54	9.90E+01	31.19	4.14E+02
	34	604-	617	609.63	105.64	1.05E+02	41.57	5.88E+02
M	35	629-	657	634.67	109.99	6.81E+01	45.19	4.14E+02
m	36	629-	657	651.09	112.83	5.32E+01	35.88	3.91E+02
	41	739-	750	745.02	129.12	1.14E+02	36.70	4.93E+02
	42	822-	835	830.08	143.87	1.09E+02	42.39	6.11E+02

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	43	882-	894	889.98	154.26	5.91E+01	38.18	5.31E+02
	44	909-	919	914.10	158.45	-2.52E+00	31.34	4.12E+02
	45	1012-	1024	1018.60	176.57	-5.22E+01	34.33	4.67E+02
	47	1052-	1081	1073.86	186.15	1.03E+03	77.06	9.90E+02
	48	1088-	1105	1097.03	190.17	1.10E+01	44.62	6.05E+02
M	49	1118-	1143	1123.87	194.83	2.29E+01	19.87	2.67E+02
m	50	1118-	1143	1137.19	197.14	4.78E+01	40.91	2.78E+02
	51	1176-	1191	1185.09	205.44	8.26E+01	37.42	4.36E+02
M	52	1201-	1241	1207.87	209.39	1.11E+02	52.96	2.89E+02
m	53	1201-	1241	1216.28	210.85	3.63E+01	19.94	2.84E+02
m	54	1201-	1241	1234.85	214.07	2.88E+01	17.08	2.75E+02
	55	1324-	1339	1331.08	230.76	-2.79E+01	35.61	4.28E+02
M	56	1355-	1406	1362.48	236.21	4.61E+01	26.70	3.95E+02
m	57	1355-	1406	1377.36	238.79	1.84E+03	87.72	3.66E+02
m	58	1355-	1406	1396.66	242.14	9.16E+02	60.60	3.26E+02
M	59	1472-	1499	1479.34	256.47	2.29E+01	18.78	2.13E+02
m	60	1472-	1499	1491.10	258.51	4.27E+01	34.28	1.89E+02
	61	1512-	1531	1522.35	263.93	-2.94E+01	38.31	4.27E+02
M	62	1544-	1571	1556.49	269.85	6.87E+01	28.77	3.22E+02
m	63	1544-	1571	1563.59	271.09	6.49E+01	27.45	3.21E+02
	64	1590-	1631	1601.87	277.72	-5.64E+01	76.00	9.29E+02
	68	1694-	1713	1704.00	295.44	1.54E+03	52.94	3.60E+02
	69	1723-	1739	1731.57	300.22	1.03E+02	31.35	2.81E+02
	70	1808-	1829	1819.83	315.52	2.98E+01	37.89	3.74E+02
	71	1882-	1903	1892.15	328.07	1.23E+02	37.72	3.46E+02
	72	1917-	1935	1925.88	333.92	-3.37E+01	33.89	3.50E+02
	73	1942-	1963	1952.48	338.53	2.74E+02	41.71	3.89E+02
	74	2019-	2043	2031.37	352.21	2.36E+03	62.57	3.77E+02
	75	2071-	2092	2083.50	361.25	2.17E+01	35.24	3.23E+02
	76	2162-	2181	2172.82	376.74	-5.29E+01	32.67	3.20E+02
	77	2256-	2275	2266.36	392.97	-6.19E+00	31.34	2.82E+02
	78	2456-	2474	2465.72	427.54	1.50E+00	30.62	2.72E+02
	79	2703-	2725	2713.21	470.46	2.43E+01	30.38	2.32E+02
	80	2804-	2824	2814.37	488.01	-1.73E+01	29.07	2.37E+02
	82	2891-	2971	2948.81	511.32	3.99E+02	100.79	8.71E+02
	83	3235-	3258	3246.02	562.87	2.14E+01	26.91	1.76E+02
	84	3352-	3379	3366.09	583.69	2.80E+02	38.00	2.59E+02
	85	3461-	3484	3473.55	602.33	-4.79E+01	31.37	2.58E+02
	86	3505-	3527	3516.76	609.82	1.10E+03	42.23	1.75E+02
	87	3539-	3564	3553.10	616.12	2.45E+01	27.76	1.76E+02
	88	3602-	3625	3613.78	626.65	-4.30E+01	28.47	2.13E+02
	89	3640-	3667	3653.54	633.54	-6.00E+00	30.66	2.10E+02
	90	3702-	3731	3716.51	644.46	4.19E+01	30.22	1.82E+02
	91	3738-	3763	3751.98	650.61	-5.80E+00	26.44	1.66E+02
	92	3809-	3834	3821.53	662.68	-3.17E+01	29.89	2.18E+02

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
93	3855-	3882	3868.95	670.90	1.36E+01	30.92	2.07E+02
94	3891-	3917	3903.19	676.84	-2.57E+01	30.60	2.19E+02
95	3950-	3974	3962.61	687.14	-1.81E+01	26.55	1.75E+02
96	4016-	4044	4028.61	698.59	7.37E+01	21.76	6.63E+01

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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***** B A C K G R O U N D S U B T R A C T R E P O R T *****
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Detector Name: DET01
Sample Title: NOPI-468-GAM1
Peak Analysis Performed on: 1-19-96 8:59:12 AM

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
	1	6.16	9.36E+01	40.01			9.36E+01	4.00E+01
	2	9.11	0.00E+00	0.00			0.00E+00	0.00E+00
	3	9.80	0.00E+00	0.00	1.54E+02	3.60E+01	-1.54E+02	3.60E+01
	4	10.88	5.23E+02	82.79	1.54E+02	3.60E+01	3.69E+02	9.03E+01
	5	13.06	1.38E+03	54.86	4.47E+01	2.75E+01	1.33E+03	6.14E+01
M	6	15.41	8.57E+02	109.17			8.57E+02	1.09E+02
m	7	16.21	1.28E+03	115.31			1.28E+03	1.15E+02
	8	19.09	3.45E+02	45.27			3.45E+02	4.53E+01
	9	21.88	1.81E+01	37.32	1.17E+01	1.72E+01	6.37E+00	4.11E+01
	10	25.71	8.19E+01	36.40			8.19E+01	3.64E+01
	11	28.50	0.00E+00	0.00			0.00E+00	0.00E+00
	12	30.06	-5.48E+01	56.40			-5.48E+01	5.64E+01
	13	34.77	1.11E+00	24.37			1.11E+00	2.44E+01
	14	39.87	1.27E+02	39.16			1.27E+02	3.92E+01
	15	46.59	1.65E+03	57.90			1.65E+03	5.79E+01
	16	50.12	1.65E+02	40.63			1.65E+02	4.06E+01
	17	53.30	3.16E+02	39.81			3.16E+02	3.98E+01
	18	58.43	3.06E+01	35.15			3.06E+01	3.52E+01
M	19	63.34	8.39E+02	100.84	5.19E+01	2.82E+01	7.88E+02	1.05E+02
m	20	64.63	3.34E+01	19.57	7.10E+00	4.38E+00	2.63E+01	2.01E+01
m	21	66.76	0.00E+00	0.00			0.00E+00	0.00E+00
m	22	67.74	8.48E+01	24.12			8.48E+01	2.41E+01
M	23	74.89	2.81E+03	83.75			2.81E+03	8.38E+01
m	24	77.16	4.51E+03	116.08			4.51E+03	1.16E+02
m	25	79.38	2.69E+02	27.76			2.69E+02	2.78E+01
m	26	81.14	1.52E+02	24.56			1.52E+02	2.46E+01
	27	83.86	4.87E+02	53.17			4.87E+02	5.32E+01
M	28	87.25	1.51E+03	96.99			1.51E+03	9.70E+01
m	29	89.94	7.33E+02	66.40			7.33E+02	6.64E+01
m	30	92.70	1.40E+03	93.04			1.40E+03	9.30E+01
m	31	94.74	1.21E+02	41.11			1.21E+02	4.11E+01
M	32	98.44	9.72E+01	30.79			9.72E+01	3.08E+01
m	33	99.54	9.90E+01	31.19			9.90E+01	3.12E+01
	34	105.64	1.05E+02	41.57			1.05E+02	4.16E+01
M	35	109.99	6.81E+01	45.19			6.81E+01	4.52E+01
m	36	112.83	5.32E+01	35.88	-1.31E+01	1.36E+01	6.63E+01	3.84E+01
	37	118.19	0.00E+00	0.00			0.00E+00	0.00E+00
	38	119.47	0.00E+00	0.00	1.40E+01	1.38E+01	-1.40E+01	1.38E+01
	39	122.39	0.00E+00	0.00			0.00E+00	0.00E+00
	40	123.41	0.00E+00	0.00			0.00E+00	0.00E+00
	41	129.12	1.14E+02	36.70	-2.79E-01	3.33E+01	1.15E+02	4.95E+01
	42	143.87	1.09E+02	42.39			1.09E+02	4.24E+01

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
	43	154.26	5.91E+01	38.18			5.91E+01	3.82E+01
	44	158.45	-2.52E+00	31.34			-2.52E+00	3.13E+01
	45	176.57	-5.22E+01	34.33			-5.22E+01	3.43E+01
	46	183.41	0.00E+00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	47	186.15	1.03E+03	77.06	1.49E+02	3.34E+01	8.80E+02	8.40E+01
	48	190.17	1.10E+01	44.62			1.10E+01	4.46E+01
M	49	194.83	2.29E+01	19.87	6.97E+00	1.22E+01	1.59E+01	2.33E+01
m	50	197.14	4.78E+01	40.91	3.28E+01	1.88E+01	1.50E+01	4.50E+01
	51	205.44	8.26E+01	37.42	5.26E+00	1.33E+01	7.74E+01	3.97E+01
M	52	209.39	1.11E+02	52.96			1.11E+02	5.30E+01
m	53	210.85	3.63E+01	19.94			3.63E+01	1.99E+01
m	54	214.07	2.88E+01	17.08			2.88E+01	1.71E+01
	55	230.76	-2.79E+01	35.61			-2.79E+01	3.56E+01
M	56	236.21	4.61E+01	26.70			4.61E+01	2.67E+01
m	57	238.79	1.84E+03	87.72	-1.27E+01	1.27E+01	1.85E+03	8.86E+01
m	58	242.14	9.16E+02	60.60			9.16E+02	6.06E+01
M	59	256.47	2.29E+01	18.78			2.29E+01	1.88E+01
m	60	258.51	4.27E+01	34.28			4.27E+01	3.43E+01
	61	263.93	-2.94E+01	38.31			-2.94E+01	3.83E+01
M	62	269.85	6.87E+01	28.77			6.87E+01	2.88E+01
m	63	271.09	6.49E+01	27.45			6.49E+01	2.75E+01
	64	277.72	-5.64E+01	76.00			-5.64E+01	7.60E+01
	65	281.69	0.00E+00	0.00			0.00E+00	0.00E+00
	66	285.71	0.00E+00	0.00			0.00E+00	0.00E+00
	67	288.86	0.00E+00	0.00			0.00E+00	0.00E+00
	68	295.44	1.54E+03	52.94			1.54E+03	5.29E+01
	69	300.22	1.03E+02	31.35			1.03E+02	3.14E+01
	70	315.52	2.98E+01	37.89			2.98E+01	3.79E+01
	71	328.07	1.23E+02	37.72			1.23E+02	3.77E+01
	72	333.92	-3.37E+01	33.89			-3.37E+01	3.39E+01
	73	338.53	2.74E+02	41.71			2.74E+02	4.17E+01
	74	352.21	2.36E+03	62.57			2.36E+03	6.26E+01
	75	361.25	2.17E+01	35.24			2.17E+01	3.52E+01
	76	376.74	-5.29E+01	32.67			-5.29E+01	3.27E+01
	77	392.97	-6.19E+00	31.34	4.02E+00	1.38E+01	-1.02E+01	3.43E+01
	78	427.54	1.50E+00	30.62			1.50E+00	3.06E+01
	79	470.46	2.43E+01	30.38			2.43E+01	3.04E+01
	80	488.01	-1.73E+01	29.07			-1.73E+01	2.91E+01
	81	503.43	0.00E+00	0.00			0.00E+00	0.00E+00
	82	511.32	3.99E+02	100.79			3.99E+02	1.01E+02
	83	562.87	2.14E+01	26.91			2.14E+01	2.69E+01
	84	583.69	2.80E+02	38.00			2.80E+02	3.80E+01
	85	602.33	-4.79E+01	31.37			-4.79E+01	3.14E+01
	86	609.82	1.10E+03	42.23			1.10E+03	4.22E+01
	87	616.12	2.45E+01	27.76			2.45E+01	2.78E+01
	88	626.65	-4.30E+01	28.47			-4.30E+01	2.85E+01
	89	633.54	-6.00E+00	30.66			-6.00E+00	3.07E+01
	90	644.46	4.19E+01	30.22			4.19E+01	3.02E+01
	91	650.61	-5.80E+00	26.44			-5.80E+00	2.64E+01
	92	662.68	-3.17E+01	29.89			-3.17E+01	2.99E+01

Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
93	670.90	1.36E+01	30.92			1.36E+01	3.09E+01
94	676.84	-2.57E+01	30.60			-2.57E+01	3.06E+01
95	687.14	-1.81E+01	26.55			-1.81E+01	2.65E+01
96	698.59	7.37E+01	21.76			7.37E+01	2.18E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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*************************************************************************
*****          A R E A   C O R R E C T I O N   R E P O R T          *****
*****      R E F E R E N C E   P E A K / B K G . S U B T R A C T    *****
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Detector Name: DET01
Sample Title: NOPI-468-GAM1
Peak Analysis Performed on: 1-19-96 8:59:12 AM

Ref. Peak Energy: 0.00; Reference Date:
Peak Ratio: 0.00; Uncertainty: 0.00
Background File : E:\GENIEPC\CAMFILES\BG122895.CNF

Corrected area is: Original * Peak Ratio - Background

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
	1	6.16	9.36E+01	40.01			9.36E+01	4.00E+01
	2	9.11	0.00E+00	0.00			0.00E+00	0.00E+00
	3	9.80	0.00E+00	0.00	1.54E+02	3.60E+01	-1.54E+02	3.60E+01
	4	10.88	5.23E+02	82.79	1.54E+02	3.60E+01	3.69E+02	9.03E+01
	5	13.06	1.38E+03	54.86	4.47E+01	2.75E+01	1.33E+03	6.14E+01
M	6	15.41	8.57E+02	109.17			8.57E+02	1.09E+02
m	7	16.21	1.28E+03	115.31			1.28E+03	1.15E+02
	8	19.09	3.45E+02	45.27			3.45E+02	4.53E+01
	9	21.88	1.81E+01	37.32	1.17E+01	1.72E+01	6.37E+00	4.11E+01
	10	25.71	8.19E+01	36.40			8.19E+01	3.64E+01
	11	28.50	0.00E+00	0.00			0.00E+00	0.00E+00
	12	30.06	-5.48E+01	56.40			-5.48E+01	5.64E+01
	13	34.77	1.11E+00	24.37			1.11E+00	2.44E+01
	14	39.87	1.27E+02	39.16			1.27E+02	3.92E+01
	15	46.59	1.65E+03	57.90			1.65E+03	5.79E+01
	16	50.12	1.65E+02	40.63			1.65E+02	4.06E+01
	17	53.30	3.16E+02	39.81			3.16E+02	3.98E+01
	18	58.43	3.06E+01	35.15			3.06E+01	3.52E+01
M	19	63.34	8.39E+02	100.84	5.19E+01	2.82E+01	7.88E+02	1.05E+02
m	20	64.63	3.34E+01	19.57	7.10E+00	4.38E+00	2.63E+01	2.01E+01
m	21	66.76	0.00E+00	0.00			0.00E+00	0.00E+00
m	22	67.74	8.48E+01	24.12			8.48E+01	2.41E+01
M	23	74.89	2.81E+03	83.75			2.81E+03	8.38E+01
m	24	77.16	4.51E+03	116.08			4.51E+03	1.16E+02
m	25	79.38	2.69E+02	27.76			2.69E+02	2.78E+01
m	26	81.14	1.52E+02	24.56			1.52E+02	2.46E+01
	27	83.86	4.87E+02	53.17			4.87E+02	5.32E+01
M	28	87.25	1.51E+03	96.99			1.51E+03	9.70E+01
m	29	89.94	7.33E+02	66.40			7.33E+02	6.64E+01
m	30	92.70	1.40E+03	93.04			1.40E+03	9.30E+01
m	31	94.74	1.21E+02	41.11			1.21E+02	4.11E+01
M	32	98.44	9.72E+01	30.79			9.72E+01	3.08E+01
m	33	99.54	9.90E+01	31.19			9.90E+01	3.12E+01
	34	105.64	1.05E+02	41.57			1.05E+02	4.16E+01
M	35	109.99	6.81E+01	45.19			6.81E+01	4.52E+01
	36	112.83	5.32E+01	35.88	-1.31E+01	1.36E+01	6.63E+01	3.84E+01
	37	118.19	0.00E+00	0.00			0.00E+00	0.00E+00
	38	119.47	0.00E+00	0.00	1.40E+01	1.38E+01	-1.40E+01	1.38E+01
	39	122.39	0.00E+00	0.00			0.00E+00	0.00E+00
	40	123.41	0.00E+00	0.00			0.00E+00	0.00E+00

41	129.12	1.14E+02	36.70	-2.79E-01	3.33E+01	1.15E+02	4.95E+01
42	143.87	1.09E+02	42.39			1.09E+02	4.24E+01

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
	43	154.26	5.91E+01	38.18			5.91E+01	3.82E+01
	44	158.45	-2.52E+00	31.34			-2.52E+00	3.13E+01
	45	176.57	-5.22E+01	34.33			-5.22E+01	3.43E+01
	46	183.41	0.00E+00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	47	186.15	1.03E+03	77.06	1.49E+02	3.34E+01	8.80E+02	8.40E+01
	48	190.17	1.10E+01	44.62			1.10E+01	4.46E+01
M	49	194.83	2.29E+01	19.87	6.97E+00	1.22E+01	1.59E+01	2.33E+01
m	50	197.14	4.78E+01	40.91	3.28E+01	1.88E+01	1.50E+01	4.50E+01
	51	205.44	8.26E+01	37.42	5.26E+00	1.33E+01	7.74E+01	3.97E+01
M	52	209.39	1.11E+02	52.96			1.11E+02	5.30E+01
m	53	210.85	3.63E+01	19.94			3.63E+01	1.99E+01
m	54	214.07	2.88E+01	17.08			2.88E+01	1.71E+01
	55	230.76	-2.79E+01	35.61			-2.79E+01	3.56E+01
M	56	236.21	4.61E+01	26.70			4.61E+01	2.67E+01
m	57	238.79	1.84E+03	87.72	-1.27E+01	1.27E+01	1.85E+03	8.86E+01
m	58	242.14	9.16E+02	60.60			9.16E+02	6.06E+01
M	59	256.47	2.29E+01	18.78			2.29E+01	1.88E+01
m	60	258.51	4.27E+01	34.28			4.27E+01	3.43E+01
	61	263.93	-2.94E+01	38.31			-2.94E+01	3.83E+01
M	62	269.85	6.87E+01	28.77			6.87E+01	2.88E+01
m	63	271.09	6.49E+01	27.45			6.49E+01	2.75E+01
	64	277.72	-5.64E+01	76.00			-5.64E+01	7.60E+01
	65	281.69	0.00E+00	0.00			0.00E+00	0.00E+00
	66	285.71	0.00E+00	0.00			0.00E+00	0.00E+00
	67	288.86	0.00E+00	0.00			0.00E+00	0.00E+00
	68	295.44	1.54E+03	52.94			1.54E+03	5.29E+01
	69	300.22	1.03E+02	31.35			1.03E+02	3.14E+01
	70	315.52	2.98E+01	37.89			2.98E+01	3.79E+01
	71	328.07	1.23E+02	37.72			1.23E+02	3.77E+01
	72	333.92	-3.37E+01	33.89			-3.37E+01	3.39E+01
	73	338.53	2.74E+02	41.71			2.74E+02	4.17E+01
	74	352.21	2.36E+03	62.57			2.36E+03	6.26E+01
	75	361.25	2.17E+01	35.24			2.17E+01	3.52E+01
	76	376.74	-5.29E+01	32.67			-5.29E+01	3.27E+01
	77	392.97	-6.19E+00	31.34	4.02E+00	1.38E+01	-1.02E+01	3.43E+01
	78	427.54	1.50E+00	30.62			1.50E+00	3.06E+01
	79	470.46	2.43E+01	30.38			2.43E+01	3.04E+01
	80	488.01	-1.73E+01	29.07			-1.73E+01	2.91E+01
	81	503.43	0.00E+00	0.00			0.00E+00	0.00E+00
	82	511.32	3.99E+02	100.79			3.99E+02	1.01E+02
	83	562.87	2.14E+01	26.91			2.14E+01	2.69E+01
	84	583.69	2.80E+02	38.00			2.80E+02	3.80E+01
	85	602.33	-4.79E+01	31.37			-4.79E+01	3.14E+01
	86	609.82	1.10E+03	42.23			1.10E+03	4.22E+01
	87	616.12	2.45E+01	27.76			2.45E+01	2.78E+01
	88	626.65	-4.30E+01	28.47			-4.30E+01	2.85E+01
	89	633.54	-6.00E+00	30.66			-6.00E+00	3.07E+01
	90	644.46	4.19E+01	30.22			4.19E+01	3.02E+01
	91	650.61	-5.80E+00	26.44			-5.80E+00	2.64E+01
	92	662.68	-3.17E+01	29.89			-3.17E+01	2.99E+01

Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
93	670.90	1.36E+01	30.92			1.36E+01	3.09E+01
94	676.84	-2.57E+01	30.60			-2.57E+01	3.06E+01
95	687.14	-1.81E+01	26.55			-1.81E+01	2.65E+01
96	698.59	7.37E+01	21.76			7.37E+01	2.18E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

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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NP469.CNF

Report Generated On	:	1-17-96 1:41:13 PM
Sample Title	:	NOPI-469-GAM1
Spectrum Description	:	NOPI-469-GAM1
Sample Identification	:	NP469
Sample Type	:	
Sample Geometry	:	
Peak Locate Threshold	:	2.00
Peak Locate Range (in channels)	:	1 - 4096
Peak Area Range (in channels)	:	1 - 4096
Identification Energy Tolerance	:	1.000 keV
Sample Size	:	0.000E+00 Unit
Sample Taken On	:	
Acquisition Started	:	1-16-96 2:45:03 PM
Live Time	:	80000.0 seconds
Real Time	:	80006.3 seconds

Energy Calibration Used Done On	:	1-16-96
Efficiency Calibration Used Done On	:	????????

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-469-GAM1
Peak Locate Performed on: 1-17-96 1:40:33 PM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 2.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	31.00	0.0000	5.53	2.50
2	37.00	<NA>	6.29	<NA>
3	63.40	0.0936	10.91	6.00
4	75.86	0.1773	13.07	6.38
5	88.53	0.1624	15.41	2.99
6	94.35	0.0782	16.23	8.02
7	103.81	0.5203	17.92	2.14
8	110.26	0.1399	19.03	5.42
9	117.00	0.0000	19.70	2.78
10	148.65	0.2460	25.69	3.96
11	216.00	<NA>	37.38	<NA>
12	231.43	0.2026	40.05	2.63
13	269.10	0.0319	46.58	27.52
14	289.98	0.2503	50.21	3.30
15	307.72	0.0943	53.28	10.54
16	365.81	0.0394	63.36	21.37
17	391.02	0.1327	67.73	6.55
18	432.22	0.0382	74.88	32.33
19	445.42	0.0281	77.16	39.55
20	458.26	0.1516	79.39	6.86
21	468.32	0.1340	81.14	9.49
22	484.30	0.1266	83.91	8.86
23	503.99	0.1603	87.26	11.79
24	519.14	0.1002	89.94	12.89
25	534.53	0.1170	92.68	13.72
26	547.29	0.3162	94.79	3.77
27	567.83	0.1916	98.25	4.68
28	574.26	0.5253	99.53	2.89
29	603.96	0.6570	104.68	2.04
30	609.24	0.3177	105.60	3.23
31	651.18	0.3790	112.85	3.14
32	744.93	0.4582	129.11	3.74
33	829.99	0.2207	143.86	5.65
34	889.98	0.4665	154.26	2.69
35	943.17	0.3930	163.49	3.39
36	988.38	0.8974	171.33	2.30
37	1004.62	0.5535	174.14	2.36
38	1025.91	0.5811	177.84	2.32
39	1073.67	0.0884	186.10	15.53
40	1088.43	0.5058	188.77	2.20
41	1150.54	0.9140	199.45	2.01

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	1186.22	0.4880	205.64	3.52
43	1207.89	0.2258	209.40	5.55
44	1232.36	0.5865	213.64	2.33
45	1320.93	0.4052	229.00	2.01
46	1362.78	0.5135	236.20	3.17
47	1377.23	0.0695	238.78	22.09
48	1396.67	0.0745	242.12	20.56
49	1478.33	0.3945	256.26	2.61
50	1493.02	0.3869	258.86	3.67
51	1555.11	0.5374	269.61	3.07
52	1639.34	0.4025	284.16	2.51
53	1651.06	0.5243	286.14	2.68
54	1703.72	0.0468	295.39	29.66
55	1730.57	0.5668	300.04	2.56
56	1838.36	0.4587	318.74	2.25
57	1952.70	0.1964	338.57	7.00
58	2031.13	0.0450	352.17	35.39
59	2246.39	0.7907	389.50	2.12
60	2294.75	0.6946	397.89	2.01
61	2360.78	0.6649	409.34	2.34
62	2624.55	0.6749	455.09	2.27
63	2639.04	0.7472	457.60	2.04
64	2655.63	0.5792	460.48	2.33
65	2948.28	0.8837	511.23	3.38
66	3130.96	0.6122	542.91	2.17
67	3365.46	0.2806	583.58	6.74
68	3516.65	0.0655	609.80	22.85
69	3691.79	0.6868	640.18	2.09
70	3742.81	0.7696	649.02	2.03
71	3839.98	0.8136	665.88	2.54
72	3885.41	0.7162	673.75	2.22
73	4027.25	0.8664	698.35	2.22

Errors quoted at 1.000 sigma

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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: DET01
Sample Title: NOPI-469-GAM1
Peak Analysis Performed on: 1-17-96 1:40:48 PM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	29-	39	32.37	5.53	1.23E+02	48.68	1.85E+03
m	2	29-	39	36.75	6.29	3.09E+02	69.38	1.53E+03
	3	60-	66	63.40	10.91	1.03E+03	56.30	1.13E+03
	4	72-	78	75.86	13.07	2.59E+03	70.75	1.29E+03
M	5	84-	119	89.35	15.41	1.90E+03	221.76	1.78E+03
m	6	84-	119	94.05	16.23	2.90E+03	256.99	1.54E+03
m	7	84-	119	103.84	17.92	2.82E+02	136.00	1.42E+03
m	8	84-	119	110.23	19.03	6.95E+02	168.49	1.49E+03
m	9	84-	119	114.09	19.70	2.79E+02	143.02	1.34E+03
	10	145-	153	148.65	25.69	1.70E+02	47.26	9.66E+02
	11	210-	218	216.00	37.38	9.19E+01	40.48	7.21E+02
	12	225-	237	231.43	40.05	1.34E+02	55.07	1.09E+03
	13	263-	275	269.10	46.58	3.62E+03	77.94	9.35E+02
	14	283-	293	289.98	50.21	2.57E+02	45.75	7.71E+02
	15	302-	313	307.72	53.28	6.60E+02	53.30	8.72E+02
	16	358-	372	365.81	63.36	2.20E+03	75.75	1.23E+03
	17	386-	394	391.02	67.73	1.88E+02	43.10	7.84E+02
M	18	425-	474	432.26	74.88	4.66E+03	111.44	1.07E+03
m	19	425-	474	445.40	77.16	8.02E+03	152.56	9.91E+02
m	20	425-	474	458.27	79.39	5.74E+02	42.18	8.11E+02
m	21	425-	474	468.33	81.14	4.88E+02	40.99	8.56E+02
	22	477-	491	484.30	83.91	1.10E+03	66.25	1.14E+03
M	23	496-	554	503.65	87.26	2.67E+03	137.27	1.29E+03
m	24	496-	554	519.07	89.94	1.26E+03	99.60	1.20E+03
m	25	496-	554	534.87	92.68	3.18E+03	147.94	1.02E+03
m	26	496-	554	547.08	94.79	3.82E+02	65.73	8.40E+02
M	27	560-	578	567.00	98.25	2.59E+02	56.26	8.63E+02
m	28	560-	578	574.41	99.53	9.24E+01	34.12	7.01E+02
M	29	599-	617	604.08	104.68	3.16E+01	16.33	4.31E+02
m	30	599-	617	609.40	105.60	1.03E+02	48.43	4.62E+02
	31	646-	657	651.18	112.85	3.62E+01	44.92	7.91E+02
	32	736-	750	744.93	129.11	1.38E+02	51.00	8.53E+02
	33	821-	837	829.99	143.86	3.54E+02	57.63	9.48E+02
	34	883-	894	889.98	154.26	1.13E+02	43.56	7.13E+02
	35	936-	949	943.17	163.49	7.84E+01	45.85	7.34E+02
	36	982-	1010	988.38	171.33	-2.37E+01	79.49	1.36E+03
	38	1017-	1031	1025.91	177.84	3.61E+01	44.67	6.81E+02
M	39	1064-	1095	1073.58	186.10	2.18E+03	96.93	7.95E+02
	40	1064-	1095	1088.94	188.77	5.45E+01	20.41	6.26E+02
	41	1144-	1156	1150.54	199.45	9.63E+00	40.70	6.22E+02
	42	1180-	1195	1186.22	205.64	6.14E+01	44.41	6.33E+02

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	43	1201-	1215	1207.89	209.40	1.95E+02	42.23	5.52E+02
	44	1225-	1238	1232.36	213.64	2.76E+00	37.03	4.96E+02
	45	1311-	1327	1320.93	229.00	-4.50E+01	43.93	6.30E+02
M	46	1354-	1405	1362.42	236.20	9.43E+01	25.07	5.97E+02
m	47	1354-	1405	1377.32	238.78	1.77E+03	80.63	5.60E+02
m	48	1354-	1405	1396.55	242.12	1.77E+03	80.60	5.30E+02
M	49	1468-	1500	1478.08	256.26	3.97E+01	28.11	3.28E+02
m	50	1468-	1500	1493.08	258.86	7.61E+01	49.01	3.22E+02
	51	1548-	1564	1555.11	269.61	8.03E+01	43.28	5.69E+02
M	52	1628-	1658	1639.00	284.16	2.29E+01	24.38	2.77E+02
m	53	1628-	1658	1650.38	286.14	3.64E+01	38.75	2.96E+02
	54	1694-	1713	1703.72	295.39	3.21E+03	70.77	5.13E+02
	55	1722-	1739	1730.57	300.04	2.76E+01	39.86	4.79E+02
	56	1830-	1848	1838.36	318.74	-1.94E+01	38.63	4.46E+02
	57	1944-	1960	1952.70	338.57	2.11E+02	39.81	4.40E+02
	58	2020-	2042	2031.13	352.17	4.71E+03	82.59	5.44E+02
	59	2237-	2256	2246.39	389.50	-1.17E+01	38.67	4.30E+02
	60	2285-	2306	2294.75	397.89	5.06E+01	41.01	4.34E+02
	61	2349-	2371	2360.78	409.34	3.55E+01	41.83	4.42E+02
	65	2922-	2996	2948.28	511.23	4.54E+02	103.23	9.73E+02
	66	3119-	3141	3130.96	542.91	1.68E+01	31.85	2.57E+02
	67	3354-	3376	3365.46	583.58	2.17E+02	38.04	3.17E+02
	68	3501-	3531	3516.65	609.80	2.45E+03	64.24	3.44E+02
	69	3676-	3703	3691.79	640.18	3.85E+01	34.01	2.49E+02
	70	3730-	3754	3742.81	649.02	-2.87E+01	32.85	2.67E+02
	71	3827-	3851	3839.98	665.88	6.96E+01	31.48	2.22E+02
	72	3871-	3897	3885.41	673.75	5.92E+01	32.01	2.20E+02
	73	4011-	4043	4027.25	698.35	1.16E+02	26.73	1.01E+02

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

****
***** B A C K G R O U N D S U B T R A C T R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-469-GAM1
Peak Analysis Performed on: 1-17-96 1:40:33 PM

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
M	1	5.53	1.23E+02	48.68			1.23E+02	4.87E+01
m	2	6.29	3.09E+02	69.38			3.09E+02	6.94E+01
	3	10.91	1.03E+03	56.30	1.54E+02	3.60E+01	8.74E+02	6.68E+01
	4	13.07	2.59E+03	70.75	4.47E+01	2.75E+01	2.54E+03	7.59E+01
M	5	15.41	1.90E+03	221.76			1.90E+03	2.22E+02
m	6	16.23	2.90E+03	256.99			2.90E+03	2.57E+02
m	7	17.92	2.82E+02	136.00			2.82E+02	1.36E+02
m	8	19.03	6.95E+02	168.49			6.95E+02	1.68E+02
m	9	19.70	2.79E+02	143.02			2.79E+02	1.43E+02
	10	25.69	1.70E+02	47.26			1.70E+02	4.73E+01
	11	37.38	9.19E+01	40.48			9.19E+01	4.05E+01
	12	40.05	1.34E+02	55.07			1.34E+02	5.51E+01
	13	46.58	3.62E+03	77.94			3.62E+03	7.79E+01
	14	50.21	2.57E+02	45.75			2.57E+02	4.58E+01
	15	53.28	6.60E+02	53.30			6.60E+02	5.33E+01
	16	63.36	2.20E+03	75.75	5.19E+01	2.82E+01	2.15E+03	8.08E+01
	17	67.73	1.88E+02	43.10			1.88E+02	4.31E+01
M	18	74.88	4.66E+03	111.44			4.66E+03	1.11E+02
m	19	77.16	8.02E+03	152.56			8.02E+03	1.53E+02
m	20	79.39	5.74E+02	42.18			5.74E+02	4.22E+01
m	21	81.14	4.88E+02	40.99			4.88E+02	4.10E+01
	22	83.91	1.10E+03	66.25			1.10E+03	6.62E+01
M	23	87.26	2.67E+03	137.27			2.67E+03	1.37E+02
m	24	89.94	1.26E+03	99.60			1.26E+03	9.96E+01
m	25	92.68	3.18E+03	147.94			3.18E+03	1.48E+02
m	26	94.79	3.82E+02	65.73			3.82E+02	6.57E+01
M	27	98.25	2.59E+02	56.26			2.59E+02	5.63E+01
m	28	99.53	9.24E+01	34.12			9.24E+01	3.41E+01
M	29	104.68	3.16E+01	16.33			3.16E+01	1.63E+01
m	30	105.60	1.03E+02	48.43			1.03E+02	4.84E+01
	31	112.85	3.62E+01	44.92	-1.31E+01	1.36E+01	4.93E+01	4.69E+01
	32	129.11	1.38E+02	51.00	-2.79E-01	3.33E+01	1.38E+02	6.09E+01
	33	143.86	3.54E+02	57.63			3.54E+02	5.76E+01
	34	154.26	1.13E+02	43.56			1.13E+02	4.36E+01
	35	163.49	7.84E+01	45.85			7.84E+01	4.59E+01
	36	171.33	-2.37E+01	79.49			-2.37E+01	7.95E+01
	37	174.14	0.00E+00	0.00	-1.36E+01	1.56E+01	1.36E+01	1.56E+01
	38	177.84	3.61E+01	44.67			3.61E+01	4.47E+01
M	39	186.10	2.18E+03	96.93	1.49E+02	3.34E+01	2.03E+03	1.03E+02
m	40	188.77	5.45E+01	20.41			5.45E+01	2.04E+01
	41	199.45	9.63E+00	40.70			9.63E+00	4.07E+01
	42	205.64	6.14E+01	44.41	5.26E+00	1.33E+01	5.61E+01	4.64E+01

