Report Generated On 6/12/2006 6:00:52 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-101-F-
Sample Title: OOL-09-01-101-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 5:50:49 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-101-F-
Title: OOL-09-01-101-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.55	73.08	1.00	2.46E+002	51.06	7.91E+002
m	2	285-	305	300.09	75.22	1.00	3.72E+002	59.63	9.59E+002
	3	332-	346	340.22	85.25	0.83	1.46E+002	111.02	1.05E+003
	4	947-	960	953.91	238.66	1.07	2.78E+002	62.53	2.68E+002
	5	1172-	1185	1179.08	294.94	0.68	6.70E+001	45.00	1.67E+002
	6	1341-	1358	1351.88	338.14	0.86	8.84E+001	50.61	1.78E+002
	7	1400-	1414	1406.20	351.72	0.68	1.40E+002	44.49	1.30E+002
	8	2032-	2048	2041.17	510.44	1.47	1.06E+002	41.03	1.06E+002
	9	2323-	2339	2330.61	582.79	1.48	1.33E+002	38.49	8.08E+001
	10	2426-	2442	2434.91	608.86	1.45	1.51E+002	38.03	7.22E+001
	11	3172-	3184	3177.74	794.55	0.68	3.55E+001	21.54	3.25E+001
	12	3634-	3654	3642.80	910.80	1.05	1.57E+002	34.33	4.14E+001
	13	3865-	3882	3873.59	968.49	1.00	8.72E+001	29.51	4.28E+001
	14	4475-	4488	4480.29	1120.15	0.32	3.76E+001	21.29	2.84E+001
	15	5829-	5856	5842.45	1460.66	1.39	9.20E+002	61.01	1.07E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.990	511.00*		100.00	1.80371E-001	7.41737E-002
K-40	0.999	1460.81*		10.67	1.95205E+001	2.04263E+000
TL-208	0.749	277.35		6.80		
		510.84*		21.60	8.35051E-001	3.50103E-001
		583.14*		84.20	2.81621E-001	8.92834E-002
		860.37		12.46		
Pb-212	0.580	74.81*	@	10.70	1.20246E+001	3.04539E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.66152E-001	2.37649E-001
Bi-214	0.703	609.31*		46.30	5.87974E-001	1.65065E-001
		1120.29*		15.10	5.17071E-001	2.97893E-001
		1764.49		15.80		
PB-214	0.618	74.82*	@	6.21	2.07187E+001	5.45859E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.11214E-001	3.53776E-001
		351.92*		37.20	5.75633E-001	2.06532E-001
Ac-228	0.995	338.32*		11.40	1.17415E+000	6.96691E-001
		911.07*		27.70	1.12464E+000	2.78455E-001
		969.11*		16.60	1.05819E+000	3.75000E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.990	1.195408E-001	7.661417E-002
K-40		0.999	1.952047E+001	2.042631E+000
TL-208		0.749	2.816209E-001	8.881045E-002
Pb-212	@	0.580	8.661522E-001	2.376491E-001
Bi-214		0.703	5.713177E-001	1.443817E-001
PB-214	@	0.618	5.592588E-001	1.783625E-001
Ac-228		0.995	1.107852E+000	2.128699E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.08	4.0940E-001	20.79
3	85.25	2.4369E-001	75.93
11	794.55	5.9167E-002	60.69

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0276E-001	8.86E-002	3.4603E-002
	1332.49	100.00	8.8582E-002		7.0902E-002
Nb-94	702.63	100.00	1.1636E-001	1.13E-001	-2.7356E-002
	871.10	100.00	1.1263E-001		9.6187E-002
Ag-108m	79.20	7.10	9.2363E+000	1.40E-001	-1.1275E+001
	433.93	89.90	1.5253E-001		1.0482E-001
	614.37	90.40	1.6495E-001		-8.2290E-003
	722.95	90.50	1.4035E-001		1.0656E-001
Sb-125	176.33	6.89	2.7614E+000	4.59E-001	-3.8860E-002
	427.89	29.33	4.5886E-001		-1.7713E-001
	463.38	10.35	1.2633E+000		-4.3506E-002
	600.56	17.80	6.4181E-001		2.2724E-002
	606.64	5.02	3.1795E+000		5.6890E+000
	635.90	11.32	1.0534E+000		-2.6938E-001
Cs-134	563.23	8.38	1.4467E+000	1.45E-001	4.1248E-001
	569.32	15.43	8.2679E-001		4.2228E-001
	604.70	97.60	1.6290E-001		3.7282E-002
	795.84	85.40	1.4492E-001		8.9624E-002
	801.93	8.73	1.2930E+000		-6.2132E-001
Cs-137	661.65	85.12	1.4959E-001	1.50E-001	2.8170E-002
Eu-152	121.78	28.40	9.9365E-001	3.90E-001	8.7338E-001
	244.69	7.49	2.2958E+000		-2.1272E+000
	344.27	26.50	5.3026E-001		-1.9735E-001
	778.89	12.74	8.3816E-001		-4.2551E-001
	867.32	4.16	2.6285E+000		-3.9939E+000
	964.01	14.40	1.0178E+000		5.4285E-001
	1085.78	10.00	1.0160E+000		-4.4682E-001
	1112.02	13.30	8.0657E-001		-1.3570E+000
	1407.95	20.70	3.8991E-001		1.8080E-001
Eu-154	123.07	40.50	6.8757E-001	2.83E-001	7.5886E-002
	247.94	6.60	2.5279E+000		1.7204E-001
	591.81	4.83	2.5072E+000		9.7245E-001
	723.30	19.70	6.4806E-001		5.4790E-001
	756.87	4.33	2.5392E+000		-2.8972E+000
	873.19	11.50	9.4873E-001		-4.3718E-001
	996.32	10.30	1.0769E+000		3.4108E-001
	1004.76	17.90	6.2549E-001		-2.9346E-001
	1274.45	35.50	2.8309E-001		-2.1131E-001
Eu-155	86.54	30.90	1.6436E+000	1.64E+000	2.6207E+000
	105.31	20.70	1.7180E+000		1.5660E+000
Am-241	59.54	35.90	3.6140E+000	3.61E+000	-8.7990E-001
Cm-243	228.19	10.56	1.6128E+000	1.12E+000	1.4947E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1214E+000	1.12E+000	5.8782E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 6:38:39 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-102-F-
Sample Title: OOL-09-01-102-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 6:28:38 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-102-F-
Title: OOL-09-01-102-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	304	291.39	73.04	0.83	1.95E+002	49.61	6.04E+002
m	2	288-	304	300.10	75.22	0.84	2.99E+002	56.04	7.74E+002
	3	332-	344	338.99	84.94	0.67	9.55E+001	98.70	9.23E+002
	4	944-	959	953.83	238.63	1.14	2.39E+002	71.59	3.65E+002
	5	1397-	1415	1406.90	351.89	1.11	1.43E+002	50.18	1.50E+002
	6	2031-	2052	2041.66	510.56	1.03	1.43E+002	49.92	1.35E+002
	7	2322-	2340	2331.03	582.90	0.62	1.89E+002	45.48	1.02E+002
	8	2427-	2444	2435.34	608.97	0.69	1.48E+002	37.81	6.91E+001
	9	2900-	2917	2906.74	726.81	1.38	5.66E+001	29.98	5.44E+001
	10	3172-	3183	3177.37	794.46	0.41	3.17E+001	22.06	3.73E+001
	11	3633-	3652	3642.91	910.83	1.48	1.55E+002	34.25	4.27E+001
M	12	3848-	3882	3855.94	964.08	2.06	5.10E+001	17.23	3.15E+001
m	13	3848-	3882	3873.53	968.48	2.07	7.72E+001	20.07	3.45E+001
	14	4472-	4485	4478.88	1119.80	0.34	4.71E+001	23.36	3.39E+001
	15	4758-	4769	4763.54	1190.96	0.41	2.00E+001	14.89	1.50E+001
	16	5830-	5855	5842.40	1460.64	1.82	9.35E+002	62.78	2.19E+001
	17	7051-	7064	7057.73	1764.44	0.70	3.28E+001	14.29	7.15E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.994	511.00*	100.00	2.44688E-001	9.14280E-002
K-40	0.999	1460.81*	10.67	1.98340E+001	2.08600E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.13281E+000	4.33270E-001
		583.14*	84.20	3.98818E-001	1.09313E-001
		860.37	12.46		
Bi-212	0.996	727.17*	11.80	9.08706E-001	4.92690E-001
Pb-212	0.580	74.81* @	10.70	9.65422E+000	2.62006E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.46399E-001	2.52084E-001
Bi-214	0.996	609.31*	46.30	5.76866E-001	1.63705E-001
		1120.29*	15.10	6.47301E-001	3.28593E-001
		1764.49*	15.80	5.12225E-001	2.28671E-001
Ac-228	0.630	338.32	11.40		
		911.07*	27.70	1.11563E+000	2.77512E-001
		969.11*	16.60	9.36999E-001	2.62715E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.994	1.585429E-001	9.438592E-002
K-40		0.999	1.983400E+001	2.086002E+000
TL-208		0.751	3.988184E-001	1.085380E-001
Bi-212		0.996	9.087062E-001	4.926901E-001
Pb-212	@	0.580	7.463987E-001	2.520841E-001
Bi-214		0.996	5.679794E-001	1.233724E-001
Ac-228		0.630	1.021425E+000	1.907841E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.04	3.2484E-001	25.46
3	84.94	1.5921E-001	103.33
5	351.89	2.3788E-001	35.15
10	794.46	5.2802E-002	69.64
M 12	964.08	8.5030E-002	33.77
15	1190.96	3.3333E-002	74.43

