SpecMaker - Spectrum Analysis Assessment

N:\NTSNet\gspec\specmaker\examples\[GV QCYKpeaks.xls]Assessment

Spreadsheet prepared by Dr. Gordon Gilmore of Nuclear Training Services Ltd.

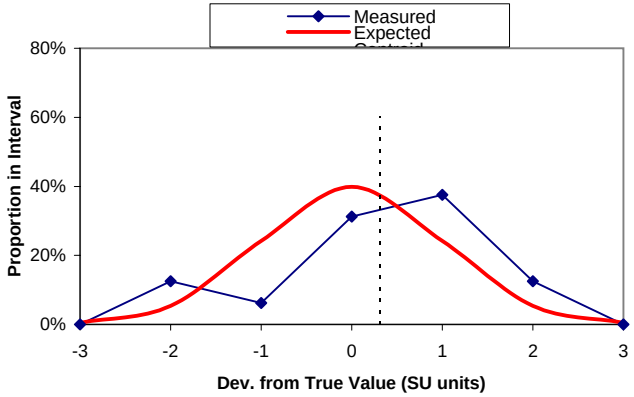
GV QCYKpeaks.xls

Program Details		
Program:	GammaVision	
Version:	5.22	
Date of Analysis:	23-Feb-08	
Comments:	QCYK peaks	
Energy Scale:	0.269309	keV/ch

Peak Analysis	
Number of peaks created:	16
Number of measured peaks:	16
Number of missed peaks:	0
Number of spurious peaks:	20
Peak Detection Index (Target =1):	-0.25

Centroid and FWHM Differences	Channels	keV
RMS Centroid Difference:	0.006	0.002
RMS FWHM differences:		0.023

Area Estimation	
Centroid of Distribution:	0.313
OK	



	Requested Values				Given Values		Measured Values					Assessment			
	Peak Energy (keV)	Peak Area (counts)	Peak Centroid (channels)	FWHM (keV)	Peak Area (counts)	Peak Centroid (channels)	Peak Energy (keV)	Peak Area (counts)	Std. Uncert. (%)	Peak Centroid (channels)	FWHM (keV)	Peak Area z-score	Significance	Centroid Difference (channels)	FWHM Difference (keV)
1	59.54	300,000	235.447	0.774	299,999	235.447	59.54	300528	0.28%	235.44	0.812	0.63		-0.007	0.038
2	88.03	300,000	341.236	0.801	300,001	341.236	88.03	301852	0.26%	341.24	0.826	2.36	May be signif.	0.004	0.025
3	14.41	300,000	67.870	0.730	299,999	67.870	14.41	300338	0.27%	67.88	0.754	0.42		0.010	0.024
4	122.06	300,000	467.597	0.834	299,999	467.597	122.06	300875	0.28%	467.60	0.873	1.04		0.003	0.039
5	136.47	300,000	521.104	0.847	299,999	521.104	136.47	301106	0.27%	521.11	0.861	1.36		0.006	0.014
6	165.86	300,000	630.236	0.875	300,002	630.236	165.86	298571	0.26%	630.23	0.888	-1.84	Prob. Not Signif.	-0.006	0.013
7	279.02	300,000	1050.424	0.980	299,998	1050.424	279.02	299927	0.27%	1050.42	1.023	-0.09		-0.004	0.043
8	391.70	300,000	1488.830	1.082	299,998	1468.830	391.70	300677	0.21%	1468.83	1.085	1.08		0.000	0.003
9	514.00	300,000	1922.957	1.189	299,991	1922.957	514.00	300143	0.24%	1922.95	1.190	0.21		-0.007	0.001
10	661.86	300,000	2471.254	1.315	299,968	2471.254	661.66	299128	0.24%	2471.25	1.333	-1.17		-0.004	0.018
11	834.84	300,000	3114.313	1.457	299,995	3114.313	834.84	298477	0.24%	3114.31	1.468	-2.12	May be signif.	-0.003	0.011
12	898.04	300,000	3348.990	1.508	299,992	3348.990	898.04	300232	0.23%	3348.99	1.511	0.35		0.000	0.003
13	1838.05	300,000	6832.078	2.158	299,988	6832.076	1836.05	299887	0.20%	6832.09	2.159	-0.17		0.014	0.001
14	1115.54	300,000	4166.624	1.674	299,958	4156.623	1115.54	300473	0.23%	4156.62	1.704	0.75		-0.003	0.030
15	1173.23	300,000	4370.842	1.717	299,932	4370.841	1173.23	301415	0.23%	4370.85	1.727	2.14	May be signif.	0.009	0.010
16	1332.49	300,000	4962.217	1.831	299,991	4962.217	1332.49	300606	0.21%	4962.22	1.849	0.97		0.003	0.018
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