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
	43	209.40	1.95E+02	42.23			1.95E+02	4.22E+01
	44	213.64	2.76E+00	37.03			2.76E+00	3.70E+01
	45	229.00	-4.50E+01	43.93			-4.50E+01	4.39E+01
M	46	236.20	9.43E+01	25.07			9.43E+01	2.51E+01
m	47	238.78	1.77E+03	80.63	-1.27E+01	1.27E+01	1.78E+03	8.16E+01
m	48	242.12	1.77E+03	80.60			1.77E+03	8.06E+01
M	49	256.26	3.97E+01	28.11			3.97E+01	2.81E+01
m	50	258.86	7.61E+01	49.01			7.61E+01	4.90E+01
	51	269.61	8.03E+01	43.28			8.03E+01	4.33E+01
M	52	284.16	2.29E+01	24.38			2.29E+01	2.44E+01
m	53	286.14	3.64E+01	38.75			3.64E+01	3.87E+01
	54	295.39	3.21E+03	70.77			3.21E+03	7.08E+01
	55	300.04	2.76E+01	39.86			2.76E+01	3.99E+01
	56	318.74	-1.94E+01	38.63	-8.83E-01	9.47E+00	-1.86E+01	3.98E+01
	57	338.57	2.11E+02	39.81			2.11E+02	3.98E+01
	58	352.17	4.71E+03	82.59			4.71E+03	8.26E+01
	59	389.50	-1.17E+01	38.67			-1.17E+01	3.87E+01
	60	397.89	5.06E+01	41.01			5.06E+01	4.10E+01
	61	409.34	3.55E+01	41.83	-7.19E+00	6.46E+00	4.26E+01	4.23E+01
	62	455.09	0.00E+00	0.00			0.00E+00	0.00E+00
	63	457.60	0.00E+00	0.00			0.00E+00	0.00E+00
	64	460.48	0.00E+00	0.00			0.00E+00	0.00E+00
	65	511.23	4.54E+02	103.23			4.54E+02	1.03E+02
	66	542.91	1.68E+01	31.85			1.68E+01	3.19E+01
	67	583.58	2.17E+02	38.04			2.17E+02	3.80E+01
	68	609.80	2.45E+03	64.24			2.45E+03	6.42E+01
	69	640.18	3.85E+01	34.01			3.85E+01	3.40E+01
	70	649.02	-2.87E+01	32.85			-2.87E+01	3.29E+01
	71	665.88	6.96E+01	31.48			6.96E+01	3.15E+01
	72	673.75	5.92E+01	32.01			5.92E+01	3.20E+01
	73	698.35	1.16E+02	26.73			1.16E+02	2.67E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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*************************************************************************
*****          A R E A   C O R R E C T I O N   R E P O R T          *****
*****      R E F E R E N C E   P E A K / B K G . S U B T R A C T    *****
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Detector Name: DET01
Sample Title: NOPI-469-GAM1
Peak Analysis Performed on: 1-17-96 1:40:33 PM

Ref. Peak Energy: 0.00; Reference Date:
Peak Ratio: 0.00; Uncertainty: 0.00
Background File : E:\GENIEPC\CAMFILES\BG122895.CNF

Corrected area is: Original * Peak Ratio - Background

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
M	1	5.53	1.23E+02	48.68			1.23E+02	4.87E+01
m	2	6.29	3.09E+02	69.38			3.09E+02	6.94E+01
	3	10.91	1.03E+03	56.30	1.54E+02	3.60E+01	8.74E+02	6.68E+01
	4	13.07	2.59E+03	70.75	4.47E+01	2.75E+01	2.54E+03	7.59E+01
M	5	15.41	1.90E+03	221.76			1.90E+03	2.22E+02
m	6	16.23	2.90E+03	256.99			2.90E+03	2.57E+02
m	7	17.92	2.82E+02	136.00			2.82E+02	1.36E+02
m	8	19.03	6.95E+02	168.49			6.95E+02	1.68E+02
m	9	19.70	2.79E+02	143.02			2.79E+02	1.43E+02
	10	25.69	1.70E+02	47.26			1.70E+02	4.73E+01
	11	37.38	9.19E+01	40.48			9.19E+01	4.05E+01
	12	40.05	1.34E+02	55.07			1.34E+02	5.51E+01
	13	46.58	3.62E+03	77.94			3.62E+03	7.79E+01
	14	50.21	2.57E+02	45.75			2.57E+02	4.58E+01
	15	53.28	6.60E+02	53.30			6.60E+02	5.33E+01
	16	63.36	2.20E+03	75.75	5.19E+01	2.82E+01	2.15E+03	8.08E+01
	17	67.73	1.88E+02	43.10			1.88E+02	4.31E+01
M	18	74.88	4.66E+03	111.44			4.66E+03	1.11E+02
m	19	77.16	8.02E+03	152.56			8.02E+03	1.53E+02
m	20	79.39	5.74E+02	42.18			5.74E+02	4.22E+01
m	21	81.14	4.88E+02	40.99			4.88E+02	4.10E+01
	22	83.91	1.10E+03	66.25			1.10E+03	6.62E+01
M	23	87.26	2.67E+03	137.27			2.67E+03	1.37E+02
m	24	89.94	1.26E+03	99.60			1.26E+03	9.96E+01
m	25	92.68	3.18E+03	147.94			3.18E+03	1.48E+02
m	26	94.79	3.82E+02	65.73			3.82E+02	6.57E+01
M	27	98.25	2.59E+02	56.26			2.59E+02	5.63E+01
m	28	99.53	9.24E+01	34.12			9.24E+01	3.41E+01
M	29	104.68	3.16E+01	16.33			3.16E+01	1.63E+01
m	30	105.60	1.03E+02	48.43			1.03E+02	4.84E+01
	31	112.85	3.62E+01	44.92	-1.31E+01	1.36E+01	4.93E+01	4.69E+01
	32	129.11	1.38E+02	51.00	-2.79E-01	3.33E+01	1.38E+02	6.09E+01
	33	143.86	3.54E+02	57.63			3.54E+02	5.76E+01
	34	154.26	1.13E+02	43.56			1.13E+02	4.36E+01
	35	163.49	7.84E+01	45.85			7.84E+01	4.59E+01
	36	171.33	-2.37E+01	79.49			-2.37E+01	7.95E+01
	37	174.14	0.00E+00	0.00	-1.36E+01	1.56E+01	1.36E+01	1.56E+01
	38	177.84	3.61E+01	44.67			3.61E+01	4.47E+01
M	39	186.10	2.18E+03	96.93	1.49E+02	3.34E+01	2.03E+03	1.03E+02
m	40	188.77	5.45E+01	20.41			5.45E+01	2.04E+01

41	199.45	9.63E+00	40.70			9.63E+00	4.07E+01
42	205.64	6.14E+01	44.41	5.26E+00	1.33E+01	5.61E+01	4.64E+01

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
	43	209.40	1.95E+02	42.23			1.95E+02	4.22E+01
	44	213.64	2.76E+00	37.03			2.76E+00	3.70E+01
	45	229.00	-4.50E+01	43.93			-4.50E+01	4.39E+01
M	46	236.20	9.43E+01	25.07			9.43E+01	2.51E+01
m	47	238.78	1.77E+03	80.63	-1.27E+01	1.27E+01	1.78E+03	8.16E+01
m	48	242.12	1.77E+03	80.60			1.77E+03	8.06E+01
M	49	256.26	3.97E+01	28.11			3.97E+01	2.81E+01
m	50	258.86	7.61E+01	49.01			7.61E+01	4.90E+01
	51	269.61	8.03E+01	43.28			8.03E+01	4.33E+01
M	52	284.16	2.29E+01	24.38			2.29E+01	2.44E+01
m	53	286.14	3.64E+01	38.75			3.64E+01	3.87E+01
	54	295.39	3.21E+03	70.77			3.21E+03	7.08E+01
	55	300.04	2.76E+01	39.86			2.76E+01	3.99E+01
	56	318.74	-1.94E+01	38.63	-8.83E-01	9.47E+00	-1.86E+01	3.98E+01
	57	338.57	2.11E+02	39.81			2.11E+02	3.98E+01
	58	352.17	4.71E+03	82.59			4.71E+03	8.26E+01
	59	389.50	-1.17E+01	38.67			-1.17E+01	3.87E+01
	60	397.89	5.06E+01	41.01			5.06E+01	4.10E+01
	61	409.34	3.55E+01	41.83	-7.19E+00	6.46E+00	4.26E+01	4.23E+01
	62	455.09	0.00E+00	0.00			0.00E+00	0.00E+00
	63	457.60	0.00E+00	0.00			0.00E+00	0.00E+00
	64	460.48	0.00E+00	0.00			0.00E+00	0.00E+00
	65	511.23	4.54E+02	103.23			4.54E+02	1.03E+02
	66	542.91	1.68E+01	31.85			1.68E+01	3.19E+01
	67	583.58	2.17E+02	38.04			2.17E+02	3.80E+01
	68	609.80	2.45E+03	64.24			2.45E+03	6.42E+01
	69	640.18	3.85E+01	34.01			3.85E+01	3.40E+01
	70	649.02	-2.87E+01	32.85			-2.87E+01	3.29E+01
	71	665.88	6.96E+01	31.48			6.96E+01	3.15E+01
	72	673.75	5.92E+01	32.01			5.92E+01	3.20E+01
	73	698.35	1.16E+02	26.73			1.16E+02	2.67E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

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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NP470.CNF

Report Generated On	:	1-15-96 8:43:41 AM
Sample Title	:	NOPI-470-GAM1
Spectrum Description	:	NOPI-470-GAM1
Sample Identification	:	NP470
Sample Type	:	
Sample Geometry	:	
Peak Locate Threshold	:	2.00
Peak Locate Range (in channels)	:	1 - 4096
Peak Area Range (in channels)	:	1 - 4096
Identification Energy Tolerance	:	1.000 keV
Sample Size	:	0.000E+00 Unit
Sample Taken On	:	
Acquisition Started	:	1-12-96 4:00:19 PM
Live Time	:	80000.0 seconds
Real Time	:	80006.8 seconds

Energy Calibration Used Done On	:	12-19-95
Efficiency Calibration Used Done On	:	????????

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-470-GAM1
Peak Locate Performed on: 1-15-96 8:42:56 AM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 2.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	19.43	0.1156	3.19	12.66
2	31.87	0.2844	5.36	3.39
3	37.05	0.3530	6.23	3.56
4	47.00	<NA>	7.93	<NA>
5	63.68	0.0482	10.80	13.81
6	76.60	0.1223	13.02	11.16
7	89.49	0.1952	15.37	5.73
8	94.89	0.0792	16.15	17.33
9	104.47	0.1112	17.84	4.35
10	111.22	0.1776	18.94	7.80
11	115.00	0.0000	19.63	3.34
12	124.00	<NA>	21.09	<NA>
13	150.02	0.1630	25.64	5.86
14	159.88	0.2478	27.36	3.65
15	171.81	0.2748	29.35	3.20
16	179.99	0.5463	30.80	2.32
17	225.13	0.3667	38.56	2.73
18	256.00	<NA>	43.86	<NA>
19	271.51	0.0227	46.53	20.75
20	292.01	0.7221	50.06	2.01
21	310.35	0.1453	53.21	8.12
22	328.72	0.2939	56.37	2.48
23	368.97	0.0565	63.29	15.44
24	385.00	<NA>	66.15	<NA>
25	394.34	0.2260	67.64	4.95
26	424.29	0.4702	72.75	2.36
27	436.02	0.0496	74.81	18.68
28	449.19	0.0389	77.08	21.77
29	462.37	0.2322	79.35	4.37
30	472.23	0.1607	81.07	6.50
31	488.31	0.2467	83.81	5.02
32	508.65	0.4045	87.30	7.27
33	523.71	0.2359	89.89	5.81
34	539.30	0.1859	92.57	6.14
35	552.41	0.2469	94.83	2.24
36	560.08	0.5460	96.15	2.02
37	573.94	0.3170	98.53	3.60
38	591.79	0.3133	101.60	2.67
39	640.98	0.5335	110.05	2.34
40	657.41	0.3825	112.88	2.91
41	664.00	0.0000	114.01	2.05

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	677.00	0.0000	116.25	2.09
43	744.77	0.2643	127.88	3.02
44	751.96	0.4772	129.11	2.15
45	837.39	0.4504	143.82	2.49
46	898.11	0.6433	154.26	2.35
47	923.57	0.2471	158.67	2.16
48	932.00	<NA>	159.27	<NA>
49	935.00	<NA>	160.04	<NA>
50	963.19	0.4185	165.45	2.08
51	1025.00	<NA>	176.05	<NA>
52	1033.70	0.3244	177.60	2.12
53	1037.00	<NA>	178.18	<NA>
54	1051.00	<NA>	180.55	<NA>
55	1083.36	0.3943	186.11	4.77
56	1117.15	0.4425	191.92	2.16
57	1144.00	<NA>	196.54	<NA>
58	1194.24	0.3221	205.18	2.47
59	1233.74	0.3047	211.97	2.49
60	1270.75	0.3575	218.33	2.14
61	1278.00	0.0001	219.58	2.09
62	1367.31	0.3278	234.93	2.06
63	1390.15	0.3170	238.86	4.73
64	1409.65	0.2072	242.21	5.86
65	1501.01	0.8058	257.92	2.96
66	1596.99	0.5616	274.42	2.25
67	1600.00	<NA>	274.94	<NA>
68	1626.00	<NA>	279.41	<NA>
69	1629.11	0.4600	279.94	2.25
70	1647.00	0.0001	283.05	2.03
71	1650.00	<NA>	283.61	<NA>
72	1655.95	0.4271	284.54	2.73
73	1670.00	0.0001	286.97	2.27
74	1719.63	0.2293	295.51	5.60
75	1971.95	0.5180	338.89	2.26
76	2047.62	0.0363	351.90	16.31
77	2319.00	<NA>	398.56	<NA>
78	2556.00	<NA>	439.31	<NA>
79	2774.21	0.3399	476.82	2.49
80	2859.14	0.4820	491.42	2.02
81	2950.00	<NA>	507.05	<NA>
82	3546.72	0.3551	609.64	2.05

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: NOPI-470-GAM1
Peak Analysis Performed on: 1-15-96 8:43:15 AM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	15-	24	19.43	3.19	1.12E+03	64.26	1.23E+03
M	2	28-	49	32.02	5.36	2.39E+02	76.32	2.26E+03
m	3	28-	49	37.12	6.23	2.29E+02	73.69	2.11E+03
	5	58-	67	63.68	10.80	1.16E+03	77.08	2.12E+03
	6	71-	81	76.60	13.02	4.01E+03	98.18	2.36E+03
M	7	84-	126	90.25	15.37	2.50E+03	238.49	2.26E+03
m	8	84-	126	94.82	16.15	3.83E+03	277.56	2.03E+03
m	9	84-	126	104.61	17.84	5.89E+02	156.45	1.93E+03
m	10	84-	126	111.02	18.94	1.04E+03	179.24	1.65E+03
m	11	84-	126	115.05	19.63	5.67E+02	155.84	1.57E+03
m	12	84-	126	123.56	21.09	8.11E+01	124.61	1.21E+03
M	13	146-	181	150.00	25.64	2.23E+02	94.25	9.38E+02
[illegible]	14	146-	181	160.03	27.36	1.52E+02	65.69	9.19E+02
m	15	146-	181	171.59	29.35	1.78E+01	18.77	1.03E+03
	17	222-	227	225.13	38.56	-1.99E+01	35.01	7.07E+02
	18	253-	258	256.00	43.86	9.35E+00	35.41	7.03E+02
	19	266-	276	271.51	46.53	4.54E+03	85.82	1.19E+03
	20	287-	297	292.01	50.06	2.83E+02	55.97	1.20E+03
	21	305-	315	310.35	53.21	8.47E+02	60.56	1.19E+03
	22	325-	331	328.72	56.37	-1.77E+01	37.64	7.56E+02
	23	363-	373	368.97	63.29	3.19E+03	79.32	1.31E+03
M	24	382-	398	385.62	66.15	7.36E+01	29.55	1.05E+03
m	25	382-	398	394.28	67.64	4.03E+02	74.72	1.10E+03
M	26	419-	441	424.00	72.75	1.61E+02	45.20	1.36E+03
m	27	419-	441	435.99	74.81	5.30E+03	137.25	1.62E+03
	28	444-	454	449.19	77.08	9.37E+03	113.59	1.49E+03
M	29	457-	476	462.37	79.35	3.57E+02	58.10	1.31E+03
m	30	457-	476	472.42	81.07	4.91E+02	70.71	1.10E+03
	31	483-	493	488.31	83.81	1.35E+03	66.06	1.27E+03
	32	503-	513	508.65	87.30	3.00E+03	77.83	1.28E+03
	33	518-	528	523.71	89.89	1.26E+03	65.58	1.28E+03
	34	534-	544	539.30	92.57	4.11E+03	84.85	1.30E+03
	35	549-	562	552.41	94.83	1.63E+02	66.37	1.51E+03
	37	568-	577	573.94	98.53	1.89E+02	48.62	9.55E+02
	38	588-	594	591.79	101.60	-1.04E+01	32.41	5.61E+02
	39	635-	643	640.98	110.05	4.77E+01	42.70	8.29E+02
	40	653-	666	657.41	112.88	1.05E+02	60.43	1.28E+03
	[illegible]42	674-	679	677.00	116.25	-2.13E+01	29.59	5.05E+02

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	43	741-	755	744.68	127.88	1.99E+01	22.43	5.18E+02
m	44	741-	755	751.79	129.11	4.23E+01	43.32	5.25E+02
	45	832-	842	837.39	143.82	4.45E+02	48.97	8.22E+02
	46	893-	903	898.11	154.26	2.05E+02	47.55	8.62E+02
M	47	918-	937	923.77	158.67	1.26E+02	43.99	8.70E+02
m	48	918-	937	927.26	159.27	7.81E+01	34.36	8.75E+02
m	49	918-	937	931.74	160.04	8.01E+01	33.78	8.82E+02
	50	958-	968	963.19	165.45	2.82E+01	43.29	7.74E+02
M	51	1021-	1040	1024.86	176.05	5.80E+01	1340.79	1.26E+02
m	52	1021-	1040	1033.84	177.60	6.69E+01	1354.41	1.28E+02
m	53	1021-	1040	1037.22	178.18	2.90E+00	115.13	1.29E+02
	54	1046-	1053	1051.00	180.55	-2.14E+00	34.10	5.76E+02
	55	1078-	1088	1083.36	186.11	2.74E+03	68.51	8.20E+02
	56	1114-	1119	1117.15	191.92	9.77E+00	26.21	3.83E+02
	57	1141-	1146	1144.00	196.54	-6.79E+01	27.84	4.67E+02
	58	1190-	1198	1194.24	205.18	8.38E+01	34.64	5.19E+02
	59	1231-	1235	1233.74	211.97	-1.18E+01	20.98	2.75E+02
	62	1365-	1370	1367.31	234.93	-3.54E+01	23.72	3.38E+02
	63	1386-	1394	1390.15	238.86	1.62E+03	51.78	4.96E+02
	64	1405-	1413	1409.65	242.21	1.87E+03	56.37	6.14E+02
	65	1497-	1505	1501.01	257.92	1.57E+03	61.52	1.04E+03
	67	1592-	1604	1600.00	274.94	1.68E+02	38.75	5.08E+02
	68	1622-	1631	1626.00	279.41	-2.03E+01	31.14	4.33E+02
M	70	1643-	1658	1647.16	283.05	1.54E+01	12.48	1.20E+02
m	71	1643-	1658	1650.42	283.61	3.71E+01	21.59	1.20E+02
m	72	1643-	1658	1655.84	284.54	3.44E+01	20.31	1.21E+02
	73	1667-	1672	1670.00	286.97	2.27E+01	21.18	2.40E+02
	74	1715-	1723	1719.63	295.51	3.47E+03	68.60	5.81E+02
	75	1967-	1975	1971.95	338.89	2.67E+02	31.46	3.35E+02
	76	2043-	2051	2047.62	351.90	2.09E+03	52.28	3.05E+02
	77	2316-	2321	2319.00	398.56	8.16E-01	5.76	1.82E+01
	78	2553-	2558	2556.00	439.31	-5.00E-01	5.27	1.55E+01
	79	2771-	2777	2774.21	476.82	1.45E+00	5.53	1.45E+01
	80	2856-	2861	2859.14	491.42	1.79E+00	4.87	1.22E+01
	81	2947-	2954	2950.00	507.05	1.28E+00	5.99	1.47E+01
	82	3542-	3550	3546.72	609.64	2.03E+02	20.74	1.05E+02

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

****
***** B A C K G R O U N D S U B T R A C T R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-470-GAM1
Peak Analysis Performed on: 1-15-96 8:42:56 AM

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
	1	3.19	1.12E+03	64.26			1.12E+03	6.43E+01
M	2	5.36	2.39E+02	76.32			2.39E+02	7.63E+01
m	3	6.23	2.29E+02	73.69			2.29E+02	7.37E+01
m	4	7.93	0.00E+00	0.00			0.00E+00	0.00E+00
	5	10.80	1.16E+03	77.08	1.54E+02	3.60E+01	1.01E+03	8.51E+01
	6	13.02	4.01E+03	98.18	4.47E+01	2.75E+01	3.96E+03	1.02E+02
M	7	15.37	2.50E+03	238.49			2.50E+03	2.38E+02
m	8	16.15	3.83E+03	277.56			3.83E+03	2.78E+02
m	9	17.84	5.89E+02	156.45			5.89E+02	1.56E+02
m	10	18.94	1.04E+03	179.24			1.04E+03	1.79E+02
m	11	19.63	5.67E+02	155.84			5.67E+02	1.56E+02
m	12	21.09	8.11E+01	124.61			8.11E+01	1.25E+02
M	13	25.64	2.23E+02	94.25			2.23E+02	9.43E+01
m	14	27.36	1.52E+02	65.69			1.52E+02	6.57E+01
m	15	29.35	1.78E+01	18.77			1.78E+01	1.88E+01
	16	30.80	0.00E+00	0.00			0.00E+00	0.00E+00
	17	38.56	-1.99E+01	35.01			-1.99E+01	3.50E+01
	18	43.86	9.35E+00	35.41			9.35E+00	3.54E+01
	19	46.53	4.54E+03	85.82			4.54E+03	8.58E+01
	20	50.06	2.83E+02	55.97			2.83E+02	5.60E+01
	21	53.21	8.47E+02	60.56			8.47E+02	6.06E+01
	22	56.37	-1.77E+01	37.64			-1.77E+01	3.76E+01
	23	63.29	3.19E+03	79.32	5.19E+01	2.82E+01	3.13E+03	8.42E+01
M	24	66.15	7.36E+01	29.55	7.10E+00	4.38E+00	6.65E+01	2.99E+01
m	25	67.64	4.03E+02	74.72			4.03E+02	7.47E+01
M	26	72.75	1.61E+02	45.20			1.61E+02	4.52E+01
m	27	74.81	5.30E+03	137.25			5.30E+03	1.37E+02
	28	77.08	9.37E+03	113.59			9.37E+03	1.14E+02
M	29	79.35	3.57E+02	58.10			3.57E+02	5.81E+01
m	30	81.07	4.91E+02	70.71			4.91E+02	7.07E+01
	31	83.81	1.35E+03	66.06			1.35E+03	6.61E+01
	32	87.30	3.00E+03	77.83			3.00E+03	7.78E+01
	33	89.89	1.26E+03	65.58			1.26E+03	6.56E+01
	34	92.57	4.11E+03	84.85			4.11E+03	8.49E+01
	35	94.83	1.63E+02	66.37			1.63E+02	6.64E+01
	36	96.15	0.00E+00	0.00			0.00E+00	0.00E+00
	37	98.53	1.89E+02	48.62			1.89E+02	4.86E+01
	38	101.60	-1.04E+01	32.41			-1.04E+01	3.24E+01
	39	110.05	4.77E+01	42.70			4.77E+01	4.27E+01
	40	112.88	1.05E+02	60.43	-1.31E+01	1.36E+01	1.18E+02	6.19E+01
	41	114.01	0.00E+00	0.00			0.00E+00	0.00E+00
	42	116.25	-2.13E+01	29.59			-2.13E+01	2.96E+01

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
M	43	127.88	1.99E+01	22.43	-2.79E-01	3.33E+01	2.02E+01	4.01E+01
m	44	129.11	4.23E+01	43.32	-2.79E-01	3.33E+01	4.26E+01	5.46E+01
	45	143.82	4.45E+02	48.97			4.45E+02	4.90E+01
	46	154.26	2.05E+02	47.55			2.05E+02	4.76E+01
M	47	158.67	1.26E+02	43.99			1.26E+02	4.40E+01
m	48	159.27	7.81E+01	34.36			7.81E+01	3.44E+01
m	49	160.04	8.01E+01	33.78			8.01E+01	3.38E+01
	50	165.45	2.82E+01	43.29	2.01E+01	1.53E+01	8.19E+00	4.59E+01
M	51	176.05	5.80E+01	1340.79			5.80E+01	1.34E+03
m	52	177.60	6.69E+01	1354.41			6.69E+01	1.35E+03
m	53	178.18	2.90E+00	115.13			2.90E+00	1.15E+02
	54	180.55	-2.14E+00	34.10			-2.14E+00	3.41E+01
	55	186.11	2.74E+03	68.51	1.49E+02	3.34E+01	2.59E+03	7.62E+01
	56	191.92	9.77E+00	26.21			9.77E+00	2.62E+01
	57	196.54	-6.79E+01	27.84	3.28E+01	1.88E+01	-1.01E+02	3.36E+01
	58	205.18	8.38E+01	34.64	5.26E+00	1.33E+01	7.85E+01	3.71E+01
	59	211.97	-1.18E+01	20.98			-1.18E+01	2.10E+01
	60	218.33	0.00E+00	0.00			0.00E+00	0.00E+00
	61	219.58	0.00E+00	0.00			0.00E+00	0.00E+00
	62	234.93	-3.54E+01	23.72			-3.54E+01	2.37E+01
	63	238.86	1.62E+03	51.78	-1.27E+01	1.27E+01	1.64E+03	5.33E+01
	64	242.21	1.87E+03	56.37			1.87E+03	5.64E+01
	65	257.92	1.57E+03	61.52			1.57E+03	6.15E+01
	66	274.42	0.00E+00	0.00			0.00E+00	0.00E+00
	67	274.94	1.68E+02	38.75			1.68E+02	3.88E+01
	68	279.41	-2.03E+01	31.14			-2.03E+01	3.11E+01
	69	279.94	0.00E+00	0.00			0.00E+00	0.00E+00
M	70	283.05	1.54E+01	12.48			1.54E+01	1.25E+01
m	71	283.61	3.71E+01	21.59			3.71E+01	2.16E+01
m	72	284.54	3.44E+01	20.31			3.44E+01	2.03E+01
	73	286.97	2.27E+01	21.18			2.27E+01	2.12E+01
	74	295.51	3.47E+03	68.60			3.47E+03	6.86E+01
	75	338.89	2.67E+02	31.46			2.67E+02	3.15E+01
	76	351.90	2.09E+03	52.28			2.09E+03	5.23E+01
	77	398.56	8.16E-01	5.76			8.16E-01	5.76E+00
	78	439.31	-5.00E-01	5.27			-5.00E-01	5.27E+00
	79	476.82	1.45E+00	5.53			1.45E+00	5.53E+00
	80	491.42	1.79E+00	4.87			1.79E+00	4.87E+00
	81	507.05	1.28E+00	5.99			1.28E+00	5.99E+00
	82	609.64	2.03E+02	20.74			2.03E+02	2.07E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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*************************************************************************
*****          A R E A   C O R R E C T I O N   R E P O R T          *****
*****      R E F E R E N C E   P E A K / B K G . S U B T R A C T    *****
*************************************************************************
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Detector Name: DET01
Sample Title: NOPI-470-GAM1
Peak Analysis Performed on: 1-15-96 8:42:56 AM

Ref. Peak Energy: 0.00; Reference Date:
Peak Ratio: 0.00; Uncertainty: 0.00
Background File : E:\GENIEPC\CAMFILES\BG122895.CNF

Corrected area is: Original * Peak Ratio - Background

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
	1	3.19	1.12E+03	64.26			1.12E+03	6.43E+01
M	2	5.36	2.39E+02	76.32			2.39E+02	7.63E+01
m	3	6.23	2.29E+02	73.69			2.29E+02	7.37E+01
m	4	7.93	0.00E+00	0.00			0.00E+00	0.00E+00
	5	10.80	1.16E+03	77.08	1.54E+02	3.60E+01	1.01E+03	8.51E+01
	6	13.02	4.01E+03	98.18	4.47E+01	2.75E+01	3.96E+03	1.02E+02
M	7	15.37	2.50E+03	238.49			2.50E+03	2.38E+02
m	8	16.15	3.83E+03	277.56			3.83E+03	2.78E+02
m	9	17.84	5.89E+02	156.45			5.89E+02	1.56E+02
m	10	18.94	1.04E+03	179.24			1.04E+03	1.79E+02
m	11	19.63	5.67E+02	155.84			5.67E+02	1.56E+02
m	12	21.09	8.11E+01	124.61			8.11E+01	1.25E+02
M	13	25.64	2.23E+02	94.25			2.23E+02	9.43E+01
m	14	27.36	1.52E+02	65.69			1.52E+02	6.57E+01
m	15	29.35	1.78E+01	18.77			1.78E+01	1.88E+01
m	16	30.80	0.00E+00	0.00			0.00E+00	0.00E+00
	17	38.56	-1.99E+01	35.01			-1.99E+01	3.50E+01
	18	43.86	9.35E+00	35.41			9.35E+00	3.54E+01
	19	46.53	4.54E+03	85.82			4.54E+03	8.58E+01
	20	50.06	2.83E+02	55.97			2.83E+02	5.60E+01
	21	53.21	8.47E+02	60.56			8.47E+02	6.06E+01
	22	56.37	-1.77E+01	37.64			-1.77E+01	3.76E+01
	23	63.29	3.19E+03	79.32	5.19E+01	2.82E+01	3.13E+03	8.42E+01
M	24	66.15	7.36E+01	29.55	7.10E+00	4.38E+00	6.65E+01	2.99E+01
m	25	67.64	4.03E+02	74.72			4.03E+02	7.47E+01
M	26	72.75	1.61E+02	45.20			1.61E+02	4.52E+01
m	27	74.81	5.30E+03	137.25			5.30E+03	1.37E+02
	28	77.08	9.37E+03	113.59			9.37E+03	1.14E+02
M	29	79.35	3.57E+02	58.10			3.57E+02	5.81E+01
m	30	81.07	4.91E+02	70.71			4.91E+02	7.07E+01
	31	83.81	1.35E+03	66.06			1.35E+03	6.61E+01
	32	87.30	3.00E+03	77.83			3.00E+03	7.78E+01
	33	89.89	1.26E+03	65.58			1.26E+03	6.56E+01
	34	92.57	4.11E+03	84.85			4.11E+03	8.49E+01
	35	94.83	1.63E+02	66.37			1.63E+02	6.64E+01
	36	96.15	0.00E+00	0.00			0.00E+00	0.00E+00
	37	98.53	1.89E+02	48.62			1.89E+02	4.86E+01
	38	101.60	-1.04E+01	32.41			-1.04E+01	3.24E+01
	39	110.05	4.77E+01	42.70			4.77E+01	4.27E+01
	40	112.88	1.05E+02	60.43	-1.31E+01	1.36E+01	1.18E+02	6.19E+01

41	114.01	0.00E+00	0.00	0.00E+00	0.00E+00
42	116.25	-2.13E+01	29.59	-2.13E+01	2.96E+01

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
M	43	127.88	1.99E+01	22.43	-2.79E-01	3.33E+01	2.02E+01	4.01E+01
m	44	129.11	4.23E+01	43.32	-2.79E-01	3.33E+01	4.26E+01	5.46E+01
	45	143.82	4.45E+02	48.97			4.45E+02	4.90E+01
	46	154.26	2.05E+02	47.55			2.05E+02	4.76E+01
M	47	158.67	1.26E+02	43.99			1.26E+02	4.40E+01
m	48	159.27	7.81E+01	34.36			7.81E+01	3.44E+01
m	49	160.04	8.01E+01	33.78			8.01E+01	3.38E+01
	50	165.45	2.82E+01	43.29	2.01E+01	1.53E+01	8.19E+00	4.59E+01
M	51	176.05	5.80E+01	1340.79			5.80E+01	1.34E+03
m	52	177.60	6.69E+01	1354.41			6.69E+01	1.35E+03
m	53	178.18	2.90E+00	115.13			2.90E+00	1.15E+02
	54	180.55	-2.14E+00	34.10			-2.14E+00	3.41E+01
	55	186.11	2.74E+03	68.51	1.49E+02	3.34E+01	2.59E+03	7.62E+01
	56	191.92	9.77E+00	26.21			9.77E+00	2.62E+01
	57	196.54	-6.79E+01	27.84	3.28E+01	1.88E+01	-1.01E+02	3.36E+01
	58	205.18	8.38E+01	34.64	5.26E+00	1.33E+01	7.85E+01	3.71E+01
	59	211.97	-1.18E+01	20.98			-1.18E+01	2.10E+01
	60	218.33	0.00E+00	0.00			0.00E+00	0.00E+00
	61	219.58	0.00E+00	0.00			0.00E+00	0.00E+00
	62	234.93	-3.54E+01	23.72			-3.54E+01	2.37E+01
	63	238.86	1.62E+03	51.78	-1.27E+01	1.27E+01	1.64E+03	5.33E+01
	64	242.21	1.87E+03	56.37			1.87E+03	5.64E+01
	65	257.92	1.57E+03	61.52			1.57E+03	6.15E+01
	66	274.42	0.00E+00	0.00			0.00E+00	0.00E+00
	67	274.94	1.68E+02	38.75			1.68E+02	3.88E+01
	68	279.41	-2.03E+01	31.14			-2.03E+01	3.11E+01
	69	279.94	0.00E+00	0.00			0.00E+00	0.00E+00
M	70	283.05	1.54E+01	12.48			1.54E+01	1.25E+01
m	71	283.61	3.71E+01	21.59			3.71E+01	2.16E+01
m	72	284.54	3.44E+01	20.31			3.44E+01	2.03E+01
	73	286.97	2.27E+01	21.18			2.27E+01	2.12E+01
	74	295.51	3.47E+03	68.60			3.47E+03	6.86E+01
	75	338.89	2.67E+02	31.46			2.67E+02	3.15E+01
	76	351.90	2.09E+03	52.28			2.09E+03	5.23E+01
	77	398.56	8.16E-01	5.76			8.16E-01	5.76E+00
	78	439.31	-5.00E-01	5.27			-5.00E-01	5.27E+00
	79	476.82	1.45E+00	5.53			1.45E+00	5.53E+00
	80	491.42	1.79E+00	4.87			1.79E+00	4.87E+00
	81	507.05	1.28E+00	5.99			1.28E+00	5.99E+00
	82	609.64	2.03E+02	20.74			2.03E+02	2.07E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

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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NP471.CNF

Report Generated On	:	1-12-96 2:56:50 PM
Sample Title	:	NOPI-471-GAM1
Spectrum Description	:	NOPI-471-GAM1
Sample Identification	:	NP471
Sample Type	:	
Sample Geometry	:	
Peak Locate Threshold	:	2.00
Peak Locate Range (in channels)	:	1 - 4096
Peak Area Range (in channels)	:	1 - 4096
Identification Energy Tolerance	:	1.000 keV
Sample Size	:	0.000E+00 Unit
Sample Taken On	:	
Acquisition Started	:	1-11-96 4:32:02 PM
Live Time	:	80000.0 seconds
Real Time	:	80247.3 seconds

Energy Calibration Used Done On	:	12-19-95
Efficiency Calibration Used Done On	:	????????