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1477E-001	9.34E-002	-1.2883E-001
	1332.49	100.00	9.3380E-002		4.1666E-002
Nb-94	702.63	100.00	1.1670E-001	1.04E-001	-1.3836E-002
	871.10	100.00	1.0449E-001		4.1515E-002
Ag-108m	79.20	7.10	9.2835E+000	1.41E-001	-1.4605E+001
	433.93	89.90	1.4062E-001		-4.5422E-002
	614.37	90.40	1.6792E-001		-6.5734E-002
	722.95	90.50	1.5244E-001		1.6380E-002
Sb-125	176.33	6.89	2.7444E+000	4.22E-001	-1.9750E+000
	427.89	29.33	4.2192E-001		-9.2119E-003
	463.38	10.35	1.2991E+000		4.2284E-002
	600.56	17.80	6.7845E-001		1.1891E-001
	606.64	5.02	3.1338E+000		3.9528E+000
	635.90	11.32	1.0973E+000		-1.9654E-001
Cs-134	563.23	8.38	1.4807E+000	1.48E-001	-1.6975E-001
	569.32	15.43	7.9027E-001		-5.7880E-001
	604.70	97.60	1.6196E-001		2.4888E-002
	795.84	85.40	1.4847E-001		5.3712E-002
	801.93	8.73	1.3016E+000		-5.3185E-001
Cs-137	661.65	85.12	1.4923E-001	1.49E-001	-1.1954E-002
Eu-152	121.78	28.40	9.8394E-001	4.39E-001	2.5181E-001
	244.69	7.49	2.3621E+000		-2.3604E+000
	344.27	26.50	5.4256E-001		-1.0579E+000
	778.89	12.74	8.8031E-001		-5.0824E-001
	867.32	4.16	2.6382E+000		-4.3493E+000
	964.01	14.40	1.0070E+000		-2.5127E-001
	1085.78	10.00	1.0674E+000		-2.1319E-001
	1112.02	13.30	8.7258E-001		-6.1983E-001
	1407.95	20.70	4.3866E-001		2.7198E-001
Eu-154	123.07	40.50	6.8133E-001	3.03E-001	2.5140E-001
	247.94	6.60	2.5040E+000		-1.1156E+000
	591.81	4.83	2.5133E+000		2.1226E-001
	723.30	19.70	6.9443E-001		-6.6203E-002
	756.87	4.33	2.8577E+000		1.6484E+000
	873.19	11.50	9.2733E-001		9.1856E-001
	996.32	10.30	1.0972E+000		4.9198E-002
	1004.76	17.90	5.8926E-001		4.0766E-002
	1274.45	35.50	3.0309E-001		-1.6913E-001
Eu-155	86.54	30.90	1.6354E+000	1.64E+000	6.6282E-001
	105.31	20.70	1.7097E+000		-1.0519E-001
Am-241	59.54	35.90	3.5415E+000	3.54E+000	1.4471E+000
Cm-243	228.19	10.56	1.7209E+000	1.16E+000	-8.8564E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1566E+000	1.16E+000	7.1288E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 9:27:44 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-103-F-
Sample Title: OOL-09-01-103-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 9:17:41 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-103-F-
Title: OOL-09-01-103-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	291.32	73.03	1.07	2.31E+002	52.73	9.39E+002
m	2	284-	306	300.15	75.23	1.07	3.81E+002	61.11	1.10E+003
	3	335-	344	339.05	84.96	0.41	8.71E+001	82.30	7.41E+002
	4	948-	961	953.83	238.63	0.86	1.89E+002	65.23	3.32E+002
	5	1175-	1188	1180.14	295.21	0.64	6.64E+001	46.24	1.75E+002
	6	1346-	1357	1352.37	338.26	0.57	3.29E+001	39.01	1.45E+002
	7	1398-	1413	1406.78	351.86	0.87	1.25E+002	47.23	1.52E+002
	8	2324-	2339	2331.27	582.96	1.08	1.43E+002	38.50	8.10E+001
	9	2427-	2443	2435.45	609.00	0.86	1.24E+002	36.39	7.03E+001
	10	2898-	2915	2906.83	726.83	0.36	6.36E+001	27.36	4.04E+001
	11	3634-	3654	3643.06	910.87	1.10	1.44E+002	30.67	2.81E+001
	12	3867-	3883	3874.37	968.69	1.56	7.93E+001	27.95	3.97E+001
	13	4473-	4485	4478.75	1119.77	0.48	1.98E+001	22.46	4.23E+001
	14	5831-	5855	5843.24	1460.85	1.88	8.50E+002	61.70	3.43E+001
	15	7053-	7067	7059.25	1764.82	0.65	3.01E+001	13.81	6.87E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	1.000	1460.81*		10.67	1.80237E+001	1.96014E+000
TL-208	0.471	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	3.02507E-001	9.04517E-002
		860.37		12.46		
Bi-212	0.996	727.17*		11.80	1.02097E+000	4.55016E-001
Pb-212	0.580	74.81*	@	10.70	1.22981E+001	3.11620E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.90864E-001	2.23552E-001
Bi-214	0.996	609.31*		46.30	4.82296E-001	1.53847E-001
		1120.29*		15.10	2.71646E-001	3.10289E-001
		1764.49*		15.80	4.69832E-001	2.20491E-001
PB-214	0.619	74.82*	@	6.21	2.11900E+001	5.58530E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.06522E-001	3.62840E-001
		351.92*		37.20	5.14593E-001	2.12223E-001
Ac-228	0.998	338.32*		11.40	4.36994E-001	5.22405E-001
		911.07*		27.70	1.03376E+000	2.50337E-001
		969.11*		16.60	9.62515E-001	3.53986E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		1.000	1.802373E+001	1.960143E+000
TL-208		0.471	3.025069E-001	9.045172E-002
Bi-212		0.996	1.020974E+000	4.550164E-001
Pb-212	@	0.580	5.908642E-001	2.235518E-001
Bi-214		0.996	4.489068E-001	1.168769E-001
PB-214	@	0.619	5.125358E-001	1.831889E-001
Ac-228		0.998	9.339350E-001	1.903408E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.03	3.8524E-001	22.81
3	84.96	1.4524E-001	94.44

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2072E-001	8.28E-002	9.0763E-002
	1332.49	100.00	8.2827E-002		-9.7396E-002
Nb-94	702.63	100.00	1.2303E-001	1.15E-001	1.0351E-001
	871.10	100.00	1.1534E-001		4.5285E-002
Ag-108m	79.20	7.10	9.4236E+000	1.43E-001	-7.9906E+000
	433.93	89.90	1.4344E-001		3.2030E-002
	614.37	90.40	1.6819E-001		-8.2444E-002
	722.95	90.50	1.4585E-001		1.7759E-002
Sb-125	176.33	6.89	2.7907E+000	4.48E-001	-2.0031E-001
	427.89	29.33	4.4841E-001		8.4062E-002
	463.38	10.35	1.3296E+000		1.0830E+000
	600.56	17.80	6.9188E-001		3.1877E-001
	606.64	5.02	3.0734E+000		4.2908E+000
	635.90	11.32	9.8065E-001		-4.7978E-001
Cs-134	563.23	8.38	1.4294E+000	1.42E-001	2.9712E-002
	569.32	15.43	8.2142E-001		4.0500E-001
	604.70	97.60	1.6031E-001		7.7687E-002
	795.84	85.40	1.4210E-001		9.4728E-003
	801.93	8.73	1.2446E+000		-9.3830E-001
Cs-137	661.65	85.12	1.3843E-001	1.38E-001	-1.2440E-002
Eu-152	121.78	28.40	9.9971E-001	4.23E-001	5.3153E-001
	244.69	7.49	2.3654E+000		-1.2317E+000
	344.27	26.50	5.5722E-001		-2.8074E-001
	778.89	12.74	8.5649E-001		-2.1351E+000
	867.32	4.16	2.8601E+000		-3.1947E+000
	964.01	14.40	9.9156E-001		-3.5764E-001
	1085.78	10.00	1.0944E+000		-8.1287E-001
	1112.02	13.30	8.1342E-001		-1.0113E+000
	1407.95	20.70	4.2308E-001		6.8339E-002
Eu-154	123.07	40.50	6.8815E-001	2.95E-001	-2.3804E-002
	247.94	6.60	2.6404E+000		-3.1163E+000
	591.81	4.83	2.5010E+000		1.3903E+000
	723.30	19.70	6.6389E-001		-7.0747E-002
	756.87	4.33	2.7237E+000		8.2403E-001
	873.19	11.50	9.9345E-001		4.4180E-001
	996.32	10.30	1.0266E+000		2.1399E-001
	1004.76	17.90	5.7152E-001		-3.7110E-002
	1274.45	35.50	2.9470E-001		1.3227E-002
Eu-155	86.54	30.90	1.6567E+000	1.66E+000	2.1459E+000
	105.31	20.70	1.7206E+000		5.6448E-001
Am-241	59.54	35.90	3.6034E+000	3.60E+000	4.6138E-001
Cm-243	228.19	10.56	1.6496E+000	1.17E+000	-1.3070E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1687E+000	1.17E+000	3.7552E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 9:46:42 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-104-F-
Sample Title: OOL-09-01-104-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 9:36:39 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-104-F-
Title: OOL-09-01-104-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	313	291.49	73.07	1.15	2.91E+002	52.46	9.70E+002
m	2	282-	313	300.23	75.25	1.16	5.10E+002	61.14	1.01E+003
m	3	282-	313	308.91	77.42	1.16	1.69E+002	49.56	9.19E+002
	4	335-	345	338.79	84.89	0.68	1.12E+002	88.89	8.10E+002
	5	948-	971	953.96	238.67	1.22	2.80E+002	89.95	4.40E+002
	6	1174-	1188	1179.54	295.06	1.01	7.20E+001	46.17	1.66E+002
	7	1344-	1362	1351.64	338.08	0.36	1.04E+002	49.96	1.60E+002
	8	1398-	1414	1407.27	351.98	0.98	1.07E+002	49.27	1.68E+002
	9	1847-	1857	1851.51	463.03	0.62	3.55E+001	25.41	5.55E+001
	10	2034-	2050	2041.27	510.47	0.59	7.88E+001	44.58	1.40E+002
	11	2323-	2338	2331.75	583.08	1.39	1.60E+002	37.41	6.80E+001
	12	2428-	2444	2436.55	609.27	0.89	1.27E+002	39.63	8.96E+001
	13	3635-	3652	3643.49	910.98	1.43	1.07E+002	31.20	4.49E+001
M	14	3852-	3884	3858.17	964.64	1.42	3.03E+001	15.02	3.22E+001
m	15	3852-	3884	3874.68	968.77	1.42	8.21E+001	20.75	3.44E+001
	16	4474-	4489	4480.34	1120.17	0.70	4.20E+001	24.56	3.80E+001
	17	5833-	5856	5843.81	1461.00	1.64	9.62E+002	63.23	2.02E+001
	18	7054-	7067	7060.75	1765.20	0.58	3.95E+001	13.74	3.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.999	1460.81*	10.67	2.04024E+001	2.12779E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	6.22244E-001	3.65765E-001
		583.14*	84.20	3.38399E-001	9.05701E-002
		860.37	12.46		
Pb-212	0.852	74.81* @	10.70	1.64661E+001	3.78348E+000
		77.11* @	18.00	2.96758E+000	1.04852E+000
		87.30 @	8.00		
		238.63*	44.60	8.72697E-001	3.12139E-001
Bi-214	0.997	609.31*	46.30	4.97003E-001	1.66257E-001
		1120.29*	15.10	5.77548E-001	3.43287E-001
		1764.49*	15.80	6.16035E-001	2.22991E-001
PB-214	0.764	74.82* @	6.21	2.83715E+001	6.83664E+000
		77.11* @	10.50	5.08729E+000	1.83716E+000
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.48887E-001	3.64069E-001
		351.92*	37.20	4.40738E-001	2.15410E-001
Ac-228	0.998	338.32*	11.40	1.37952E+000	6.97539E-001
		911.07*	27.70	7.69302E-001	2.40927E-001
		969.11*	16.60	9.96704E-001	2.72713E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
X	ANN		0.991		
	K-40		0.999	2.040240E+001	2.127789E+000
	TL-208		0.752	3.547973E-001	8.791500E-002
	Pb-212	@	0.852	8.726966E-001	3.121387E-001
	Bi-214		0.997	5.445109E-001	1.242510E-001
	PB-214	@	0.764	4.687812E-001	1.853899E-001
	Ac-228		0.998	9.010434E-001	1.747972E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.07	4.8462E-001	18.04
4	84.89	1.8585E-001	79.71
9	463.03	5.9116E-002	71.65
M 14	964.64	5.0485E-002	49.60

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1031E-001	7.94E-002	-1.7696E-001
	1332.49	100.00	7.9435E-002		-3.0218E-003
Nb-94	702.63	100.00	1.1806E-001	1.16E-001	9.5828E-002
	871.10	100.00	1.1572E-001		4.7297E-002
Ag-108m	79.20	7.10	9.6918E+000	1.37E-001	-2.5312E+000
	433.93	89.90	1.3721E-001		-7.2651E-002
	614.37	90.40	1.7292E-001		5.9169E-002
	722.95	90.50	1.4105E-001		1.1414E-001
Sb-125	176.33	6.89	2.7740E+000	4.48E-001	-2.6188E-001
	427.89	29.33	4.4841E-001		1.3390E-001
	463.38	10.35	1.2519E+000		1.5387E+000
	600.56	17.80	6.5426E-001		-7.0633E-001
	606.64	5.02	3.1749E+000		4.8675E+000
	635.90	11.32	1.0618E+000		-3.0825E-001
Cs-134	563.23	8.38	1.5106E+000	1.40E-001	7.1726E-001
	569.32	15.43	7.9771E-001		-4.6387E-001
	604.70	97.60	1.6220E-001		-3.8581E-002
	795.84	85.40	1.4046E-001		8.9019E-002
	801.93	8.73	1.3186E+000		-1.3538E+000
Cs-137	661.65	85.12	1.4263E-001	1.43E-001	-1.6469E-001
Eu-152	121.78	28.40	9.9724E-001	4.26E-001	-4.0721E-001
	244.69	7.49	2.2991E+000		-8.4081E-002
	344.27	26.50	5.4794E-001		1.7380E-001
	778.89	12.74	9.2603E-001		-7.8128E-001
	867.32	4.16	2.6955E+000		-3.4532E+000
	964.01	14.40	1.0683E+000		2.0063E-001
	1085.78	10.00	1.0855E+000		6.6376E-001
	1112.02	13.30	8.6940E-001		-5.5658E-001
	1407.95	20.70	4.2624E-001		-1.6272E-001
Eu-154	123.07	40.50	6.9259E-001	3.18E-001	5.1286E-001
	247.94	6.60	2.5828E+000		9.9726E-002
	591.81	4.83	2.4447E+000		8.1495E-001
	723.30	19.70	6.4485E-001		4.2590E-001
	756.87	4.33	2.7797E+000		-1.3431E-001
	873.19	11.50	1.0035E+000		-3.7349E-001
	996.32	10.30	1.0479E+000		-1.7061E-001
	1004.76	17.90	5.8676E-001		-3.2112E-001
	1274.45	35.50	3.1787E-001		6.8431E-002
Eu-155	86.54	30.90	1.6756E+000	1.68E+000	1.2854E+000
	105.31	20.70	1.6992E+000		1.3115E+000
Am-241	59.54	35.90	3.6305E+000	3.63E+000	-1.4451E+000
Cm-243	228.19	10.56	1.6789E+000	1.09E+000	3.7277E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0894E+000	1.09E+000	2.6791E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 10:06:56 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-105-F-
Sample Title: OOL-09-01-105-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 9:56:53 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-105-F-
Title: OOL-09-01-105-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	292.19	73.24	0.95	1.92E+002	49.12	8.27E+002
m	2	282-	306	300.09	75.22	0.95	3.40E+002	58.00	8.93E+002
M	3	333-	359	339.71	85.12	0.89	1.86E+002	52.51	8.71E+002
m	4	333-	359	350.05	87.71	0.90	8.50E+001	44.54	7.99E+002
	5	948-	961	954.13	238.71	1.03	1.95E+002	61.33	2.82E+002
	6	1173-	1185	1180.42	295.28	0.54	5.39E+001	43.16	1.64E+002
	7	1348-	1358	1353.01	338.42	0.44	4.39E+001	33.73	1.05E+002
	8	1400-	1415	1406.77	351.86	1.49	1.43E+002	45.08	1.28E+002
	9	2033-	2054	2041.93	510.63	1.81	1.32E+002	45.70	1.09E+002
	10	2324-	2340	2331.87	583.11	1.33	1.45E+002	36.58	6.51E+001
	11	2426-	2445	2435.97	609.13	1.13	1.26E+002	41.23	9.02E+001
	12	3175-	3188	3180.95	795.35	0.88	2.12E+001	21.04	3.38E+001
	13	3636-	3655	3643.48	910.97	1.43	1.34E+002	34.39	5.00E+001
	14	3867-	3883	3875.21	968.90	0.43	5.61E+001	26.81	4.19E+001
	15	4475-	4488	4481.08	1120.35	0.62	3.53E+001	22.42	3.47E+001
	16	5831-	5856	5844.12	1461.07	1.81	9.11E+002	61.83	1.96E+001
	17	6347-	6360	6353.70	1588.45	0.39	1.90E+001	9.80	1.95E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.996	511.00*	100.00	2.24525E-001	8.37307E-002
K-40	0.998	1460.81*	10.67	1.93335E+001	2.04217E+000
TL-208	0.753	277.35	6.80		
		510.84*	21.60	1.03947E+000	3.96828E-001
		583.14*	84.20	3.06364E-001	8.70353E-002
		860.37	12.46		
Pb-212	0.726	74.81* @	10.70	1.09794E+001	2.85462E+000
		77.11 @	18.00		
		87.30* @	8.00	2.30153E+000	1.28711E+000
		238.63*	44.60	6.08460E-001	2.13764E-001
Bi-214	0.706	609.31*	46.30	4.90626E-001	1.71806E-001
		1120.29*	15.10	4.85184E-001	3.12741E-001
		1764.49	15.80		
PB-214	0.697	74.82* @	6.21	1.89178E+001	5.10670E+000
		77.11 @	10.50		
		87.30* @	4.67	3.94267E+000	2.22492E+000
		241.98	7.49		
		295.21*	19.20	4.10933E-001	3.36395E-001
		351.92*	37.20	5.85997E-001	2.09492E-001
Ac-228	0.999	338.32*	11.40	5.83084E-001	4.57166E-001
		911.07*	27.70	9.62222E-001	2.70682E-001
		969.11*	16.60	6.81187E-001	3.33217E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.996	1.583502E-001	8.578812E-002
K-40		0.998	1.933353E+001	2.042168E+000
TL-208		0.753	3.063644E-001	8.646076E-002
Pb-212	@	0.726	6.084595E-001	2.137644E-001
Bi-214		0.706	4.893641E-001	1.505802E-001
PB-214	@	0.697	5.370762E-001	1.778278E-001
Ac-228		0.999	8.038686E-001	1.909031E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.24	3.2014E-001	25.57
M 3	85.12	3.0965E-001	28.26
12	795.35	3.5273E-002	99.41
17	1588.45	3.1746E-002	51.47

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1736E-001	8.22E-002	1.4008E-003
	1332.49	100.00	8.2161E-002		-2.5279E-002
Nb-94	702.63	100.00	1.1670E-001	1.14E-001	1.9637E-002
	871.10	100.00	1.1419E-001		1.4693E-002
Ag-108m	79.20	7.10	9.2178E+000	1.36E-001	-3.4596E+000
	433.93	89.90	1.3641E-001		3.6950E-002
	614.37	90.40	1.5771E-001		-4.7151E-002
	722.95	90.50	1.3680E-001		8.5927E-003
Sb-125	176.33	6.89	2.6435E+000	4.20E-001	-1.8483E+000
	427.89	29.33	4.1950E-001		4.9816E-001
	463.38	10.35	1.2147E+000		7.7008E-001
	600.56	17.80	6.8520E-001		2.0191E-001
	606.64	5.02	3.0781E+000		4.4403E+000
	635.90	11.32	9.9861E-001		-4.3599E-002
Cs-134	563.23	8.38	1.4638E+000	1.35E-001	9.7902E-002
	569.32	15.43	7.7133E-001		-7.4211E-002
	604.70	97.60	1.5936E-001		3.5568E-002
	795.84	85.40	1.3542E-001		4.3026E-002
	801.93	8.73	1.2310E+000		7.1595E-001
Cs-137	661.65	85.12	1.3843E-001	1.38E-001	-7.4543E-002
Eu-152	121.78	28.40	1.0106E+000	3.76E-001	3.4308E-001
	244.69	7.49	2.1729E+000		-1.5371E-002
	344.27	26.50	5.0180E-001		-5.7544E-002
	778.89	12.74	7.8044E-001		-1.0614E+000
	867.32	4.16	2.8244E+000		-4.1823E+000
	964.01	14.40	9.8712E-001		2.0294E-001
	1085.78	10.00	1.0628E+000		1.5027E-001
	1112.02	13.30	8.0312E-001		-7.6683E-001
	1407.95	20.70	3.7576E-001		2.2370E-001
Eu-154	123.07	40.50	6.9567E-001	2.73E-001	-1.7484E-002
	247.94	6.60	2.3913E+000		-3.8223E+000
	591.81	4.83	2.5010E+000		2.1857E+000
	723.30	19.70	6.3182E-001		4.4517E-001
	756.87	4.33	2.5129E+000		-5.0811E-001
	873.19	11.50	9.9345E-001		3.5150E-001
	996.32	10.30	9.5967E-001		-2.3103E-001
	1004.76	17.90	5.5051E-001		1.9775E-001
	1274.45	35.50	2.7251E-001		-1.0461E-001
Eu-155	86.54	30.90	1.6538E+000	1.65E+000	2.7264E+000
	105.31	20.70	1.6992E+000		3.2721E-001
Am-241	59.54	35.90	3.5726E+000	3.57E+000	-9.4205E-001
Cm-243	228.19	10.56	1.6139E+000	1.10E+000	-2.0125E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1023E+000	1.10E+000	-5.7027E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 10:25:32 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-106-F-
Sample Title: OOL-09-01-106-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 10:15:28 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-106-F-
Title: OOL-09-01-106-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.26	73.01	0.95	1.61E+002	49.85	9.02E+002
m	2	282-	306	300.35	75.28	0.95	3.12E+002	59.39	1.06E+003
	3	945-	960	954.10	238.70	1.08	2.17E+002	65.76	3.01E+002
	4	1173-	1186	1181.02	295.43	0.70	7.72E+001	44.09	1.56E+002
	5	1396-	1415	1407.15	351.95	0.99	1.40E+002	49.94	1.45E+002
	6	1847-	1856	1851.18	462.95	0.47	2.61E+001	25.80	6.09E+001
	7	2034-	2054	2041.93	510.63	1.09	1.35E+002	47.69	1.26E+002
	8	2322-	2340	2331.12	582.92	1.58	1.28E+002	40.25	8.62E+001
	9	2428-	2445	2436.67	609.30	1.15	1.52E+002	37.69	6.59E+001
	10	2640-	2651	2645.65	661.54	0.79	2.84E+001	21.72	3.76E+001
	11	2904-	2917	2909.67	727.54	0.87	3.23E+001	26.21	5.27E+001
	12	3636-	3654	3643.84	911.06	1.51	1.21E+002	32.57	4.57E+001
	13	3869-	3884	3876.47	969.22	0.38	6.46E+001	26.83	4.04E+001
	14	4474-	4489	4480.48	1120.20	1.00	6.90E+001	20.10	1.20E+001
	15	5830-	5857	5844.76	1461.23	1.98	9.30E+002	62.21	1.74E+001
	16	7055-	7069	7061.80	1765.46	0.84	3.79E+001	14.22	5.09E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.996	511.00*	100.00	2.30226E-001	8.71869E-002
K-40	0.994	1460.81*	10.67	1.97208E+001	2.07149E+000
Cs-137	1.000	661.65*	85.12	6.19569E-002	4.78698E-002
TL-208	0.752	277.35	6.80		
		510.84*	21.60	1.06586E+000	4.12922E-001
		583.14*	84.20	2.70360E-001	9.21120E-002
		860.37	12.46		
Bi-212	0.996	727.17*	11.80	5.17738E-001	4.25022E-001
Pb-212	0.580	74.81* @	10.70	1.00769E+001	2.75146E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.75393E-001	2.30841E-001
Bi-214	0.994	609.31*	46.30	5.93126E-001	1.64163E-001
		1120.29*	15.10	9.49118E-001	2.94299E-001
		1764.49*	15.80	5.91230E-001	2.29525E-001
PB-214	0.619	74.82* @	6.21	1.73627E+001	4.90553E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.88903E-001	3.50680E-001
		351.92*	37.20	5.75579E-001	2.26610E-001
Ac-228	0.635	338.32	11.40		
		911.07*	27.70	8.71249E-001	2.54523E-001
		969.11*	16.60	7.84569E-001	3.35966E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.996	1.718280E-001	8.940797E-002
K-40		0.994	1.972079E+001	2.071492E+000
Cs-137		1.000	6.195685E-002	4.786975E-002
TL-208		0.752	2.703599E-001	9.168964E-002
Bi-212		0.996	5.177380E-001	4.250222E-001
Pb-212	@	0.580	6.753934E-001	2.308411E-001
Bi-214		0.994	6.533648E-001	1.215952E-001
PB-214	@	0.619	5.795039E-001	1.903296E-001
Ac-228		0.635	8.396415E-001	2.028773E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.01	2.6839E-001	30.95
6	462.95	4.3534E-002	98.77