****
***** P E A K L O C A T E R E P O R T *****
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Detector Name: DET01
Sample Title: NOPI-471-GAM1
Peak Locate Performed on: 1-12-96 2:55:22 PM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 2.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	19.34	0.0087	3.33	72.71
2	26.01	0.4401	4.31	2.90
3	31.52	0.0261	5.30	18.14
4	37.40	0.0177	6.16	31.78
5	41.00	<NA>	6.81	<NA>
6	46.88	0.1801	7.83	7.73
7	53.55	0.0659	9.09	7.74
8	56.96	0.4761	9.64	2.54
9	63.63	0.0139	10.79	85.11
10	76.52	0.0166	13.00	82.23
11	84.00	<NA>	15.12	<NA>
12	89.38	0.0106	15.52	54.90
13	94.78	0.0110	16.18	116.16
14	104.48	0.0202	17.81	23.87
15	111.06	0.0212	18.94	61.12
16	115.00	<NA>	19.59	<NA>
17	118.00	0.0000	20.12	8.68
18	122.42	0.1060	20.90	5.05
19	141.05	0.8497	24.14	2.44
20	149.91	0.0221	25.63	47.10
21	159.98	0.0253	27.35	41.98
22	175.02	0.3811	29.94	3.25
23	187.84	0.1644	32.15	5.64
24	196.00	<NA>	33.55	<NA>
25	213.90	0.1241	36.63	9.47
26	239.66	0.2759	41.05	2.29
27	271.50	0.0033	46.53	142.51
28	292.25	0.0317	50.10	32.12
29	310.44	0.0168	53.22	62.26
30	331.88	0.4274	56.91	2.36
31	341.71	0.4324	58.60	2.46
32	356.78	0.3566	61.19	2.29
33	368.95	0.0065	63.28	143.92
34	379.51	0.1934	65.06	2.43
35	394.44	0.0347	67.67	30.95
36	413.20	0.2879	70.82	2.93
37	424.45	0.2685	72.86	5.51
38	436.02	0.0062	74.81	140.47
39	449.25	0.0052	77.09	173.19
40	462.08	0.0209	79.34	42.51
41	472.43	0.0319	81.09	41.47

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	488.33	0.0257	83.84	48.70
43	497.78	0.1397	85.43	8.06
44	508.67	0.0520	87.23	53.39
45	523.43	0.0314	89.84	40.12
46	539.32	0.0223	92.58	47.84
47	552.20	0.0441	94.78	18.80
48	559.26	0.1902	96.00	3.98
49	568.31	0.0957	97.56	7.10
50	573.52	0.0682	98.45	18.97
51	583.24	0.3733	100.13	2.97
52	595.71	0.2422	102.27	2.91
53	610.54	0.2085	104.88	2.40
54	615.30	0.3797	105.68	5.19
55	636.07	0.1554	109.17	4.68
56	643.53	0.2964	110.50	3.91
57	648.62	0.1901	111.39	5.07
58	657.13	0.0506	112.85	16.53
59	667.07	0.2372	114.55	3.52
60	690.92	0.5054	118.64	2.18
61	712.67	0.1593	122.38	5.72
62	745.69	0.5249	128.06	2.89
63	758.75	0.2532	130.38	3.20
64	765.14	0.3801	131.36	2.55
65	770.00	<NA>	132.28	<NA>
66	837.62	0.0612	143.86	18.37
67	868.00	0.0000	149.09	2.32
68	883.00	0.0000	151.67	2.19
69	898.21	0.1005	154.28	11.88
70	923.72	0.3381	158.67	2.77
71	951.49	0.1191	163.44	10.33
72	980.24	0.8680	168.38	2.51
73	1015.33	0.2933	174.42	2.20
74	1083.50	0.0447	186.14	32.03
75	1097.39	0.2428	188.52	2.39
76	1142.44	0.2016	196.27	2.55
77	1159.00	<NA>	199.12	<NA>
78	1195.89	0.2480	205.46	7.30
79	1227.29	0.2596	210.86	2.75
80	1239.48	0.1913	212.96	2.49
81	1300.10	0.3737	223.38	2.86
82	1337.00	0.0001	229.72	2.13
83	1374.48	0.1189	236.17	8.46
84	1393.00	<NA>	239.35	<NA>
85	1409.44	0.0239	242.18	40.58
86	1437.99	0.4700	247.08	2.69
87	1472.30	0.9608	252.98	2.04
88	1500.70	0.1208	257.87	13.55
89	1569.45	0.1208	269.73	7.54
90	1579.78	0.2069	271.52	6.05
91	1601.00	0.3292	275.11	3.59

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
92	1633.00	<NA>	280.61	<NA>
93	1666.69	0.5155	286.41	3.50
94	1719.53	0.0195	295.49	48.46
95	1747.27	0.2312	300.26	3.91
96	1762.76	0.7841	302.92	2.32
97	1785.29	0.5734	306.80	2.37
98	1799.90	0.4634	309.31	2.27
99	1862.91	0.5150	320.14	2.09
100	1894.00	<NA>	325.49	<NA>
101	1898.00	0.0001	326.17	2.10
102	1917.00	0.0001	329.63	2.16
103	1921.89	0.4340	330.27	2.54
104	1983.78	0.1493	340.92	5.51
105	1991.00	0.0001	342.16	2.08
106	2047.66	0.0050	351.87	126.53
107	2051.35	0.0454	352.48	13.85
108	2068.00	<NA>	355.40	<NA>
109	2096.11	0.4971	360.24	2.08
110	2109.00	<NA>	362.45	<NA>
111	2186.00	<NA>	375.69	<NA>
112	2189.56	0.2019	376.30	2.59
113	2199.00	<NA>	377.93	<NA>
114	2265.43	0.2125	389.35	2.48
115	2279.64	0.2747	391.79	2.22
116	2339.65	1.1473	402.11	2.35
117	2398.00	<NA>	412.14	<NA>
118	2490.00	<NA>	427.96	<NA>
119	2508.00	<NA>	431.05	<NA>
120	2514.00	<NA>	432.08	<NA>
121	2523.69	0.3061	433.75	2.21
122	2533.00	<NA>	435.35	<NA>
123	2582.17	0.3774	443.81	2.41
124	2682.15	0.4302	460.99	2.23
125	2745.76	0.3523	471.93	2.22
126	2776.00	0.0001	477.13	2.35
127	2785.00	0.0002	478.68	2.03
128	2807.00	<NA>	482.46	<NA>
129	2880.06	0.4597	495.02	2.51
130	2938.00	<NA>	504.98	<NA>
131	2975.21	0.4213	511.38	2.01
132	2986.82	0.6006	513.38	2.03
133	3110.00	0.0001	534.56	2.24
134	3125.22	0.3927	537.17	2.09
135	3128.87	0.4149	537.80	2.39
136	3134.95	0.5039	538.85	2.35
137	3242.85	0.4559	557.40	2.08
138	3385.00	0.0001	581.84	2.40
139	3438.00	<NA>	590.95	<NA>
140	3470.41	0.2435	596.52	2.26
141	3496.04	0.5078	600.93	2.37

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
142	3549.36	0.1833	610.09	9.79
143	3610.78	0.3564	620.65	2.29
144	3627.86	0.3869	623.59	2.51
145	3671.98	0.5490	631.18	2.28
146	3708.88	0.4700	637.52	2.18
147	3720.17	0.4084	639.46	2.24
148	3762.00	0.0001	646.65	2.25
149	3778.00	0.0001	649.41	2.34
150	3908.76	0.3656	671.89	2.16
151	3940.18	0.4277	677.29	2.09
152	4031.68	0.1166	693.02	5.70

Errors quoted at 1.000 sigma

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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: DET01
Sample Title: NOPI-471-GAM1
Peak Analysis Performed on: 1-12-96 2:55:51 PM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	15-	67	20.21	3.33	3.79E+04	4204.98	1.55E+04
m	2	15-	67	25.94	4.31	2.07E+04	3310.97	2.47E+04
m	3	15-	67	31.68	5.30	3.14E+04	4076.56	3.48E+04
m	4	15-	67	36.71	6.16	3.12E+04	4419.32	4.49E+04
m	5	15-	67	40.47	6.81	1.11E+04	3795.54	5.04E+04
m	6	15-	67	46.40	7.83	4.51E+03	3397.23	5.94E+04
m	7	15-	67	53.75	9.09	4.37E+03	3679.62	7.07E+04
m	9	15-	67	63.66	10.79	5.82E+04	5780.76	7.40E+04
M	10	71-	127	76.47	13.00	2.08E+05	18429.9	9.66E+04
m	11	71-	127	88.82	15.12	7.73E+04	16779.4	8.13E+04
m	12	71-	127	91.13	15.52	1.04E+05	16052.5	7.95E+04
m	13	71-	127	94.98	16.18	2.24E+05	18889.6	7.56E+04
m	14	71-	127	104.47	17.81	2.87E+04	9921.72	7.65E+04
m	15	71-	127	111.02	18.94	5.77E+04	11787.3	6.78E+04
m	16	71-	127	114.81	19.59	3.21E+04	10867.3	6.64E+04
m	17	71-	127	117.87	20.12	1.61E+04	9025.17	6.55E+04
M	19	136-	164	141.26	24.14	1.02E+03	217.00	4.57E+04
m	20	136-	164	149.93	25.63	2.48E+04	548.80	5.05E+04
m	21	136-	164	159.97	27.35	2.03E+04	470.28	4.93E+04
	22	170-	177	175.02	29.94	9.50E+02	296.89	4.32E+04
	23	182-	198	187.84	32.15	2.25E+03	536.97	9.13E+04
	25	209-	218	213.90	36.63	3.78E+03	354.78	5.41E+04
	26	237-	242	239.66	41.05	-8.01E+02	241.14	3.33E+04
	27	266-	276	271.50	46.53	2.28E+05	603.64	5.74E+04
	28	287-	297	292.25	50.10	2.57E+04	399.00	5.58E+04
	29	305-	315	310.44	53.22	5.84E+04	438.82	5.64E+04
	31	329-	344	341.71	58.60	-2.00E+03	508.76	8.66E+04
	32	353-	359	356.78	61.19	-1.36E+02	281.71	4.20E+04
M	33	363-	382	368.93	63.28	2.22E+05	872.68	5.34E+04
m	34	363-	382	379.26	65.06	6.45E+02	329.83	4.64E+04
	35	389-	399	394.44	67.67	2.64E+04	423.76	6.43E+04
M	36	408-	441	412.81	70.82	1.19E+03	1237.64	6.79E+04
m	37	408-	441	424.63	72.86	2.67E+03	1261.88	6.48E+04
m	38	408-	441	435.99	74.81	3.07E+05	2155.23	8.28E+04
	39	444-	454	449.25	77.09	5.64E+05	860.04	7.42E+04
M	40	457-	477	462.32	79.34	3.26E+04	2331.00	7.21E+04
m	41	457-	477	472.53	81.09	3.78E+04	2340.05	5.77E+04
M	42	483-	513	488.51	83.84	9.71E+04	5804.23	7.68E+04

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
m	44	483-	513	508.22	87.23	1.67E+05	5830.21	8.02E+04
	45	518-	528	523.43	89.84	6.92E+04	468.28	6.30E+04
	46	534-	544	539.32	92.58	2.71E+05	644.91	6.05E+04
M	47	547-	588	552.15	94.78	-8.17E+03	3167.59	7.21E+04
m	50	547-	588	573.49	98.45	-1.06E+04	3199.78	4.10E+04
	52	591-	600	595.71	102.27	1.04E+03	292.87	3.75E+04
M	53	608-	620	610.90	104.88	8.98E+02	221.15	3.28E+04
m	54	608-	620	615.57	105.68	2.54E+03	331.61	3.99E+04
M	55	631-	670	635.81	109.17	4.18E+03	429.35	4.05E+04
m	56	631-	670	643.55	110.50	2.98E+03	406.03	4.41E+04
m	57	631-	670	648.75	111.39	4.36E+03	427.47	4.40E+04
m	58	631-	670	657.23	112.85	1.43E+04	738.04	4.39E+04
m	59	631-	670	667.13	114.55	1.17E+03	400.26	3.29E+04
	60	688-	694	690.92	118.64	-7.72E+01	214.02	2.42E+04
	61	709-	717	712.67	122.38	2.44E+03	263.60	3.14E+04
	62	740-	749	745.69	128.06	8.56E+02	283.95	3.52E+04
M	63	755-	772	759.20	130.38	1.15E+03	336.53	3.17E+04
m	64	755-	772	764.92	131.36	5.07E+02	185.49	3.09E+04
m	65	755-	772	770.25	132.28	8.57E+01	146.06	2.36E+04
	66	832-	842	837.62	143.86	2.99E+04	348.23	3.85E+04
	67	865-	872	868.00	149.09	-1.29E+02	239.30	2.85E+04
	68	881-	885	883.00	151.67	2.17E+01	171.96	1.79E+04
	69	893-	903	898.21	154.28	1.17E+04	322.34	3.87E+04
	70	919-	928	923.72	158.67	1.85E+03	279.49	3.38E+04
	71	946-	956	951.49	163.44	8.53E+03	302.06	3.47E+04
	72	977-	985	980.24	168.38	1.64E+02	241.04	2.71E+04
	73	1012-	1018	1015.33	174.42	9.50E+01	197.87	2.06E+04
	74	1078-	1088	1083.50	186.14	1.94E+05	529.00	3.62E+04
	75	1094-	1100	1097.39	188.52	-1.36E+02	196.32	2.04E+04
	76	1139-	1146	1142.44	196.27	4.42E+02	219.64	2.37E+04
	77	1155-	1163	1159.00	199.12	8.96E+02	235.26	2.54E+04
	78	1191-	1199	1195.89	205.46	6.79E+03	236.87	2.31E+04
	79	1223-	1231	1227.29	210.86	7.94E+02	212.71	2.08E+04
	80	1237-	1242	1239.48	212.96	-3.21E+01	153.93	1.34E+04
	81	1298-	1302	1300.10	223.38	-1.60E+02	131.47	1.06E+04
	82	1334-	1340	1337.00	229.72	-3.44E+02	167.76	1.51E+04
	83	1370-	1378	1374.48	236.17	1.04E+04	226.80	1.93E+04
	84	1391-	1397	1393.00	239.35	6.06E+01	169.74	1.52E+04
	85	1405-	1413	1409.44	242.18	1.36E+05	430.89	2.32E+04
	86	1435-	1440	1437.99	247.08	-6.02E+01	143.39	1.16E+04
	87	1468-	1476	1472.30	252.98	5.18E+02	193.93	1.74E+04
	88	1496-	1504	1500.70	257.87	8.51E+04	459.99	5.88E+04
M	89	1565-	1583	1569.70	269.73	1.08E+04	528.54	2.14E+04
m	90	1565-	1583	1580.09	271.52	8.14E+03	510.60	3.38E+04
	91	1597-	1605	1601.00	275.11	3.58E+03	195.90	1.63E+04
	92	1630-	1635	1633.00	280.61	-4.78E+02	136.65	1.08E+04

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	93	1662-	1670	1666.69	286.41	2.68E+03	193.33	1.62E+04
	94	1715-	1723	1719.53	295.49	2.56E+05	569.16	3.18E+04
	95	1743-	1751	1747.27	300.26	3.08E+03	183.88	1.44E+04
	96	1758-	1766	1762.76	302.92	1.08E+03	177.93	1.43E+04
	97	1782-	1787	1785.29	306.80	-1.23E+02	127.59	9.27E+03
	98	1797-	1802	1799.90	309.31	-1.38E+02	127.60	9.27E+03
	99	1860-	1864	1862.91	320.14	-1.69E+02	111.36	7.62E+03
M	102	1913-	1925	1918.09	329.63	7.03E+02	168.92	1.83E+04
m	103	1913-	1925	1921.80	330.27	1.76E+03	228.00	1.68E+04
	104	1981-	1992	1983.78	340.92	-1.15E+03	212.95	1.85E+04
M	106	2043-	2055	2047.44	351.87	1.52E+05	18213.3	1.39E+04
m	107	2043-	2055	2050.97	352.48	6.24E+04	18210.4	7.74E+03
	108	2066-	2070	2068.00	355.40	-3.90E+01	49.61	1.52E+03
	109	2092-	2098	2096.11	360.24	3.90E+01	62.20	2.02E+03
	110	2107-	2113	2109.00	362.45	3.41E+01	62.39	2.04E+03
	114	2261-	2269	2265.43	389.35	5.11E+02	82.51	2.95E+03
	115	2276-	2282	2279.64	391.79	-3.76E+01	63.18	2.13E+03
	116	2335-	2343	2339.65	402.11	5.53E+02	82.91	2.96E+03
	117	2395-	2401	2398.00	412.14	3.83E+01	65.57	2.25E+03
	118	2486-	2492	2490.00	427.96	2.17E+02	66.06	2.18E+03
	120	2506-	2537	2514.00	432.08	-5.90E+01	206.00	8.50E+03
	123	2580-	2584	2582.17	443.81	-2.63E+01	43.94	1.19E+03
	124	2679-	2684	2682.15	460.99	-8.12E+01	48.86	1.39E+03
	125	2743-	2748	2745.76	471.93	-1.09E+02	48.32	1.38E+03
	126	2773-	2786	2776.00	477.13	-2.56E+00	90.36	2.96E+03
	128	2805-	2809	2807.00	482.46	-5.13E+01	41.95	1.09E+03
	129	2877-	2883	2880.06	495.02	6.81E+01	51.16	1.35E+03
	130	2934-	2940	2938.00	504.98	5.29E+01	49.75	1.28E+03
	133	3105-	3113	3110.00	534.56	2.14E+02	61.23	1.65E+03
	135	3122-	3137	3128.87	537.80	-1.54E+01	93.25	2.89E+03
	137	3240-	3245	3242.85	557.40	-8.75E-01	43.07	1.05E+03
	138	3383-	3387	3385.00	581.84	-4.04E+01	39.49	9.56E+02
	139	3434-	3441	3438.00	590.95	-4.71E+01	54.10	1.48E+03
	140	3467-	3472	3470.41	596.52	-4.85E+01	45.46	1.20E+03
	141	3492-	3498	3496.04	600.93	2.98E+01	51.60	1.39E+03
	142	3545-	3553	3549.36	610.09	3.58E+04	251.64	1.29E+04

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
143	3608-	3612	3610.78	620.65	-4.41E+01	35.67	8.00E+02
144	3625-	3629	3627.86	623.59	-3.87E+01	35.23	7.76E+02
145	3669-	3675	3671.98	631.18	4.87E+01	44.45	1.02E+03
146	3706-	3711	3708.88	637.52	1.53E+01	39.03	8.50E+02
147	3716-	3722	3720.17	639.46	-1.13E+01	44.61	1.06E+03
148	3758-	3764	3762.00	646.65	4.45E+01	44.62	1.03E+03
149	3776-	3780	3778.00	649.41	-2.10E+01	34.53	7.36E+02
150	3905-	3911	3908.76	671.89	-8.71E+00	42.57	9.64E+02
151	3937-	3944	3940.18	677.29	5.76E+01	47.60	1.10E+03
152	4029-	4035	4031.68	693.02	3.08E+02	39.71	1.92E+02

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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***** B A C K G R O U N D S U B T R A C T R E P O R T *****
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Detector Name: DET01
Sample Title: NOPI-471-GAM1
Peak Analysis Performed on: 1-12-96 2:55:22 PM

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
M	1	3.33	3.79E+04	4204.98			3.79E+04	4.20E+03
m	2	4.31	2.07E+04	3310.97			2.07E+04	3.31E+03
m	3	5.30	3.14E+04	4076.56			3.14E+04	4.08E+03
m	4	6.16	3.12E+04	4419.32			3.12E+04	4.42E+03
m	5	6.81	1.11E+04	3795.54			1.11E+04	3.80E+03
m	6	7.83	4.51E+03	3397.23			4.51E+03	3.40E+03
m	7	9.09	4.37E+03	3679.62			4.37E+03	3.68E+03
m	8	9.64	0.00E+00	0.00	1.54E+02	3.60E+01	-1.54E+02	3.60E+01
m	9	10.79	5.82E+04	5780.76	1.54E+02	3.60E+01	5.81E+04	5.78E+03
M	10	13.00	2.08E+05	18429.9	4.47E+01	2.75E+01	2.08E+05	1.84E+04
m	11	15.12	7.73E+04	16779.4			7.73E+04	1.68E+04
m	12	15.52	1.04E+05	16052.5			1.04E+05	1.61E+04
m	13	16.18	2.24E+05	18889.6			2.24E+05	1.89E+04
m	14	17.81	2.87E+04	9921.72			2.87E+04	9.92E+03
m	15	18.94	5.77E+04	11787.3			5.77E+04	1.18E+04
m	16	19.59	3.21E+04	10867.3			3.21E+04	1.09E+04
m	17	20.12	1.61E+04	9025.17			1.61E+04	9.03E+03
m	18	20.90	0.00E+00	0.00			0.00E+00	0.00E+00
M	19	24.14	1.02E+03	217.00			1.02E+03	2.17E+02
m	20	25.63	2.48E+04	548.80			2.48E+04	5.49E+02
m	21	27.35	2.03E+04	470.28			2.03E+04	4.70E+02
	22	29.94	9.50E+02	296.89			9.50E+02	2.97E+02
	23	32.15	2.25E+03	536.97			2.25E+03	5.37E+02
	24	33.55	0.00E+00	0.00	1.06E+01	1.70E+01	-1.06E+01	1.70E+01
	25	36.63	3.78E+03	354.78			3.78E+03	3.55E+02
	26	41.05	-8.01E+02	241.14			-8.01E+02	2.41E+02
	27	46.53	2.28E+05	603.64			2.28E+05	6.04E+02
	28	50.10	2.57E+04	399.00			2.57E+04	3.99E+02
	29	53.22	5.84E+04	438.82			5.84E+04	4.39E+02
	30	56.91	0.00E+00	0.00			0.00E+00	0.00E+00
	31	58.60	-2.00E+03	508.76			-2.00E+03	5.09E+02
	32	61.19	-1.36E+02	281.71	1.06E+01	1.52E+01	-1.47E+02	2.82E+02
M	33	63.28	2.22E+05	872.68	5.19E+01	2.82E+01	2.22E+05	8.73E+02
m	34	65.06	6.45E+02	329.83	7.10E+00	4.38E+00	6.38E+02	3.30E+02
	35	67.67	2.64E+04	423.76			2.64E+04	4.24E+02
M	36	70.82	1.19E+03	1237.64			1.19E+03	1.24E+03
m	37	72.86	2.67E+03	1261.88			2.67E+03	1.26E+03
m	38	74.81	3.07E+05	2155.23			3.07E+05	2.16E+03
	39	77.09	5.64E+05	860.04			5.64E+05	8.60E+02
M	40	79.34	3.26E+04	2331.00			3.26E+04	2.33E+03
m	41	81.09	3.78E+04	2340.05			3.78E+04	2.34E+03
M	42	83.84	9.71E+04	5804.23			9.71E+04	5.80E+03

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
m	43	85.43	0.00E+00	0.00			0.00E+00	0.00E+00
m	44	87.23	1.67E+05	5830.21			1.67E+05	5.83E+03
	45	89.84	6.92E+04	468.28			6.92E+04	4.68E+02
	46	92.58	2.71E+05	644.91			2.71E+05	6.45E+02
M	47	94.78	-8.17E+03	3167.59			-8.17E+03	3.17E+03
m	48	96.00	0.00E+00	0.00			0.00E+00	0.00E+00
m	49	97.56	0.00E+00	0.00			0.00E+00	0.00E+00
m	50	98.45	-1.06E+04	3199.78			-1.06E+04	3.20E+03
m	51	100.13	0.00E+00	0.00			0.00E+00	0.00E+00
	52	102.27	1.04E+03	292.87			1.04E+03	2.93E+02
M	53	104.88	8.98E+02	221.15			8.98E+02	2.21E+02
m	54	105.68	2.54E+03	331.61			2.54E+03	3.32E+02
M	55	109.17	4.18E+03	429.35			4.18E+03	4.29E+02
m	56	110.50	2.98E+03	406.03			2.98E+03	4.06E+02
m	57	111.39	4.36E+03	427.47	-1.31E+01	1.36E+01	4.37E+03	4.28E+02
m	58	112.85	1.43E+04	738.04	-1.31E+01	1.36E+01	1.43E+04	7.38E+02
m	59	114.55	1.17E+03	400.26			1.17E+03	4.00E+02
	60	118.64	-7.72E+01	214.02			-7.72E+01	2.14E+02
	61	122.38	2.44E+03	263.60			2.44E+03	2.64E+02
	62	128.06	8.56E+02	283.95	-2.79E-01	3.33E+01	8.56E+02	2.86E+02
M	63	130.38	1.15E+03	336.53	0.00E+00	0.00E+00	1.15E+03	3.37E+02
m	64	131.36	5.07E+02	185.49	0.00E+00	0.00E+00	5.07E+02	1.85E+02
m	65	132.28	8.57E+01	146.06			8.57E+01	1.46E+02
	66	143.86	2.99E+04	348.23			2.99E+04	3.48E+02
	67	149.09	-1.29E+02	239.30			-1.29E+02	2.39E+02
	68	151.67	2.17E+01	171.96			2.17E+01	1.72E+02
	69	154.28	1.17E+04	322.34			1.17E+04	3.22E+02
	70	158.67	1.85E+03	279.49			1.85E+03	2.79E+02
	71	163.44	8.53E+03	302.06			8.53E+03	3.02E+02
	72	168.38	1.64E+02	241.04			1.64E+02	2.41E+02
	73	174.42	9.50E+01	197.87	-1.36E+01	1.56E+01	1.09E+02	1.98E+02
	74	186.14	1.94E+05	529.00	1.49E+02	3.34E+01	1.94E+05	5.30E+02
	75	188.52	-1.36E+02	196.32			-1.36E+02	1.96E+02
	76	196.27	4.42E+02	219.64	3.28E+01	1.88E+01	4.09E+02	2.20E+02
	77	199.12	8.96E+02	235.26			8.96E+02	2.35E+02
	78	205.46	6.79E+03	236.87	5.26E+00	1.33E+01	6.78E+03	2.37E+02
	79	210.86	7.94E+02	212.71			7.94E+02	2.13E+02
	80	212.96	-3.21E+01	153.93			-3.21E+01	1.54E+02
	81	223.38	-1.60E+02	131.47			-1.60E+02	1.31E+02
	82	229.72	-3.44E+02	167.76			-3.44E+02	1.68E+02
	83	236.17	1.04E+04	226.80			1.04E+04	2.27E+02
	84	239.35	6.06E+01	169.74	-1.27E+01	1.27E+01	7.32E+01	1.70E+02
	85	242.18	1.36E+05	430.89			1.36E+05	4.31E+02
	86	247.08	-6.02E+01	143.39			-6.02E+01	1.43E+02
	87	252.98	5.18E+02	193.93			5.18E+02	1.94E+02
	88	257.87	8.51E+04	459.99			8.51E+04	4.60E+02
M	89	269.73	1.08E+04	528.54			1.08E+04	5.29E+02
m	90	271.52	8.14E+03	510.60			8.14E+03	5.11E+02
	91	275.11	3.58E+03	195.90			3.58E+03	1.96E+02
	92	280.61	-4.78E+02	136.65			-4.78E+02	1.37E+02

Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
93	286.41	2.68E+03	193.33			2.68E+03	1.93E+02
94	295.49	2.56E+05	569.16			2.56E+05	5.69E+02
95	300.26	3.08E+03	183.88			3.08E+03	1.84E+02
96	302.92	1.08E+03	177.93			1.08E+03	1.78E+02
97	306.80	-1.23E+02	127.59			-1.23E+02	1.28E+02
98	309.31	-1.38E+02	127.60			-1.38E+02	1.28E+02
99	320.14	-1.69E+02	111.36			-1.69E+02	1.11E+02
100	325.49	0.00E+00	0.00			0.00E+00	0.00E+00
101	326.17	0.00E+00	0.00			0.00E+00	0.00E+00
M 102	329.63	7.03E+02	168.92			7.03E+02	1.69E+02
m 103	330.27	1.76E+03	228.00			1.76E+03	2.28E+02
104	340.92	-1.15E+03	212.95			-1.15E+03	2.13E+02
105	342.16	0.00E+00	0.00			0.00E+00	0.00E+00
M 106	351.87	1.52E+05	18213.3			1.52E+05	1.82E+04
m 107	352.48	6.24E+04	18210.4			6.24E+04	1.82E+04
108	355.40	-3.90E+01	49.61			-3.90E+01	4.96E+01
109	360.24	3.90E+01	62.20			3.90E+01	6.22E+01
110	362.45	3.41E+01	62.39			3.41E+01	6.24E+01
111	375.69	0.00E+00	0.00			0.00E+00	0.00E+00
112	376.30	0.00E+00	0.00			0.00E+00	0.00E+00
113	377.93	0.00E+00	0.00			0.00E+00	0.00E+00
114	389.35	5.11E+02	82.51			5.11E+02	8.25E+01
115	391.79	-3.76E+01	63.18	4.02E+00	1.38E+01	-4.16E+01	6.47E+01
116	402.11	5.53E+02	82.91			5.53E+02	8.29E+01
117	412.14	3.83E+01	65.57			3.83E+01	6.56E+01
118	427.96	2.17E+02	66.06			2.17E+02	6.61E+01
119	431.05	0.00E+00	0.00			0.00E+00	0.00E+00
120	432.08	-5.90E+01	206.00			-5.90E+01	2.06E+02
121	433.75	0.00E+00	0.00			0.00E+00	0.00E+00
122	435.35	0.00E+00	0.00			0.00E+00	0.00E+00
123	443.81	-2.63E+01	43.94			-2.63E+01	4.39E+01
124	460.99	-8.12E+01	48.86			-8.12E+01	4.89E+01
125	471.93	-1.09E+02	48.32			-1.09E+02	4.83E+01
126	477.13	-2.56E+00	90.36			-2.56E+00	9.04E+01
127	478.68	0.00E+00	0.00			0.00E+00	0.00E+00
128	482.46	-5.13E+01	41.95			-5.13E+01	4.19E+01
129	495.02	6.81E+01	51.16			6.81E+01	5.12E+01
130	504.98	5.29E+01	49.75			5.29E+01	4.97E+01
131	511.38	0.00E+00	0.00			0.00E+00	0.00E+00
132	513.38	0.00E+00	0.00	-3.13E+00	8.49E+00	3.13E+00	8.49E+00
133	534.56	2.14E+02	61.23			2.14E+02	6.12E+01
134	537.17	0.00E+00	0.00			0.00E+00	0.00E+00
135	537.80	-1.54E+01	93.25			-1.54E+01	9.33E+01
136	538.85	0.00E+00	0.00			0.00E+00	0.00E+00
137	557.40	-8.75E-01	43.07			-8.75E-01	4.31E+01
138	581.84	-4.04E+01	39.49			-4.04E+01	3.95E+01
139	590.95	-4.71E+01	54.10			-4.71E+01	5.41E+01
140	596.52	-4.85E+01	45.46			-4.85E+01	4.55E+01
141	600.93	2.98E+01	51.60			2.98E+01	5.16E+01
142	610.09	3.58E+04	251.64			3.58E+04	2.52E+02

Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
143	620.65	-4.41E+01	35.67			-4.41E+01	3.57E+01
144	623.59	-3.87E+01	35.23			-3.87E+01	3.52E+01
145	631.18	4.87E+01	44.45			4.87E+01	4.44E+01
146	637.52	1.53E+01	39.03			1.53E+01	3.90E+01
147	639.46	-1.13E+01	44.61			-1.13E+01	4.46E+01
148	646.65	4.45E+01	44.62			4.45E+01	4.46E+01
149	649.41	-2.10E+01	34.53			-2.10E+01	3.45E+01
150	671.89	-8.71E+00	42.57			-8.71E+00	4.26E+01
151	677.29	5.76E+01	47.60			5.76E+01	4.76E+01
152	693.02	3.08E+02	39.71			3.08E+02	3.97E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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*************************************************************************
*****        A R E A   C O R R E C T I O N   R E P O R T          *****
*****     R E F E R E N C E   P E A K / B K G . S U B T R A C T   *****
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Detector Name: DET01
Sample Title: NOPI-471-GAM1
Peak Analysis Performed on: 1-12-96 2:55:22 PM

Ref. Peak Energy: 0.00; Reference Date:
Peak Ratio: 0.00; Uncertainty: 0.00
Background File : E:\GENIEPC\CAMFILES\BG122895.CNF

Corrected area is: Original * Peak Ratio - Background

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
M	1	3.33	3.79E+04	4204.98			3.79E+04	4.20E+03
m	2	4.31	2.07E+04	3310.97			2.07E+04	3.31E+03
m	3	5.30	3.14E+04	4076.56			3.14E+04	4.08E+03
m	4	6.16	3.12E+04	4419.32			3.12E+04	4.42E+03
m	5	6.81	1.11E+04	3795.54			1.11E+04	3.80E+03
m	6	7.83	4.51E+03	3397.23			4.51E+03	3.40E+03
m	7	9.09	4.37E+03	3679.62			4.37E+03	3.68E+03
m	8	9.64	0.00E+00	0.00	1.54E+02	3.60E+01	-1.54E+02	3.60E+01
m	9	10.79	5.82E+04	5780.76	1.54E+02	3.60E+01	5.81E+04	5.78E+03
M	10	13.00	2.08E+05	18429.9	4.47E+01	2.75E+01	2.08E+05	1.84E+04
m	11	15.12	7.73E+04	16779.4			7.73E+04	1.68E+04
m	12	15.52	1.04E+05	16052.5			1.04E+05	1.61E+04
m	13	16.18	2.24E+05	18889.6			2.24E+05	1.89E+04
m	14	17.81	2.87E+04	9921.72			2.87E+04	9.92E+03
m	15	18.94	5.77E+04	11787.3			5.77E+04	1.18E+04
m	16	19.59	3.21E+04	10867.3			3.21E+04	1.09E+04
m	17	20.12	1.61E+04	9025.17			1.61E+04	9.03E+03
m	18	20.90	0.00E+00	0.00			0.00E+00	0.00E+00
M	19	24.14	1.02E+03	217.00			1.02E+03	2.17E+02
m	20	25.63	2.48E+04	548.80			2.48E+04	5.49E+02
m	21	27.35	2.03E+04	470.28			2.03E+04	4.70E+02
	22	29.94	9.50E+02	296.89			9.50E+02	2.97E+02
	23	32.15	2.25E+03	536.97			2.25E+03	5.37E+02
	24	33.55	0.00E+00	0.00	1.06E+01	1.70E+01	-1.06E+01	1.70E+01
	25	36.63	3.78E+03	354.78			3.78E+03	3.55E+02
	26	41.05	-8.01E+02	241.14			-8.01E+02	2.41E+02
	27	46.53	2.28E+05	603.64			2.28E+05	6.04E+02
	28	50.10	2.57E+04	399.00			2.57E+04	3.99E+02
	29	53.22	5.84E+04	438.82			5.84E+04	4.39E+02
	30	56.91	0.00E+00	0.00			0.00E+00	0.00E+00
	31	58.60	-2.00E+03	508.76			-2.00E+03	5.09E+02
	32	61.19	-1.36E+02	281.71	1.06E+01	1.52E+01	-1.47E+02	2.82E+02
M	33	63.28	2.22E+05	872.68	5.19E+01	2.82E+01	2.22E+05	8.73E+02
m	34	65.06	6.45E+02	329.83	7.10E+00	4.38E+00	6.38E+02	3.30E+02
	35	67.67	2.64E+04	423.76			2.64E+04	4.24E+02
M	36	70.82	1.19E+03	1237.64			1.19E+03	1.24E+03
m	37	72.86	2.67E+03	1261.88			2.67E+03	1.26E+03
m	38	74.81	3.07E+05	2155.23			3.07E+05	2.16E+03
	39	77.09	5.64E+05	860.04			5.64E+05	8.60E+02
M	40	79.34	3.26E+04	2331.00			3.26E+04	2.33E+03

m 41	81.09	3.78E+04	2340.05	3.78E+04	2.34E+03
M 42	83.84	9.71E+04	5804.23	9.71E+04	5.80E+03

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
m	43	85.43	0.00E+00	0.00			0.00E+00	0.00E+00
m	44	87.23	1.67E+05	5830.21			1.67E+05	5.83E+03
	45	89.84	6.92E+04	468.28			6.92E+04	4.68E+02
	46	92.58	2.71E+05	644.91			2.71E+05	6.45E+02
M	47	94.78	-8.17E+03	3167.59			-8.17E+03	3.17E+03
m	48	96.00	0.00E+00	0.00			0.00E+00	0.00E+00
m	49	97.56	0.00E+00	0.00			0.00E+00	0.00E+00
m	50	98.45	-1.06E+04	3199.78			-1.06E+04	3.20E+03
m	51	100.13	0.00E+00	0.00			0.00E+00	0.00E+00
	52	102.27	1.04E+03	292.87			1.04E+03	2.93E+02
M	53	104.88	8.98E+02	221.15			8.98E+02	2.21E+02
m	54	105.68	2.54E+03	331.61			2.54E+03	3.32E+02
M	55	109.17	4.18E+03	429.35			4.18E+03	4.29E+02
m	56	110.50	2.98E+03	406.03			2.98E+03	4.06E+02
m	57	111.39	4.36E+03	427.47	-1.31E+01	1.36E+01	4.37E+03	4.28E+02
m	58	112.85	1.43E+04	738.04	-1.31E+01	1.36E+01	1.43E+04	7.38E+02
m	59	114.55	1.17E+03	400.26			1.17E+03	4.00E+02
	60	118.64	-7.72E+01	214.02			-7.72E+01	2.14E+02
	61	122.38	2.44E+03	263.60			2.44E+03	2.64E+02
	62	128.06	8.56E+02	283.95	-2.79E-01	3.33E+01	8.56E+02	2.86E+02
M	63	130.38	1.15E+03	336.53	0.00E+00	0.00E+00	1.15E+03	3.37E+02
m	64	131.36	5.07E+02	185.49	0.00E+00	0.00E+00	5.07E+02	1.85E+02
m	65	132.28	8.57E+01	146.06			8.57E+01	1.46E+02
	66	143.86	2.99E+04	348.23			2.99E+04	3.48E+02
	67	149.09	-1.29E+02	239.30			-1.29E+02	2.39E+02
	68	151.67	2.17E+01	171.96			2.17E+01	1.72E+02
	69	154.28	1.17E+04	322.34			1.17E+04	3.22E+02
	70	158.67	1.85E+03	279.49			1.85E+03	2.79E+02
	71	163.44	8.53E+03	302.06			8.53E+03	3.02E+02
	72	168.38	1.64E+02	241.04			1.64E+02	2.41E+02
	73	174.42	9.50E+01	197.87	-1.36E+01	1.56E+01	1.09E+02	1.98E+02
	74	186.14	1.94E+05	529.00	1.49E+02	3.34E+01	1.94E+05	5.30E+02
	75	188.52	-1.36E+02	196.32			-1.36E+02	1.96E+02
	76	196.27	4.42E+02	219.64	3.28E+01	1.88E+01	4.09E+02	2.20E+02
	77	199.12	8.96E+02	235.26			8.96E+02	2.35E+02
	78	205.46	6.79E+03	236.87	5.26E+00	1.33E+01	6.78E+03	2.37E+02
	79	210.86	7.94E+02	212.71			7.94E+02	2.13E+02
	80	212.96	-3.21E+01	153.93			-3.21E+01	1.54E+02
	81	223.38	-1.60E+02	131.47			-1.60E+02	1.31E+02
	82	229.72	-3.44E+02	167.76			-3.44E+02	1.68E+02
	83	236.17	1.04E+04	226.80			1.04E+04	2.27E+02
	84	239.35	6.06E+01	169.74	-1.27E+01	1.27E+01	7.32E+01	1.70E+02
	85	242.18	1.36E+05	430.89			1.36E+05	4.31E+02
	86	247.08	-6.02E+01	143.39			-6.02E+01	1.43E+02
	87	252.98	5.18E+02	193.93			5.18E+02	1.94E+02
	88	257.87	8.51E+04	459.99			8.51E+04	4.60E+02
M	89	269.73	1.08E+04	528.54			1.08E+04	5.29E+02
m	90	271.52	8.14E+03	510.60			8.14E+03	5.11E+02
	91	275.11	3.58E+03	195.90			3.58E+03	1.96E+02
	92	280.61	-4.78E+02	136.65			-4.78E+02	1.37E+02

Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
93	286.41	2.68E+03	193.33			2.68E+03	1.93E+02
94	295.49	2.56E+05	569.16			2.56E+05	5.69E+02
95	300.26	3.08E+03	183.88			3.08E+03	1.84E+02
96	302.92	1.08E+03	177.93			1.08E+03	1.78E+02
97	306.80	-1.23E+02	127.59			-1.23E+02	1.28E+02
98	309.31	-1.38E+02	127.60			-1.38E+02	1.28E+02
99	320.14	-1.69E+02	111.36			-1.69E+02	1.11E+02
100	325.49	0.00E+00	0.00			0.00E+00	0.00E+00
101	326.17	0.00E+00	0.00			0.00E+00	0.00E+00
M 102	329.63	7.03E+02	168.92			7.03E+02	1.69E+02
m 103	330.27	1.76E+03	228.00			1.76E+03	2.28E+02
104	340.92	-1.15E+03	212.95			-1.15E+03	2.13E+02
105	342.16	0.00E+00	0.00			0.00E+00	0.00E+00
M 106	351.87	1.52E+05	18213.3			1.52E+05	1.82E+04
m 107	352.48	6.24E+04	18210.4			6.24E+04	1.82E+04
108	355.40	-3.90E+01	49.61			-3.90E+01	4.96E+01
109	360.24	3.90E+01	62.20			3.90E+01	6.22E+01
110	362.45	3.41E+01	62.39			3.41E+01	6.24E+01
111	375.69	0.00E+00	0.00			0.00E+00	0.00E+00
112	376.30	0.00E+00	0.00			0.00E+00	0.00E+00
113	377.93	0.00E+00	0.00			0.00E+00	0.00E+00
114	389.35	5.11E+02	82.51			5.11E+02	8.25E+01
115	391.79	-3.76E+01	63.18	4.02E+00	1.38E+01	-4.16E+01	6.47E+01
116	402.11	5.53E+02	82.91			5.53E+02	8.29E+01
117	412.14	3.83E+01	65.57			3.83E+01	6.56E+01
118	427.96	2.17E+02	66.06			2.17E+02	6.61E+01
119	431.05	0.00E+00	0.00			0.00E+00	0.00E+00
120	432.08	-5.90E+01	206.00			-5.90E+01	2.06E+02
121	433.75	0.00E+00	0.00			0.00E+00	0.00E+00
122	435.35	0.00E+00	0.00			0.00E+00	0.00E+00
123	443.81	-2.63E+01	43.94			-2.63E+01	4.39E+01
124	460.99	-8.12E+01	48.86			-8.12E+01	4.89E+01
125	471.93	-1.09E+02	48.32			-1.09E+02	4.83E+01
126	477.13	-2.56E+00	90.36			-2.56E+00	9.04E+01
127	478.68	0.00E+00	0.00			0.00E+00	0.00E+00
128	482.46	-5.13E+01	41.95			-5.13E+01	4.19E+01
129	495.02	6.81E+01	51.16			6.81E+01	5.12E+01
130	504.98	5.29E+01	49.75			5.29E+01	4.97E+01
131	511.38	0.00E+00	0.00			0.00E+00	0.00E+00
132	513.38	0.00E+00	0.00	-3.13E+00	8.49E+00	3.13E+00	8.49E+00
133	534.56	2.14E+02	61.23			2.14E+02	6.12E+01
134	537.17	0.00E+00	0.00			0.00E+00	0.00E+00
135	537.80	-1.54E+01	93.25			-1.54E+01	9.33E+01
136	538.85	0.00E+00	0.00			0.00E+00	0.00E+00
137	557.40	-8.75E-01	43.07			-8.75E-01	4.31E+01
138	581.84	-4.04E+01	39.49			-4.04E+01	3.95E+01
139	590.95	-4.71E+01	54.10			-4.71E+01	5.41E+01
140	596.52	-4.85E+01	45.46			-4.85E+01	4.55E+01
141	600.93	2.98E+01	51.60			2.98E+01	5.16E+01
142	610.09	3.58E+04	251.64			3.58E+04	2.52E+02

Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
143	620.65	-4.41E+01	35.67			-4.41E+01	3.57E+01
144	623.59	-3.87E+01	35.23			-3.87E+01	3.52E+01
145	631.18	4.87E+01	44.45			4.87E+01	4.44E+01
146	637.52	1.53E+01	39.03			1.53E+01	3.90E+01
147	639.46	-1.13E+01	44.61			-1.13E+01	4.46E+01
148	646.65	4.45E+01	44.62			4.45E+01	4.46E+01
149	649.41	-2.10E+01	34.53			-2.10E+01	3.45E+01
150	671.89	-8.71E+00	42.57			-8.71E+00	4.26E+01
151	677.29	5.76E+01	47.60			5.76E+01	4.76E+01
152	693.02	3.08E+02	39.71			3.08E+02	3.97E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

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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NP472.CNF

Report Generated On	:	1-11-96 4:14:08 PM
Sample Title	:	NOPI-472-GAM1
Spectrum Description	:	NOPI-472-GAM1
Sample Identification	:	NP472
Sample Type	:	
Sample Geometry	:	
Peak Locate Threshold	:	2.00
Peak Locate Range (in channels)	:	1 - 4096
Peak Area Range (in channels)	:	1 - 4096
Identification Energy Tolerance	:	1.000 keV
Sample Size	:	0.000E+00 Unit
Sample Taken On	:	
Acquisition Started	:	1-10-96 5:44:05 PM
Live Time	:	80000.0 seconds
Real Time	:	80018.3 seconds

Energy Calibration Used Done On	:	12-19-95
Efficiency Calibration Used Done On	:	????????

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-472-GAM1
Peak Locate Performed on: 1-11-96 4:13:23 PM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 2.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	19.30	0.0375	3.17	18.49
2	31.45	0.1070	5.36	4.77
3	37.38	0.0754	6.23	7.70
4	63.57	0.0700	10.78	15.91
5	76.43	0.0814	12.99	17.31
6	89.35	0.0469	15.32	13.31
7	94.79	0.0478	16.15	26.50
8	104.50	0.0728	17.82	6.31
9	111.00	0.0907	18.95	14.63
10	115.00	0.0000	19.64	5.43
11	122.77	0.3819	20.97	2.12
12	135.79	0.3888	23.20	2.15
13	149.84	0.1051	25.62	9.97
14	160.09	0.1307	27.37	9.16
15	213.50	0.1875	36.56	2.47
16	251.00	0.0000	43.00	2.88
17	271.49	0.0123	46.53	37.86
18	292.43	0.1487	50.13	7.22
19	310.38	0.0661	53.21	16.50
20	323.26	0.3552	55.43	2.14
21	336.17	0.3790	57.65	2.40
22	368.99	0.0280	63.29	32.81
23	394.47	0.1556	67.67	9.22
24	412.64	0.2916	70.80	2.11
25	436.10	0.0245	74.83	35.90
26	449.39	0.0308	77.11	42.81
27	462.10	0.0798	79.32	12.19
28	472.71	0.0819	81.12	10.55
29	488.38	0.1077	83.86	12.21
30	497.95	0.6167	85.46	2.38
31	508.86	0.2131	87.24	13.89
32	523.56	0.0899	89.87	11.44
33	539.42	0.1048	92.59	11.70
34	552.60	0.2938	94.86	4.82
35	567.81	0.3210	97.55	2.75
36	573.08	0.2030	98.40	5.50
37	599.94	0.5277	103.00	2.19
38	611.83	0.4134	105.04	2.22
39	657.32	0.3722	112.86	3.90
40	674.66	0.3100	115.85	2.06
41	696.23	0.3877	119.55	2.09

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	712.75	0.4461	122.39	2.21
43	739.02	0.4185	126.91	3.01
44	827.90	0.4407	142.19	2.40
45	837.89	0.3703	143.91	4.59
46	849.63	0.2797	145.93	2.13
47	898.59	0.3763	154.34	3.10
48	951.68	0.7344	163.47	2.31
49	975.26	0.3215	167.53	2.34
50	1048.25	0.3280	180.08	2.33
51	1052.00	<NA>	180.72	<NA>
52	1084.38	0.1364	186.29	9.27
53	1143.04	0.4673	196.37	2.56
54	1174.00	<NA>	201.70	<NA>
55	1219.84	0.3230	209.58	2.88
56	1259.99	0.7039	216.48	2.06
57	1374.69	0.4893	236.20	2.75
58	1390.34	0.2750	238.89	4.79
59	1409.86	0.0996	242.25	11.73
60	1457.00	<NA>	250.35	<NA>
61	1501.94	0.3802	258.08	4.29
62	1556.00	<NA>	267.37	<NA>
63	1601.31	0.2297	275.16	2.96
64	1633.21	0.3921	280.65	2.15
65	1674.15	0.3839	287.69	2.48
66	1720.01	0.1022	295.57	12.58
67	1839.73	0.3723	316.16	2.00
68	1887.15	0.4741	324.31	2.03
69	1972.34	0.2159	338.96	2.95
70	2003.00	<NA>	344.23	<NA>
71	2047.69	0.0223	351.88	30.36
72	2051.47	0.0873	352.58	5.58
73	2450.32	0.3129	421.14	2.12
74	2455.00	<NA>	421.95	<NA>
75	2514.00	0.0001	432.08	2.20
76	2547.87	0.4535	437.91	2.18
77	2639.12	0.4736	453.60	2.16
78	2690.12	0.3858	462.36	2.63
79	2755.00	<NA>	473.52	<NA>
80	2807.00	<NA>	482.46	<NA>
81	2967.00	0.0001	509.97	2.55
82	3099.58	0.2671	532.76	2.01
83	3106.19	0.4193	533.90	2.07
84	3179.00	<NA>	546.42	<NA>
85	3234.17	0.4506	555.90	2.01
86	3335.00	<NA>	573.24	<NA>
87	3406.19	0.4129	585.48	2.12
88	3437.00	0.0001	590.78	2.12
89	3495.00	<NA>	600.75	<NA>
90	3505.00	<NA>	602.47	<NA>
91	3550.09	0.5845	610.22	2.95

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
92	3624.40	0.2553	623.00	2.18
93	3704.00	<NA>	636.68	<NA>
94	3712.00	0.0002	638.06	2.05
95	3900.00	0.0001	670.38	2.30

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: NOPI-472-GAM1
Peak Analysis Performed on: 1-11-96 4:13:42 PM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	15-	24	19.30	3.17	1.92E+03	89.92	2.53E+03
M	2	28-	42	32.03	5.36	7.83E+02	105.09	4.56E+03
m	3	28-	42	37.12	6.23	1.24E+03	127.51	4.34E+03
	4	58-	68	63.57	10.78	1.76E+03	131.95	6.50E+03
	5	71-	81	76.43	12.99	8.90E+03	153.56	6.13E+03
M	6	84-	127	89.98	15.32	6.29E+03	642.29	5.99E+03
m	7	84-	127	94.81	16.15	9.92E+03	751.22	5.50E+03
m	8	84-	127	104.55	17.82	1.40E+03	416.19	5.39E+03
m	9	84-	127	111.06	18.95	2.96E+03	508.31	4.67E+03
m	10	84-	127	115.08	19.64	1.52E+03	432.42	4.50E+03
m	11	84-	127	122.82	20.97	2.00E+02	344.28	3.89E+03
	12	133-	137	135.79	23.20	-1.22E+02	56.18	1.99E+03
M	13	145-	165	149.89	25.62	1.17E+03	102.84	3.10E+03
m	14	145-	165	160.09	27.37	9.69E+02	87.41	2.88E+03
	15	210-	218	213.50	36.56	1.98E+02	85.57	3.34E+03
	16	247-	253	251.00	43.00	3.78E+01	70.41	2.60E+03
	17	266-	276	271.49	46.53	1.61E+04	159.11	3.88E+03
	18	287-	297	292.43	50.13	1.23E+03	100.83	3.73E+03
	19	305-	315	310.38	53.21	3.64E+03	113.75	3.91E+03
	20	321-	326	323.26	55.43	-9.19E+01	59.59	2.06E+03
	21	333-	339	336.17	57.65	4.59E+01	68.45	2.45E+03
	22	363-	373	368.99	63.29	1.17E+04	148.72	4.37E+03
	23	389-	399	394.47	67.67	2.17E+03	112.41	4.39E+03
	24	407-	417	412.64	70.80	2.49E+02	103.39	4.38E+03
	25	431-	441	436.10	74.83	2.08E+04	185.24	5.64E+03
	26	444-	454	449.39	77.11	3.82E+04	223.88	5.03E+03
M	27	457-	477	462.21	79.32	1.87E+03	179.07	4.49E+03
m	28	457-	477	472.69	81.12	1.99E+03	182.19	3.47E+03
M	29	483-	513	488.61	83.86	5.47E+03	414.05	4.94E+03
m	31	483-	513	508.28	87.24	1.16E+04	444.74	5.15E+03
	32	518-	528	523.56	89.87	4.74E+03	120.62	4.12E+03
	33	534-	544	539.42	92.59	1.46E+04	155.04	3.96E+03
	34	548-	557	552.60	94.86	1.16E+03	97.70	3.65E+03
M	35	564-	578	568.23	97.55	2.36E+02	42.80	2.75E+03
m	36	564-	578	573.20	98.40	7.14E+02	91.45	2.82E+03
	37	597-	613	599.94	103.00	-2.16E+02	120.69	4.71E+03
	39	653-	662	657.32	112.86	6.41E+02	81.42	2.65E+03
	40	672-	677	674.66	115.85	-8.40E+01	51.29	1.53E+03
	41	694-	698	696.23	119.55	-7.23E+01	43.82	1.20E+03
	42	710-	717	712.75	122.39	4.99E+01	63.47	1.98E+03

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	43	737-	741	739.02	126.91	-3.88E+01	44.42	1.22E+03
	45	825-	853	837.89	143.91	1.56E+03	186.46	7.16E+03
	47	894-	903	898.59	154.34	5.73E+02	78.91	2.50E+03
	48	946-	956	951.68	163.47	3.23E+02	78.94	2.48E+03
	49	972-	980	975.26	167.53	-9.30E+00	63.18	1.87E+03
	50	1043-	1054	1048.25	180.08	8.16E+00	80.09	2.55E+03
	52	1079-	1089	1084.38	186.29	1.21E+04	134.76	2.53E+03
	53	1140-	1146	1143.04	196.37	4.42E+01	52.91	1.46E+03
	54	1171-	1176	1174.00	201.70	-2.91E+01	45.97	1.21E+03
	55	1215-	1222	1219.84	209.58	9.19E+01	53.14	1.35E+03
	56	1256-	1262	1259.99	216.48	-2.26E+01	45.82	1.12E+03
	57	1370-	1378	1374.69	236.20	5.28E+02	57.86	1.32E+03
	58	1386-	1394	1390.34	238.89	1.48E+03	65.88	1.34E+03
	59	1405-	1413	1409.86	242.25	8.64E+03	111.84	1.82E+03
	60	1455-	1459	1457.00	250.35	-9.50E+00	33.09	6.70E+02
	61	1497-	1505	1501.94	258.08	5.72E+03	117.33	3.74E+03
	62	1553-	1560	1556.00	267.37	1.63E+01	43.06	9.12E+02
	63	1597-	1605	1601.31	275.16	2.42E+02	51.80	1.14E+03
	64	1631-	1635	1633.21	280.65	-8.15E+01	31.30	6.42E+02
	65	1672-	1676	1674.15	287.69	-7.26E+01	31.87	6.62E+02
	66	1716-	1724	1720.01	295.57	1.71E+04	145.30	1.89E+03
	67	1837-	1843	1839.73	316.16	6.70E+00	37.87	7.55E+02
	68	1883-	1891	1887.15	324.31	1.22E+02	45.81	9.21E+02
	69	1968-	1976	1972.34	338.96	2.65E+02	50.13	1.04E+03
	70	1999-	2005	2003.00	344.23	-2.47E+01	36.55	7.15E+02
M	71	2043-	2055	2047.53	351.88	8.11E+03	709.46	8.63E+02
m	72	2043-	2055	2051.60	352.58	4.25E+03	706.16	5.49E+02
M	73	2447-	2457	2450.33	421.14	-1.49E+00	23.03	2.29E+01
m	74	2447-	2457	2455.05	421.95	-1.19E-01	1.84	2.45E+01
	75	2511-	2516	2514.00	432.08	6.00E+00	14.39	1.14E+02
	76	2544-	2550	2547.87	437.91	-7.37E+00	14.92	1.21E+02
	77	2636-	2641	2639.12	453.60	-6.50E+00	13.18	1.00E+02
	78	2687-	2694	2690.12	462.36	1.67E+01	16.23	1.22E+02
	79	2752-	2757	2755.00	473.52	-3.13E+01	12.63	1.04E+02
	80	2805-	2809	2807.00	482.46	9.41E-01	10.63	6.71E+01
	81	2964-	2969	2967.00	509.97	-2.31E+01	13.49	1.09E+02
	82	3097-	3110	3099.58	532.76	-1.11E+01	22.76	1.92E+02
	84	3177-	3181	3179.00	546.42	-1.29E+01	9.89	6.59E+01
	85	3232-	3236	3234.17	555.90	-7.42E+00	9.44	5.74E+01
	86	3332-	3337	3335.00	573.24	6.71E+00	11.92	7.73E+01
	87	3404-	3409	3406.19	585.48	-6.97E+00	12.08	8.50E+01
	88	3434-	3439	3437.00	590.78	4.93E+00	10.38	5.81E+01
	90	3493-	3508	3505.00	602.47	-2.57E+01	25.78	2.29E+02
	91	3546-	3554	3550.09	610.22	2.47E+03	65.75	8.71E+02
	92	3621-	3628	3624.40	623.00	3.16E+01	13.62	7.64E+01

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
93	3701-	3714	3704.00	636.68	1.53E+01	19.67	1.34E+02
95	3897-	3902	3900.00	670.38	-9.50E+00	9.73	5.85E+01

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

****
***** B A C K G R O U N D S U B T R A C T R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-472-GAM1
Peak Analysis Performed on: 1-11-96 4:13:23 PM

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
	1	3.17	1.92E+03	89.92			1.92E+03	8.99E+01
M	2	5.36	7.83E+02	105.09			7.83E+02	1.05E+02
m	3	6.23	1.24E+03	127.51			1.24E+03	1.28E+02
	4	10.78	1.76E+03	131.95	1.54E+02	3.60E+01	1.60E+03	1.37E+02
	5	12.99	8.90E+03	153.56	4.47E+01	2.75E+01	8.85E+03	1.56E+02
M	6	15.32	6.29E+03	642.29			6.29E+03	6.42E+02
m	7	16.15	9.92E+03	751.22			9.92E+03	7.51E+02
m	8	17.82	1.40E+03	416.19			1.40E+03	4.16E+02
m	9	18.95	2.96E+03	508.31			2.96E+03	5.08E+02
m	10	19.64	1.52E+03	432.42			1.52E+03	4.32E+02
m	11	20.97	2.00E+02	344.28			2.00E+02	3.44E+02
	12	23.20	-1.22E+02	56.18	1.17E+01	1.72E+01	-1.33E+02	5.88E+01
M	13	25.62	1.17E+03	102.84			1.17E+03	1.03E+02
m	14	27.37	9.69E+02	87.41			9.69E+02	8.74E+01
	15	36.56	1.98E+02	85.57			1.98E+02	8.56E+01
	16	43.00	3.78E+01	70.41			3.78E+01	7.04E+01
	17	46.53	1.61E+04	159.11			1.61E+04	1.59E+02
	18	50.13	1.23E+03	100.83			1.23E+03	1.01E+02
	19	53.21	3.64E+03	113.75			3.64E+03	1.14E+02
	20	55.43	-9.19E+01	59.59			-9.19E+01	5.96E+01
	21	57.65	4.59E+01	68.45			4.59E+01	6.84E+01
	22	63.29	1.17E+04	148.72	5.19E+01	2.82E+01	1.17E+04	1.51E+02
	23	67.67	2.17E+03	112.41			2.17E+03	1.12E+02
	24	70.80	2.49E+02	103.39			2.49E+02	1.03E+02
	25	74.83	2.08E+04	185.24			2.08E+04	1.85E+02
	26	77.11	3.82E+04	223.88			3.82E+04	2.24E+02
M	27	79.32	1.87E+03	179.07			1.87E+03	1.79E+02
m	28	81.12	1.99E+03	182.19			1.99E+03	1.82E+02
M	29	83.86	5.47E+03	414.05			5.47E+03	4.14E+02
m	30	85.46	0.00E+00	0.00			0.00E+00	0.00E+00
m	31	87.24	1.16E+04	444.74			1.16E+04	4.45E+02
	32	89.87	4.74E+03	120.62			4.74E+03	1.21E+02
	33	92.59	1.46E+04	155.04			1.46E+04	1.55E+02
	34	94.86	1.16E+03	97.70			1.16E+03	9.77E+01
M	35	97.55	2.36E+02	42.80			2.36E+02	4.28E+01
m	36	98.40	7.14E+02	91.45			7.14E+02	9.15E+01
	37	103.00	-2.16E+02	120.69			-2.16E+02	1.21E+02
	38	105.04	0.00E+00	0.00			0.00E+00	0.00E+00
	39	112.86	6.41E+02	81.42	-1.31E+01	1.36E+01	6.54E+02	8.25E+01
	40	115.85	-8.40E+01	51.29			-8.40E+01	5.13E+01
	41	119.55	-7.23E+01	43.82	1.40E+01	1.38E+01	-8.63E+01	4.59E+01
	42	122.39	4.99E+01	63.47			4.99E+01	6.35E+01

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
	43	126.91	-3.88E+01	44.42			-3.88E+01	4.44E+01
	44	142.19	0.00E+00	0.00			0.00E+00	0.00E+00
	45	143.91	1.56E+03	186.46			1.56E+03	1.86E+02
	46	145.93	0.00E+00	0.00			0.00E+00	0.00E+00
	47	154.34	5.73E+02	78.91			5.73E+02	7.89E+01
	48	163.47	3.23E+02	78.94			3.23E+02	7.89E+01
	49	167.53	-9.30E+00	63.18			-9.30E+00	6.32E+01
	50	180.08	8.16E+00	80.09			8.16E+00	8.01E+01
	51	180.72	0.00E+00	0.00			0.00E+00	0.00E+00
	52	186.29	1.21E+04	134.76	1.49E+02	3.34E+01	1.20E+04	1.39E+02
	53	196.37	4.42E+01	52.91	3.28E+01	1.88E+01	1.14E+01	5.62E+01
	54	201.70	-2.91E+01	45.97			-2.91E+01	4.60E+01
	55	209.58	9.19E+01	53.14			9.19E+01	5.31E+01
	56	216.48	-2.26E+01	45.82			-2.26E+01	4.58E+01
	57	236.20	5.28E+02	57.86			5.28E+02	5.79E+01
	58	238.89	1.48E+03	65.88	-1.27E+01	1.27E+01	1.49E+03	6.71E+01
	59	242.25	8.64E+03	111.84			8.64E+03	1.12E+02
	60	250.35	-9.50E+00	33.09	3.89E+00	8.81E+00	-1.34E+01	3.42E+01
	61	258.08	5.72E+03	117.33			5.72E+03	1.17E+02
	62	267.37	1.63E+01	43.06			1.63E+01	4.31E+01
	63	275.16	2.42E+02	51.80			2.42E+02	5.18E+01
	64	280.65	-8.15E+01	31.30			-8.15E+01	3.13E+01
	65	287.69	-7.26E+01	31.87			-7.26E+01	3.19E+01
	66	295.57	1.71E+04	145.30			1.71E+04	1.45E+02
	67	316.16	6.70E+00	37.87			6.70E+00	3.79E+01
	68	324.31	1.22E+02	45.81			1.22E+02	4.58E+01
	69	338.96	2.65E+02	50.13			2.65E+02	5.01E+01
	70	344.23	-2.47E+01	36.55			-2.47E+01	3.66E+01
M	71	351.88	8.11E+03	709.46			8.11E+03	7.09E+02
m	72	352.58	4.25E+03	706.16			4.25E+03	7.06E+02
M	73	421.14	-1.49E+00	23.03			-1.49E+00	2.30E+01
m	74	421.95	-1.19E-01	1.84			-1.19E-01	1.84E+00
	75	432.08	6.00E+00	14.39			6.00E+00	1.44E+01
	76	437.91	-7.37E+00	14.92			-7.37E+00	1.49E+01
	77	453.60	-6.50E+00	13.18			-6.50E+00	1.32E+01
	78	462.36	1.67E+01	16.23			1.67E+01	1.62E+01
	79	473.52	-3.13E+01	12.63			-3.13E+01	1.26E+01
	80	482.46	9.41E-01	10.63			9.41E-01	1.06E+01
	81	509.97	-2.31E+01	13.49			-2.31E+01	1.35E+01
	82	532.76	-1.11E+01	22.76			-1.11E+01	2.28E+01
	83	533.90	0.00E+00	0.00			0.00E+00	0.00E+00
	84	546.42	-1.29E+01	9.89			-1.29E+01	9.89E+00
	85	555.90	-7.42E+00	9.44			-7.42E+00	9.44E+00
	86	573.24	6.71E+00	11.92			6.71E+00	1.19E+01
	87	585.48	-6.97E+00	12.08			-6.97E+00	1.21E+01
	88	590.78	4.93E+00	10.38			4.93E+00	1.04E+01
	89	600.75	0.00E+00	0.00			0.00E+00	0.00E+00
	90	602.47	-2.57E+01	25.78			-2.57E+01	2.58E+01
	91	610.22	2.47E+03	65.75			2.47E+03	6.57E+01
	92	623.00	3.16E+01	13.62			3.16E+01	1.36E+01

Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
93	636.68	1.53E+01	19.67			1.53E+01	1.97E+01
94	638.06	0.00E+00	0.00			0.00E+00	0.00E+00
95	670.38	-9.50E+00	9.73			-9.50E+00	9.73E+00

M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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*************************************************************************
*****          A R E A   C O R R E C T I O N   R E P O R T          *****
*****      R E F E R E N C E   P E A K / B K G . S U B T R A C T    *****
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Detector Name: DET01
Sample Title: NOPI-472-GAM1
Peak Analysis Performed on: 1-11-96 4:13:23 PM

Ref. Peak Energy: 0.00; Reference Date:
Peak Ratio: 0.00; Uncertainty: 0.00
Background File : E:\GENIEPC\CAMFILES\BG122895.CNF

Corrected area is: Original * Peak Ratio - Background

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
	1	3.17	1.92E+03	89.92			1.92E+03	8.99E+01
M	2	5.36	7.83E+02	105.09			7.83E+02	1.05E+02
m	3	6.23	1.24E+03	127.51			1.24E+03	1.28E+02
	4	10.78	1.76E+03	131.95	1.54E+02	3.60E+01	1.60E+03	1.37E+02
	5	12.99	8.90E+03	153.56	4.47E+01	2.75E+01	8.85E+03	1.56E+02
M	6	15.32	6.29E+03	642.29			6.29E+03	6.42E+02
m	7	16.15	9.92E+03	751.22			9.92E+03	7.51E+02
m	8	17.82	1.40E+03	416.19			1.40E+03	4.16E+02
m	9	18.95	2.96E+03	508.31			2.96E+03	5.08E+02
[illegible]	10	19.64	1.52E+03	432.42			1.52E+03	4.32E+02
[illegible]	11	20.97	2.00E+02	344.28			2.00E+02	3.44E+02
	12	23.20	-1.22E+02	56.18	1.17E+01	1.72E+01	-1.33E+02	5.88E+01
M	13	25.62	1.17E+03	102.84			1.17E+03	1.03E+02
m	14	27.37	9.69E+02	87.41			9.69E+02	8.74E+01
	15	36.56	1.98E+02	85.57			1.98E+02	8.56E+01
	16	43.00	3.78E+01	70.41			3.78E+01	7.04E+01
	17	46.53	1.61E+04	159.11			1.61E+04	1.59E+02
	18	50.13	1.23E+03	100.83			1.23E+03	1.01E+02
	19	53.21	3.64E+03	113.75			3.64E+03	1.14E+02
	20	55.43	-9.19E+01	59.59			-9.19E+01	5.96E+01
	21	57.65	4.59E+01	68.45			4.59E+01	6.84E+01
	22	63.29	1.17E+04	148.72	5.19E+01	2.82E+01	1.17E+04	1.51E+02
	23	67.67	2.17E+03	112.41			2.17E+03	1.12E+02
	24	70.80	2.49E+02	103.39			2.49E+02	1.03E+02
	25	74.83	2.08E+04	185.24			2.08E+04	1.85E+02
	26	77.11	3.82E+04	223.88			3.82E+04	2.24E+02
M	27	79.32	1.87E+03	179.07			1.87E+03	1.79E+02
m	28	81.12	1.99E+03	182.19			1.99E+03	1.82E+02
M	29	83.86	5.47E+03	414.05			5.47E+03	4.14E+02
m	30	85.46	0.00E+00	0.00			0.00E+00	0.00E+00
m	31	87.24	1.16E+04	444.74			1.16E+04	4.45E+02
	32	89.87	4.74E+03	120.62			4.74E+03	1.21E+02
	33	92.59	1.46E+04	155.04			1.46E+04	1.55E+02
	34	94.86	1.16E+03	97.70			1.16E+03	9.77E+01
M	35	97.55	2.36E+02	42.80			2.36E+02	4.28E+01
[illegible]	36	98.40	7.14E+02	91.45			7.14E+02	9.15E+01
	37	103.00	-2.16E+02	120.69			-2.16E+02	1.21E+02
	38	105.04	0.00E+00	0.00			0.00E+00	0.00E+00
	39	112.86	6.41E+02	81.42	-1.31E+01	1.36E+01	6.54E+02	8.25E+01
	40	115.85	-8.40E+01	51.29			-8.40E+01	5.13E+01

41	119.55	-7.23E+01	43.82	1.40E+01	1.38E+01	-8.63E+01	4.59E+01
42	122.39	4.99E+01	63.47			4.99E+01	6.35E+01

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
	43	126.91	-3.88E+01	44.42			-3.88E+01	4.44E+01
	44	142.19	0.00E+00	0.00			0.00E+00	0.00E+00
	45	143.91	1.56E+03	186.46			1.56E+03	1.86E+02
	46	145.93	0.00E+00	0.00			0.00E+00	0.00E+00
	47	154.34	5.73E+02	78.91			5.73E+02	7.89E+01
	48	163.47	3.23E+02	78.94			3.23E+02	7.89E+01
	49	167.53	-9.30E+00	63.18			-9.30E+00	6.32E+01
	50	180.08	8.16E+00	80.09			8.16E+00	8.01E+01
	51	180.72	0.00E+00	0.00			0.00E+00	0.00E+00
	52	186.29	1.21E+04	134.76	1.49E+02	3.34E+01	1.20E+04	1.39E+02
	53	196.37	4.42E+01	52.91	3.28E+01	1.88E+01	1.14E+01	5.62E+01
	54	201.70	-2.91E+01	45.97			-2.91E+01	4.60E+01
	55	209.58	9.19E+01	53.14			9.19E+01	5.31E+01
	56	216.48	-2.26E+01	45.82			-2.26E+01	4.58E+01
	57	236.20	5.28E+02	57.86			5.28E+02	5.79E+01
	58	238.89	1.48E+03	65.88	-1.27E+01	1.27E+01	1.49E+03	6.71E+01
	59	242.25	8.64E+03	111.84			8.64E+03	1.12E+02
	60	250.35	-9.50E+00	33.09	3.89E+00	8.81E+00	-1.34E+01	3.42E+01
	61	258.08	5.72E+03	117.33			5.72E+03	1.17E+02
	62	267.37	1.63E+01	43.06			1.63E+01	4.31E+01
	63	275.16	2.42E+02	51.80			2.42E+02	5.18E+01
	64	280.65	-8.15E+01	31.30			-8.15E+01	3.13E+01
	65	287.69	-7.26E+01	31.87			-7.26E+01	3.19E+01
	66	295.57	1.71E+04	145.30			1.71E+04	1.45E+02
	67	316.16	6.70E+00	37.87			6.70E+00	3.79E+01
	68	324.31	1.22E+02	45.81			1.22E+02	4.58E+01
	69	338.96	2.65E+02	50.13			2.65E+02	5.01E+01
	70	344.23	-2.47E+01	36.55			-2.47E+01	3.66E+01
M	71	351.88	8.11E+03	709.46			8.11E+03	7.09E+02
m	72	352.58	4.25E+03	706.16			4.25E+03	7.06E+02
M	73	421.14	-1.49E+00	23.03			-1.49E+00	2.30E+01
m	74	421.95	-1.19E-01	1.84			-1.19E-01	1.84E+00
	75	432.08	6.00E+00	14.39			6.00E+00	1.44E+01
	76	437.91	-7.37E+00	14.92			-7.37E+00	1.49E+01
	77	453.60	-6.50E+00	13.18			-6.50E+00	1.32E+01
	78	462.36	1.67E+01	16.23			1.67E+01	1.62E+01
	79	473.52	-3.13E+01	12.63			-3.13E+01	1.26E+01
	80	482.46	9.41E-01	10.63			9.41E-01	1.06E+01
	81	509.97	-2.31E+01	13.49			-2.31E+01	1.35E+01
	82	532.76	-1.11E+01	22.76			-1.11E+01	2.28E+01
	83	533.90	0.00E+00	0.00			0.00E+00	0.00E+00
	84	546.42	-1.29E+01	9.89			-1.29E+01	9.89E+00
	85	555.90	-7.42E+00	9.44			-7.42E+00	9.44E+00
	86	573.24	6.71E+00	11.92			6.71E+00	1.19E+01
	87	585.48	-6.97E+00	12.08			-6.97E+00	1.21E+01
	88	590.78	4.93E+00	10.38			4.93E+00	1.04E+01
	89	600.75	0.00E+00	0.00			0.00E+00	0.00E+00
	90	602.47	-2.57E+01	25.78			-2.57E+01	2.58E+01
	91	610.22	2.47E+03	65.75			2.47E+03	6.57E+01
	92	623.00	3.16E+01	13.62			3.16E+01	1.36E+01

Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
93	636.68	1.53E+01	19.67			1.53E+01	1.97E+01
94	638.06	0.00E+00	0.00			0.00E+00	0.00E+00
95	670.38	-9.50E+00	9.73			-9.50E+00	9.73E+00

M = First peak in a multiplet region
m = Other peak in a multiplet region

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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NP473.CNF

Report Generated On	:	1-09-96 8:48:10 AM
Sample Title	:	NOPI-473-GAM1
Spectrum Description	:	NOPI-473-GAM1
Sample Identification	:	NP473
Sample Type	:	
Sample Geometry	:	
Peak Locate Threshold	:	2.00
Peak Locate Range (in channels)	:	1 - 4096
Peak Area Range (in channels)	:	1 - 4096
Identification Energy Tolerance	:	1.000 keV
Sample Size	:	0.000E+00 Unit
Sample Taken On	:	
Acquisition Started	:	1-08-96 8:47:14 AM
Live Time	:	80000.0 seconds
Real Time	:	80146.3 seconds

Energy Calibration Used Done On	:	12-19-95
Efficiency Calibration Used Done On	:	????????