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.2871E-001	1.03E-001	1.4429E-001
		1332.49	100.00	1.0332E-001		1.4054E-001
	Nb-94	702.63	100.00	1.1738E-001	1.09E-001	4.5096E-002
		871.10	100.00	1.0905E-001		2.5775E-002
	Ag-108m	79.20	7.10	9.5676E+000	1.36E-001	1.2052E+000
		433.93	89.90	1.3561E-001		-5.8042E-002
		614.37	90.40	1.6441E-001		7.2332E-002
		722.95	90.50	1.3823E-001		-6.2972E-002
	Sb-125	176.33	6.89	2.6988E+000	4.14E-001	-5.9652E-001
		427.89	29.33	4.1380E-001		-4.3822E-001
		463.38	10.35	1.2656E+000		5.3600E-001
		600.56	17.80	6.5073E-001		1.6770E-002
		606.64	5.02	3.1338E+000		6.2635E+000
		635.90	11.32	1.0590E+000		-2.5785E-001
	Cs-134	563.23	8.38	1.4706E+000	1.39E-001	3.6991E-001
		569.32	15.43	7.7325E-001		-4.6877E-001
		604.70	97.60	1.5864E-001		-6.8338E-002
		795.84	85.40	1.3880E-001		1.8639E-001
		801.93	8.73	1.1988E+000		-1.8391E+000
+	Cs-137	661.65*	85.12	7.5506E-002	7.55E-002	6.1957E-002
	Eu-152	121.78	28.40	9.7498E-001	4.04E-001	3.0628E-001
		244.69	7.49	2.1800E+000		-1.4999E+000
		344.27	26.50	5.4256E-001		-6.3285E-001
		778.89	12.74	8.9774E-001		2.9741E-001
		867.32	4.16	2.5993E+000		-4.1182E+000
		964.01	14.40	9.4379E-001		-5.6912E-002
		1085.78	10.00	9.7176E-001		-1.3163E+000
		1112.02	13.30	7.9267E-001		-8.1019E-001
		1407.95	20.70	4.0353E-001		-3.1724E-001
	Eu-154	123.07	40.50	6.7326E-001	2.60E-001	3.0522E-002
		247.94	6.60	2.3766E+000		-2.1301E+000
		591.81	4.83	2.4447E+000		-1.4724E+000
		723.30	19.70	6.4161E-001		-1.8042E-001
		756.87	4.33	2.6664E+000		1.6101E+000
		873.19	11.50	9.2371E-001		-1.2495E-001
		996.32	10.30	1.0004E+000		-1.1561E+000
		1004.76	17.90	5.8676E-001		-1.9187E-002
		1274.45	35.50	2.5985E-001		-4.3611E-002
	Eu-155	86.54	30.90	1.6773E+000	1.68E+000	1.3275E+000
		105.31	20.70	1.6917E+000		-2.9160E-002
	Am-241	59.54	35.90	3.5259E+000	3.53E+000	-1.8438E+000
	Cm-243	228.19	10.56	1.6290E+000	1.13E+000	-5.1796E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1308E+000	1.13E+000	2.6195E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 10:40:31 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-107-F-
Sample Title: OOL-09-01-107-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 10:30:28 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-107-F-
Title: OOL-09-01-107-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	309	291.79	73.14	1.08	2.20E+002	51.66	1.04E+003
m	2	282-	309	300.26	75.26	1.09	4.01E+002	59.26	9.72E+002
	3	335-	344	339.42	85.05	0.44	1.54E+002	81.01	6.87E+002
	4	943-	959	954.27	238.75	1.05	2.09E+002	67.16	3.09E+002
	5	1176-	1189	1180.94	295.41	0.37	6.45E+001	41.90	1.42E+002
	6	1398-	1414	1407.49	352.04	0.99	9.73E+001	48.62	1.66E+002
	7	2033-	2053	2041.33	510.48	1.11	1.54E+002	43.05	8.97E+001
	8	2323-	2340	2331.88	583.11	0.80	1.11E+002	34.53	6.10E+001
	9	2427-	2445	2436.51	609.26	0.68	1.16E+002	39.38	8.54E+001
	10	2639-	2652	2645.35	661.47	0.77	5.31E+001	26.30	4.59E+001
	11	3636-	3652	3644.15	911.14	1.04	9.21E+001	32.51	5.79E+001
	12	3869-	3885	3876.54	969.23	0.38	5.75E+001	25.43	3.55E+001
	13	4473-	4486	4480.40	1120.18	1.28	3.27E+001	20.92	2.93E+001
	14	5325-	5339	5331.44	1332.92	0.62	3.73E+001	20.13	2.37E+001
	15	5831-	5858	5844.64	1461.20	2.04	8.80E+002	58.62	3.38E+000
	16	7055-	7069	7061.84	1765.47	1.13	3.57E+001	13.96	5.29E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.991	511.00*		100.00	2.63349E-001	8.16984E-002
K-40	0.995	1460.81*		10.67	1.86601E+001	1.95670E+000
Cs-137	0.999	661.65*		85.12	1.15725E-001	5.88806E-002
TL-208	0.752	277.35		6.80		
		510.84*		21.60	1.21921E+000	3.91119E-001
		583.14*		84.20	2.34753E-001	7.91677E-002
		860.37		12.46		
Pb-212	0.580	74.81*	@	10.70	1.29373E+001	3.17649E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.53370E-001	2.33188E-001
Bi-214	0.994	609.31*		46.30	4.51102E-001	1.63346E-001
		1120.29*		15.10	4.49709E-001	2.91700E-001
		1764.49*		15.80	5.56924E-001	2.24811E-001
PB-214	0.619	74.82*	@	6.21	2.22914E+001	5.70738E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	4.91754E-001	3.30166E-001
		351.92*		37.20	3.99520E-001	2.10618E-001
Ac-228	0.635	338.32		11.40		
		911.07*		27.70	6.61723E-001	2.45595E-001
		969.11*		16.60	6.98672E-001	3.17303E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.991	2.126425E-001	8.345247E-002
K-40		0.995	1.866006E+001	1.956697E+000
Cs-137		0.999	1.157245E-001	5.888059E-002
TL-208		0.752	2.347531E-001	7.879722E-002
Pb-212	@	0.580	6.533697E-001	2.331878E-001
Bi-214		0.994	4.812025E-001	1.203707E-001
PB-214	@	0.619	4.261973E-001	1.775653E-001
Ac-228		0.635	6.755657E-001	1.942150E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.14	3.6650E-001	23.49
3	85.05	2.5744E-001	52.44
14	1332.92	6.2199E-002	53.95

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.2794E-001	1.14E-001	1.2740E-001
		1332.49	100.00	1.1376E-001		1.5799E-001
	Nb-94	702.63	100.00	1.2400E-001	1.04E-001	5.0073E-002
		871.10	100.00	1.0407E-001		-2.2658E-002
	Ag-108m	79.20	7.10	9.3711E+000	1.38E-001	-4.2102E+000
		433.93	89.90	1.4268E-001		-1.8460E-002
		614.37	90.40	1.6248E-001		4.7144E-003
		722.95	90.50	1.3752E-001		7.7882E-002
	Sb-125	176.33	6.89	2.7103E+000	4.20E-001	-2.0378E+000
		427.89	29.33	4.2031E-001		5.6748E-002
		463.38	10.35	1.2519E+000		2.0878E-002
		600.56	17.80	6.7163E-001		1.8732E-001
		606.64	5.02	3.0734E+000		6.6579E+000
		635.90	11.32	1.0618E+000		-5.0251E-001
	Cs-134	563.23	8.38	1.3356E+000	1.35E-001	3.9020E-001
		569.32	15.43	7.3596E-001		9.0647E-003
		604.70	97.60	1.5597E-001		-4.1618E-002
		795.84	85.40	1.3499E-001		4.7821E-002
		801.93	8.73	1.2800E+000		-1.3162E+000
+	Cs-137	661.65*	85.12	8.6621E-002	8.66E-002	1.1572E-001
	Eu-152	121.78	28.40	9.7526E-001	3.38E-001	4.8303E-002
		244.69	7.49	2.1977E+000		-5.4588E+000
		344.27	26.50	5.4994E-001		-9.0885E-001
		778.89	12.74	9.0917E-001		-1.7351E-001
		867.32	4.16	2.7049E+000		-1.4830E+000
		964.01	14.40	9.4612E-001		-6.9898E-003
		1085.78	10.00	1.0490E+000		-1.0706E+000
		1112.02	13.30	7.9267E-001		5.3913E-001
		1407.95	20.70	3.3754E-001		2.9007E-002
	Eu-154	123.07	40.50	6.7622E-001	2.73E-001	-1.5591E-001
		247.94	6.60	2.4657E+000		-6.4985E-001
		591.81	4.83	2.3608E+000		-7.1313E-001
		723.30	19.70	6.2519E-001		3.7917E-002
		756.87	4.33	2.5129E+000		-9.8589E-001
		873.19	11.50	9.3452E-001		2.2844E-001
		996.32	10.30	1.0563E+000		-7.7450E-001
		1004.76	17.90	5.8676E-001		1.3566E-001
		1274.45	35.50	2.7251E-001		2.6480E-001
	Eu-155	86.54	30.90	1.6633E+000	1.66E+000	1.2464E+000
		105.31	20.70	1.6988E+000		2.7484E-001
	Am-241	59.54	35.90	3.7035E+000	3.70E+000	-3.1537E-001
	Cm-243	228.19	10.56	1.6393E+000	1.10E+000	1.0299E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0958E+000	1.10E+000	7.2577E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 4:34:02 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-01-108-F-
Sample Title: OOL-09-01-108-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 4:24:01 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-01-108-F-
Title: OOL-09-01-108-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	295-	309	300.54	75.04	1.52	5.34E+002	155.18	1.98E+003
	2	331-	345	339.01	84.66	0.57	1.53E+002	139.40	1.70E+003
	3	947-	964	954.26	238.51	0.80	2.51E+002	74.79	3.68E+002
	4	1401-	1412	1407.16	351.76	0.78	5.60E+001	40.03	1.44E+002
	5	2035-	2053	2044.48	511.14	1.00	1.07E+002	47.34	1.41E+002
	6	2319-	2343	2332.19	583.08	1.33	1.90E+002	49.59	1.09E+002
	7	2426-	2446	2436.03	609.05	0.84	1.39E+002	44.81	1.05E+002
	8	2639-	2650	2644.05	661.07	0.51	2.62E+001	22.93	4.38E+001
	9	3634-	3653	3644.40	911.22	0.65	1.41E+002	35.24	5.22E+001
M	10	3852-	3884	3857.75	964.58	1.78	2.23E+001	14.31	3.56E+001
m	11	3852-	3884	3875.43	969.00	1.78	7.25E+001	20.33	5.28E+001
	12	5625-	5638	5631.39	1408.10	0.58	1.39E+001	12.33	8.07E+000
	13	5829-	5860	5844.74	1461.45	2.37	1.12E+003	68.87	2.38E+001
	14	7056-	7071	7062.32	1765.93	0.64	4.50E+001	17.74	1.20E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.999	511.00*	100.00	1.50589E-001	6.96695E-002
K-40	0.987	1460.81*	10.67	1.93133E+001	1.96592E+000
Cs-137	0.989	661.65*	85.12	4.71330E-002	4.16404E-002
TL-208	0.751	277.35	6.80		
		510.84*	21.60	6.97173E-001	3.27531E-001
		583.14*	84.20	3.31276E-001	9.67078E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	7.91379E+000	2.77389E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.29357E-001	2.12040E-001
Bi-214	0.684	609.31*	46.30	4.46283E-001	1.54425E-001
		1120.29	15.10		
		1764.49*	15.80	5.46007E-001	2.22079E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	8.32621E-001	2.29341E-001
		969.11*	16.60	7.28209E-001	2.17927E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN	0.999	7.903384E-002	7.269625E-002
K-40	0.987	1.931331E+001	1.965921E+000
Cs-137	0.989	4.713299E-002	4.164037E-002
TL-208	0.751	3.312761E-001	9.610325E-002
Pb-212 @	0.521	6.293566E-001	2.120399E-001
Bi-214	0.684	4.787859E-001	1.267858E-001
Ac-228	0.633	7.777523E-001	1.579785E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.66	2.5579E-001	90.83
4	351.76	9.3333E-002	71.48
M 10	964.58	3.7242E-002	64.04
12	1408.10	2.3220E-002	88.53

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
	Co-60	1173.22	100.00	1.0668E-001	7.84E-002	-5.3962E-002
		1332.49	100.00	7.8425E-002		7.2001E-002
	Nb-94	702.63	100.00	1.0211E-001	8.77E-002	3.9721E-002
		871.10	100.00	8.7696E-002		-5.0459E-002
	Ag-108m	79.20	7.10	5.8664E+000	1.21E-001	-4.4711E+000
		433.93	89.90	1.2088E-001		-9.3071E-003
		614.37	90.40	1.3621E-001		-3.2668E-002
		722.95	90.50	1.2175E-001		9.4594E-002
	Sb-125	176.33	6.89	2.2655E+000	3.66E-001	-1.2988E-001
		427.89	29.33	3.6632E-001		7.4642E-002
		463.38	10.35	1.1033E+000		1.0371E+000
		600.56	17.80	5.6704E-001		4.6677E-001
		606.64	5.02	2.6879E+000		5.6496E+000
		635.90	11.32	9.0197E-001		3.6741E-002
	Cs-134	563.23	8.38	1.2967E+000	1.14E-001	8.2909E-001
		569.32	15.43	7.1798E-001		4.8411E-001
		604.70	97.60	1.3507E-001		6.4212E-002
		795.84	85.40	1.1437E-001		-1.1603E-002
		801.93	8.73	1.0179E+000		-9.3790E-001
+	Cs-137	661.65*	85.12	6.7164E-002	6.72E-002	4.7133E-002
	Eu-152	121.78	28.40	7.7777E-001	3.40E-001	2.5220E-001
		244.69	7.49	1.9212E+000		-1.8932E+000
		344.27	26.50	4.2881E-001		-9.2135E-001
		778.89	12.74	7.7691E-001		-4.6048E-001
		867.32	4.16	2.2101E+000		-2.1573E+000
		964.01	14.40	8.2342E-001		-8.6682E-002
		1085.78	10.00	8.7888E-001		-2.0935E-001
		1112.02	13.30	6.9661E-001		-1.3743E+000
		1407.95	20.70	3.4035E-001		2.1194E-002
	Eu-154	123.07	40.50	5.4203E-001	2.29E-001	2.5566E-001
		247.94	6.60	2.0881E+000		1.1252E+000
		591.81	4.83	2.1444E+000		5.9961E-001
		723.30	19.70	5.5935E-001		4.0053E-001
		756.87	4.33	2.2460E+000		-9.9651E-001
		873.19	11.50	7.5997E-001		-8.7650E-002
		996.32	10.30	8.8916E-001		-2.9627E-001
		1004.76	17.90	5.0293E-001		-4.5268E-001
		1274.45	35.50	2.2915E-001		-8.2728E-002
	Eu-155	86.54	30.90	1.1925E+000	1.19E+000	1.6581E-001
		105.31	20.70	1.2604E+000		-1.6135E-001
	Am-241	59.54	35.90	1.5149E+000	1.51E+000	3.5679E-001
	Cm-243	228.19	10.56	1.2917E+000	9.54E-001	-5.4718E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.5383E-001	9.54E-001	4.8918E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 4:19:03 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-01-109-F-
Sample Title: OOL-09-01-109-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 4:09:01 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-01-109-F-
Title: OOL-09-01-109-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	309	291.72	72.83	1.41	3.12E+002	73.06	1.78E+003
m	2	286-	309	300.48	75.02	1.41	6.87E+002	80.36	2.40E+003
	3	332-	348	339.28	84.72	0.70	1.94E+002	148.18	1.76E+003
	4	946-	964	953.93	238.43	1.94	3.16E+002	74.63	3.35E+002
	5	1349-	1359	1353.43	338.33	0.61	3.40E+001	34.27	1.13E+002
	6	1398-	1416	1406.47	351.59	1.23	1.59E+002	51.31	1.56E+002
	7	2031-	2049	2042.25	510.58	1.27	9.38E+001	46.68	1.40E+002
	8	2322-	2343	2332.82	583.24	1.53	1.47E+002	44.47	9.80E+001
	9	2425-	2445	2435.31	608.87	2.01	1.76E+002	39.10	6.05E+001
	10	2902-	2916	2908.68	727.25	0.35	3.74E+001	26.17	4.66E+001
	11	3433-	3448	3440.96	860.35	0.56	4.40E+001	22.27	2.80E+001
	12	3635-	3657	3644.57	911.26	2.08	1.36E+002	36.46	5.46E+001
	13	4472-	4487	4479.58	1120.07	0.49	4.10E+001	26.05	4.40E+001
	14	5829-	5858	5844.84	1461.48	2.17	1.01E+003	66.72	3.05E+001
	15	7054-	7067	7060.24	1765.41	0.55	2.80E+001	14.43	9.01E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.994	511.00*	100.00	1.31876E-001	6.80444E-002
K-40	0.986	1460.81*	10.67	1.75019E+001	1.82773E+000
TL-208	0.902	277.35	6.80		
		510.84*	21.60	6.10536E-001	3.18942E-001
		583.14*	84.20	2.56568E-001	8.45044E-002
		860.37*	12.46	5.70816E-001	2.97249E-001
Bi-212	1.000	727.17*	11.80	4.95070E-001	3.51383E-001
Pb-212	0.520	74.81* @	10.70	1.01792E+001	2.32371E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.92371E-001	2.24740E-001
Bi-214	0.991	609.31*	46.30	5.68235E-001	1.44041E-001
		1120.29*	15.10	4.70968E-001	3.03689E-001
		1764.49*	15.80	3.39554E-001	1.78343E-001
Ac-228	0.540	338.32*	11.40	3.69143E-001	3.76096E-001
		911.07*	27.70	8.06729E-001	2.34693E-001
		969.11	16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN	0.994	7.140859E-002	7.025244E-002
K-40	0.986	1.750185E+001	1.827727E+000
TL-208	0.902	2.799406E-001	8.090217E-002
Bi-212	1.000	4.950705E-001	3.513829E-001
Pb-212 @	0.520	7.923711E-001	2.247400E-001
Bi-214	0.991	4.771169E-001	1.051284E-001
Ac-228	0.540	6.840881E-001	1.991066E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.83	5.2050E-001	23.40
3	84.72	3.2403E-001	76.22
6	351.59	2.6551E-001	32.21

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0502E-001	8.13E-002	-3.7521E-002
	1332.49	100.00	8.1272E-002		-1.1428E-002
Nb-94	702.63	100.00	9.5783E-002	9.10E-002	-1.0511E-001
	871.10	100.00	9.1043E-002		-3.5615E-003
Ag-108m	79.20	7.10	5.7132E+000	1.15E-001	-5.6350E+000
	433.93	89.90	1.1504E-001		-1.1664E-001
	614.37	90.40	1.3463E-001		2.8738E-002
	722.95	90.50	1.2202E-001		1.2231E-002
Sb-125	176.33	6.89	2.2492E+000	3.52E-001	5.8833E-001
	427.89	29.33	3.5228E-001		-9.6359E-002
	463.38	10.35	1.0437E+000		3.2175E-002
	600.56	17.80	5.2835E-001		2.1212E-002
	606.64	5.02	2.5721E+000		3.6632E+000
	635.90	11.32	8.6317E-001		4.0854E-001
Cs-134	563.23	8.38	1.2353E+000	1.14E-001	-2.1079E-001
	569.32	15.43	6.8509E-001		1.1991E-001
	604.70	97.60	1.3057E-001		2.4003E-002
	795.84	85.40	1.1402E-001		1.0142E-001
	801.93	8.73	1.0793E+000		-3.6173E-002
Cs-137	661.65	85.12	1.2654E-001	1.27E-001	-4.3205E-002
Eu-152	121.78	28.40	7.5021E-001	3.38E-001	-3.9773E-002
	244.69	7.49	1.8069E+000		-1.2796E+000
	344.27	26.50	4.3392E-001		3.5158E-002
	778.89	12.74	8.2703E-001		1.7973E-001
	867.32	4.16	2.2334E+000		-1.2488E+000
	964.01	14.40	8.2342E-001		1.1590E+000
	1085.78	10.00	9.0543E-001		-3.8726E-001
	1112.02	13.30	7.0763E-001		-4.0623E-002
	1407.95	20.70	3.3765E-001		-1.1356E-001
Eu-154	123.07	40.50	5.2197E-001	2.42E-001	-3.0376E-002
	247.94	6.60	1.9677E+000		-1.3204E+000
	591.81	4.83	2.0335E+000		1.1776E-001
	723.30	19.70	5.5427E-001		-1.8141E-001
	756.87	4.33	2.2659E+000		2.3656E+000
	873.19	11.50	7.9207E-001		-7.4290E-001
	996.32	10.30	7.7594E-001		4.3800E-005
	1004.76	17.90	4.5432E-001		-1.8491E-001
	1274.45	35.50	2.4161E-001		1.9707E-001
Eu-155	86.54	30.90	1.1452E+000	1.15E+000	2.0475E+000
	105.31	20.70	1.2453E+000		4.3580E-001
Am-241	59.54	35.90	1.5189E+000	1.52E+000	1.5336E-001
Cm-243	228.19	10.56	1.3305E+000	9.13E-001	7.5331E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.1327E-001	9.13E-001	3.3551E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 4:02:24 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-01-110-F-
Sample Title: OOL-09-01-110-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 3:52:20 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-01-110-F-
Title: OOL-09-01-110-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	309	300.36	74.99	1.21	4.03E+002	166.11	2.24E+003
2	946-	960	953.68	238.37	1.33	1.85E+002	67.84	3.52E+002
3	1346-	1362	1352.20	338.02	0.32	6.55E+001	49.70	1.84E+002
4	1398-	1413	1407.18	351.77	1.30	1.59E+002	49.33	1.58E+002
5	2031-	2053	2042.88	510.74	1.59	1.83E+002	49.59	1.18E+002
6	2320-	2343	2332.91	583.26	0.85	1.99E+002	44.86	8.11E+001
7	2426-	2448	2435.65	608.96	2.30	1.61E+002	42.78	8.16E+001
8	2902-	2918	2909.13	727.36	0.82	7.35E+001	26.38	3.45E+001
9	3635-	3652	3643.70	911.05	2.05	1.41E+002	38.78	7.67E+001
10	3867-	3885	3874.93	968.87	1.17	6.14E+001	31.46	5.76E+001
11	4473-	4487	4481.07	1120.45	0.35	3.68E+001	25.20	4.32E+001
12	5103-	5116	5109.26	1277.53	0.76	1.47E+001	16.67	1.73E+001
13	5830-	5861	5845.28	1461.59	2.04	1.10E+003	68.47	2.40E+001
14	7054-	7071	7063.35	1766.19	0.61	5.66E+001	19.70	1.34E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.998	511.00*	100.00	2.57579E-001	7.80046E-002
K-40	0.981	1460.81*	10.67	1.90334E+001	1.94375E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.19249E+000	3.74033E-001
		583.14*	84.20	3.47213E-001	9.04164E-002
		860.37	12.46		
Bi-212	0.999	727.17*	11.80	9.73701E-001	3.67532E-001
Pb-212	0.520	74.81* @	10.70	5.97806E+000	2.72824E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.63209E-001	1.85064E-001
Bi-214	0.979	609.31*	46.30	5.19747E-001	1.51916E-001
		1120.29*	15.10	4.23141E-001	2.93248E-001
		1764.49*	15.80	6.87295E-001	2.48762E-001
Ac-228	0.999	338.32*	11.40	7.10198E-001	5.50103E-001
		911.07*	27.70	8.35669E-001	2.48619E-001
		969.11*	16.60	6.16013E-001	3.22399E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN	0.998	1.825805E-001	8.037511E-002
K-40	0.981	1.903338E+001	1.943753E+000
TL-208	0.751	3.472130E-001	8.970556E-002
Bi-212	0.999	9.737008E-001	3.675316E-001
Pb-212 @	0.520	4.632090E-001	1.850645E-001
Bi-214	0.979	5.420212E-001	1.185792E-001
Ac-228	0.999	7.488106E-001	1.853643E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
4	351.77	2.6490E-001	31.04
12	1277.53	2.4440E-002	113.66