****
***** P E A K L O C A T E R E P O R T *****
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Detector Name: DET01
Sample Title: NOPI-473-GAM1
Peak Locate Performed on: 1-09-96 8:47:02 AM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 2.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	19.36	0.0118	3.18	51.78
2	31.55	0.0290	5.34	17.65
3	37.49	0.0246	6.26	19.19
4	41.12	0.3617	6.92	2.80
5	47.26	0.1657	7.98	7.57
6	53.35	0.1002	9.02	6.28
7	63.67	0.0199	10.81	59.30
8	72.00	<NA>	12.39	<NA>
9	76.64	0.0171	13.04	54.23
10	84.00	<NA>	14.75	<NA>
11	89.43	0.0116	15.32	45.59
12	94.90	0.0149	16.13	83.58
13	99.00	<NA>	16.77	<NA>
14	104.51	0.0224	17.82	21.17
15	111.16	0.0296	18.94	43.38
16	115.00	0.0000	19.60	16.99
17	118.12	0.1552	20.17	6.50
18	122.38	0.1631	20.89	3.63
19	149.98	0.0300	25.64	36.06
20	160.10	0.0303	27.37	34.99
21	175.10	0.6401	29.96	2.13
22	198.00	<NA>	33.89	<NA>
23	213.99	0.1483	36.64	6.98
24	262.00	<NA>	44.90	<NA>
25	271.52	0.0044	46.53	109.06
26	292.33	0.0357	50.11	29.02
27	310.49	0.0099	53.23	46.92
28	341.02	0.6524	58.48	2.19
29	369.00	0.0083	63.29	111.08
30	385.44	0.2563	66.12	2.01
31	394.50	0.0160	67.68	28.77
32	413.18	0.5835	70.87	2.46
33	424.63	0.2473	72.85	6.17
34	436.06	0.0081	74.82	109.55
35	449.28	0.0070	77.10	129.18
36	462.16	0.0276	79.35	31.18
37	472.49	0.0359	81.10	36.41
38	488.37	0.0293	83.84	44.39
39	497.99	0.1640	85.44	5.39
40	508.74	0.0697	86.89	42.07
41	516.00	<NA>	87.41	<NA>

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	523.44	0.0418	89.86	30.45
43	539.34	0.0294	92.58	37.61
44	552.41	0.0797	94.83	15.44
45	568.31	0.2060	97.65	4.97
46	573.54	0.0987	98.43	14.56
47	595.00	<NA>	102.34	<NA>
48	599.86	0.2614	102.97	3.75
49	615.31	0.3436	105.64	2.69
50	636.06	0.2168	109.21	4.52
51	648.76	0.2351	111.35	4.35
52	657.39	0.1028	112.88	11.20
53	712.75	0.2745	122.39	4.48
54	723.96	0.4900	124.32	2.43
55	759.07	0.3355	130.36	2.06
56	837.72	0.0814	143.88	15.96
57	898.22	0.1081	154.28	12.09
58	924.84	1.2156	158.86	2.09
59	951.40	0.1569	163.43	6.90
60	1060.00	<NA>	182.10	<NA>
61	1083.49	0.0560	186.14	25.79
62	1176.83	0.8061	202.18	2.02
63	1195.47	0.2138	205.39	6.69
64	1228.92	0.4826	211.14	2.29
65	1246.23	0.3574	214.12	2.24
66	1286.00	<NA>	220.95	<NA>
67	1348.00	<NA>	231.61	<NA>
68	1374.45	0.1236	236.16	9.44
69	1389.65	0.8366	238.77	2.24
70	1409.44	0.0308	242.18	33.61
71	1500.81	0.1668	257.89	9.96
72	1556.29	0.3382	267.42	2.08
73	1569.60	0.1242	269.73	8.60
74	1579.70	0.1515	271.49	5.77
75	1594.89	0.5111	274.02	2.01
76	1600.89	0.3924	274.97	3.43
77	1609.00	0.0001	275.42	2.60
78	1624.23	0.3440	279.11	2.32
79	1666.30	0.3943	286.34	3.49
80	1689.00	<NA>	290.24	<NA>
81	1719.49	0.0251	295.48	37.70
82	1747.63	0.8722	300.32	3.43
83	1762.12	0.3641	302.81	2.80
84	1827.00	<NA>	313.97	<NA>
85	1840.25	0.2646	316.25	2.91
86	1885.97	0.4360	324.11	3.11
87	1921.35	0.8101	330.19	2.02
88	1942.00	0.0001	333.74	2.58
89	1970.54	0.8798	338.65	2.08
90	1983.60	0.4582	340.89	3.40
91	2004.00	<NA>	344.40	<NA>

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
92	2008.45	0.4379	345.17	2.34
93	2047.67	0.0070	351.87	92.68
94	2051.14	0.1032	352.44	9.47
95	2075.00	<NA>	356.61	<NA>
96	2109.00	<NA>	362.45	<NA>
97	2175.84	0.3673	373.94	2.55
98	2204.78	0.3664	378.92	2.26
99	2241.23	0.6554	385.19	2.19
100	2266.24	0.3864	389.49	2.02
101	2284.00	<NA>	392.54	<NA>
102	2299.00	<NA>	395.13	<NA>
103	2309.08	0.5691	396.91	2.07
104	2327.77	0.3850	400.07	2.10
105	2357.47	0.7061	405.17	2.28
106	2401.67	0.3161	412.77	2.07
107	2426.00	<NA>	416.95	<NA>
108	2492.00	<NA>	428.30	<NA>
109	2591.00	<NA>	445.32	<NA>
110	2604.00	<NA>	447.56	<NA>
111	2641.00	<NA>	453.92	<NA>
112	2672.00	0.0001	459.25	2.47
113	2687.04	0.4845	461.84	2.47
114	2730.93	0.7976	469.38	2.04
115	2826.00	<NA>	485.73	<NA>
116	2853.02	0.6079	490.37	2.06
117	2914.00	<NA>	500.86	<NA>
118	2922.11	0.5050	502.25	2.05
119	2938.00	0.0001	504.98	2.47
120	3017.00	<NA>	518.57	<NA>
121	3046.04	0.5319	523.56	2.26
122	3060.20	0.4167	525.99	2.06
123	3098.00	0.0001	532.49	2.25
124	3103.91	0.3945	533.51	2.76
125	3169.00	<NA>	544.70	<NA>
126	3224.05	0.5673	554.16	2.08
127	3305.90	0.4204	568.24	2.53
128	3347.00	0.0001	575.30	2.46
129	3392.90	0.4066	583.19	2.60
130	3453.00	<NA>	593.53	<NA>
131	3527.00	<NA>	606.25	<NA>
132	3548.60	0.1724	609.96	7.99
133	3665.19	0.3758	630.01	2.34
134	3798.17	0.3362	652.87	2.71
135	3855.77	0.3874	662.78	2.10
136	3885.00	<NA>	667.80	<NA>
137	4031.66	0.1174	693.02	5.45

Errors quoted at 1.000 sigma

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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: DET01
Sample Title: NOPI-473-GAM1
Peak Analysis Performed on: 1-09-96 8:47:35 AM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	15-	24	19.36	3.18	1.36E+04	244.44	1.88E+04
M	2	26-	58	31.94	5.34	2.17E+03	518.96	3.51E+04
m	3	26-	58	37.29	6.26	2.57E+03	574.44	3.68E+04
M	7	58-	127	63.77	10.81	3.16E+04	3444.45	4.40E+04
m	8	58-	127	72.92	12.39	2.51E+04	3681.51	4.31E+04
m	9	58-	127	76.69	13.04	9.05E+04	5059.44	4.26E+04
m	10	58-	127	86.69	14.75	1.62E+04	3311.96	4.14E+04
m	11	58-	127	89.99	15.32	6.99E+04	4740.65	4.09E+04
m	12	58-	127	94.69	16.13	1.03E+05	5451.84	3.99E+04
m	13	58-	127	98.42	16.77	3.15E+04	3837.60	3.57E+04
m	14	58-	127	104.53	17.82	1.88E+04	2811.09	3.52E+04
m	15	58-	127	111.03	18.94	2.90E+04	3327.73	3.82E+04
	16	58-	127	114.86	19.60	1.58E+04	3134.31	3.79E+04
m	17	58-	127	118.17	20.17	7.17E+03	2820.52	3.77E+04
m	18	58-	127	122.36	20.89	2.11E+03	2162.47	3.75E+04
M	19	144-	165	149.98	25.64	1.28E+04	314.69	3.03E+04
m	20	144-	165	160.08	27.37	1.31E+04	321.32	2.90E+04
	21	171-	180	175.10	29.96	7.15E+02	267.04	3.12E+04
	22	196-	200	198.00	33.89	-3.41E+02	159.24	1.56E+04
	23	210-	218	213.99	36.64	1.79E+03	248.95	2.82E+04
	25	257-	276	271.52	46.53	1.25E+05	598.66	6.25E+04
	26	287-	297	292.33	50.11	1.88E+04	311.29	3.27E+04
	27	305-	315	310.49	53.23	3.42E+04	335.47	3.30E+04
	28	336-	344	341.02	58.48	5.14E+02	248.73	2.86E+04
	29	363-	373	369.00	63.29	1.33E+05	473.63	3.85E+04
	31	383-	399	394.50	67.68	1.91E+04	453.28	5.96E+04
M	32	408-	441	413.05	70.87	9.78E+02	1633.52	3.99E+04
m	33	408-	441	424.58	72.85	2.07E+03	1673.58	3.80E+04
m	34	408-	441	436.06	74.82	1.81E+05	2508.10	4.83E+04
	35	444-	454	449.28	77.10	3.27E+05	656.79	4.40E+04
M	36	457-	477	462.39	79.35	1.93E+04	1558.89	4.37E+04
m	37	457-	477	472.57	81.10	2.76E+04	1578.69	3.50E+04
M	38	483-	528	488.52	83.84	6.81E+04	4429.44	3.73E+04
m	39	483-	528	497.79	85.44	1.61E+03	1959.55	4.01E+04
m	40	483-	528	506.26	86.89	4.53E+04	5193.08	3.97E+04
m	41	483-	528	509.27	87.41	6.95E+04	5525.64	3.95E+04
m	42	483-	528	523.55	89.86	4.13E+04	3509.24	3.30E+04

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	43	534-	544	539.34	92.58	1.60E+05	499.14	3.72E+04
	44	547-	557	552.41	94.83	1.07E+04	343.14	4.30E+04
M	45	563-	578	568.86	97.65	4.06E+03	205.98	2.66E+04
m	46	563-	578	573.37	98.43	9.40E+03	306.07	2.64E+04
M	47	591-	604	596.11	102.34	1.09E+03	241.12	2.32E+04
m	48	591-	604	599.76	102.97	1.46E+03	265.44	2.12E+04
	49	610-	620	615.31	105.64	2.28E+03	239.03	2.30E+04
	50	631-	639	636.06	109.21	2.10E+03	212.25	2.00E+04
M	51	643-	662	648.52	111.35	2.15E+03	261.78	2.69E+04
m	52	643-	662	657.44	112.88	9.14E+03	414.24	2.40E+04
	53	708-	726	712.75	122.39	6.62E+02	366.64	3.95E+04
	55	754-	763	759.07	130.36	5.11E+02	219.22	2.10E+04
	56	832-	842	837.72	143.88	1.91E+04	270.97	2.29E+04
	57	893-	903	898.22	154.28	8.77E+03	251.15	2.28E+04
	58	919-	928	924.84	158.86	8.88E+02	215.92	2.02E+04
	59	946-	956	951.40	163.43	5.47E+03	231.39	2.02E+04
	60	1057-	1062	1060.00	182.10	-9.67E+00	139.21	1.09E+04
	61	1078-	1088	1083.49	186.14	1.18E+05	410.74	2.12E+04
	62	1172-	1180	1176.83	202.18	8.59E+02	178.44	1.45E+04
	63	1191-	1199	1195.47	205.39	3.82E+03	180.30	1.35E+04
	64	1224-	1232	1228.92	211.14	8.70E+02	162.92	1.20E+04
	65	1243-	1250	1246.23	214.12	2.86E+02	144.13	1.02E+04
	66	1284-	1288	1286.00	220.95	-1.44E+02	102.47	6.46E+03
	67	1345-	1350	1348.00	231.61	-1.15E+02	114.86	7.50E+03
	68	1370-	1378	1374.45	236.16	7.58E+03	178.76	1.14E+04
	69	1385-	1393	1389.65	238.77	1.14E+03	155.94	1.09E+04
	70	1405-	1413	1409.44	242.18	8.03E+04	329.22	1.32E+04
	71	1496-	1504	1500.81	257.89	4.78E+04	342.05	3.22E+04
	72	1554-	1558	1556.29	267.42	-1.89E+02	89.38	4.96E+03
M	73	1565-	1583	1569.68	269.73	8.29E+03	487.66	1.13E+04
m	74	1565-	1583	1579.93	271.49	6.12E+03	475.06	1.95E+04
M	75	1590-	1611	1594.64	274.02	5.27E+02	194.40	1.20E+04
m	76	1590-	1611	1600.15	274.97	1.95E+03	423.71	1.70E+04
m	77	1590-	1611	1602.78	275.42	6.00E+02	429.05	1.99E+04
	78	1621-	1628	1624.23	279.11	1.93E+02	125.62	7.73E+03
	79	1662-	1670	1666.30	286.34	2.06E+03	148.53	9.33E+03
	80	1686-	1691	1689.00	290.24	8.14E+01	106.74	6.39E+03
	81	1715-	1723	1719.49	295.48	1.51E+05	433.90	1.76E+04
	82	1743-	1751	1747.63	300.32	2.38E+03	141.15	8.21E+03
	83	1758-	1766	1762.12	302.81	9.41E+02	136.47	8.27E+03
	84	1823-	1831	1827.00	313.97	1.07E+03	141.96	8.93E+03
	85	1838-	1842	1840.25	316.25	-5.40E+01	85.24	4.44E+03
	86	1881-	1889	1885.97	324.11	1.60E+03	136.47	7.97E+03
	87	1917-	1925	1921.35	330.19	1.48E+03	137.37	8.14E+03
	88	1938-	1943	1942.00	333.74	-1.45E+02	100.41	5.76E+03
	89	1966-	1974	1970.54	338.65	1.35E+03	141.21	8.70E+03
	90	1981-	1986	1983.60	340.89	2.07E+02	96.32	5.09E+03
M	91	2001-	2011	2003.98	344.40	1.16E+01	31.16	2.58E+03
m	92	2001-	2011	2008.50	345.17	4.50E+01	119.84	1.74E+03

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	93	2043-	2055	2047.43	351.87	9.37E+04	10994.7	8.40E+03
m	94	2043-	2055	2050.78	352.44	4.02E+04	10991.9	5.75E+03
	95	2072-	2079	2075.00	356.61	8.99E+01	57.13	1.58E+03
	96	2105-	2111	2109.00	362.45	1.40E+01	51.84	1.41E+03
	97	2173-	2177	2175.84	373.94	-1.14E+01	40.31	9.89E+02
	98	2201-	2207	2204.78	378.92	-1.57E+01	52.37	1.46E+03
	99	2238-	2243	2241.23	385.19	3.99E+01	47.69	1.26E+03
	100	2262-	2270	2266.24	389.49	5.26E+02	69.23	1.99E+03
	101	2280-	2288	2284.00	392.54	9.96E+01	64.47	1.90E+03
M	102	2296-	2312	2299.08	395.13	3.48E+00	16.72	6.37E+02
m	103	2296-	2312	2309.44	396.91	1.93E+01	89.98	8.41E+02
	104	2324-	2329	2327.77	400.07	2.74E+01	48.04	1.28E+03
	105	2353-	2361	2357.47	405.17	2.50E+02	70.30	2.18E+03
	106	2397-	2404	2401.67	412.77	6.43E+01	59.60	1.73E+03
	107	2423-	2428	2426.00	416.95	-1.72E+01	49.93	1.42E+03
	108	2490-	2496	2492.00	428.30	5.37E+01	54.48	1.54E+03
	109	2587-	2593	2591.00	445.32	-2.03E+01	48.26	1.24E+03
	110	2601-	2608	2604.00	447.56	6.52E+01	51.80	1.30E+03
	111	2637-	2643	2641.00	453.92	-3.11E-01	48.33	1.23E+03
	112	2669-	2674	2672.00	459.25	-5.67E+01	41.42	1.01E+03
	113	2684-	2689	2687.04	461.84	2.01E+01	42.55	1.01E+03
	114	2727-	2733	2730.93	469.38	-3.44E+01	46.76	1.16E+03
	115	2823-	2830	2826.00	485.73	-5.14E+00	48.53	1.17E+03
	116	2849-	2857	2853.02	490.37	3.45E+01	51.20	1.21E+03
	118	2912-	2925	2922.11	502.25	-1.23E+02	71.41	1.90E+03
	119	2933-	2940	2938.00	504.98	-2.78E+01	45.87	1.06E+03
	120	3015-	3019	3017.00	518.57	-5.23E+01	31.43	6.31E+02
	121	3043-	3048	3046.04	523.56	-2.72E+01	35.83	7.41E+02
	122	3057-	3062	3060.20	525.99	-1.00E+01	35.55	7.20E+02
	125	3166-	3173	3169.00	544.70	8.33E-01	45.62	1.03E+03
	126	3220-	3226	3224.05	554.16	2.03E+01	39.52	8.15E+02
	127	3301-	3308	3305.90	568.24	-4.26E+01	44.03	9.79E+02
	128	3345-	3349	3347.00	575.30	1.29E+01	32.73	6.43E+02
	129	3389-	3395	3392.90	583.19	1.75E+01	40.48	8.56E+02
	130	3450-	3455	3453.00	593.53	-7.38E-01	37.14	7.77E+02
	131	3524-	3529	3527.00	606.25	-1.57E+01	38.85	8.60E+02
	132	3544-	3552	3548.60	609.96	2.50E+04	211.40	9.16E+03
	133	3662-	3668	3665.19	630.01	7.62E-01	36.27	6.95E+02
	134	3795-	3802	3798.17	652.87	2.23E+01	39.99	7.85E+02
	135	3851-	3858	3855.77	662.78	2.57E+01	39.60	7.64E+02
	136	3883-	3887	3885.00	667.80	-5.06E+01	30.31	5.78E+02
	137	4029-	4035	4031.66	693.02	2.37E+02	34.74	1.56E+02

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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***** B A C K G R O U N D S U B T R A C T R E P O R T *****
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Detector Name: DET01
Sample Title: NOPI-473-GAM1
Peak Analysis Performed on: 1-09-96 8:47:02 AM

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
	1	3.18	1.36E+04	244.44			1.36E+04	2.44E+02
M	2	5.34	2.17E+03	518.96			2.17E+03	5.19E+02
m	3	6.26	2.57E+03	574.44			2.57E+03	5.74E+02
m	4	6.92	0.00E+00	0.00			0.00E+00	0.00E+00
m	5	7.98	0.00E+00	0.00			0.00E+00	0.00E+00
m	6	9.02	0.00E+00	0.00			0.00E+00	0.00E+00
M	7	10.81	3.16E+04	3444.45	1.54E+02	3.60E+01	3.15E+04	3.44E+03
m	8	12.39	2.51E+04	3681.51	4.47E+01	2.75E+01	2.51E+04	3.68E+03
m	9	13.04	9.05E+04	5059.44	4.47E+01	2.75E+01	9.04E+04	5.06E+03
m	10	14.75	1.62E+04	3311.96			1.62E+04	3.31E+03
m	11	15.32	6.99E+04	4740.65			6.99E+04	4.74E+03
m	12	16.13	1.03E+05	5451.84			1.03E+05	5.45E+03
m	13	16.77	3.15E+04	3837.60			3.15E+04	3.84E+03
m	14	17.82	1.88E+04	2811.09			1.88E+04	2.81E+03
m	15	18.94	2.90E+04	3327.73			2.90E+04	3.33E+03
[illegible]	16	19.60	1.58E+04	3134.31			1.58E+04	3.13E+03
[illegible]	17	20.17	7.17E+03	2820.52			7.17E+03	2.82E+03
m	18	20.89	2.11E+03	2162.47			2.11E+03	2.16E+03
M	19	25.64	1.28E+04	314.69			1.28E+04	3.15E+02
m	20	27.37	1.31E+04	321.32			1.31E+04	3.21E+02
	21	29.96	7.15E+02	267.04			7.15E+02	2.67E+02
	22	33.89	-3.41E+02	159.24	1.06E+01	1.70E+01	-3.51E+02	1.60E+02
	23	36.64	1.79E+03	248.95			1.79E+03	2.49E+02
	24	44.90	0.00E+00	0.00			0.00E+00	0.00E+00
	25	46.53	1.25E+05	598.66			1.25E+05	5.99E+02
	26	50.11	1.88E+04	311.29			1.88E+04	3.11E+02
	27	53.23	3.42E+04	335.47			3.42E+04	3.35E+02
	28	58.48	5.14E+02	248.73			5.14E+02	2.49E+02
	29	63.29	1.33E+05	473.63	5.19E+01	2.82E+01	1.33E+05	4.74E+02
	30	66.12	0.00E+00	0.00	7.10E+00	4.38E+00	-7.10E+00	4.38E+00
	31	67.68	1.91E+04	453.28			1.91E+04	4.53E+02
M	32	70.87	9.78E+02	1633.52			9.78E+02	1.63E+03
m	33	72.85	2.07E+03	1673.58			2.07E+03	1.67E+03
m	34	74.82	1.81E+05	2508.10			1.81E+05	2.51E+03
	35	77.10	3.27E+05	656.79			3.27E+05	6.57E+02
M	36	79.35	1.93E+04	1558.89			1.93E+04	1.56E+03
m	37	81.10	2.76E+04	1578.69			2.76E+04	1.58E+03
M	38	83.84	6.81E+04	4429.44			6.81E+04	4.43E+03
m	39	85.44	1.61E+03	1959.55			1.61E+03	1.96E+03
m	40	86.89	4.53E+04	5193.08			4.53E+04	5.19E+03
m	41	87.41	6.95E+04	5525.64			6.95E+04	5.53E+03
[illegible]	42	89.86	4.13E+04	3509.24			4.13E+04	3.51E+03

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
	43	92.58	1.60E+05	499.14			1.60E+05	4.99E+02
	44	94.83	1.07E+04	343.14			1.07E+04	3.43E+02
M	45	97.65	4.06E+03	205.98			4.06E+03	2.06E+02
m	46	98.43	9.40E+03	306.07			9.40E+03	3.06E+02
M	47	102.34	1.09E+03	241.12			1.09E+03	2.41E+02
m	48	102.97	1.46E+03	265.44			1.46E+03	2.65E+02
	49	105.64	2.28E+03	239.03			2.28E+03	2.39E+02
	50	109.21	2.10E+03	212.25			2.10E+03	2.12E+02
M	51	111.35	2.15E+03	261.78	-1.31E+01	1.36E+01	2.16E+03	2.62E+02
m	52	112.88	9.14E+03	414.24	-1.31E+01	1.36E+01	9.15E+03	4.14E+02
	53	122.39	6.62E+02	366.64			6.62E+02	3.67E+02
	54	124.32	0.00E+00	0.00			0.00E+00	0.00E+00
	55	130.36	5.11E+02	219.22	0.00E+00	0.00E+00	5.11E+02	2.19E+02
	56	143.88	1.91E+04	270.97			1.91E+04	2.71E+02
	57	154.28	8.77E+03	251.15			8.77E+03	2.51E+02
	58	158.86	8.88E+02	215.92			8.88E+02	2.16E+02
	59	163.43	5.47E+03	231.39			5.47E+03	2.31E+02
	60	182.10	-9.67E+00	139.21			-9.67E+00	1.39E+02
	61	186.14	1.18E+05	410.74	1.49E+02	3.34E+01	1.18E+05	4.12E+02
	62	202.18	8.59E+02	178.44			8.59E+02	1.78E+02
	63	205.39	3.82E+03	180.30	5.26E+00	1.33E+01	3.82E+03	1.81E+02
	64	211.14	8.70E+02	162.92			8.70E+02	1.63E+02
	65	214.12	2.86E+02	144.13			2.86E+02	1.44E+02
	66	220.95	-1.44E+02	102.47			-1.44E+02	1.02E+02
	67	231.61	-1.15E+02	114.86			-1.15E+02	1.15E+02
	68	236.16	7.58E+03	178.76			7.58E+03	1.79E+02
	69	238.77	1.14E+03	155.94	-1.27E+01	1.27E+01	1.15E+03	1.56E+02
	70	242.18	8.03E+04	329.22			8.03E+04	3.29E+02
	71	257.89	4.78E+04	342.05			4.78E+04	3.42E+02
	72	267.42	-1.89E+02	89.38			-1.89E+02	8.94E+01
M	73	269.73	8.29E+03	487.66			8.29E+03	4.88E+02
m	74	271.49	6.12E+03	475.06			6.12E+03	4.75E+02
M	75	274.02	5.27E+02	194.40			5.27E+02	1.94E+02
m	76	274.97	1.95E+03	423.71			1.95E+03	4.24E+02
m	77	275.42	6.00E+02	429.05	4.06E+00	1.24E+01	5.96E+02	4.29E+02
	78	279.11	1.93E+02	125.62			1.93E+02	1.26E+02
	79	286.34	2.06E+03	148.53			2.06E+03	1.49E+02
	80	290.24	8.14E+01	106.74			8.14E+01	1.07E+02
	81	295.48	1.51E+05	433.90			1.51E+05	4.34E+02
	82	300.32	2.38E+03	141.15			2.38E+03	1.41E+02
	83	302.81	9.41E+02	136.47			9.41E+02	1.36E+02
	84	313.97	1.07E+03	141.96			1.07E+03	1.42E+02
	85	316.25	-5.40E+01	85.24			-5.40E+01	8.52E+01
	86	324.11	1.60E+03	136.47			1.60E+03	1.36E+02
	87	330.19	1.48E+03	137.37			1.48E+03	1.37E+02
	88	333.74	-1.45E+02	100.41			-1.45E+02	1.00E+02
	89	338.65	1.35E+03	141.21			1.35E+03	1.41E+02
	90	340.89	2.07E+02	96.32			2.07E+02	9.63E+01
M	91	344.40	1.16E+01	31.16			1.16E+01	3.12E+01
	92	345.17	4.50E+01	119.84			4.50E+01	1.20E+02

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
M	93	351.87	9.37E+04	10994.7			9.37E+04	1.10E+04
m	94	352.44	4.02E+04	10991.9			4.02E+04	1.10E+04
	95	356.61	8.99E+01	57.13	1.59E+01	1.07E+01	7.40E+01	5.81E+01
	96	362.45	1.40E+01	51.84			1.40E+01	5.18E+01
	97	373.94	-1.14E+01	40.31			-1.14E+01	4.03E+01
	98	378.92	-1.57E+01	52.37			-1.57E+01	5.24E+01
	99	385.19	3.99E+01	47.69			3.99E+01	4.77E+01
	100	389.49	5.26E+02	69.23			5.26E+02	6.92E+01
	101	392.54	9.96E+01	64.47	4.02E+00	1.38E+01	9.56E+01	6.59E+01
M	102	395.13	3.48E+00	16.72			3.48E+00	1.67E+01
m	103	396.91	1.93E+01	89.98			1.93E+01	9.00E+01
	104	400.07	2.74E+01	48.04			2.74E+01	4.80E+01
	105	405.17	2.50E+02	70.30			2.50E+02	7.03E+01
	106	412.77	6.43E+01	59.60			6.43E+01	5.96E+01
	107	416.95	-1.72E+01	49.93			-1.72E+01	4.99E+01
	108	428.30	5.37E+01	54.48			5.37E+01	5.45E+01
	109	445.32	-2.03E+01	48.26			-2.03E+01	4.83E+01
	110	447.56	6.52E+01	51.80			6.52E+01	5.18E+01
	111	453.92	-3.11E-01	48.33			-3.11E-01	4.83E+01
	112	459.25	-5.67E+01	41.42			-5.67E+01	4.14E+01
	113	461.84	2.01E+01	42.55			2.01E+01	4.25E+01
	114	469.38	-3.44E+01	46.76			-3.44E+01	4.68E+01
	115	485.73	-5.14E+00	48.53			-5.14E+00	4.85E+01
	116	490.37	3.45E+01	51.20			3.45E+01	5.12E+01
	117	500.86	0.00E+00	0.00			0.00E+00	0.00E+00
	118	502.25	-1.23E+02	71.41			-1.23E+02	7.14E+01
	119	504.98	-2.78E+01	45.87			-2.78E+01	4.59E+01
	120	518.57	-5.23E+01	31.43			-5.23E+01	3.14E+01
	121	523.56	-2.72E+01	35.83			-2.72E+01	3.58E+01
	122	525.99	-1.00E+01	35.55			-1.00E+01	3.56E+01
	123	532.49	0.00E+00	0.00			0.00E+00	0.00E+00
	124	533.51	0.00E+00	0.00			0.00E+00	0.00E+00
	125	544.70	8.33E-01	45.62			8.33E-01	4.56E+01
	126	554.16	2.03E+01	39.52			2.03E+01	3.95E+01
	127	568.24	-4.26E+01	44.03			-4.26E+01	4.40E+01
	128	575.30	1.29E+01	32.73			1.29E+01	3.27E+01
	129	583.19	1.75E+01	40.48			1.75E+01	4.05E+01
	130	593.53	-7.38E-01	37.14			-7.38E-01	3.71E+01
	131	606.25	-1.57E+01	38.85			-1.57E+01	3.89E+01
	132	609.96	2.50E+04	211.40			2.50E+04	2.11E+02
	133	630.01	7.62E-01	36.27			7.62E-01	3.63E+01
	134	652.87	2.23E+01	39.99			2.23E+01	4.00E+01
	135	662.78	2.57E+01	39.60			2.57E+01	3.96E+01
	136	667.80	-5.06E+01	30.31			-5.06E+01	3.03E+01
	137	693.02	2.37E+02	34.74			2.37E+02	3.47E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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*************************************************************************
*****          A R E A   C O R R E C T I O N   R E P O R T          *****
*****      R E F E R E N C E   P E A K / B K G . S U B T R A C T    *****
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Detector Name: DET01
Sample Title: NOPI-473-GAM1
Peak Analysis Performed on: 1-09-96 8:47:02 AM

Ref. Peak Energy: 0.00; Reference Date:
Peak Ratio: 0.00; Uncertainty: 0.00
Background File : E:\GENIEPC\CAMFILES\BG122895.CNF

Corrected area is: Original * Peak Ratio - Background

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
	1	3.18	1.36E+04	244.44			1.36E+04	2.44E+02
M	2	5.34	2.17E+03	518.96			2.17E+03	5.19E+02
m	3	6.26	2.57E+03	574.44			2.57E+03	5.74E+02
m	4	6.92	0.00E+00	0.00			0.00E+00	0.00E+00
m	5	7.98	0.00E+00	0.00			0.00E+00	0.00E+00
m	6	9.02	0.00E+00	0.00			0.00E+00	0.00E+00
M	7	10.81	3.16E+04	3444.45	1.54E+02	3.60E+01	3.15E+04	3.44E+03
m	8	12.39	2.51E+04	3681.51	4.47E+01	2.75E+01	2.51E+04	3.68E+03
m	9	13.04	9.05E+04	5059.44	4.47E+01	2.75E+01	9.04E+04	5.06E+03
	10	14.75	1.62E+04	3311.96			1.62E+04	3.31E+03
	11	15.32	6.99E+04	4740.65			6.99E+04	4.74E+03
m	12	16.13	1.03E+05	5451.84			1.03E+05	5.45E+03
m	13	16.77	3.15E+04	3837.60			3.15E+04	3.84E+03
m	14	17.82	1.88E+04	2811.09			1.88E+04	2.81E+03
m	15	18.94	2.90E+04	3327.73			2.90E+04	3.33E+03
m	16	19.60	1.58E+04	3134.31			1.58E+04	3.13E+03
m	17	20.17	7.17E+03	2820.52			7.17E+03	2.82E+03
m	18	20.89	2.11E+03	2162.47			2.11E+03	2.16E+03
M	19	25.64	1.28E+04	314.69			1.28E+04	3.15E+02
m	20	27.37	1.31E+04	321.32			1.31E+04	3.21E+02
	21	29.96	7.15E+02	267.04			7.15E+02	2.67E+02
	22	33.89	-3.41E+02	159.24	1.06E+01	1.70E+01	-3.51E+02	1.60E+02
	23	36.64	1.79E+03	248.95			1.79E+03	2.49E+02
	24	44.90	0.00E+00	0.00			0.00E+00	0.00E+00
	25	46.53	1.25E+05	598.66			1.25E+05	5.99E+02
	26	50.11	1.88E+04	311.29			1.88E+04	3.11E+02
	27	53.23	3.42E+04	335.47			3.42E+04	3.35E+02
	28	58.48	5.14E+02	248.73			5.14E+02	2.49E+02
	29	63.29	1.33E+05	473.63	5.19E+01	2.82E+01	1.33E+05	4.74E+02
	30	66.12	0.00E+00	0.00	7.10E+00	4.38E+00	-7.10E+00	4.38E+00
	31	67.68	1.91E+04	453.28			1.91E+04	4.53E+02
M	32	70.87	9.78E+02	1633.52			9.78E+02	1.63E+03
m	33	72.85	2.07E+03	1673.58			2.07E+03	1.67E+03
m	34	74.82	1.81E+05	2508.10			1.81E+05	2.51E+03
	35	77.10	3.27E+05	656.79			3.27E+05	6.57E+02
	36	79.35	1.93E+04	1558.89			1.93E+04	1.56E+03
m	37	81.10	2.76E+04	1578.69			2.76E+04	1.58E+03
M	38	83.84	6.81E+04	4429.44			6.81E+04	4.43E+03
m	39	85.44	1.61E+03	1959.55			1.61E+03	1.96E+03
m	40	86.89	4.53E+04	5193.08			4.53E+04	5.19E+03

m 41	87.41	6.95E+04	5525.64	6.95E+04	5.53E+03
m 42	89.86	4.13E+04	3509.24	4.13E+04	3.51E+03