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0402E-001	7.84E-002	-6.5349E-002
	1332.49	100.00	7.8425E-002		3.5249E-002
Nb-94	702.63	100.00	9.7474E-002	8.35E-002	-2.3042E-002
	871.10	100.00	8.3493E-002		-5.4166E-002
Ag-108m	79.20	7.10	5.8279E+000	1.17E-001	-5.6009E+000
	433.93	89.90	1.1883E-001		1.1308E-001
	614.37	90.40	1.3302E-001		-1.5924E-002
	722.95	90.50	1.1698E-001		-9.9819E-002
Sb-125	176.33	6.89	2.3221E+000	3.57E-001	1.2299E+000
	427.89	29.33	3.5681E-001		3.1033E-002
	463.38	10.35	1.0892E+000		6.7997E-001
	600.56	17.80	6.2353E-001		5.9738E-001
	606.64	5.02	2.7169E+000		8.0865E-001
	635.90	11.32	8.4665E-001		-1.1352E+000
Cs-134	563.23	8.38	1.2783E+000	1.11E-001	-2.0127E-001
	569.32	15.43	6.9959E-001		5.2200E-001
	604.70	97.60	1.3867E-001		7.1001E-002
	795.84	85.40	1.1123E-001		-8.1171E-002
	801.93	8.73	1.0473E+000		-1.3982E+000
Cs-137	661.65	85.12	1.2939E-001	1.29E-001	4.0548E-002
Eu-152	121.78	28.40	7.8044E-001	3.24E-001	-2.7943E-002
	244.69	7.49	1.8950E+000		-3.5051E+000
	344.27	26.50	4.3617E-001		-3.4713E-001
	778.89	12.74	7.7916E-001		-8.2259E-001
	867.32	4.16	2.0395E+000		-2.3306E+000
	964.01	14.40	8.3069E-001		8.0005E-001
	1085.78	10.00	1.0009E+000		1.0758E+000
	1112.02	13.30	7.1036E-001		-5.1049E-001
	1407.95	20.70	3.2383E-001		1.1187E-001
Eu-154	123.07	40.50	5.3948E-001	2.42E-001	-6.5047E-002
	247.94	6.60	2.0504E+000		-7.2374E-001
	591.81	4.83	2.1591E+000		-8.8112E-001
	723.30	19.70	5.4006E-001		-3.7427E-001
	756.87	4.33	2.2326E+000		6.8464E-002
	873.19	11.50	7.1693E-001		1.0907E-001
	996.32	10.30	9.6732E-001		2.2952E-001
	1004.76	17.90	5.0891E-001		-1.8510E-001
	1274.45	35.50	2.4161E-001		-1.4917E-001
Eu-155	86.54	30.90	1.1633E+000	1.16E+000	1.1848E+000
	105.31	20.70	1.2583E+000		3.3597E-002
Am-241	59.54	35.90	1.5681E+000	1.57E+000	1.5602E+000
Cm-243	228.19	10.56	1.3241E+000	9.10E-001	-1.4213E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.0988E-001	9.10E-001	-4.9042E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 3:41:03 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-01-111-F-
Sample Title: OOL-09-01-111-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 3:31:00 PM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-01-111-F-
Title: OOL-09-01-111-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	309	300.58	75.05	0.89	4.85E+002	157.70	2.06E+003
2	330-	345	339.45	84.77	0.73	1.99E+002	144.22	1.73E+003
3	944-	965	954.58	238.59	1.29	3.52E+002	90.10	4.68E+002
4	1399-	1417	1407.03	351.73	0.80	1.19E+002	55.93	2.03E+002
5	2030-	2053	2042.96	510.76	2.19	1.91E+002	53.44	1.38E+002
6	2319-	2339	2331.87	583.00	1.65	2.07E+002	43.48	7.91E+001
7	2425-	2448	2436.04	609.05	0.65	1.85E+002	46.34	9.32E+001
8	3635-	3655	3644.63	911.28	0.89	1.36E+002	36.48	5.78E+001
9	3867-	3888	3875.78	969.08	2.12	1.06E+002	36.70	6.53E+001
10	5831-	5859	5845.14	1461.55	2.14	1.12E+003	67.44	1.41E+001
11	7056-	7070	7063.10	1766.13	0.99	4.47E+001	18.19	1.43E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.998	511.00*	100.00	2.68636E-001	8.35287E-002
K-40	0.983	1460.81*	10.67	1.93780E+001	1.95522E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.24369E+000	3.99823E-001
		583.14*	84.20	3.61044E-001	8.92641E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	7.18624E+000	2.72830E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.82839E-001	2.65140E-001
Bi-214	0.680	609.31*	46.30	5.95187E-001	1.66268E-001
		1120.29	15.10		
		1764.49*	15.80	5.41803E-001	2.27294E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	8.05689E-001	2.34757E-001
		969.11*	16.60	1.06155E+000	3.84932E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.998	1.906506E-001	8.568748E-002
K-40		0.983	1.937799E+001	1.955221E+000
TL-208		0.751	3.610442E-001	8.848527E-002
Pb-212	@	0.521	8.828393E-001	2.651404E-001
Bi-214		0.680	5.765780E-001	1.341957E-001
Ac-228		0.633	8.750523E-001	2.004250E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.77	3.3109E-001	72.60
4	351.73	1.9802E-001	47.07

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0128E-001	7.44E-002	-3.3965E-002
	1332.49	100.00	7.4448E-002		-3.1480E-002
Nb-94	702.63	100.00	1.0653E-001	9.10E-002	7.3049E-002
	871.10	100.00	9.1043E-002		2.9106E-002
Ag-108m	79.20	7.10	5.8640E+000	1.13E-001	-5.7536E+000
	433.93	89.90	1.2449E-001		-1.4049E-001
	614.37	90.40	1.4171E-001		-1.0881E-002
	722.95	90.50	1.1348E-001		-8.2836E-003
Sb-125	176.33	6.89	2.3273E+000	3.74E-001	-1.6532E+000
	427.89	29.33	3.7375E-001		-5.6547E-002
	463.38	10.35	1.0418E+000		3.8190E-001
	600.56	17.80	5.6288E-001		3.3339E-001
	606.64	5.02	2.7349E+000		6.4708E-001
	635.90	11.32	9.3482E-001		9.3817E-001
Cs-134	563.23	8.38	1.2914E+000	1.21E-001	6.0192E-001
	569.32	15.43	6.5356E-001		-5.7086E-001
	604.70	97.60	1.3621E-001		-4.9531E-003
	795.84	85.40	1.2136E-001		-4.2572E-002
	801.93	8.73	1.1699E+000		-8.4246E-001
Cs-137	661.65	85.12	1.3273E-001	1.33E-001	1.1424E-001
Eu-152	121.78	28.40	7.8593E-001	3.59E-001	-1.7263E-001
	244.69	7.49	1.9291E+000		-9.9169E-001
	344.27	26.50	4.5216E-001		-5.2580E-001
	778.89	12.74	7.8364E-001		-5.7362E-001
	867.32	4.16	2.1866E+000		-3.6704E+000
	964.01	14.40	8.8999E-001		2.2162E-001
	1085.78	10.00	1.0143E+000		1.1447E+000
	1112.02	13.30	7.5002E-001		-8.7952E-002
	1407.95	20.70	3.5859E-001		1.2907E-001
Eu-154	123.07	40.50	5.4203E-001	2.48E-001	-2.7384E-001
	247.94	6.60	1.9972E+000		-2.7155E+000
	591.81	4.83	2.0592E+000		-8.0583E-001
	723.30	19.70	5.2410E-001		1.1041E-001
	756.87	4.33	2.2922E+000		1.2015E+000
	873.19	11.50	7.7180E-001		-4.8622E-001
	996.32	10.30	8.6846E-001		-7.9316E-001
	1004.76	17.90	5.3024E-001		6.5146E-001
	1274.45	35.50	2.4760E-001		-1.9858E-001
Eu-155	86.54	30.90	1.1711E+000	1.17E+000	-1.0140E-001
	105.31	20.70	1.2652E+000		4.5578E-001
Am-241	59.54	35.90	1.5130E+000	1.51E+000	-8.7291E-002
Cm-243	228.19	10.56	1.3094E+000	9.42E-001	-5.7955E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.4161E-001	9.42E-001	7.8888E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/5/2006 8:05:14 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-01-112-F-G
Sample ID: OOL-09-01-112-F
Sample Title: OOL-09-01-112-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 12:12:32 AM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-01-112-F-G
Log Number: OOL-09-01-112-F
Title: OOL-09-01-112-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	309	292.20	73.25	1.02	1.70E+002	50.58	8.39E+002
m	2	287-	309	300.19	75.24	1.02	3.92E+002	59.57	1.02E+003
	3	335-	344	339.42	85.05	0.64	7.02E+001	81.39	7.29E+002
	4	947-	963	954.36	238.77	1.08	2.05E+002	68.01	3.13E+002
	5	1174-	1186	1180.56	295.31	1.04	4.81E+001	41.11	1.49E+002
	6	1397-	1418	1407.42	352.02	1.02	1.22E+002	52.94	1.62E+002
	7	2032-	2053	2043.01	510.90	1.02	1.09E+002	43.53	1.02E+002
	8	2325-	2341	2331.67	583.06	1.46	1.46E+002	37.49	7.03E+001
	9	2428-	2445	2436.49	609.26	0.41	1.27E+002	35.32	6.06E+001
	10	3636-	3655	3644.65	911.27	1.24	1.30E+002	30.39	3.16E+001
	11	3871-	3882	3876.85	969.31	0.68	4.77E+001	19.23	1.93E+001
	12	4474-	4491	4482.05	1120.59	0.62	4.07E+001	23.08	2.83E+001
	13	5506-	5519	5512.69	1378.22	0.36	1.21E+001	14.70	1.59E+001
	14	5833-	5859	5844.90	1461.27	2.02	8.21E+002	57.18	6.75E+000
	15	7055-	7068	7061.44	1765.37	0.36	3.23E+001	14.69	8.66E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-01-112-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	1.000	511.00*		100.00	1.86181E-001	7.84846E-002
K-40	0.993	1460.81*		10.67	1.74221E+001	1.86037E+000
TL-208	0.753	277.35		6.80		
		510.84*		21.60	8.61949E-001	3.70111E-001
		583.14*		84.20	3.08081E-001	8.88669E-002
		860.37		12.46		
Pb-212	0.580	74.81*	@	10.70	1.26596E+001	3.14017E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.40464E-001	2.34717E-001
Bi-214	0.994	609.31*		46.30	4.96973E-001	1.50743E-001
		1120.29*		15.10	5.59624E-001	3.23032E-001
		1764.49*		15.80	5.04319E-001	2.34534E-001
PB-214	0.619	74.82*	@	6.21	2.18128E+001	5.63754E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.66746E-001	3.19647E-001
		351.92*		37.20	5.02496E-001	2.33132E-001
Ac-228	0.634	338.32		11.40		
		911.07*		27.70	9.36744E-001	2.43403E-001
		969.11*		16.60	5.79361E-001	2.41236E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-01-112-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		1.000	1.196356E-001	8.076876E-002
K-40		0.993	1.742211E+001	1.860374E+000
TL-208		0.753	3.080805E-001	8.829789E-002
Pb-212	@	0.580	6.404643E-001	2.347165E-001
Bi-214		0.994	5.071996E-001	1.180398E-001
PB-214	@	0.619	4.553593E-001	1.883568E-001
Ac-228		0.634	7.564542E-001	1.713406E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.25	2.8263E-001	29.83
3	85.05	1.1698E-001	115.95
13	1378.22	2.0208E-002	121.27