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
	43	92.58	1.60E+05	499.14			1.60E+05	4.99E+02
	44	94.83	1.07E+04	343.14			1.07E+04	3.43E+02
M	45	97.65	4.06E+03	205.98			4.06E+03	2.06E+02
m	46	98.43	9.40E+03	306.07			9.40E+03	3.06E+02
M	47	102.34	1.09E+03	241.12			1.09E+03	2.41E+02
m	48	102.97	1.46E+03	265.44			1.46E+03	2.65E+02
	49	105.64	2.28E+03	239.03			2.28E+03	2.39E+02
	50	109.21	2.10E+03	212.25			2.10E+03	2.12E+02
M	51	111.35	2.15E+03	261.78	-1.31E+01	1.36E+01	2.16E+03	2.62E+02
m	52	112.88	9.14E+03	414.24	-1.31E+01	1.36E+01	9.15E+03	4.14E+02
	53	122.39	6.62E+02	366.64			6.62E+02	3.67E+02
	54	124.32	0.00E+00	0.00			0.00E+00	0.00E+00
	55	130.36	5.11E+02	219.22	0.00E+00	0.00E+00	5.11E+02	2.19E+02
	56	143.88	1.91E+04	270.97			1.91E+04	2.71E+02
	57	154.28	8.77E+03	251.15			8.77E+03	2.51E+02
	58	158.86	8.88E+02	215.92			8.88E+02	2.16E+02
	59	163.43	5.47E+03	231.39			5.47E+03	2.31E+02
	60	182.10	-9.67E+00	139.21			-9.67E+00	1.39E+02
	61	186.14	1.18E+05	410.74	1.49E+02	3.34E+01	1.18E+05	4.12E+02
	62	202.18	8.59E+02	178.44			8.59E+02	1.78E+02
	63	205.39	3.82E+03	180.30	5.26E+00	1.33E+01	3.82E+03	1.81E+02
	64	211.14	8.70E+02	162.92			8.70E+02	1.63E+02
	65	214.12	2.86E+02	144.13			2.86E+02	1.44E+02
	66	220.95	-1.44E+02	102.47			-1.44E+02	1.02E+02
	67	231.61	-1.15E+02	114.86			-1.15E+02	1.15E+02
	68	236.16	7.58E+03	178.76			7.58E+03	1.79E+02
	69	238.77	1.14E+03	155.94	-1.27E+01	1.27E+01	1.15E+03	1.56E+02
	70	242.18	8.03E+04	329.22			8.03E+04	3.29E+02
	71	257.89	4.78E+04	342.05			4.78E+04	3.42E+02
	72	267.42	-1.89E+02	89.38			-1.89E+02	8.94E+01
M	73	269.73	8.29E+03	487.66			8.29E+03	4.88E+02
m	74	271.49	6.12E+03	475.06			6.12E+03	4.75E+02
M	75	274.02	5.27E+02	194.40			5.27E+02	1.94E+02
m	76	274.97	1.95E+03	423.71			1.95E+03	4.24E+02
m	77	275.42	6.00E+02	429.05	4.06E+00	1.24E+01	5.96E+02	4.29E+02
	78	279.11	1.93E+02	125.62			1.93E+02	1.26E+02
	79	286.34	2.06E+03	148.53			2.06E+03	1.49E+02
	80	290.24	8.14E+01	106.74			8.14E+01	1.07E+02
	81	295.48	1.51E+05	433.90			1.51E+05	4.34E+02
	82	300.32	2.38E+03	141.15			2.38E+03	1.41E+02
	83	302.81	9.41E+02	136.47			9.41E+02	1.36E+02
	84	313.97	1.07E+03	141.96			1.07E+03	1.42E+02
	85	316.25	-5.40E+01	85.24			-5.40E+01	8.52E+01
	86	324.11	1.60E+03	136.47			1.60E+03	1.36E+02
	87	330.19	1.48E+03	137.37			1.48E+03	1.37E+02
	88	333.74	-1.45E+02	100.41			-1.45E+02	1.00E+02
	89	338.65	1.35E+03	141.21			1.35E+03	1.41E+02
	90	340.89	2.07E+02	96.32			2.07E+02	9.63E+01
M	91	344.40	1.16E+01	31.16			1.16E+01	3.12E+01
	92	345.17	4.50E+01	119.84			4.50E+01	1.20E+02

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
M	93	351.87	9.37E+04	10994.7			9.37E+04	1.10E+04
m	94	352.44	4.02E+04	10991.9			4.02E+04	1.10E+04
	95	356.61	8.99E+01	57.13	1.59E+01	1.07E+01	7.40E+01	5.81E+01
	96	362.45	1.40E+01	51.84			1.40E+01	5.18E+01
	97	373.94	-1.14E+01	40.31			-1.14E+01	4.03E+01
	98	378.92	-1.57E+01	52.37			-1.57E+01	5.24E+01
	99	385.19	3.99E+01	47.69			3.99E+01	4.77E+01
	100	389.49	5.26E+02	69.23			5.26E+02	6.92E+01
	101	392.54	9.96E+01	64.47	4.02E+00	1.38E+01	9.56E+01	6.59E+01
M	102	395.13	3.48E+00	16.72			3.48E+00	1.67E+01
m	103	396.91	1.93E+01	89.98			1.93E+01	9.00E+01
	104	400.07	2.74E+01	48.04			2.74E+01	4.80E+01
	105	405.17	2.50E+02	70.30			2.50E+02	7.03E+01
	106	412.77	6.43E+01	59.60			6.43E+01	5.96E+01
	107	416.95	-1.72E+01	49.93			-1.72E+01	4.99E+01
	108	428.30	5.37E+01	54.48			5.37E+01	5.45E+01
	109	445.32	-2.03E+01	48.26			-2.03E+01	4.83E+01
	110	447.56	6.52E+01	51.80			6.52E+01	5.18E+01
	111	453.92	-3.11E-01	48.33			-3.11E-01	4.83E+01
	112	459.25	-5.67E+01	41.42			-5.67E+01	4.14E+01
	113	461.84	2.01E+01	42.55			2.01E+01	4.25E+01
	114	469.38	-3.44E+01	46.76			-3.44E+01	4.68E+01
	115	485.73	-5.14E+00	48.53			-5.14E+00	4.85E+01
	116	490.37	3.45E+01	51.20			3.45E+01	5.12E+01
	117	500.86	0.00E+00	0.00			0.00E+00	0.00E+00
	118	502.25	-1.23E+02	71.41			-1.23E+02	7.14E+01
	119	504.98	-2.78E+01	45.87			-2.78E+01	4.59E+01
	120	518.57	-5.23E+01	31.43			-5.23E+01	3.14E+01
	121	523.56	-2.72E+01	35.83			-2.72E+01	3.58E+01
	122	525.99	-1.00E+01	35.55			-1.00E+01	3.56E+01
	123	532.49	0.00E+00	0.00			0.00E+00	0.00E+00
	124	533.51	0.00E+00	0.00			0.00E+00	0.00E+00
	125	544.70	8.33E-01	45.62			8.33E-01	4.56E+01
	126	554.16	2.03E+01	39.52			2.03E+01	3.95E+01
	127	568.24	-4.26E+01	44.03			-4.26E+01	4.40E+01
	128	575.30	1.29E+01	32.73			1.29E+01	3.27E+01
	129	583.19	1.75E+01	40.48			1.75E+01	4.05E+01
	130	593.53	-7.38E-01	37.14			-7.38E-01	3.71E+01
	131	606.25	-1.57E+01	38.85			-1.57E+01	3.89E+01
	132	609.96	2.50E+04	211.40			2.50E+04	2.11E+02
	133	630.01	7.62E-01	36.27			7.62E-01	3.63E+01
	134	652.87	2.23E+01	39.99			2.23E+01	4.00E+01
	135	662.78	2.57E+01	39.60			2.57E+01	3.96E+01
	136	667.80	-5.06E+01	30.31			-5.06E+01	3.03E+01
	137	693.02	2.37E+02	34.74			2.37E+02	3.47E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

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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NP474.CNF

Report Generated On	:	1-05-96 3:59:20 PM
Sample Title	:	NOPI-474
Spectrum Description	:	NOPI-474-GAM1
Sample Identification	:	NP474
Sample Type	:	
Sample Geometry	:	
Peak Locate Threshold	:	3.00
Peak Locate Range (in channels)	:	1 - 4096
Peak Area Range (in channels)	:	1 - 4096
Identification Energy Tolerance	:	1.000 keV
Sample Size	:	0.000E+00 Unit
Sample Taken On	:	
Acquisition Started	:	1-02-96 8:29:38 AM
Live Time	:	80000.0 seconds
Real Time	:	80016.7 seconds

Energy Calibration Used Done On	:	12-19-95
Efficiency Calibration Used Done On	:	????????

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-474
Peak Locate Performed on: 1-05-96 3:58:40 PM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 3.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	31.84	0.2056	5.43	6.31
2	37.37	0.0971	6.25	6.11
3	63.59	0.0467	10.78	25.98
4	76.52	0.0607	13.01	21.95
5	89.35	0.0488	15.36	12.84
6	94.83	0.0478	16.15	27.08
7	104.39	0.0757	17.79	7.63
8	110.93	0.0838	18.92	14.55
9	115.00	<NA>	19.64	<NA>
10	149.89	0.0950	25.63	11.31
11	159.87	0.1226	27.36	8.64
12	213.99	0.6285	36.64	3.26
13	271.46	0.0260	46.52	42.34
14	291.99	0.1527	50.05	6.78
15	310.32	0.0613	53.20	16.30
16	368.85	0.0303	63.27	30.59
17	394.38	0.1408	67.66	6.70
18	435.94	0.0259	74.80	34.70
19	449.16	0.0199	77.08	43.84
20	462.07	0.0826	79.31	10.72
21	472.20	0.0928	81.06	8.60
22	488.10	0.0742	83.77	12.97
23	508.78	0.1046	87.33	13.12
24	523.35	0.1333	89.83	9.90
25	539.13	0.0996	92.54	11.45
26	552.27	0.3031	94.80	4.11
27	573.31	0.3729	98.42	4.25
28	580.00	0.0000	99.57	3.57
29	657.16	0.2084	112.84	3.99
30	818.00	<NA>	140.49	<NA>
31	837.65	0.2700	143.87	5.98
32	897.89	0.7970	154.23	3.32
33	1083.32	0.1437	186.11	7.41
34	1349.00	<NA>	231.78	<NA>
35	1389.66	0.3543	238.78	4.37
36	1409.37	0.0977	242.16	9.29
37	1719.04	0.1099	295.41	12.17
38	2048.96	0.1056	352.13	11.24
39	3547.81	0.4923	609.83	5.37

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: NOPI-474
Peak Analysis Performed on: 1-05-96 3:58:50 PM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	26-	42	32.45	5.43	9.39E+02	108.54	4.42E+03
m	2	26-	42	37.23	6.25	1.09E+03	116.72	4.13E+03
	3	58-	68	63.59	10.78	3.57E+03	136.46	6.24E+03
	4	71-	81	76.52	13.01	1.37E+04	168.04	6.07E+03
M	5	84-	120	90.21	15.36	8.19E+03	895.19	6.29E+03
m	6	84-	120	94.79	16.15	1.22E+04	1003.05	5.76E+03
m	7	84-	120	104.35	17.79	1.31E+03	543.76	4.96E+03
m	8	84-	120	110.93	18.92	3.09E+03	668.81	4.67E+03
m	9	84-	120	115.12	19.64	1.61E+03	573.80	4.08E+03
M	10	144-	164	149.95	25.63	1.42E+03	97.31	2.64E+03
m	11	144-	164	160.00	27.36	1.14E+03	82.36	2.44E+03
	12	210-	218	213.99	36.64	3.35E+02	72.85	2.33E+03
	13	266-	276	271.46	46.52	1.84E+04	159.01	2.90E+03
	14	286-	296	291.99	50.05	1.14E+03	87.08	2.71E+03
	15	305-	315	310.32	53.20	3.27E+03	99.82	2.81E+03
	16	363-	373	368.85	63.27	1.05E+04	135.28	3.26E+03
	17	389-	399	394.38	67.66	1.35E+03	95.58	3.26E+03
	18	430-	440	435.94	74.80	1.82E+04	165.73	3.89E+03
	19	444-	454	449.16	77.08	3.27E+04	204.27	3.80E+03
M	20	457-	477	462.15	79.31	1.72E+03	153.09	3.41E+03
m	21	457-	477	472.34	81.06	1.70E+03	152.64	2.92E+03
	22	483-	493	488.10	83.77	4.44E+03	106.41	2.89E+03
	23	503-	513	508.78	87.33	1.02E+04	135.44	3.40E+03
	24	518-	528	523.35	89.83	4.10E+03	108.54	3.23E+03
	25	534-	544	539.13	92.54	1.27E+04	142.82	3.20E+03
	26	548-	557	552.27	94.80	9.76E+02	86.09	2.79E+03
	27	568-	582	573.31	98.42	7.98E+02	100.03	3.16E+03
	29	652-	662	657.16	112.84	4.21E+02	76.06	2.25E+03
	30	815-	820	818.00	140.49	1.56E+01	44.21	1.09E+03
	31	832-	842	837.65	143.87	1.38E+03	78.33	2.00E+03
	32	892-	902	897.89	154.23	6.01E+02	72.56	1.96E+03
	33	1078-	1088	1083.32	186.11	1.05E+04	120.91	1.74E+03
	34	1346-	1351	1349.00	231.78	-3.88E+01	33.51	6.58E+02
	35	1385-	1393	1389.66	238.78	9.23E+02	53.38	9.05E+02
	36	1405-	1413	1409.37	242.16	7.81E+03	101.08	1.13E+03
	37	1715-	1723	1719.04	295.41	1.45E+04	132.84	1.47E+03
	38	2044-	2052	2048.96	352.13	1.93E+04	161.48	3.19E+03
	39	3543-	3551	3547.81	609.83	7.42E+03	116.19	2.81E+03

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

****
***** B A C K G R O U N D S U B T R A C T R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-474
Peak Analysis Performed on: 1-05-96 3:58:40 PM

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
M	1	5.43	9.39E+02	108.54			9.39E+02	1.09E+02
m	2	6.25	1.09E+03	116.72			1.09E+03	1.17E+02
	3	10.78	3.57E+03	136.46	1.54E+02	3.60E+01	3.42E+03	1.41E+02
	4	13.01	1.37E+04	168.04	4.47E+01	2.75E+01	1.37E+04	1.70E+02
M	5	15.36	8.19E+03	895.19			8.19E+03	8.95E+02
m	6	16.15	1.22E+04	1003.05			1.22E+04	1.00E+03
m	7	17.79	1.31E+03	543.76			1.31E+03	5.44E+02
m	8	18.92	3.09E+03	668.81			3.09E+03	6.69E+02
m	9	19.64	1.61E+03	573.80			1.61E+03	5.74E+02
M	10	25.63	1.42E+03	97.31			1.42E+03	9.73E+01
m	11	27.36	1.14E+03	82.36			1.14E+03	8.24E+01
	12	36.64	3.35E+02	72.85			3.35E+02	7.29E+01
	13	46.52	1.84E+04	159.01			1.84E+04	1.59E+02
	14	50.05	1.14E+03	87.08			1.14E+03	8.71E+01
	15	53.20	3.27E+03	99.82			3.27E+03	9.98E+01
	16	63.27	1.05E+04	135.28	5.19E+01	2.82E+01	1.05E+04	1.38E+02
	17	67.66	1.35E+03	95.58			1.35E+03	9.56E+01
	18	74.80	1.82E+04	165.73			1.82E+04	1.66E+02
	19	77.08	3.27E+04	204.27			3.27E+04	2.04E+02
M	20	79.31	1.72E+03	153.09			1.72E+03	1.53E+02
m	21	81.06	1.70E+03	152.64			1.70E+03	1.53E+02
	22	83.77	4.44E+03	106.41			4.44E+03	1.06E+02
	23	87.33	1.02E+04	135.44			1.02E+04	1.35E+02
	24	89.83	4.10E+03	108.54			4.10E+03	1.09E+02
	25	92.54	1.27E+04	142.82			1.27E+04	1.43E+02
	26	94.80	9.76E+02	86.09			9.76E+02	8.61E+01
	27	98.42	7.98E+02	100.03			7.98E+02	1.00E+02
	28	99.57	0.00E+00	0.00			0.00E+00	0.00E+00
	29	112.84	4.21E+02	76.06	-1.31E+01	1.36E+01	4.34E+02	7.73E+01
	30	140.49	1.56E+01	44.21			1.56E+01	4.42E+01
	31	143.87	1.38E+03	78.33			1.38E+03	7.83E+01
	32	154.23	6.01E+02	72.56			6.01E+02	7.26E+01
	33	186.11	1.05E+04	120.91	1.49E+02	3.34E+01	1.03E+04	1.25E+02
	34	231.78	-3.88E+01	33.51			-3.88E+01	3.35E+01
	35	238.78	9.23E+02	53.38	-1.27E+01	1.27E+01	9.36E+02	5.49E+01
	36	242.16	7.81E+03	101.08			7.81E+03	1.01E+02
	37	295.41	1.45E+04	132.84			1.45E+04	1.33E+02
	38	352.13	1.93E+04	161.48			1.93E+04	1.61E+02
	39	609.83	7.42E+03	116.19			7.42E+03	1.16E+02

M - First peak in a multiplet region
m - Other peak in a multiplet region

Errors quoted at 1.000 sigma

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*************************************************************************
*****          A R E A   C O R R E C T I O N   R E P O R T          *****
*****      R E F E R E N C E   P E A K / B K G . S U B T R A C T    *****
*************************************************************************
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Detector Name: DET01
Sample Title: NOPI-474
Peak Analysis Performed on: 1-05-96 3:58:40 PM

Ref. Peak Energy: 0.00; Reference Date:
Peak Ratio: 0.00; Uncertainty: 0.00
Background File : E:\GENIEPC\CAMFILES\BG122895.CNF

Corrected area is: Original * Peak Ratio - Background

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
M	1	5.43	9.39E+02	108.54			9.39E+02	1.09E+02
m	2	6.25	1.09E+03	116.72			1.09E+03	1.17E+02
	3	10.78	3.57E+03	136.46	1.54E+02	3.60E+01	3.42E+03	1.41E+02
	4	13.01	1.37E+04	168.04	4.47E+01	2.75E+01	1.37E+04	1.70E+02
M	5	15.36	8.19E+03	895.19			8.19E+03	8.95E+02
m	6	16.15	1.22E+04	1003.05			1.22E+04	1.00E+03
m	7	17.79	1.31E+03	543.76			1.31E+03	5.44E+02
m	8	18.92	3.09E+03	668.81			3.09E+03	6.69E+02
m	9	19.64	1.61E+03	573.80			1.61E+03	5.74E+02
	10	25.63	1.42E+03	97.31			1.42E+03	9.73E+01
m	11	27.36	1.14E+03	82.36			1.14E+03	8.24E+01
	12	36.64	3.35E+02	72.85			3.35E+02	7.29E+01
	13	46.52	1.84E+04	159.01			1.84E+04	1.59E+02
	14	50.05	1.14E+03	87.08			1.14E+03	8.71E+01
	15	53.20	3.27E+03	99.82			3.27E+03	9.98E+01
	16	63.27	1.05E+04	135.28	5.19E+01	2.82E+01	1.05E+04	1.38E+02
	17	67.66	1.35E+03	95.58			1.35E+03	9.56E+01
	18	74.80	1.82E+04	165.73			1.82E+04	1.66E+02
	19	77.08	3.27E+04	204.27			3.27E+04	2.04E+02
M	20	79.31	1.72E+03	153.09			1.72E+03	1.53E+02
m	21	81.06	1.70E+03	152.64			1.70E+03	1.53E+02
	22	83.77	4.44E+03	106.41			4.44E+03	1.06E+02
	23	87.33	1.02E+04	135.44			1.02E+04	1.35E+02
	24	89.83	4.10E+03	108.54			4.10E+03	1.09E+02
	25	92.54	1.27E+04	142.82			1.27E+04	1.43E+02
	26	94.80	9.76E+02	86.09			9.76E+02	8.61E+01
	27	98.42	7.98E+02	100.03			7.98E+02	1.00E+02
	28	99.57	0.00E+00	0.00			0.00E+00	0.00E+00
	29	112.84	4.21E+02	76.06	-1.31E+01	1.36E+01	4.34E+02	7.73E+01
	30	140.49	1.56E+01	44.21			1.56E+01	4.42E+01
	31	143.87	1.38E+03	78.33			1.38E+03	7.83E+01
	32	154.23	6.01E+02	72.56			6.01E+02	7.26E+01
	33	186.11	1.05E+04	120.91	1.49E+02	3.34E+01	1.03E+04	1.25E+02
	34	231.78	-3.88E+01	33.51			-3.88E+01	3.35E+01
	35	238.78	9.23E+02	53.38	-1.27E+01	1.27E+01	9.36E+02	5.49E+01
	36	242.16	7.81E+03	101.08			7.81E+03	1.01E+02
	37	295.41	1.45E+04	132.84			1.45E+04	1.33E+02
	38	352.13	1.93E+04	161.48			1.93E+04	1.61E+02
	39	609.83	7.42E+03	116.19			7.42E+03	1.16E+02

M First peak in a multiplet region
Other peak in a multiplet region

Errors quoted at 1.000 sigma

Center for Nuclear Waste Regulatory Analyses
6220 CULEBRA ROAD • P.O. DRAWER 28510 • SAN ANTONIO, TEXAS, U.S.A. 78228-0510
(210) 522-5160 • FAX (210) 522-5184

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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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Report Generated On	:	1-02-96 4:41:48 PM
Sample Title	:	NOPI-475-GAM1
Spectrum Description	:	NOPI-475-GAM1
Sample Identification	:	NP475
Sample Type	:	
Sample Geometry	:	
Peak Locate Threshold	:	2.00
Peak Locate Range (in channels)	:	1 - 4096
Peak Area Range (in channels)	:	1 - 4096
Identification Energy Tolerance	:	1.000 keV
Sample Size	:	0.000E+00 Unit
Sample Taken On	:	
Acquisition Started	:	12-29-95 3:28:29 PM
Live Time	:	80000.0 seconds
Real Time	:	80012.8 seconds

NP475.CNF

Energy Calibration Used Done On	:	12-19-95
Efficiency Calibration Used Done On	:	????????

Center for Nuclear Waste
Regulatory Analyses

****
***** P E A K L O C A T E R E P O R T *****
****

6220 CULEBRA ROAD • P.O. DRAWER 28510 • SAN ANTONIO, TEXAS, U.S.A. 78228-0510
(210) 522-5160 • FAX (210) 522-5184

Detector Name: DET01
Sample Title: NOPI-475-GAM1
Peak Locate Performed on: 1-02-96 4:40:51 PM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 2.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	31.60	0.2809	5.40	4.26
2	37.38	0.0867	6.24	6.78
3	46.99	0.6261	7.93	2.03
4	63.57	0.0255	10.78	20.85
5	76.46	0.0710	13.00	19.43
6	89.30	0.0517	15.34	13.52
7	94.75	0.0512	16.15	25.31
8	104.43	0.0706	17.83	7.49
9	110.91	0.0989	18.93	13.79
10	115.00	<NA>	19.64	<NA>
11	149.68	0.1211	25.61	9.92
12	159.84	0.1401	27.34	6.83
13	214.67	0.2293	36.76	2.86
14	222.00	<NA>	38.02	<NA>
15	259.00	<NA>	44.38	<NA>
16	262.00	<NA>	45.00	<NA>
17	271.35	0.0275	46.50	38.18
18	291.96	0.1567	50.05	5.97
19	310.24	0.0718	53.19	14.21
20	341.00	<NA>	58.48	<NA>
21	368.74	0.0374	63.25	26.37
22	394.31	0.1469	67.64	6.84
23	435.85	0.0320	74.79	27.57
24	449.08	0.0235	77.06	37.04
25	461.75	0.1109	79.28	8.97
26	472.12	0.0989	81.05	8.04
27	488.06	0.0888	83.80	9.53
28	498.96	0.4919	85.64	2.45
29	508.37	0.2492	87.17	9.01
30	523.14	0.0966	89.79	8.86
31	538.93	0.1115	92.51	10.25
32	552.05	0.2230	94.76	4.06
33	567.34	0.3131	97.53	2.01
34	573.05	0.2232	98.36	5.27
35	657.43	0.1140	112.88	4.69
36	706.00	<NA>	121.23	<NA>
37	745.54	0.2094	128.01	2.37
38	751.19	0.8584	128.91	2.05
39	758.66	0.2650	130.30	2.39
40	837.16	0.4674	143.78	3.96
41	869.00	0.0000	149.26	2.29

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	898.33	0.2381	154.30	2.74
43	917.00	0.0000	157.51	2.08
44	951.08	0.6116	163.37	2.59
45	977.00	0.0000	167.83	2.27
46	1083.19	0.2337	186.08	6.63
47	1194.87	0.4662	205.29	2.16
48	1373.81	0.4261	236.05	2.07
49	1389.31	0.4921	238.72	2.84
50	1408.74	0.1186	242.06	8.95
51	1430.71	0.3056	245.83	2.31
52	1475.71	0.3262	253.57	2.16
53	1482.00	<NA>	254.63	<NA>
54	1491.11	0.4515	256.27	2.15
55	1521.95	0.3862	261.52	3.06
56	1578.94	0.6675	271.32	2.39
57	1640.07	0.4612	281.83	2.42
58	1718.62	0.1400	295.33	9.62
59	1747.23	0.3793	300.25	2.11
60	1808.00	0.0001	310.70	2.14
61	1842.33	0.3166	316.60	2.06
62	1922.22	0.2927	330.34	2.78
63	2048.66	0.1353	352.08	10.90
64	2169.00	0.0002	372.77	2.00
65	2295.73	0.2647	394.56	2.80
66	2302.82	0.3972	395.78	2.23
67	2343.00	0.0001	402.68	2.17
68	2393.88	0.4506	411.43	2.24
69	2503.16	0.4631	430.22	2.00
70	2573.00	0.0001	442.23	2.38
71	2645.00	<NA>	454.61	<NA>
72	2671.16	0.3741	459.10	2.52
73	2770.86	0.5477	476.25	2.20
74	2812.00	<NA>	483.32	<NA>
75	2868.00	<NA>	492.95	<NA>
76	2871.82	0.4216	493.60	2.10
77	3009.15	0.4113	517.24	2.32
78	3012.97	0.6041	517.87	2.04
79	3092.05	0.5173	531.47	2.27
80	3148.00	<NA>	541.09	<NA>
81	3200.19	0.4306	550.06	2.04
82	3324.19	0.3663	571.38	2.42
83	3355.35	0.3044	576.74	2.05
84	3547.21	0.5520	609.73	4.48
85	3565.88	0.4945	612.93	2.05
86	3650.00	<NA>	627.40	<NA>
87	3671.00	<NA>	631.01	<NA>
88	3699.00	<NA>	635.82	<NA>
89	3737.03	0.7787	642.36	2.06
90	3742.92	0.5174	643.37	2.14
91	3758.99	0.5829	646.14	2.20

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
92	3778.00	0.0001	649.41	2.67
93	3793.12	0.4652	652.00	2.19
94	3949.00	<NA>	678.81	<NA>
95	3973.86	0.4518	683.08	2.15

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: NOPI-475-GAM1
Peak Analysis Performed on: 1-02-96 4:41:16 PM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	28-	49	32.29	5.40	4.70E+02	85.30	3.31E+03
m	2	28-	49	37.19	6.24	7.50E+02	118.75	3.13E+03
	4	58-	67	63.57	10.78	3.25E+03	109.10	3.84E+03
	5	71-	81	76.46	13.00	1.07E+04	146.53	4.49E+03
M	6	84-	120	90.10	15.34	6.34E+03	687.17	4.42E+03
m	7	84-	120	94.78	16.15	9.44E+03	772.81	4.31E+03
m	8	84-	120	104.55	17.83	1.20E+03	413.87	3.63E+03
m	9	84-	120	110.99	18.93	2.27E+03	498.17	3.09E+03
m	10	84-	120	115.11	19.64	1.23E+03	426.15	2.95E+03
M	11	145-	164	149.82	25.61	9.28E+02	85.15	1.83E+03
m	12	145-	164	159.88	27.34	6.21E+02	61.92	1.75E+03
	13	209-	224	214.67	36.76	1.94E+02	97.38	3.08E+03
	16	256-	276	262.63	45.00	4.73E+01	42.23	1.85E+03
m	17	256-	276	271.34	46.50	1.37E+04	177.96	1.63E+03
	18	286-	296	291.96	50.05	8.19E+02	73.00	1.89E+03
	19	305-	315	310.24	53.19	2.25E+03	83.60	1.99E+03
	20	336-	343	341.00	58.48	1.83E+01	56.55	1.57E+03
	21	363-	373	368.74	63.25	7.85E+03	115.77	2.34E+03
	22	389-	399	394.31	67.64	1.02E+03	82.15	2.40E+03
	23	430-	440	435.85	74.79	1.24E+04	138.61	2.88E+03
	24	444-	454	449.08	77.06	2.25E+04	169.77	2.65E+03
M	25	457-	477	462.01	79.28	1.19E+03	114.00	2.37E+03
m	26	457-	477	472.26	81.05	1.27E+03	117.04	2.11E+03
M	27	483-	513	488.25	83.80	3.40E+03	192.47	2.86E+03
m	29	483-	513	507.86	87.17	6.94E+03	227.27	2.89E+03
	30	518-	528	523.14	89.79	3.02E+03	91.40	2.24E+03
	31	533-	543	538.93	92.51	9.60E+03	123.30	2.36E+03
	32	547-	557	552.05	94.76	3.52E+02	82.40	2.59E+03
M	33	563-	578	568.14	97.53	1.48E+02	30.68	1.66E+03
m	34	563-	578	572.98	98.36	4.81E+02	71.59	1.67E+03
	35	652-	661	657.43	112.88	4.15E+02	60.89	1.46E+03
	36	701-	708	706.00	121.23	-5.42E+01	46.11	1.07E+03
M	37	742-	763	745.43	128.01	7.20E+01	37.60	8.96E+02
m	38	742-	763	750.63	128.91	4.39E+01	27.40	8.94E+02
m	39	742-	763	758.72	130.30	1.20E+02	57.01	8.91E+02
	40	832-	842	837.16	143.78	1.04E+03	67.47	1.48E+03
	41	866-	871	869.00	149.26	-9.74E+00	37.19	7.86E+02
	42	893-	903	898.33	154.30	5.11E+02	62.19	1.40E+03

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	43	914-	919	917.00	157.51	-1.50E+00	37.70	8.06E+02
	44	946-	956	951.08	163.37	3.91E+02	58.43	1.26E+03
	45	974-	979	977.00	167.83	3.62E+01	34.61	6.55E+02
	46	1078-	1088	1083.19	186.08	7.36E+03	103.05	1.37E+03
	47	1190-	1198	1194.87	205.29	2.02E+02	44.96	8.53E+02
	48	1369-	1377	1373.81	236.05	3.43E+02	42.93	7.05E+02
	49	1385-	1393	1389.31	238.72	8.99E+02	48.29	6.73E+02
	50	1404-	1412	1408.74	242.06	5.15E+03	83.51	8.59E+02
	51	1427-	1433	1430.71	245.83	-1.63E+01	29.25	4.59E+02
M	53	1472-	1495	1481.86	254.63	1.75E+01	24.43	8.72E+02
m	54	1472-	1495	1491.43	256.27	1.71E+02	77.30	8.60E+02
	55	1518-	1524	1521.95	261.52	1.33E+01	27.79	4.01E+02
	56	1575-	1582	1578.94	271.32	1.60E+02	37.61	6.23E+02
	57	1637-	1642	1640.07	281.83	-9.56E+00	25.96	3.85E+02
	58	1714-	1722	1718.62	295.33	9.80E+03	110.73	1.15E+03
	59	1743-	1751	1747.23	300.25	1.25E+02	33.06	4.51E+02
	60	1805-	1810	1808.00	310.70	-1.57E+01	23.76	3.28E+02
	61	1839-	1845	1842.33	316.60	2.66E+01	25.91	3.38E+02
	62	1918-	1926	1922.22	330.34	8.00E+01	32.53	4.57E+02
	63	2044-	2052	2048.66	352.08	1.38E+04	133.92	1.92E+03
	64	2166-	2171	2169.00	372.77	3.04E+01	22.38	2.65E+02
	65	2292-	2304	2295.73	394.56	-5.27E+01	41.57	6.72E+02
	67	2340-	2345	2343.00	402.68	8.80E+00	23.99	3.16E+02
	68	2391-	2396	2393.88	411.43	2.44E+00	23.56	3.11E+02
	69	2499-	2507	2503.16	430.22	4.86E+01	29.79	3.92E+02
	70	2570-	2575	2573.00	442.23	-1.32E+01	20.07	2.37E+02
	71	2641-	2647	2645.00	454.61	6.03E+00	23.41	2.87E+02
	72	2668-	2675	2671.16	459.10	2.70E+01	23.44	2.60E+02
	73	2768-	2773	2770.86	476.25	-1.13E+01	18.74	2.04E+02
	74	2809-	2814	2812.00	483.32	-1.88E+00	18.57	1.96E+02
	76	2865-	2874	2871.82	493.60	-4.01E+01	27.34	3.49E+02
M	77	3006-	3016	3009.26	517.24	8.53E+00	14.45	1.45E+02
m	78	3006-	3016	3012.93	517.87	8.17E+00	13.86	1.39E+02
	79	3088-	3096	3092.05	531.47	1.23E+01	23.84	2.58E+02
	80	3144-	3152	3148.00	541.09	1.65E+01	23.73	2.55E+02
	81	3197-	3202	3200.19	550.06	-8.29E+00	17.13	1.67E+02
	82	3321-	3327	3324.19	571.38	3.15E+01	18.90	1.72E+02
	83	3353-	3357	3355.35	576.74	-2.54E+01	14.65	1.44E+02
	84	3543-	3551	3547.21	609.73	5.51E+03	96.03	1.74E+03
	85	3563-	3567	3565.88	612.93	2.92E+00	13.82	1.13E+02
	86	3648-	3652	3650.00	627.40	-1.57E+01	13.98	1.28E+02
	87	3667-	3673	3671.00	631.01	-4.00E+00	17.83	1.70E+02
	88	3695-	3703	3699.00	635.82	2.71E+01	21.30	2.00E+02
	90	3733-	3745	3742.92	643.37	2.94E+01	28.30	2.93E+02
	91	3756-	3761	3758.99	646.14	6.24E+00	15.80	1.38E+02
	92	3774-	3780	3778.00	649.41	2.26E+01	18.23	1.62E+02

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
93	3789-	3795	3793.12	652.00	-1.15E+01	17.18	1.62E+02
94	3946-	3951	3949.00	678.81	6.89E+00	15.48	1.31E+02
95	3970-	3976	3973.86	683.08	-1.29E+01	17.01	1.59E+02

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

****
***** B A C K G R O U N D S U B T R A C T R E P O R T *****
****

Detector Name: DET01
Sample Title: NOPI-475-GAM1
Peak Analysis Performed on: 1-02-96 4:40:51 PM

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
M	1	5.40	4.70E+02	85.30			4.70E+02	8.53E+01
m	2	6.24	7.50E+02	118.75			7.50E+02	1.19E+02
m	3	7.93	0.00E+00	0.00			0.00E+00	0.00E+00
	4	10.78	3.25E+03	109.10	1.54E+02	3.60E+01	3.10E+03	1.15E+02
	5	13.00	1.07E+04	146.53	4.47E+01	2.75E+01	1.07E+04	1.49E+02
M	6	15.34	6.34E+03	687.17			6.34E+03	6.87E+02
m	7	16.15	9.44E+03	772.81			9.44E+03	7.73E+02
m	8	17.83	1.20E+03	413.87			1.20E+03	4.14E+02
m	9	18.93	2.27E+03	498.17			2.27E+03	4.98E+02
m	10	19.64	1.23E+03	426.15			1.23E+03	4.26E+02
M	11	25.61	9.28E+02	85.15			9.28E+02	8.51E+01
m	12	27.34	6.21E+02	61.92			6.21E+02	6.19E+01
	13	36.76	1.94E+02	97.38			1.94E+02	9.74E+01
	14	38.02	0.00E+00	0.00			0.00E+00	0.00E+00
m	15	44.38	0.00E+00	0.00			0.00E+00	0.00E+00
	16	45.00	4.73E+01	42.23			4.73E+01	4.22E+01
	17	46.50	1.37E+04	177.96			1.37E+04	1.78E+02
	18	50.05	8.19E+02	73.00			8.19E+02	7.30E+01
	19	53.19	2.25E+03	83.60			2.25E+03	8.36E+01
	20	58.48	1.83E+01	56.55			1.83E+01	5.66E+01
	21	63.25	7.85E+03	115.77	5.19E+01	2.82E+01	7.79E+03	1.19E+02
	22	67.64	1.02E+03	82.15			1.02E+03	8.22E+01
	23	74.79	1.24E+04	138.61			1.24E+04	1.39E+02
	24	77.06	2.25E+04	169.77			2.25E+04	1.70E+02
M	25	79.28	1.19E+03	114.00			1.19E+03	1.14E+02
m	26	81.05	1.27E+03	117.04			1.27E+03	1.17E+02
M	27	83.80	3.40E+03	192.47			3.40E+03	1.92E+02
m	28	85.64	0.00E+00	0.00			0.00E+00	0.00E+00
m	29	87.17	6.94E+03	227.27			6.94E+03	2.27E+02
	30	89.79	3.02E+03	91.40			3.02E+03	9.14E+01
	31	92.51	9.60E+03	123.30			9.60E+03	1.23E+02
	32	94.76	3.52E+02	82.40			3.52E+02	8.24E+01
M	33	97.53	1.48E+02	30.68			1.48E+02	3.07E+01
m	34	98.36	4.81E+02	71.59			4.81E+02	7.16E+01
	35	112.88	4.15E+02	60.89	-1.31E+01	1.36E+01	4.28E+02	6.24E+01
	36	121.23	-5.42E+01	46.11			-5.42E+01	4.61E+01
M	37	128.01	7.20E+01	37.60	-2.79E-01	3.33E+01	7.23E+01	5.02E+01
m	38	128.91	4.39E+01	27.40	-2.79E-01	3.33E+01	4.42E+01	4.31E+01
m	39	130.30	1.20E+02	57.01	0.00E+00	0.00E+00	1.20E+02	5.70E+01
	40	143.78	1.04E+03	67.47			1.04E+03	6.75E+01
	41	149.26	-9.74E+00	37.19			-9.74E+00	3.72E+01
	42	154.30	5.11E+02	62.19			5.11E+02	6.22E+01