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-01-112-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0661E-001	8.92E-002	6.0705E-002
	1332.49	100.00	8.9197E-002		-3.7205E-002
Nb-94	702.63	100.00	1.0779E-001	9.65E-002	-5.3973E-002
	871.10	100.00	9.6544E-002		6.9452E-002
Ag-108m	79.20	7.10	9.4357E+000	1.30E-001	-1.6798E+000
	433.93	89.90	1.3641E-001		-2.2992E-002
	614.37	90.40	1.5743E-001		1.0054E-002
	722.95	90.50	1.2977E-001		1.4416E-001
Sb-125	176.33	6.89	2.6465E+000	4.10E-001	-5.4111E-001
	427.89	29.33	4.1050E-001		-3.4395E-001
	463.38	10.35	1.2496E+000		-2.8826E-001
	600.56	17.80	6.3458E-001		9.5945E-002
	606.64	5.02	2.9192E+000		4.8855E+000
	635.90	11.32	9.4050E-001		9.7099E-002
Cs-134	563.23	8.38	1.3652E+000	1.26E-001	-1.2977E-001
	569.32	15.43	7.6362E-001		-4.7132E-001
	604.70	97.60	1.4974E-001		-2.2713E-002
	795.84	85.40	1.2563E-001		6.6676E-002
	801.93	8.73	1.2081E+000		-1.5840E+000
Cs-137	661.65	85.12	1.4412E-001	1.44E-001	5.8966E-002
Eu-152	121.78	28.40	9.9586E-001	3.61E-001	5.2084E-001
	244.69	7.49	2.1097E+000		4.9758E-001
	344.27	26.50	5.0326E-001		-8.5678E-001
	778.89	12.74	8.2570E-001		-6.4275E-002
	867.32	4.16	2.2397E+000		-4.0929E+000
	964.01	14.40	9.1532E-001		-5.4359E-001
	1085.78	10.00	9.7176E-001		-2.3703E-001
	1112.02	13.30	7.1501E-001		-5.5165E-001
	1407.95	20.70	3.6100E-001		-2.1441E-001
Eu-154	123.07	40.50	6.8387E-001	2.65E-001	-1.3464E-003
	247.94	6.60	2.3036E+000		-2.7265E+000
	591.81	4.83	2.5195E+000		6.1356E-001
	723.30	19.70	5.9444E-001		5.3931E-001
	756.87	4.33	2.4324E+000		-3.2894E-001
	873.19	11.50	8.5189E-001		6.8391E-001
	996.32	10.30	9.4569E-001		6.1497E-001
	1004.76	17.90	5.3694E-001		-4.1275E-002
	1274.45	35.50	2.6467E-001		-1.2171E-001
Eu-155	86.54	30.90	1.6340E+000	1.63E+000	1.8315E+000
	105.31	20.70	1.6935E+000		-3.8303E-001
Am-241	59.54	35.90	3.7058E+000	3.71E+000	-2.5104E-001
Cm-243	228.19	10.56	1.5630E+000	1.10E+000	-7.5626E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0980E+000	1.10E+000	1.0209E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 12:09:06 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-113-F-
Sample Title: OOL-09-01-113-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 11:59:04 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-113-F-
Title: OOL-09-01-113-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	291.44	73.06	0.96	1.54E+002	51.84	9.65E+002
m	2	286-	306	300.39	75.29	0.96	3.67E+002	62.95	1.17E+003
	3	334-	345	339.62	85.10	1.59	1.68E+002	95.51	8.80E+002
	4	390-	397	393.15	98.48	0.55	6.43E+001	61.76	4.62E+002
M	5	950-	972	954.44	238.79	0.97	2.32E+002	37.58	1.59E+002
m	6	950-	972	965.43	241.54	0.98	6.30E+001	25.47	1.90E+002
	7	1176-	1185	1180.23	295.23	0.66	5.73E+001	33.90	1.06E+002
	8	1347-	1359	1352.18	338.21	0.39	4.50E+001	37.25	1.20E+002
	9	1397-	1418	1407.13	351.95	0.84	1.60E+002	52.13	1.46E+002
	10	2033-	2051	2041.92	510.63	1.68	1.15E+002	43.88	1.14E+002
	11	2322-	2339	2331.94	583.13	0.82	1.40E+002	37.46	6.95E+001
	12	2424-	2446	2436.73	609.32	1.32	1.71E+002	41.72	7.17E+001
	13	3635-	3654	3644.22	911.16	0.93	9.49E+001	31.58	4.71E+001
M	14	3853-	3886	3859.01	964.85	1.68	3.09E+001	14.65	2.90E+001
m	15	3853-	3886	3876.24	969.16	1.68	6.68E+001	18.46	2.36E+001
	16	4473-	4488	4480.35	1120.17	0.51	4.80E+001	23.02	3.00E+001
	17	5833-	5857	5844.38	1461.14	2.03	7.35E+002	56.37	2.21E+001
	18	7055-	7069	7061.95	1765.50	0.41	4.48E+001	17.22	1.13E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.996	511.00*		100.00	1.96109E-001	7.94816E-002
K-40	0.997	1460.81*		10.67	1.55895E+001	1.73870E+000
TL-208	0.753	277.35		6.80		
		510.84*		21.60	9.07913E-001	3.75366E-001
		583.14*		84.20	2.95075E-001	8.80457E-002
		860.37		12.46		
Pb-212	0.579	74.81*	@	10.70	1.18237E+001	3.08061E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.25210E-001	1.63317E-001
Bi-214	0.993	609.31*		46.30	6.68246E-001	1.82349E-001
		1120.29*		15.10	6.60781E-001	3.24317E-001
		1764.49*		15.80	6.97967E-001	2.77505E-001
PB-214	0.776	74.82*	@	6.21	2.03726E+001	5.51014E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98*		7.49	1.17432E+000	5.12910E-001
		295.21*		19.20	4.36746E-001	2.68866E-001
		351.92*		37.20	6.58979E-001	2.40819E-001
Ac-228	1.000	338.32*		11.40	5.97955E-001	5.03288E-001
		911.07*		27.70	6.81708E-001	2.39968E-001
		969.11*		16.60	8.10495E-001	2.39644E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.996	1.323730E-001	8.169882E-002
K-40		0.997	1.558946E+001	1.738699E+000
TL-208		0.753	2.950747E-001	8.751902E-002
Pb-212	@	0.579	7.252102E-001	1.633167E-001
Bi-214		0.993	6.742379E-001	1.379250E-001
PB-214	@	0.776	6.270000E-001	1.693267E-001
Ac-228		1.000	7.310769E-001	1.606928E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.06	2.5698E-001	33.62
3	85.10	2.7933E-001	56.98
4	98.48	1.0709E-001	96.11
M 14	964.85	5.1492E-002	47.42

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1077E-001	9.90E-002	7.0255E-002
	1332.49	100.00	9.9031E-002		4.9839E-002
Nb-94	702.63	100.00	1.1072E-001	1.11E-001	-3.0360E-002
	871.10	100.00	1.1065E-001		-1.1419E-003
Ag-108m	79.20	7.10	9.8376E+000	1.30E-001	-2.7753E+000
	433.93	89.90	1.4140E-001		-1.8535E-002
	614.37	90.40	1.6276E-001		-6.7339E-002
	722.95	90.50	1.3015E-001		4.9354E-002
Sb-125	176.33	6.89	2.7782E+000	4.00E-001	3.0206E+000
	427.89	29.33	3.9959E-001		-4.3303E-001
	463.38	10.35	1.2076E+000		2.8052E-001
	600.56	17.80	6.4896E-001		-3.7556E-001
	606.64	5.02	3.0687E+000		5.3729E+000
	635.90	11.32	9.8367E-001		7.9197E-001
Cs-134	563.23	8.38	1.3688E+000	1.28E-001	-3.4792E-001
	569.32	15.43	7.4596E-001		5.1283E-001
	604.70	97.60	1.5597E-001		-7.8575E-002
	795.84	85.40	1.2793E-001		8.2108E-002
	801.93	8.73	1.2756E+000		7.6693E-001
Cs-137	661.65	85.12	1.3766E-001	1.38E-001	6.4929E-002
Eu-152	121.78	28.40	9.8784E-001	4.00E-001	-1.6180E-001
	244.69	7.49	2.1694E+000		-1.5897E-003
	344.27	26.50	4.9218E-001		-1.8191E-001
	778.89	12.74	8.4431E-001		-7.8224E-001
	867.32	4.16	2.6860E+000		-2.5671E+000
	964.01	14.40	9.3204E-001		-2.7237E-001
	1085.78	10.00	1.0112E+000		3.3585E-001
	1112.02	13.30	7.7493E-001		-3.1186E-002
	1407.95	20.70	4.0017E-001		2.2955E-001
Eu-154	123.07	40.50	6.8834E-001	2.98E-001	3.9401E-001
	247.94	6.60	2.3850E+000		-1.4570E+000
	591.81	4.83	2.3934E+000		-3.2509E-001
	723.30	19.70	5.9968E-001		1.2078E-001
	756.87	4.33	2.7156E+000		-2.0954E-001
	873.19	11.50	9.3452E-001		3.8300E-001
	996.32	10.30	1.0479E+000		-4.2627E-001
	1004.76	17.90	5.9175E-001		2.5955E-001
	1274.45	35.50	2.9752E-001		-2.2661E-001
Eu-155	86.54	30.90	1.7015E+000	1.70E+000	6.5153E-001
	105.31	20.70	1.7655E+000		-3.8657E-001
Am-241	59.54	35.90	3.8762E+000	3.88E+000	7.4373E-001
Cm-243	228.19	10.56	1.5376E+000	1.06E+000	-9.0876E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0641E+000	1.06E+000	-1.2779E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 11:54:15 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-114-F-
Sample Title: OOL-09-01-114-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 11:44:12 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-114-F-
Title: OOL-09-01-114-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	307	292.29	73.27	1.03	1.59E+002	50.89	1.10E+003
m	2	284-	307	300.29	75.27	1.03	3.98E+002	61.93	1.12E+003
	3	335-	348	339.69	85.12	1.04	1.10E+002	103.98	9.78E+002
	4	950-	959	954.27	238.75	1.19	2.21E+002	49.22	1.80E+002
	5	1174-	1186	1180.28	295.24	1.05	5.13E+001	39.73	1.36E+002
	6	1397-	1416	1407.34	352.00	1.19	1.07E+002	49.10	1.48E+002
	7	2030-	2050	2042.72	510.83	1.16	1.05E+002	44.18	1.09E+002
	8	2325-	2340	2332.39	583.24	1.33	9.84E+001	34.54	7.06E+001
	9	2428-	2442	2436.17	609.18	1.42	1.39E+002	31.79	4.31E+001
M	10	2618-	2654	2623.57	656.02	1.08	1.35E+001	11.14	2.64E+001
m	11	2618-	2654	2646.49	661.75	1.08	5.92E+001	18.25	3.04E+001
	12	2901-	2913	2907.73	727.06	0.71	1.94E+001	23.88	4.56E+001
	13	3635-	3653	3643.80	911.05	1.44	9.55E+001	32.77	5.45E+001
	14	3868-	3884	3875.66	969.01	1.57	8.42E+001	26.55	3.18E+001
	15	5833-	5856	5844.83	1461.25	1.40	6.83E+002	54.23	2.07E+001
	16	7054-	7068	7061.16	1765.30	0.42	4.10E+001	12.55	0.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*	100.00	1.78485E-001	7.91984E-002
K-40	0.994	1460.81*	10.67	1.44960E+001	1.64340E+000
Cs-137	1.000	661.65*	85.12	1.29072E-001	4.25651E-002
TL-208	0.753	277.35	6.80		
		510.84*	21.60	8.26320E-001	3.72817E-001
		583.14*	84.20	2.08232E-001	7.79187E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	3.11566E-001	3.84893E-001
Pb-212	0.580	74.81* @	10.70	1.28336E+001	3.21276E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.88334E-001	1.87669E-001
Bi-214	0.691	609.31*	46.30	5.41743E-001	1.40792E-001
		1120.29	15.10		
		1764.49*	15.80	6.39446E-001	2.05909E-001
PB-214	0.619	74.82* @	6.21	2.21127E+001	5.76372E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.91588E-001	3.10116E-001
		351.92*	37.20	4.39813E-001	2.14690E-001
Ac-228	0.635	338.32	11.40		
		911.07*	27.70	6.86166E-001	2.48283E-001
		969.11*	16.60	1.02274E+000	3.39663E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.999	1.335069E-001	8.095366E-002
K-40		0.994	1.449600E+001	1.643401E+000
Cs-137		1.000	1.290720E-001	4.256509E-002
TL-208		0.753	2.082324E-001	7.762257E-002
Bi-212		1.000	3.115661E-001	3.848933E-001
Pb-212	@	0.580	6.883344E-001	1.876686E-001
Bi-214		0.691	5.728693E-001	1.162213E-001
PB-214	@	0.619	4.241886E-001	1.765177E-001
Ac-228		0.635	8.033768E-001	2.004422E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.27	2.6576E-001	31.91
3	85.12	1.8358E-001	94.40
M 10	656.02	2.2469E-002	82.65