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
	43	157.51	-1.50E+00	37.70			-1.50E+00	3.77E+01
	44	163.37	3.91E+02	58.43			3.91E+02	5.84E+01
	45	167.83	3.62E+01	34.61			3.62E+01	3.46E+01
	46	186.08	7.36E+03	103.05	1.49E+02	3.34E+01	7.21E+03	1.08E+02
	47	205.29	2.02E+02	44.96	5.26E+00	1.33E+01	1.97E+02	4.69E+01
	48	236.05	3.43E+02	42.93			3.43E+02	4.29E+01
	49	238.72	8.99E+02	48.29	-1.27E+01	1.27E+01	9.12E+02	4.99E+01
	50	242.06	5.15E+03	83.51			5.15E+03	8.35E+01
	51	245.83	-1.63E+01	29.25			-1.63E+01	2.93E+01
m	52	253.57	0.00E+00	0.00			0.00E+00	0.00E+00
M	53	254.63	1.75E+01	24.43			1.75E+01	2.44E+01
m	54	256.27	1.71E+02	77.30			1.71E+02	7.73E+01
	55	261.52	1.33E+01	27.79			1.33E+01	2.78E+01
	56	271.32	1.60E+02	37.61			1.60E+02	3.76E+01
	57	281.83	-9.56E+00	25.96			-9.56E+00	2.60E+01
	58	295.33	9.80E+03	110.73			9.80E+03	1.11E+02
	59	300.25	1.25E+02	33.06			1.25E+02	3.31E+01
	60	310.70	-1.57E+01	23.76			-1.57E+01	2.38E+01
	61	316.60	2.66E+01	25.91			2.66E+01	2.59E+01
	62	330.34	8.00E+01	32.53			8.00E+01	3.25E+01
	63	352.08	1.38E+04	133.92			1.38E+04	1.34E+02
	64	372.77	3.04E+01	22.38			3.04E+01	2.24E+01
	65	394.56	-5.27E+01	41.57			-5.27E+01	4.16E+01
	66	395.78	0.00E+00	0.00			0.00E+00	0.00E+00
	67	402.68	8.80E+00	23.99			8.80E+00	2.40E+01
	68	411.43	2.44E+00	23.56			2.44E+00	2.36E+01
	69	430.22	4.86E+01	29.79			4.86E+01	2.98E+01
	70	442.23	-1.32E+01	20.07			-1.32E+01	2.01E+01
	71	454.61	6.03E+00	23.41			6.03E+00	2.34E+01
	72	459.10	2.70E+01	23.44			2.70E+01	2.34E+01
	73	476.25	-1.13E+01	18.74			-1.13E+01	1.87E+01
	74	483.32	-1.88E+00	18.57			-1.88E+00	1.86E+01
	75	492.95	0.00E+00	0.00			0.00E+00	0.00E+00
	76	493.60	-4.01E+01	27.34			-4.01E+01	2.73E+01
M	77	517.24	8.53E+00	14.45			8.53E+00	1.44E+01
m	78	517.87	8.17E+00	13.86			8.17E+00	1.39E+01
	79	531.47	1.23E+01	23.84			1.23E+01	2.38E+01
	80	541.09	1.65E+01	23.73			1.65E+01	2.37E+01
	81	550.06	-8.29E+00	17.13			-8.29E+00	1.71E+01
	82	571.38	3.15E+01	18.90			3.15E+01	1.89E+01
	83	576.74	-2.54E+01	14.65			-2.54E+01	1.47E+01
	84	609.73	5.51E+03	96.03			5.51E+03	9.60E+01
	85	612.93	2.92E+00	13.82			2.92E+00	1.38E+01
	86	627.40	-1.57E+01	13.98			-1.57E+01	1.40E+01
	87	631.01	-4.00E+00	17.83			-4.00E+00	1.78E+01
	88	635.82	2.71E+01	21.30			2.71E+01	2.13E+01
	89	642.36	0.00E+00	0.00			0.00E+00	0.00E+00
	90	643.37	2.94E+01	28.30			2.94E+01	2.83E+01
	91	646.14	6.24E+00	15.80			6.24E+00	1.58E+01
	92	649.41	2.26E+01	18.23			2.26E+01	1.82E+01

Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
93	652.00	-1.15E+01	17.18			-1.15E+01	1.72E+01
94	678.81	6.89E+00	15.48			6.89E+00	1.55E+01
95	683.08	-1.29E+01	17.01			-1.29E+01	1.70E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

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*************************************************************************
*****          A R E A   C O R R E C T I O N   R E P O R T          *****
*****     R E F E R E N C E   P E A K / B K G . S U B T R A C T     *****
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Detector Name: DET01
Sample Title: NOPI-475-GAM1
Peak Analysis Performed on: 1-02-96 4:40:51 PM

Ref. Peak Energy: 0.00; Reference Date:
Peak Ratio: 0.00; Uncertainty: 0.00
Background File : E:\GENIEPC\CAMFILES\BG122895.CNF

Corrected area is: Original * Peak Ratio - Background

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
M	1	5.40	4.70E+02	85.30			4.70E+02	8.53E+01
m	2	6.24	7.50E+02	118.75			7.50E+02	1.19E+02
m	3	7.93	0.00E+00	0.00			0.00E+00	0.00E+00
	4	10.78	3.25E+03	109.10	1.54E+02	3.60E+01	3.10E+03	1.15E+02
	5	13.00	1.07E+04	146.53	4.47E+01	2.75E+01	1.07E+04	1.49E+02
M	6	15.34	6.34E+03	687.17			6.34E+03	6.87E+02
m	7	16.15	9.44E+03	772.81			9.44E+03	7.73E+02
m	8	17.83	1.20E+03	413.87			1.20E+03	4.14E+02
m	9	18.93	2.27E+03	498.17			2.27E+03	4.98E+02
	10	19.64	1.23E+03	426.15			1.23E+03	4.26E+02
M	11	25.61	9.28E+02	85.15			9.28E+02	8.51E+01
m	12	27.34	6.21E+02	61.92			6.21E+02	6.19E+01
	13	36.76	1.94E+02	97.38			1.94E+02	9.74E+01
	14	38.02	0.00E+00	0.00			0.00E+00	0.00E+00
m	15	44.38	0.00E+00	0.00			0.00E+00	0.00E+00
M	16	45.00	4.73E+01	42.23			4.73E+01	4.22E+01
m	17	46.50	1.37E+04	177.96			1.37E+04	1.78E+02
	18	50.05	8.19E+02	73.00			8.19E+02	7.30E+01
	19	53.19	2.25E+03	83.60			2.25E+03	8.36E+01
	20	58.48	1.83E+01	56.55			1.83E+01	5.66E+01
	21	63.25	7.85E+03	115.77	5.19E+01	2.82E+01	7.79E+03	1.19E+02
	22	67.64	1.02E+03	82.15			1.02E+03	8.22E+01
	23	74.79	1.24E+04	138.61			1.24E+04	1.39E+02
	24	77.06	2.25E+04	169.77			2.25E+04	1.70E+02
M	25	79.28	1.19E+03	114.00			1.19E+03	1.14E+02
m	26	81.05	1.27E+03	117.04			1.27E+03	1.17E+02
M	27	83.80	3.40E+03	192.47			3.40E+03	1.92E+02
m	28	85.64	0.00E+00	0.00			0.00E+00	0.00E+00
m	29	87.17	6.94E+03	227.27			6.94E+03	2.27E+02
	30	89.79	3.02E+03	91.40			3.02E+03	9.14E+01
	31	92.51	9.60E+03	123.30			9.60E+03	1.23E+02
	32	94.76	3.52E+02	82.40			3.52E+02	8.24E+01
M	33	97.53	1.48E+02	30.68			1.48E+02	3.07E+01
m	34	98.36	4.81E+02	71.59			4.81E+02	7.16E+01
	35	112.88	4.15E+02	60.89	-1.31E+01	1.36E+01	4.28E+02	6.24E+01
	36	121.23	-5.42E+01	46.11			-5.42E+01	4.61E+01
M	37	128.01	7.20E+01	37.60	-2.79E-01	3.33E+01	7.23E+01	5.02E+01
m	38	128.91	4.39E+01	27.40	-2.79E-01	3.33E+01	4.42E+01	4.31E+01
m	39	130.30	1.20E+02	57.01	0.00E+00	0.00E+00	1.20E+02	5.70E+01
	40	143.78	1.04E+03	67.47			1.04E+03	6.75E+01

41	149.26	-9.74E+00	37.19	-9.74E+00	3.72E+01
42	154.30	5.11E+02	62.19	5.11E+02	6.22E+01

	Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
	43	157.51	-1.50E+00	37.70			-1.50E+00	3.77E+01
	44	163.37	3.91E+02	58.43			3.91E+02	5.84E+01
	45	167.83	3.62E+01	34.61			3.62E+01	3.46E+01
	46	186.08	7.36E+03	103.05	1.49E+02	3.34E+01	7.21E+03	1.08E+02
	47	205.29	2.02E+02	44.96	5.26E+00	1.33E+01	1.97E+02	4.69E+01
	48	236.05	3.43E+02	42.93			3.43E+02	4.29E+01
	49	238.72	8.99E+02	48.29	-1.27E+01	1.27E+01	9.12E+02	4.99E+01
	50	242.06	5.15E+03	83.51			5.15E+03	8.35E+01
	51	245.83	-1.63E+01	29.25			-1.63E+01	2.93E+01
m	52	253.57	0.00E+00	0.00			0.00E+00	0.00E+00
M	53	254.63	1.75E+01	24.43			1.75E+01	2.44E+01
m	54	256.27	1.71E+02	77.30			1.71E+02	7.73E+01
	55	261.52	1.33E+01	27.79			1.33E+01	2.78E+01
	56	271.32	1.60E+02	37.61			1.60E+02	3.76E+01
	57	281.83	-9.56E+00	25.96			-9.56E+00	2.60E+01
	58	295.33	9.80E+03	110.73			9.80E+03	1.11E+02
	59	300.25	1.25E+02	33.06			1.25E+02	3.31E+01
	60	310.70	-1.57E+01	23.76			-1.57E+01	2.38E+01
	61	316.60	2.66E+01	25.91			2.66E+01	2.59E+01
	62	330.34	8.00E+01	32.53			8.00E+01	3.25E+01
	63	352.08	1.38E+04	133.92			1.38E+04	1.34E+02
	64	372.77	3.04E+01	22.38			3.04E+01	2.24E+01
	65	394.56	-5.27E+01	41.57			-5.27E+01	4.16E+01
	66	395.78	0.00E+00	0.00			0.00E+00	0.00E+00
	67	402.68	8.80E+00	23.99			8.80E+00	2.40E+01
	68	411.43	2.44E+00	23.56			2.44E+00	2.36E+01
	69	430.22	4.86E+01	29.79			4.86E+01	2.98E+01
	70	442.23	-1.32E+01	20.07			-1.32E+01	2.01E+01
	71	454.61	6.03E+00	23.41			6.03E+00	2.34E+01
	72	459.10	2.70E+01	23.44			2.70E+01	2.34E+01
	73	476.25	-1.13E+01	18.74			-1.13E+01	1.87E+01
	74	483.32	-1.88E+00	18.57			-1.88E+00	1.86E+01
	75	492.95	0.00E+00	0.00			0.00E+00	0.00E+00
	76	493.60	-4.01E+01	27.34			-4.01E+01	2.73E+01
M	77	517.24	8.53E+00	14.45			8.53E+00	1.44E+01
m	78	517.87	8.17E+00	13.86			8.17E+00	1.39E+01
	79	531.47	1.23E+01	23.84			1.23E+01	2.38E+01
	80	541.09	1.65E+01	23.73			1.65E+01	2.37E+01
	81	550.06	-8.29E+00	17.13			-8.29E+00	1.71E+01
	82	571.38	3.15E+01	18.90			3.15E+01	1.89E+01
	83	576.74	-2.54E+01	14.65			-2.54E+01	1.47E+01
	84	609.73	5.51E+03	96.03			5.51E+03	9.60E+01
	85	612.93	2.92E+00	13.82			2.92E+00	1.38E+01
	86	627.40	-1.57E+01	13.98			-1.57E+01	1.40E+01
	87	631.01	-4.00E+00	17.83			-4.00E+00	1.78E+01
	88	635.82	2.71E+01	21.30			2.71E+01	2.13E+01
	89	642.36	0.00E+00	0.00			0.00E+00	0.00E+00
	90	643.37	2.94E+01	28.30			2.94E+01	2.83E+01
	91	646.14	6.24E+00	15.80			6.24E+00	1.58E+01
	92	649.41	2.26E+01	18.23			2.26E+01	1.82E+01

Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Corrected Area	Corrected Uncert.
93	652.00	-1.15E+01	17.18			-1.15E+01	1.72E+01
94	678.81	6.89E+00	15.48			6.89E+00	1.55E+01
95	683.08	-1.29E+01	17.01			-1.29E+01	1.70E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region

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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Report Generated On	:	1-22-96 10:19:57 AM
Sample Title	:	Background
Spectrum Description	:	Background 10/21/96
Sample Identification	:	BG012196
Sample Type	:	
Sample Geometry	:	
Peak Locate Threshold	:	2.00
Peak Locate Range (in channels)	:	1 - 4096
Peak Area Range (in channels)	:	1 - 4096
Identification Energy Tolerance	:	1.000 keV
Sample Size	:	0.000E+00 Unit
Sample Taken On	:	
Acquisition Started	:	1-21-96 11:30:39 AM
Live Time	:	80000.0 seconds
Real Time	:	80002.9 seconds

BG012196.CNF

Energy Calibration Used Done On	:	1-16-96
Efficiency Calibration Used Done On	:	????????

****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: Background
Peak Locate Performed on: 1-22-96 10:19:30 AM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 2.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	37.00	<NA>	6.33	<NA>
2	60.82	0.3314	10.46	2.72
3	115.00	<NA>	19.86	<NA>
4	162.00	<NA>	28.01	<NA>
5	195.33	0.2856	33.79	2.30
6	250.97	0.6935	43.42	2.07
7	259.23	0.3859	44.84	2.10
8	269.23	0.3132	46.69	2.68
9	291.33	0.2975	50.44	2.17
10	366.21	0.2102	63.43	4.36
11	432.64	0.3591	75.01	2.56
12	446.31	0.4817	77.24	2.69
13	481.40	0.2550	83.40	2.21
14	534.11	0.2299	92.59	5.59
15	546.62	0.3599	94.61	2.88
16	634.94	0.3795	110.03	2.88
17	692.99	0.3821	120.10	2.34
18	715.79	0.4996	124.05	2.07
19	829.35	0.3458	143.75	2.94
20	874.84	0.4223	151.64	2.07
21	960.02	0.3379	166.41	2.58
22	1045.75	0.6289	181.28	2.17
23	1072.25	0.2313	185.87	6.24
24	1137.76	0.3619	197.23	3.47
25	1186.91	0.4004	205.76	2.07
26	1212.53	0.4598	210.20	2.21
27	1377.52	0.2163	238.82	4.45
28	1500.41	0.4578	260.13	2.26
29	1689.02	0.6504	292.84	2.05
30	1704.04	0.5382	295.44	3.13
31	1870.16	0.5908	324.25	2.38
32	1901.82	0.3995	329.74	3.25
33	1917.43	0.6553	332.45	2.06
34	1979.49	0.3686	343.21	2.58
35	2007.26	0.5936	348.03	2.18
36	2033.11	0.4232	352.51	3.06
37	2112.44	0.4599	366.27	2.12
38	2297.42	0.6075	398.35	2.28
39	2404.20	0.6495	416.87	2.07
40	2589.48	0.5629	449.00	2.22
41	2638.30	0.8697	457.47	2.05

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
42	2697.98	0.5899	467.82	2.37
43	2758.60	0.6484	478.33	2.03
44	2892.59	0.6368	501.57	2.05
45	2918.89	0.5635	506.13	2.24
46	2948.85	0.7534	511.33	2.77
47	3124.60	0.6755	541.81	2.19
48	3366.78	1.2003	583.81	2.05
49	3517.26	0.5944	609.91	2.98
50	3549.92	0.8030	615.57	2.06
51	3643.99	0.5659	631.89	2.11
52	3663.69	0.6582	635.30	2.04
53	3812.61	0.3830	661.13	3.23
54	3978.05	0.4002	689.82	2.78
55	4028.07	0.8717	698.50	2.33

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: Background
Peak Analysis Performed on: 1-22-96 10:19:43 AM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	35-	39	37.00	6.33	4.00E+01	30.42	5.31E+02
	2	57-	63	60.82	10.46	1.57E+02	30.84	4.18E+02
	3	112-	117	115.00	19.86	-1.92E-01	16.33	1.51E+02
	4	159-	164	162.00	28.01	-1.27E+01	13.39	1.08E+02
	5	192-	200	195.33	33.79	1.36E+01	17.47	1.36E+02
M	6	248-	272	250.87	43.42	6.50E-01	1.97	0.00E+00
m	7	248-	272	259.07	44.84	4.72E-01	1.43	0.00E+00
m	8	248-	272	269.68	46.69	1.16E+01	34.97	0.00E+00
	9	288-	297	291.33	50.44	-1.20E+01	17.25	1.37E+02
	10	360-	372	366.21	63.43	7.25E+01	24.94	2.08E+02
M	11	429-	451	433.01	75.01	4.70E+01	18.87	1.57E+02
m	12	429-	451	445.88	77.24	6.88E+01	25.53	1.85E+02
	13	476-	485	481.40	83.40	-3.10E+01	19.61	1.76E+02
M	14	527-	550	534.38	92.59	2.61E+02	40.07	2.17E+02
m	15	527-	550	546.03	94.61	2.42E+01	13.65	1.74E+02
	16	628-	639	634.94	110.03	9.22E+01	24.61	2.05E+02
	17	688-	699	692.99	120.10	6.68E+00	22.95	2.07E+02
	18	709-	720	715.79	124.05	-2.34E+01	21.69	1.95E+02
	19	824-	834	829.35	143.75	4.83E+01	20.67	1.59E+02
	20	867-	882	874.84	151.64	2.94E+01	26.35	2.22E+02
	21	955-	966	960.02	166.41	-1.96E+01	21.59	1.94E+02
	22	1036-	1051	1045.75	181.28	2.17E+01	25.64	2.08E+02
	23	1066-	1081	1072.25	185.87	1.65E+02	29.24	2.28E+02
	24	1129-	1143	1137.76	197.23	5.02E+01	26.29	2.20E+02
	25	1179-	1192	1186.91	205.76	-8.75E+00	22.76	1.91E+02
	26	1205-	1220	1212.53	210.20	-2.56E+01	24.94	2.16E+02
	27	1367-	1384	1377.52	238.82	7.88E+01	25.29	1.70E+02
	28	1490-	1510	1500.41	260.13	1.45E+01	26.63	1.91E+02
	30	1678-	1713	1704.04	295.44	1.05E+01	40.21	2.89E+02
	31	1862-	1878	1870.16	324.25	-2.18E+01	19.91	1.34E+02
	32	1889-	1925	1901.82	329.74	-2.16E+01	39.05	2.74E+02
	34	1971-	1989	1979.49	343.21	-1.38E+01	20.48	1.28E+02
	35	1995-	2015	2007.26	348.03	4.52E+01	19.53	9.18E+01
	36	2021-	2044	2033.11	352.51	8.80E+01	23.55	1.15E+02
	37	2100-	2124	2112.44	366.27	3.80E+01	23.53	1.25E+02
	38	2288-	2306	2297.42	398.35	-7.13E+00	17.87	9.61E+01
	39	2395-	2413	2404.20	416.87	1.23E+01	16.73	7.87E+01
	40	2576-	2602	2589.48	449.00	1.17E+01	20.88	9.53E+01
	41	2628-	2648	2638.30	457.47	-1.25E+01	17.36	8.65E+01
	42	2684-	2710	2697.98	467.82	1.48E+01	20.36	9.12E+01

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
43	2745-	2769	2758.60	478.33	1.31E+01	19.83	9.09E+01
46	2882-	2971	2948.85	511.33	3.07E+02	72.66	3.83E+02
47	3110-	3138	3124.60	541.81	3.93E+01	19.64	7.47E+01
48	3352-	3377	3366.78	583.81	2.12E+01	16.87	6.18E+01
49	3506-	3532	3517.26	609.91	4.28E+01	19.52	7.72E+01
50	3538-	3562	3549.92	615.57	-1.45E+00	16.76	6.84E+01
53	3799-	3825	3812.61	661.13	-2.10E+01	17.22	6.70E+01
54	3966-	3990	3978.05	689.82	-5.15E+01	19.20	9.25E+01
55	4014-	4044	4028.07	698.50	4.50E+01	10.46	1.40E+01

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

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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BG122895.CNF

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Report Generated On              :  1-02-96 11:42:06 AM

Sample Title                     : bg122895.cnf
Spectrum Description             : empty vial
Sample Identification            : bg122895
Sample Type                      : empty vial
Sample Geometry                  : vial

Peak Locate Threshold            :  2.00
Peak Locate Range (in channels)  :     1 -  4096
Peak Area Range (in channels)    :     1 -  4096
Identification Energy Tolerance  :    1.000 keV

Sample Size                      :   0.000E+00 Unit

Sample Taken On                  :
Acquisition Started              : 12-27-95  2:13:11 PM

Live Time                        :    80000.0 seconds
Real Time                        :    80003.0 seconds


          Energy Calibration Used Done On       : 12-19-95
          Efficiency Calibration Used Done On   : ????????
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****
***** P E A K L O C A T E R E P O R T *****
****

Detector Name: DET01
Sample Title: bg122895.cnf
Peak Locate Performed on: 1-02-96 11:41:42 AM
Peak Locate From Channel: 1
Peak Locate To Channel: 4096
Peak Search Sensitivity: 2.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	61.28	0.2044	10.39	3.52
2	78.10	0.5203	13.28	2.55
3	133.00	<NA>	22.72	<NA>
4	196.00	<NA>	33.55	<NA>
5	356.00	0.0000	61.06	2.52
6	369.12	0.3913	63.28	2.17
7	380.00	<NA>	65.20	<NA>
8	652.00	0.0000	111.95	2.11
9	697.84	0.3297	119.83	2.83
10	748.06	0.4899	128.47	2.33
11	756.00	<NA>	129.83	<NA>
12	761.00	<NA>	130.69	<NA>
13	964.00	<NA>	165.59	<NA>
14	1016.99	0.6306	174.70	2.03
15	1070.00	<NA>	183.82	<NA>
16	1081.37	0.4312	185.77	2.18
17	1130.14	0.6866	194.16	2.20
18	1147.86	0.7708	197.20	2.10
19	1196.27	0.3233	205.53	2.28
20	1394.93	0.4195	239.68	2.66
21	1453.00	<NA>	249.67	<NA>
22	1608.00	<NA>	276.32	<NA>
23	1852.76	0.3435	318.40	2.31
24	1952.24	0.3901	335.50	2.03
25	2032.00	0.0001	349.21	2.09
26	2078.27	0.3409	357.17	2.19
27	2218.00	<NA>	381.19	<NA>
28	2281.98	0.5880	392.19	2.12
29	2288.00	<NA>	393.23	<NA>
30	2384.00	<NA>	409.73	<NA>
31	2613.00	0.0001	449.11	2.30
32	2959.99	0.4840	508.76	2.63
33	2989.00	<NA>	513.75	<NA>
34	3291.00	<NA>	565.67	<NA>
35	3312.00	<NA>	569.29	<NA>

Errors quoted at 1.000 sigma

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

Detector Name: DET01
Sample Title: bg122895.cnf
Peak Analysis Performed on: 1-02-96 11:41:53 AM
Peak Analysis From Channel: 1
Peak Analysis To Channel: 4096

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	57-	65	61.28	10.39	1.54E+02	36.04	5.35E+02
	2	73-	80	78.10	13.28	4.47E+01	27.47	3.53E+02
	3	129-	135	133.00	22.72	1.17E+01	17.25	1.51E+02
	4	191-	198	196.00	33.55	1.06E+01	16.96	1.36E+02
	5	351-	358	356.00	61.06	1.06E+01	15.23	1.08E+02
M	6	364-	382	368.93	63.28	5.19E+01	28.20	1.15E+02
m	7	364-	382	380.11	65.20	7.10E+00	4.38	9.31E+01
	8	649-	654	652.00	111.95	-1.31E+01	13.58	1.11E+02
	9	694-	699	697.84	119.83	1.40E+01	13.81	9.80E+01
	10	745-	763	748.06	128.47	-2.79E-01	33.27	3.23E+02
	13	959-	966	964.00	165.59	2.01E+01	15.29	1.05E+02
	14	1014-	1021	1016.99	174.70	-1.36E+01	15.61	1.28E+02
	16	1067-	1086	1081.37	185.77	1.49E+02	33.36	2.72E+02
	17	1127-	1132	1130.14	194.16	6.97E+00	12.20	7.90E+01
	18	1143-	1151	1147.86	197.20	3.28E+01	18.80	1.49E+02
	19	1193-	1199	1196.27	205.53	5.26E+00	13.33	9.07E+01
	20	1392-	1397	1394.93	239.68	-1.27E+01	12.69	8.57E+01
	21	1451-	1455	1453.00	249.67	3.89E+00	8.81	4.21E+01
	22	1605-	1612	1608.00	276.32	4.06E+00	12.42	7.49E+01
	23	1850-	1856	1852.76	318.40	-8.83E-01	9.47	4.79E+01
	24	1949-	1954	1952.24	335.50	-4.86E-01	8.17	3.65E+01
	25	2030-	2034	2032.00	349.21	-1.23E+01	7.07	3.73E+01
	26	2075-	2082	2078.27	357.17	1.59E+01	10.73	4.91E+01
	27	2215-	2222	2218.00	381.19	-6.49E-01	8.67	3.76E+01
	28	2277-	2290	2281.98	392.19	4.02E+00	13.83	6.60E+01
	30	2382-	2386	2384.00	409.73	-7.19E+00	6.46	2.92E+01
	31	2610-	2614	2613.00	449.11	-2.30E+00	6.29	2.23E+01
	32	2955-	2962	2959.99	508.76	-5.59E+00	12.26	7.36E+01
	33	2986-	2991	2989.00	513.75	-3.13E+00	8.49	3.91E+01
	34	3288-	3293	3291.00	565.67	-8.78E+00	6.31	2.58E+01
	35	3309-	3314	3312.00	569.29	2.31E+00	5.89	1.77E+01

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region

Errors quoted at 1.000 sigma

May 95 measurements					
	keV	T	A/O	CF/CF(DM1B)	CF/CF(DP1B)
DM1B	27.3	0.56287461	1.31472206		1.053123484
	42.9	0.79109682	1.12173935		1.042275682
	48.6	0.83712957	1.09152053		1.035436755
	86.4	0.94777997	1.02705614		1.012983404
	105.2	0.95662124	1.02233776		1.008026072
	122.9	0.96801888	1.01633988		1.007514681
	176.1	1.00291157	0.99854704		1.014525728
	247.7	0.98958471	1.00524409		1.000110166
	427.7	1.04366816	0.97878144		0.998141553
	591.6	1.0035833	0.99821262		1.003431486
	600.4	1.04171643	0.97970431		1.004156889
	635.7	1.01581516	0.99217481		1.022130891
CM1B	27.3	0.62797695	1.25059943	0.951227235	1.00175974
	42.9	0.84724728	1.08517007	0.967399484	1.008296956
	48.6	0.87955472	1.06554196	0.976199649	1.010792997
	86.4	0.94570166	1.02817378	1.001088198	1.01408573
	105.2	0.94565496	1.02819894	1.00573311	1.013805196
	122.9	0.95859839	1.02129052	1.004871044	1.012422329
	176.1	0.9875295	1.00628758	1.007751806	1.022390134
	247.7	0.97513939	1.01264024	1.00735757	1.007468546
	427.7	1.0108926	0.99459293	1.016154258	1.014265789
	591.6	1.01047461	0.99479898	0.996580249	1
	600.4	0.99899825	1.00050121	1.021227731	1.025472862
	635.7	0.98474782	1.00770453	1.015652198	1.038129486
DP1B	27.3	0.63037381	1.24840257	0.949556263	
	42.9	0.86174784	1.07624055	0.95943906	
	48.6	0.89902826	1.05416436	0.965776032	
	86.4	0.9727217	1.01389237	0.987183005	
	105.2	0.9721333	1.01419774	0.992037833	
	122.9	0.98268378	1.00875938	0.992541368	
	176.1	1.03217369	0.98425009	0.985682248	
	247.7	0.98980314	1.00513336	0.999889847	
	427.7	1.03981875	0.98060384	1.001861907	
	591.6	1.01047461	0.99479898	0.996580249	
	600.4	1.05033018	0.97564865	0.995860319	
	635.7	1.06098636	0.97069252	0.978348281	
BL5D	27.3	0.61521711	1.2624783	0.960262504	1.011274994
	42.9	0.84126633	1.08891193	0.970735251	1.011773745
	48.6	0.86356655	1.07513454	0.984987923	1.019892698
	86.4	0.9731097	1.01369115	0.986987081	0.999801532
	105.2	0.96873693	1.01596516	0.993766642	1.001742684
	122.9	0.9732644	1.01361095	0.997314937	1.004809441
	176.1	1.0132267	0.99344439	0.994889932	1.009341433

	247.7	0.9973551	1.00132478	0.996101142	0.996210878
	427.7	1.0511983	0.97524237	0.996384209	0.994532482
	591.6	1.02404019	0.98816914	0.989938536	0.993335496
	600.4	1.02734468	0.9865719	1.007009863	1.011195892
	635.7	1.01721307	0.99149097	0.999310761	1.021426398
W510 5/95	27.3	0.66021765	1.22191669	0.929410651	0.978784183
	42.9	0.85654886	1.07941922	0.962272757	1.002953494
	48.6	0.88925081	1.05983581	0.97097194	1.005380035
	86.4	0.94814815	1.02685849	0.999807556	1.012788461
	105.2	0.94676806	1.02759991	1.00514717	1.013214554
	122.9	0.95652174	1.02239054	1.00595338	1.013512799
	176.1	0.99279279	1.00362101	1.005081359	1.019680897
	247.7	0.97794118	1.01119434	1.005919211	1.006030029
	427.7	1.0030722	0.99846704	1.020112356	1.018216531
	591.6	0.98327759	1.0084556	1.010261322	1.013728019
	600.4	1.01593625	0.99211553	1.012668332	1.016877882
	635.7	0.98717949	1.00646558	1.014403473	1.036853125
FR-A-5	27.3	0.65138593	1.22959176	0.935248438	0.984932094
	42.9	0.8815261	1.0643751	0.948861335	0.988975095
	48.6	0.91875	1.04296897	0.955519331	0.989379835
	86.4	0.97916667	1.01056364	0.983941965	0.996716881
	105.2	0.98920863	1.00543482	0.983466382	0.991359754
	122.9	0.99069767	1.00468021	0.988527783	0.995956254
	176.1	0.99841772	1.00079197	1.002248205	1.01680659
	247.7	1.00714286	0.99644549	0.991247299	0.9913565
	427.7	1.04	0.98051783	1.001774032	0.999912288
	591.6	1.01286174	0.99362375	0.99540291	0.99881862
	600.4	1.04316547	0.97901892	0.999300408	1.003454389
	635.7	1.02272727	0.98880566	0.996604271	1.018660011
FR-A-6	27.3	0.63326226	1.24576933	0.947553378	0.997890715
	42.9	0.86345382	1.07520301	0.958514122	0.99903596
	48.6	0.903125	1.05181221	0.963621096	0.997768701
	86.4	0.96296296	1.01898886	0.992145231	1.005026653
	105.2	0.9676259	1.01654512	0.994333927	1.002314523
	122.9	0.97209302	1.01421865	0.997912867	1.005411864
	176.1	0.96360759	1.01865008	1.020132298	1.034950462
	247.7	0.99285714	1.00358853	0.998353075	0.998463059
	427.7	1.00551724	0.99725148	1.018870448	1.016976931
	591.6	0.99356913	1.00322929	1.005025649	1.008474379
	600.4	1.01798561	0.99111359	1.011645635	1.015850934
	635.7	0.98863636	1.00572523	1.013657289	1.036090428
FR-A-7	27.3	0.71855011	1.174347	0.893228335	0.940679737
	42.9	0.8935743	1.05731785	0.94256999	0.982417779
	48.6	0.921875	1.04122419	0.953920845	0.987724704
	86.4	0.96064815	1.02020785	0.993332109	1.00622894
	105.2	0.9676259	1.01654512	0.994333927	1.002314523

	122.9	0.97209302	1.01421865	0.997912867	1.005411864
	176.1	0.97310127	1.01369552	1.015170526	1.029916617
	247.7	0.97857143	1.01086985	1.005596413	1.005707195
	427.7	0.98896552	1.00555817	1.027357208	1.025447919
	591.6	1	1	1.00179058	1.00522821
	600.4	0.97841727	1.0109492	1.03189216	1.036181622
	635.7	1	1	1.007886902	1.030192337
FR-A-8	27.3	0.7249467	1.16943569	0.889492707	0.936745659
	42.9	0.91064257	1.04753245	0.933846578	0.973325579
	48.6	0.9375	1.03261634	0.946034739	0.97955914
	86.4	0.98611111	1.00700942	0.980481376	0.993211362
	105.2	0.99640288	1.00180289	0.979913807	0.987778665
	122.9	0.99534884	1.00233282	0.98621813	0.993629245
	176.1	0.96677215	1.01699138	1.018471178	1.033265213
	247.7	0.99285714	1.00358853	0.998353075	0.998463059
	427.7	1.02068966	0.98979568	1.011253015	1.009373655
	591.6	1.00643087	0.99679829	0.998583132	1.002009756
	600.4	1.0323741	0.98415404	1.004541914	1.008717684
	635.7	1.01136364	0.99436086	1.002203289	1.024382941
FR-A-5B	27.3	0.57995736	1.29701284	0.986530062	1.038937976
	42.9	0.85140562	1.08258889	0.965098433	1.005898627
	48.6	0.89375	1.05721586	0.968571667	1.002894704
	86.4	0.96990741	1.01535513	0.988607232	1.001442718
	105.2	0.98561151	1.00726401	0.985255604	0.993163337
	122.9	0.98604651	1.00704233	0.990851928	0.998297864
	176.1	0.98734177	1.00638304	1.007847402	1.022487119
	247.7	1	1	0.994783268	0.994892859
	427.7	1.0137931	0.99316622	1.014696617	1.012810857
	591.6	1.02572347	0.98735466	0.989122597	0.992516757
	600.4	1.02158273	0.98936143	1.009857183	1.014055048
	635.7	1.03977273	0.98062568	0.988359781	1.010233063
FR-A-1-G	27.3	0.58934169	1.2875647	0.979343646	1.031369793
	42.9	0.85585586	1.07984484	0.962652186	1.003348964
	48.6	0.88598131	1.0617507	0.972726274	1.007196536
	86.4	0.95890411	1.02112884	0.994228845	1.00713732
	105.2	0.96702128	1.0168611	0.994643007	1.002626083
	122.9	0.97916667	1.01056364	0.994316625	1.001788598
	176.1	0.98604651	1.00704233	1.008507656	1.023156964
	247.7	0.99785867	1.00107219	0.99584987	0.995959578
	427.7	1.03688525	0.9819987	1.003287004	1.001422448
	591.6	1.02884615	0.98584842	0.987613665	0.991002647
	600.4	0.99790136	1.00105079	1.021788696	1.026036159
	635.7	0.98799314	1.00605192	1.013986555	1.036426981
FR-A-3-G	27.3	0.5015674	1.38437431	1.052978682	1.108916579
	42.9	0.81081081	1.10852281	0.988217814	1.029995396
	48.6	0.85327103	1.08143637	0.990761366	1.025870734

	86.4	0.94520548	1.02844109	1.001348463	1.014349374
	105.2	0.94574468	1.02815062	1.005685846	1.013757553
	122.9	0.96527778	1.01777375	1.001410819	1.008936102
	176.1	0.97674419	1.01181139	1.013283653	1.028002335
	247.7	0.99571734	1.00214746	0.996919527	0.997029353
	427.7	1.03278689	0.9839563	1.005287042	1.003418769
	591.6	1	1	1.00179058	1.00522821
	600.4	0.98426023	1.00795345	1.028834356	1.033111107
	635.7	1.02744425	0.98652388	0.994304496	1.01630934
FR-A-4-G	27.3	0.68025078	1.20498731	0.916533879	0.965223353
	42.9	0.8978979	1.05481586	0.940339537	0.980093032
	48.6	0.92336449	1.04039531	0.953161473	0.986938422
	86.4	0.97945205	1.01041692	0.983799106	0.996572167
	105.2	0.99255319	1.00374199	0.981810545	0.989690627
	122.9	0.99444444	1.00278811	0.986666101	0.994080582
	176.1	0.96744186	1.01664127	1.018120565	1.032909507
	247.7	1.02141328	0.98944379	0.984282129	0.984390563
	427.7	1.02459016	0.98790283	1.00931913	1.007443364
	591.6	1.02884615	0.98584842	0.987613665	0.991002647
	600.4	1.03777545	0.98157486	1.001909299	1.006074125
	635.7	1.02744425	0.98652388	0.994304496	1.01630934
FR-B-1-G	27.3	0.75862069	1.14447827	0.870509673	0.91675418
	42.9	0.92192192	1.04119805	0.928199629	0.967439901
	48.6	0.94392523	1.02913166	0.942842244	0.976253513
	86.4	0.97945205	1.01041692	0.983799106	0.996572167
	105.2	0.97978723	1.01024467	0.988171137	0.99610227
	122.9	0.98611111	1.00700942	0.990819548	0.998265241
	176.1	0.97674419	1.01181139	1.013283653	1.028002335
	247.7	0.98715203	1.00647954	1.001229008	1.001339309
	427.7	1.00819672	0.9959239	1.017514082	1.015623086
	591.6	1.02884615	0.98584842	0.987613665	0.991002647
	600.4	1.00944386	0.99530759	1.01592652	1.020149614
	635.7	1.02058319	0.98984748	0.997654313	1.019733292
FR-B-2-G	27.3	0.67084639	1.21285346	0.922517002	0.971524319
	42.9	0.88588589	1.06180672	0.946571702	0.986588666
	48.6	0.91588785	1.0445739	0.956989694	0.990902303
	86.4	0.96575342	1.01752455	0.990719505	1.003582416
	105.2	0.9712766	1.01464278	0.99247315	1.000438811
	122.9	0.98194444	1.00913794	0.992913844	1.000375275
	176.1	0.9627907	1.01907944	1.020562277	1.035386687
	247.7	0.99143469	1.00430727	0.999068067	0.99917813
	427.7	1.01229508	0.99390239	1.015448749	1.013561591
	591.6	0.99038462	1.00483873	1.006637979	1.010092243
	600.4	1.00419727	0.99790722	1.018580003	1.022814128
	635.7	1.01200686	0.9940442	1.001884125	1.024056713
FR-B-3-G	27.3	0.77742947	1.13115763	0.860377764	0.906084029

	42.9	0.93093093	1.03621192	0.923754631	0.962806988
	48.6	0.95327103	1.02411885	0.938249741	0.971498267
	86.4	0.98630137	1.00691252	0.980387023	0.993115783
	105.2	0.99255319	1.00374199	0.981810545	0.989690627
	122.9	1	1	0.983922817	0.991316684
	176.1	0.98139535	1.00941934	1.010888121	1.025572007
	247.7	1.00642398	0.9968017	0.991601652	0.991710892
	427.7	1.02459016	0.98790283	1.00931913	1.007443364
	591.6	1	1	1.00179058	1.00522821
	600.4	0.98635887	1.00688324	1.027741969	1.032014178
	635.7	1.04631218	0.9775349	0.985244625	1.007048967
FR-B-4-G	27.3	0.6677116	1.21550718	0.924535468	0.973650013
	42.9	0.87987988	1.06534926	0.949729775	0.989880249
	48.6	0.90934579	1.04826737	0.960373477	0.994405996
	86.4	0.95890411	1.02112884	0.994228845	1.00713732
	105.2	0.9606383	1.02021304	0.997921706	1.005931097
	122.9	0.97222222	1.01415157	0.997846871	1.005345372
	176.1	0.97209302	1.01421865	1.015694413	1.030448113
	247.7	0.99143469	1.00430727	0.999068067	0.99917813
	427.7	1.01639344	0.99189177	1.013394547	1.011511206
	591.6	0.99038462	1.00483873	1.006637979	1.010092243
	600.4	0.9475341	1.0271882	1.048467569	1.052825933
	635.7	1.00686106	0.99658508	1.004445048	1.026674312
SP1SM1B 2	27.3	0.31023454	1.69684734	1.290650993	1.359214871
	42.9	0.59538153	1.28158473	1.142497795	1.190797668
	48.6	0.65	1.23080833	1.127608963	1.167567765
	86.4	0.84722222	1.08518567	1.056598194	1.070316435
	105.2	0.89208633	1.05818261	1.035061647	1.043369126
	122.9	0.90232558	1.05227009	1.03535255	1.043132894
	176.1	0.92563291	1.03913638	1.0406484	1.055764575
	247.7	0.97142857	1.01456379	1.009271084	1.009382271
	427.7	1.01517241	0.99248966	1.014005399	1.012120924
	591.6	0.97427653	1.01308665	1.014900659	1.018383276
	600.4	1.02877698	0.98588173	1.006305389	1.010488489
	635.7	0.96022727	1.0204299	1.028477931	1.051239064
DP1DM1B 2	27.3	0.56289979	1.31469546	0.999979763	1.053102173
	42.9	0.8062249	1.11155945	0.990924897	1.032816922
	48.6	0.85	1.08345953	0.99261489	1.027789941
	86.4	0.94444444	1.02885145	1.00174801	1.014754109
	105.2	0.95683453	1.02222465	0.999889359	1.007914542
	122.9	0.9627907	1.01907944	1.002695511	1.010230448
	176.1	0.9778481	1.01124228	1.012713721	1.027424125
	247.7	0.97857143	1.01086985	1.005596413	1.005707195
	427.7	1.0137931	0.99316622	1.014696617	1.012810857
	591.6	1.00321543	0.99839572	1.000183428	1.003615543
	600.4	1.00359712	0.99820574	1.01888471	1.023120101

	635.7	0.99431818	1.00285172	1.01076111	1.033130153
BL-5	27.3	0.13240938	2.3304272	1.772562634	1.866727337
	42.9	0.50301205	1.3826113	1.232560219	1.284667542
	48.6	0.585	1.29191188	1.183589177	1.225531736
	86.4	0.9375	1.03261634	1.005413719	1.018467411
	105.2	0.90647482	1.04989936	1.026959385	1.035201834
	122.9	0.84837209	1.08447023	1.067035	1.075053427
	176.1	0.95411392	1.02366996	1.025159477	1.040050665
	247.7	0.98571429	1.00721162	1.001957269	1.00206765
	427.7	1.07586207	0.9638844	0.984780014	0.982949853
	591.6	0.99356913	1.00322929	1.005025649	1.008474379
	600.4	1.04676259	0.97732297	0.997569333	1.001716119
	635.7	1.07045455	0.96634457	0.97396603	0.995520766

Notes on Transmission Measurements - 5/95					
Peak area (counts) in 1800 sec run - source used is SRM 4275C-27 (from F. Iddings)					
All measurements done on top of detector cap (unlike sample U-series measurements)					
No corrections for thickness (yet), or for SRM decay.					
				Sb125	
	date	wt. (g)	dead time %	27.3 keV	corr(5/31)
source 5/95	5/31/95		11	8.27E+05	8.27E+05
DM1B	5/17/95	2.9994	11	4.70E+05	4.65E+05
CM1B	5/18/95	3.0248	11	5.24E+05	5.19E+05
DP1B	5/18/95	3.001	11	5.26E+05	5.21E+05
BL5D	5/19/95	3.0155	11	5.13E+05	5.09E+05
W510 5/95	5/31/95	3.0035	11	5.46E+05	5.46E+05
source 3/95	4/4/95		12	8.70E+05	
BL-5 3/95	4/4/95		11	1.22E+05	

			Eu154,155		
% uncert.	T	A/O	42.9 keV	corr(5/31)	% uncert.
0.2			9.62E+05	9.62E+05	2.3
0.3	0.56287461	1.31472206	7.64E+05	7.61E+05	3.4
0.3	0.62797695	1.25059943	8.18E+05	8.15E+05	3.5
0.3	0.63037381	1.24840257	8.32E+05	8.29E+05	3.5
0.3	0.61521711	1.2624783	8.12E+05	8.09E+05	2.3
0.3	0.66021765	1.22191669	8.24E+05	8.24E+05	3.3
0.24			1.53E+06		0.2
2.7	0.14022989	2.28488073	4.90E+05		3.3

		Eu154,155			
T	A/O	48.6 keV	corr(5/31)	% uncert.	T
		3.07E+05	3.07E+05	0.6	
0.79109682	1.12173935	2.58E+05	2.57E+05	0.8	0.83712957
0.84724728	1.08517007	2.71E+05	2.70E+05	0.9	0.87955472
0.86174784	1.07624055	2.77E+05	2.76E+05	0.9	0.89902826
0.84126633	1.08891193	2.66E+05	2.65E+05	4.9	0.86356655
0.85654886	1.07941922	2.73E+05	2.73E+05	0.9	0.88925081
		3.14E+05		1.5	
0.32026144	1.6750817	1.84E+05		6.1	0.58598726

	Eu155				
A/O	86.4 keV	corr(5/31)	% uncert.	T	A/O
	4.05E+05	4.05E+05	0.4		
1.09152053	3.86E+05	3.84E+05	0.4	0.94777997	1.02705614
1.06554196	3.85E+05	3.83E+05	0.4	0.94570166	1.02817378
1.05416436	3.96E+05	3.94E+05	0.4	0.9727217	1.01389237
1.07513454	3.96E+05	3.94E+05	0.4	0.9731097	1.01369115
1.05983581	3.84E+05	3.84E+05	0.4	0.94814815	1.02685849
	4.19E+05		0.37		
1.29091977	3.89E+05		2	0.92840095	1.03760568

Eu155					Eu154
105.2 keV	corr(5/31)	% uncert.	T	A/O	122.9 keV
2.63E+05	2.63E+05	0.5			2.07E+06
2.53E+05	2.52E+05	0.5	0.95662124	1.02233776	2.01E+06
2.50E+05	2.49E+05	0.5	0.94565496	1.02819894	1.99E+06
2.57E+05	2.56E+05	0.5	0.9721333	1.01419774	2.04E+06
2.56E+05	2.55E+05	0.5	0.96873693	1.01596516	2.02E+06
2.49E+05	2.49E+05	0.5	0.94676806	1.02759991	1.98E+06
2.70E+05		0.5			2.11E+06
2.40E+05		0.58	0.88888889	1.06004732	1.79E+06

				Sb125	
corr(5/31)	% uncert.	T	A/O	176.1 keV	corr(5/31)
2.07E+06	0.1			5.55E+04	5.55E+04
2.00E+06	0.2	0.96801888	1.01633988	5.62E+04	5.57E+04
1.98E+06	0.2	0.95859839	1.02129052	5.53E+04	5.48E+04
2.03E+06	0.2	0.98268378	1.00875938	5.78E+04	5.73E+04
2.01E+06	0.2	0.9732644	1.01361095	5.67E+04	5.62E+04
1.98E+06	0.2	0.95652174	1.02239054	5.51E+04	5.51E+04
	0.14			5.88E+04	
	0.16	0.84834123	1.08448941	5.31E+04	

			Eu154		
% uncert.	T	A/O	247.7 keV	corr(5/31)	% uncert.
2.1			1.36E+05	1.36E+05	0.7
2.2	1.00291157	0.99854704	1.35E+05	1.35E+05	0.7
2.3	0.9875295	1.00628758	1.33E+05	1.33E+05	0.7
2.2	1.03217369	0.98425009	1.35E+05	1.35E+05	0.7
2.3	1.0132267	0.99344439	1.36E+05	1.36E+05	0.7
2.3	0.99279279	1.00362101	1.33E+05	1.33E+05	0.7
2.2			1.38E+05		0.73
2.5	0.90306122	1.05184872	1.32E+05		1.8

		Sb125			
T	A/O	427.7 keV	corr(5/31)	% uncert.	T
		6.51E+04	6.51E+04	1.2	
0.98958471	1.00524409	6.86E+04	6.79E+04	1.1	1.04366816
0.97513939	1.01264024	6.64E+04	6.58E+04	1.1	1.0108926
0.98980314	1.00513336	6.83E+04	6.77E+04	1.1	1.03981875
0.9973551	1.00132478	6.90E+04	6.84E+04	1.2	1.0511983
0.97794118	1.01119434	6.53E+04	6.53E+04	1.1	1.0030722
		6.85E+04		1.1	
0.95652174	1.02239054	7.16E+04		1.2	1.04525547

	Eu154				
A/O	591.6 keV	corr(5/31)	% uncert.	T	A/O
	2.99E+04	2.99E+04	2.1		
0.97878144	3.01E+04	3.00E+04	2.0	1.0035833	0.99821262
0.99459293	3.03E+04	3.02E+04	2.0	1.01047461	0.99479898
0.98060384	3.03E+04	3.02E+04	2.0	1.01047461	0.99479898
0.97524237	3.07E+04	3.06E+04	2.0	1.02404019	0.98816914
0.99846704	2.94E+04	2.94E+04	1.9	0.98327759	1.0084556
	3.07E+04		2.2		
0.97803259	3.09E+04		2.1	1.00651466	0.99675675

Sb125					Sb125
600.4 keV	corr(5/31)	% uncert.	T	A/O	635.7 keV
2.51E+04	2.51E+04	2.5			1.56E+04
2.64E+04	2.61E+04	2.2	1.04171643	0.97970431	1.60E+04
2.53E+04	2.51E+04	2.5	0.99899825	1.00050121	1.55E+04
2.66E+04	2.64E+04	2.3	1.05033018	0.97564865	1.67E+04
2.60E+04	2.58E+04	2.2	1.02734468	0.9865719	1.60E+04
2.55E+04	2.55E+04	2.4	1.01593625	0.99211553	1.54E+04
2.69E+04		3.6			1.72E+04
2.74E+04		2.6	1.01858736	0.9908199	1.67E+04

corr(5/31)	% uncert.	T	A/O
1.56E+04	3.6		
1.58E+04	3.5	1.01581516	0.99217481
1.54E+04	3.9	0.98474782	1.00770453
1.66E+04	3.4	1.06098636	0.97069252
1.59E+04	3.5	1.01721307	0.99149097
1.54E+04	3.6	0.98717949	1.00646558
	4		
	3.9	0.97093023	1.01482286

apply trans. corr.

Nopal plant samples gamma spec. data reduction					
Sample count data entered as total counts in sample. Bq/g is for DRIED plant.					
A/O corrected relative to DP1DM1B and activity also. ***NO thickness correction yet.***					
sample	wt. ash (g)	ash/dried	time meas (s)	25.6 keV	cps
FR-A-1	1.705	0.2301	50000	3.12E+02	0.00624
FR-A-3	1.895	0.3398	80000	3.94E+02	0.004925
FR-A-4	1.222	0.2679	80000	0	0
FR-B-1	0.731	0.1234	50000	8.92E+02	0.01784
FR-B-2	1.232	0.111	80000	1.00E+03	0.0125
FR-B-3	0.922	0.1173	80000	5.77E+02	0.0072125
FR-B-4	1.204	0.1215	80000	1.20E+02	0.0015
FR-A-5	1.6077	0.1287	80000	0	0
FR-A-6	1.4843	0.1287	80000	2.62E+02	0.003275
FR-A-7	1.3948	0.1363	80000	0	0
FR-A-8	1.1674	0.1201	80000	0	0
FR-A-5B	1.6077	0.1287	80000	0	0
FR-A-5C	1.6077	0.1287	80000	0	0
DP1DM1B 2	3.272				0.01318
SP1SM1B 2	3	1	90000	7.86E+03	0.08733333
BL-5	3	1	50000	5.81E+04	1.162
NOPI-216b	3	1	80000	1.37E+03	0.017125
combo. of counting errors (%)					
FR-A-5					
FR-A-6					
FR-A-7					
FR-A-8					
FR-B-1					
FR-B-2					
FR-B-3					
FR-B-4					
SP1SM1B 2					
BL-5					
NOPI-216b					

+/- %	A/O rel. std.	231Th (Bq/g)	27.4 keV	cps	+/- %
66.3	0.97393334	0.04520192	2.29E+02	0.00458	73.7
79.4	1	0.04867111	3.51E+02	0.0043875	60.1
	0.91103707	0	0.00E+00	0	
11.8	0.86078073	0.14286835	8.02E+02	0.01604	12.1
31.3	0.91729918	0.05693563	6.96E+02	0.0087	33.2
35.5	0.84993351	0.04298221	4.37E+02	0.0054625	37.1
198	0.91994665	0.00767458	0	0	
	0.93242804	0	0	0	
107	0.94475677	0.0147856	2.12E+02	0.00265	107
	0.88750012	0	0	0	
	0.88357037	0	0	0	
	0.97033569	0	0	0	
	0.93242804	0	0	0	
13.4		0.222		0.01182	13.5
9.5	1.30140919	2.08796642	7.55E+03	0.08388889	9.6
4	1.8235055	38.9262718	5.19E+04	1.038	4.1
17.2	1	0.31460106	1.06E+03	0.01325	18.3
13.4					13.5
107.8					107.8
13.4					13.5
13.4					13.5
17.9					18.1
34.0					35.8
37.9					39.5
198.5					
16.4					16.6
14.0					14.1
21.8					22.7

apply trans. corr.

A/O rel. std.	231Pa (Bq/g)	46.5 keV	cps	+/- %	A/O rel. std.
0.97449579	0.03701574	5.74E+03	0.1148	5.1	0.98002468
1	0.04834817	8.19E+03	0.102375	4.4	1
0.91632687	0	4.66E+03	0.05825	7	0.95631827
0.87132114	0.14498704	1.06E+04	0.212	1.5	0.9454509
0.92234662	0.04442981	9.41E+03	0.117625	3.6	0.96144618
0.86127397	0.03678313	4.87E+03	0.060875	5.3	0.9411027
0.92490455	0	3.89E+03	0.048625	7.3	0.96417056
0.93556441	0	5.69E+03	0.071125	8.1	0.96088594
0.94755706	0.01338002	5.53E+03	0.069125	7.8	0.97011041
0.89542273	0	5.79E+03	0.072375	6.4	0.95645748
0.89117302	0	3.10E+03	0.03875	12.1	0.94835405
0.97077816		5.26E+03	0.06575	7.6	0.97533909
0.93556441	0	5.66E+03	0.07075	7.2	0.96088594
	0.222		0.1559	1.8	
1.28392632	2.20633819	1.20E+05	1.33333333	0.84	1.14519772
1.75120109	37.2358191	1.03E+06	20.6	0.29	1.21598469
1	0.27142098	2.25E+04	0.28125	1.8	1
				8.3	
				8.0	
				6.6	
				12.2	
				2.3	
				4.0	
				5.6	
				7.5	
				2.0	
				1.8	
				2.5	

210Pb (Bq/g)	50 keV	cps	+/- %	A/O rel. std.	227Ac (Bq/g)
1.53597927	4.55E+02	0.0091	27.9	0.98095089	0.06197442
1.85704442	9.57E+02	0.0119625	38.9	1	0.11034882
1.23541852	2.32E+02	0.0029	125	0.96099038	0.03143042
3.42284193	8.36E+02	0.01672	10.8	0.95326034	0.13841309
1.03074468	9.45E+02	0.0118125	37.4	0.96620225	0.05289976
0.73732219	5.91E+02	0.0073875	45.2	0.94946494	0.0459066
0.47860529	3.05E+02	0.0038125	36.7	0.96910825	0.01918066
0.55345444	5.08E+02	0.00635	25.8	0.96417069	0.02521348
0.58820321	4.41E+02	0.0055125	65.3	0.973046	0.02392602
0.6843092	7.72E+02	0.00965	49	0.96376981	0.04675371
0.38245447	0	0		0.95494688	0
0.51932489	6.32E+02	0.0079	24.5	0.97614453	0.0317575
0.5505364	0	0		0.96417069	0
4.82		0.01412	14.4		0.222
51.4887292	1.17E+04	0.13	6.5	1.12774375	2.5139932
844.672372	1.03E+05	2.06	2	1.1566125	40.8569008
9.48386786	1.63E+03	0.020375	15.5	1	0.34938796
			29.5		
			66.9		
			51.1		
			14.4		
			18.0		
			40.1		
			47.4		
			39.4		
			15.8		
			14.5		
			21.2		

apply trans. corr.

53.2 keV	cps	+/- %	A/O rel. std.	214Pb + 234U	63.3 keV
7.97E+03	0.1594	6.7	0.98177417		3.54E+03
1.32E+04	0.165	3	1		4.63E+03
1.12E+04	0.14	3.4	0.9646866		1.15E+03
6.64E+03	0.1328	3.8	0.95925843		8.74E+03
9.04E+03	0.113	3.7	0.97001991		7.66E+03
6.08E+03	0.076	4.9	0.95585435		3.72E+03
1.11E+04	0.13875	3.7	0.97311462		1.45E+03
1.58E+04	0.1975	2.8	0.96686623	0	2.99E+03
1.38E+04	0.1725	3	0.97546468	0	2.75E+03
1.33E+04	0.16625	3.2	0.96959185	0	3.50E+03
1.34E+04	0.1675	3.2	0.96012732	0	5.04E+02
1.59E+04	0.19875	5.2	0.97687163		2.81E+03
1.64E+04	0.205	3	0.96686623	0	3.07E+03
	0.03865	6.5			
3.03E+04	0.33666667	2.9	1.11359377		1.28E+05
2.77E+05	5.54	0.83	1.11086788		1.13E+06
5.13E+03	0.064125	5.6	1		1.49E+04
		7.1			
		7.2			
		7.2			
		7.2			
		7.5			
		7.5			
		8.1			
		7.5			
		7.1			
		6.6			
		8.6			

apply trans. corr.

cps	+/- %	A/O rel. std.	234Th (Bq/g)	67.7 keV	cps
0.0708	8.2	0.98422537	0.98090871	7.04E+02	0.01408
0.057875	7.9	1	1.08246461	9.65E+02	0.0120625
0.014375	31	0.97328032	0.31993065	6.39E+02	0.0079875
0.1748	2	0.97244709	2.99304836	1.11E+03	0.0222
0.09575	5.3	0.97919657	0.88110868	1.38E+03	0.01725
0.0465	7.7	0.9696476	0.59833239	5.66E+02	0.007075
0.018125	22.1	0.98296373	0.18753133	6.49E+02	0.0081125
0.037375	12.9	0.97366974	0.30386099	1.22E+03	0.01525
0.034375	13.9	0.9816552	0.30518774	9.74E+02	0.012175
0.04375	9.6	0.98325071	0.43846485	8.95E+02	0.0111875
0.0063	67.7	0.97193128	0.06570645	4.47E+02	0.0055875
0.035125	12.7	0.97910394	0.28716216	1.02E+03	0.01275
0.038375	12.7	0.97366974	0.31199105	0.00E+00	0
0.1512	2.2		4.82		0.01788
1.42222222	0.91	1.07894089	53.3522081	1.65E+04	0.18333333
22.6	0.49	1.01271573	795.762153	1.36E+05	2.72
0.18625	2.6	1	6.475653	1.86E+03	0.02325
	13.1				
	14.1				
	9.8				
	67.7				
	3.0				
	5.7				
	8.0				
	22.2				
	2.4				
	2.3				
	3.4				

apply trans. corr.

+/- %	A/O rel. std.	230Th (Bq/g)	92.8 keV	cps	+/- %
39.9	0.98522333	1.65128638	5.47E+03	0.1094	12.7
40.7	1	1.90785035	7.98E+03	0.09975	12.6
53.6	0.97581451	1.50720549	3.72E+03	0.0465	18
15	0.97608623	3.22650069	1.23E+04	0.246	3.6
27.9	0.98204273	1.34624645	1.16E+04	0.145	8.6
44.7	0.97329387	0.77273457	5.88E+03	0.0735	9.5
62.1	0.98610956	0.71206967	3.28E+03	0.041	20.2
35.8	0.97592989	1.05088409	6.11E+03	0.076375	16.9
42.1	0.98376916	0.91603454	5.49E+03	0.068625	17.3
39.5	0.98728842	0.952037	6.15E+03	0.076875	15.6
79.2	0.97527222	0.49449229	1.87E+03	0.023375	36.4
44.6	0.98004451	0.88231231	5.88E+03	0.0735	17.5
	0.97592989	0	6.00E+03	0.075	18
12.1		4.82		0.2141	13.7
5.7	1.06797175	57.5668896	2.14E+05	2.37777778	10.4
1.8	1	799.724623	1.51E+06	30.2	4.2
14	1	6.83588143	1.97E+04	0.24625	5.4
37.8					21.8
43.8					22.1
41.3					20.8
80.1					38.9
19.3					14.2
30.4					16.2
46.3					16.7
63.3					24.4
13.4					17.2
12.2					14.3
18.5					14.7

A/O rel. std.	234Th (Bq/g)	128 keV	cps	+/- %	A/O rel. std.
0.99010691	1.07680067	0	0		0.99473359
1	1.317561	0	0		1
0.98183184	0.73728473	5.33E+02	0.0066625	50.2	0.98527861
0.98449138	3.01153887	0	0		0.9908884
0.98973006	0.95244674	4.28E+02	0.00535	61.9	0.99288777
0.97990564	0.67496671	6.56E+01	0.00082	156	0.98342385
0.99495935	0.30323732	5.22E+02	0.006525	51.5	0.99634712
0.9830844	0.44275067	5.37E+02	0.0067125	56	0.98550561
0.99137396	0.43453063	6.55E+02	0.0081875	48.6	0.99735574
0.99561738	0.55094111	0	0		0.99189948
0.98151451	0.17386627	5.99E+02	0.0074875	44.9	0.98169067
0.98498278	0.4269069	0	0		0.990542
0.9830844	0.43477971	0.00E+00	0		0.98550561
	4.82		0.03012	7.7	
1.0388255	60.6507644	2.86E+04	0.31777778	4.7	1.04074555
1	741.531073	7.74E+03	0.1548	15.1	1
1	6.04642472	0	0		1
				56.5	
				49.2	
				7.7	
				45.6	
				62.4	
				156.2	
				52.1	
				9.0	
				16.9	
				7.7	

apply trans. corr.

228Ac (Bq/g)	186 keV	cps	+/- %	A/O rel. std.	236 keV
0	1.92E+04	0.384	2.1	0.99627183	2.77E+02
0	3.36E+04	0.42	1.5	1	4.03E+02
0.43773789	2.62E+04	0.3275	1.8	1	0.00E+00
0	1.78E+04	0.356	1.1	0.99979366	4.47E+02
0.14557358	2.45E+04	0.30625	1.8	1	4.31E+02
0.031206	1.63E+04	0.20375	2.4	0.99907213	3.09E+02
0.19955257	2.62E+04	0.3275	1.8	1	0.00E+00
0.16107691	3.84E+04	0.48	1.5	0.99112707	3.04E+02
0.21536475	3.39E+04	0.42375	1.5	1	0.00E+00
0	3.18E+04	0.3975	1.8	1	2.67E+02
0.23001236	3.20E+04	0.4	1.6	1	0.00E+00
0	3.70E+04	0.4625	1.5	0.99433663	
0	3.89E+04	0.48625	1.4	0.99112707	
2.8		0.1476	2.2		
33.5322882	1.34E+05	1.48888889	0.83	1.01639792	7.53E+03
15.6951713	1.17E+06	23.4	0.76	1	6.90E+04
0	1.81E+04	0.22625	2	1	8.49E+02
			2.7		
			2.7		
			2.8		
			2.7		
			2.5		
			2.8		
			3.3		
			2.8		
			2.4		
			2.3		
			3.0		

apply trans. corr.

cps	+/- %	A/O rel. std.	227Th (Bq/g)	238.6 keV	cps
0.00554	39	1	0.06504019	8.44E+02	0.01688
0.0050375	28.1	1	0.07857946	1.66E+03	0.02075
0		1	0	1.34E+03	0.01675
0.00894	10.3	1	0.131285	5.29E+02	0.01058
0.0053875	23.1	1	0.04222594	8.63E+02	0.0107875
0.0038625	31.4	1	0.04274796	7.38E+02	0.009225
0		1	0	1.24E+03	0.0155
0.0038	38.5	1	0.02646287	2.01E+03	0.025125
0		1	0	1.75E+03	0.021875
0.0033375	43.8	1	0.02837168	1.61E+03	0.020125
0		1	0	1.76E+03	0.022
0		1	0	1.89E+03	0.023625
0		1	0	1.83E+03	0.022875
0.00835	86.6		0.222		0.4529
0.08366667	75	1	2.42611289	3.61E+05	4.01111111
1.38	2.8	1	40.0163641	2.10E+03	0.042
0.0106125	11.5	1	0.30773454	1.33E+03	0.016625
	94.8				
	86.6				
	97.0				
	86.6				
	87.2				
	89.6				
	92.1				
	114.6				
	86.6				
	87.4				

apply trans. corr.

+/- %	A/O rel. std.	212Pb (Bq/g)	242 keV	cps	+/- %
17.5	1	0.04608225	2.38E+04	0.476	2.2
8.1	1	0.07526642	4.26E+04	0.5325	1.9
10.1	1	0.0742823	3.39E+04	0.42375	1.8
9.8	1	0.03612871	1.85E+04	0.37	1.6
15	1	0.01966084	2.84E+04	0.355	2.5
14.2	1	0.02374119	1.95E+04	0.24375	3.1
13.3	1	0.03164102	3.44E+04	0.43	1.8
8.1	1	0.04068634	4.94E+04	0.6175	1.5
10.5	1	0.03836842	4.34E+04	0.5425	1.6
9.8	1	0.0397822	4.13E+04	0.51625	1.7
8.7	1	0.04578413	4.23E+04	0.52875	1.7
7.9	1	0.0382573	4.85E+04	0.60625	1.5
11.7	1	0.03704279	4.99E+04	0.62375	1.5
3.9		2.8		0.1229	13.2
3.7	1	27.0465854	1.14E+05	1.26666667	11.2
67.6	1	0.28320247	9.34E+05	18.68	0.29
9.9	1	0.11210098	1.42E+04	0.1775	3.6
9.0					13.3
11.2					13.3
10.5					13.3
9.5					13.3
10.5					13.3
15.5					13.4
14.7					13.6
13.9					13.3
5.4					17.3
67.7					13.2
10.6					13.7

apply trans. corr.

A/O rel. std.	214Pb (Bq/g)	295 keV	cps	+/- %	A/O rel. std.
1	8.243424	4.82E+04	0.964	1.1	1
1	12.2529941	8.50E+04	1.0625	0.77	1
1	11.9211916	6.80E+04	0.85	0.88	1
1	8.01508177	3.73E+04	0.746	0.59	1
1	4.10439429	5.65E+04	0.70625	0.96	1
1	3.97942355	3.87E+04	0.48375	1.2	1
1	5.5683522	6.92E+04	0.865	0.85	1
1	6.34335398	9.82E+04	1.2275	0.72	1
1	6.03621989	8.58E+04	1.0725	0.77	1
1	6.47369795	8.18E+04	1.0225	0.8	1
1	6.98042956	8.47E+04	1.05875	0.79	1
1	6.22778681	9.67E+04	1.20875	0.75	1
1	6.40755797	1.01E+05	1.2625	0.73	1
	4.82		0.2124	1.4	
1	54.1813145	1.98E+05	2.2	0.57	1
1	799.031807	1.87E+06	37.4	0.36	1
1	7.59251315	2.83E+04	0.35375	1.9	1
				1.6	
				1.6	
				1.6	
				1.6	
				1.5	
				1.7	
				1.8	
				1.6	
				1.5	
				1.4	
				2.4	

apply trans. corr.

					rel. to BL-5
214Pb (Bq/g)	349 keV	cps	+/- %	A/O rel. std.	227Th (Bq/g)
9.65995471	0	0		1	0
14.1464973	3.90E+02	0.004875	51.4	1	0.61034437
13.8365002	4.39E+02	0.0054875	40.1	1	0.83996697
9.35066356	2.23E+02	0.00446	31.7	1	0.5256768
4.72472518	0	0		1	0
4.56976524	2.24E+02	0.0028	54.4	1	0.24872033
6.4814432	0	0		1	0
7.29626933	4.82E+02	0.006025	35.5	1	0.33675709
6.90494114	4.38E+02	0.005475	31.7	1	0.33145696
7.41913126	0	0		1	0
8.08765399	4.16E+02	0.0052	34.6	1	0.37351911
7.18481919	0	0		1	0
7.50430959	3.93E+02	0.0049125	57.8	1	0.2745758
4.82		0			0
54.4511739	0.00E+00	0	0	1	0
925.669956	8.66E+03	0.1732	90.1	1	40.31
8.75550126	0	0		1	0
			35.5		
			31.7		
			0.0		
			34.6		
			31.7		
			0.0		
			54.4		
			0.0		
			0.0		
			90.1		
			0.0		

apply trans. corr.

352 keV	cps	+/- %	A/O rel. std.	214Pb (Bq/g)	583 keV
7.18E+04	1.436	0.82	1	9.44784421	2.07E+02
1.27E+05	1.5875	0.61	1	13.8775865	2.81E+02
1.01E+05	1.2625	0.7	1	13.4933238	2.43E+02
5.61E+04	1.122	0.46	1	9.23371972	0
8.51E+04	1.06375	0.77	1	4.67237716	8.51E+01
5.82E+04	0.7275	0.92	1	4.5121771	2.15E+02
1.04E+05	1.3	0.69	1	6.39556904	3.55E+02
1.48E+05	1.85	0.66	1	7.21990215	4.18E+02
1.29E+05	1.6125	0.69	1	6.8162048	3.16E+02
1.22E+05	1.525	0.64	1	7.2650701	4.32E+02
1.27E+05	1.5875	0.63	1	7.962017	1.94E+02
1.44E+05	1.8	0.58	1	7.02476966	0
1.51E+05	1.8875	0.65	1	7.36625152	0.00E+00
	0.3235	1.1		4.82	
3.01E+05	3.34444444	0.43	1	54.3486524	5.71E+04
2.85E+06	57	0.31	1	926.274374	0
4.35E+04	0.54375	1.1	1	8.83617002	2.32E+02
		1.3			
		1.3			
		1.3			
		1.3			
		1.2			
		1.3			
		1.4			
		1.3			
		1.2			
		1.1			
		1.6			

apply trans. corr.

cps	+/- %	A/O rel. std.	208Tl (Bq/g)	609 keV	cps
0.00414	64.2	1	0.07251381	3.71E+04	0.742
0.0035125	50.4	1	0.08174452	6.63E+04	0.82875
0.0030375	62.1	1	0.0864263	5.22E+04	0.6525
0		1	0	2.85E+04	0.57
0.00106375	116	1	0.01243884	4.36E+04	0.545
0.0026875	67.7	1	0.04437555	2.95E+04	0.36875
0.0044375	45.7	1	0.05811875	5.30E+04	0.6625
0.005225	44.5	1	0.05428602	7.61E+04	0.95125
0.00395	52.2	1	0.04445106	6.68E+04	0.835
0.0054	40.7	1	0.06848663	6.35E+04	0.79375
0.002425	86.1	1	0.03237898	6.56E+04	0.82
0		1	0	7.53E+04	0.94125
0		1	0	7.83E+04	0.97875
0.07059	3		2.8		0.1682
0.63444444	1.3	1	27.4473543	1.55E+05	1.72222222
0		1	0	1.46E+06	29.2
0.0029	64.7	1	0.12545989	2.23E+04	0.27875
	44.6				
	52.3				
	40.8				
	86.2				
	116.0				
	67.8				
	45.8				
	3.3				
	64.8				

apply trans. corr.

+/- %	A/O rel. std.	214Bi (Bq/g)
1.2	1	9.38924091
0.9	1	13.9338793
1	1	13.4127048
0.69	1	9.02208637
1.1	1	4.60408269
1.3	1	4.39879236
1	1	6.26859216
0.82	1	7.14007127
0.88	1	6.78856025
0.91	1	7.2728059
0.9	1	7.90990946
0.82	1	7.06501139
0.81	1	7.34648594
1.5		4.82
0.65	1	53.8272603
0.2	1	912.632517
1.6	1	8.71220254
1.7		
1.7		
1.8		
1.7		
1.7		
1.9		
2.0		
1.8		
1.6		
1.5		
2.2		