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.1122E-001	8.61E-002	-4.2992E-002
		1332.49	100.00	8.6075E-002		2.7843E-002
	Nb-94	702.63	100.00	1.0926E-001	1.05E-001	-8.7102E-003
		871.10	100.00	1.0533E-001		-3.4935E-003
	Ag-108m	79.20	7.10	9.5418E+000	1.27E-001	2.1960E+000
		433.93	89.90	1.3261E-001		-1.5379E-002
		614.37	90.40	1.5941E-001		-9.5992E-002
		722.95	90.50	1.2668E-001		-1.7914E-002
	Sb-125	176.33	6.89	2.6184E+000	4.06E-001	-1.2510E+000
		427.89	29.33	4.0634E-001		7.5643E-002
		463.38	10.35	1.0767E+000		-4.7674E-002
		600.56	17.80	6.4181E-001		3.0375E-001
		606.64	5.02	2.9389E+000		2.3610E+000
		635.90	11.32	9.8967E-001		-2.6820E-001
	Cs-134	563.23	8.38	1.3431E+000	1.21E-001	9.6827E-001
		569.32	15.43	7.0085E-001		6.8286E-002
		604.70	97.60	1.5176E-001		-3.0630E-002
		795.84	85.40	1.2091E-001		-7.9154E-003
		801.93	8.73	1.2127E+000		-1.1679E-001
+	Cs-137	661.65*	85.12	6.1754E-002	6.18E-002	1.2907E-001
	Eu-152	121.78	28.40	9.5823E-001	4.04E-001	-8.4564E-001
		244.69	7.49	2.0707E+000		-4.9612E+000
		344.27	26.50	4.9664E-001		-7.8716E-001
		778.89	12.74	7.9037E-001		-6.5659E-001
		867.32	4.16	2.5195E+000		-1.8916E+000
		964.01	14.40	9.3204E-001		3.2619E-002
		1085.78	10.00	9.4105E-001		7.0162E-001
		1112.02	13.30	7.7851E-001		-1.1683E-001
		1407.95	20.70	4.0353E-001		1.5545E-001
	Eu-154	123.07	40.50	6.6126E-001	2.71E-001	-5.2202E-001
		247.94	6.60	2.3123E+000		-1.0085E+000
		591.81	4.83	2.3008E+000		1.2200E+000
		723.30	19.70	5.8203E-001		-1.2429E-001
		756.87	4.33	2.3012E+000		-1.9851E-001
		873.19	11.50	9.4520E-001		1.1953E+000
		996.32	10.30	1.0479E+000		1.4508E+000
		1004.76	17.90	5.7919E-001		3.7450E-001
		1274.45	35.50	2.7096E-001		1.2082E-001
	Eu-155	86.54	30.90	1.6171E+000	1.62E+000	1.0293E+000
		105.31	20.70	1.7023E+000		-1.0768E+000
	Am-241	59.54	35.90	3.7571E+000	3.76E+000	-1.6854E+000
	Cm-243	228.19	10.56	1.4674E+000	1.05E+000	-9.6970E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0507E+000	1.05E+000	8.4879E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 4:51:28 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-01-115-F-
Sample Title: OOL-09-01-115-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 4:41:27 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-01-115-F-
Title: OOL-09-01-115-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	284-	309	300.20	74.95	1.98	1.23E+003	223.69	2.78E+003
2	330-	343	339.79	84.85	1.30	2.54E+002	126.62	1.42E+003
3	947-	961	954.14	238.48	1.51	2.26E+002	66.79	3.24E+002
4	1345-	1357	1351.57	337.86	0.41	5.08E+001	39.00	1.31E+002
5	1399-	1414	1407.37	351.82	1.19	1.34E+002	45.63	1.36E+002
6	2033-	2049	2040.74	510.20	0.54	8.90E+001	39.33	9.90E+001
7	2324-	2341	2331.55	582.93	1.56	1.57E+002	41.66	9.00E+001
8	2426-	2447	2436.07	609.06	1.27	1.79E+002	46.74	1.04E+002
9	2638-	2654	2645.24	661.37	0.79	5.00E+001	28.38	5.10E+001
10	3635-	3653	3644.22	911.18	0.68	1.20E+002	30.83	3.77E+001
11	3867-	3884	3875.25	968.95	0.37	5.74E+001	25.31	3.36E+001
12	4945-	4958	4951.13	1237.99	0.57	1.71E+001	20.29	3.19E+001
13	5829-	5859	5844.64	1461.43	2.36	1.08E+003	67.63	2.33E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.980	511.00*	100.00	1.25103E-001	5.78452E-002
K-40	0.988	1460.81*	10.67	1.86296E+001	1.90900E+000
Cs-137	0.997	661.65*	85.12	8.99986E-002	5.21767E-002
TL-208	0.749	277.35	6.80		
		510.84*	21.60	5.79178E-001	2.71947E-001
		583.14*	84.20	2.74011E-001	8.09983E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.82404E+001	4.87902E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.68177E-001	1.89817E-001
Bi-214	0.397	609.31*	46.30	5.76549E-001	1.66420E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.998	338.32*	11.40	5.50561E-001	4.31468E-001
		911.07*	27.70	7.11165E-001	1.99822E-001
		969.11*	16.60	5.76797E-001	2.61177E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN	0.980	6.591623E-002	6.040239E-002
K-40	0.988	1.862964E+001	1.909004E+000
Cs-137	0.997	8.999859E-002	5.217673E-002
TL-208	0.749	2.740107E-001	8.050461E-002
Pb-212 @	0.521	5.681768E-001	1.898165E-001
Bi-214	0.397	5.765490E-001	1.664204E-001
Ac-228	0.998	6.483267E-001	1.489454E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.85	4.2384E-001	49.79
5	351.82	2.2338E-001	34.04
12	1237.99	2.8418E-002	119.02

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
	Co-60	1173.22	100.00	1.0128E-001	7.44E-002	3.8547E-002
		1332.49	100.00	7.4448E-002		3.4399E-002
	Nb-94	702.63	100.00	1.0316E-001	9.01E-002	2.3981E-002
		871.10	100.00	9.0053E-002		5.2986E-002
	Ag-108m	79.20	7.10	5.8592E+000	1.14E-001	-5.7097E+000
		433.93	89.90	1.1482E-001		1.8594E-002
		614.37	90.40	1.4150E-001		-3.1430E-002
		722.95	90.50	1.1378E-001		1.3115E-001
	Sb-125	176.33	6.89	2.2174E+000	3.52E-001	1.0144E+000
		427.89	29.33	3.5228E-001		4.5242E-002
		463.38	10.35	1.0730E+000		1.3501E-001
		600.56	17.80	5.6704E-001		1.4188E-001
		606.64	5.02	2.7776E+000		5.5257E+000
		635.90	11.32	7.9239E-001		-5.6980E-001
	Cs-134	563.23	8.38	1.2809E+000	1.19E-001	8.8995E-001
		569.32	15.43	6.7176E-001		8.0816E-002
		604.70	97.60	1.3848E-001		-3.0248E-004
		795.84	85.40	1.1941E-001		8.7284E-002
		801.93	8.73	1.0898E+000		-2.4449E-001
+	Cs-137	661.65*	85.12	7.9709E-002	7.97E-002	8.9999E-002
	Eu-152	121.78	28.40	7.4942E-001	3.35E-001	-4.4417E-001
		244.69	7.49	1.8069E+000		-2.1286E+000
		344.27	26.50	4.3729E-001		-4.5340E-002
		778.89	12.74	7.6557E-001		-3.6430E-001
		867.32	4.16	2.2564E+000		-3.7270E+000
		964.01	14.40	7.6466E-001		3.4450E-002
		1085.78	10.00	9.4200E-001		-1.8518E-001
		1112.02	13.30	7.0214E-001		-8.3446E-001
		1407.95	20.70	3.3494E-001		-1.0794E-001
	Eu-154	123.07	40.50	5.2322E-001	2.43E-001	2.6352E-001
		247.94	6.60	1.9560E+000		-7.3465E-001
		591.81	4.83	1.9268E+000		-2.1108E+000
		723.30	19.70	5.2003E-001		5.2760E-001
		756.87	4.33	2.0939E+000		3.8863E-001
		873.19	11.50	7.8633E-001		1.4632E-001
		996.32	10.30	8.4363E-001		2.4589E-001
		1004.76	17.90	4.8243E-001		4.2562E-001
		1274.45	35.50	2.4282E-001		-2.9694E-001
	Eu-155	86.54	30.90	1.1598E+000	1.16E+000	3.4800E-002
		105.31	20.70	1.2292E+000		-8.3267E-001
	Am-241	59.54	35.90	1.5009E+000	1.50E+000	-1.2457E+000
	Cm-243	228.19	10.56	1.1889E+000	8.92E-001	-6.3766E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	8.9185E-001	8.92E-001	-9.8512E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 8:23:19 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-116-F-
Sample Title: OOL-09-01-116-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 8:13:15 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-116-F-
Title: OOL-09-01-116-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	291.86	72.79	0.85	3.54E+002	64.46	1.26E+003
m	2	284-	305	300.24	74.89	0.85	6.59E+002	77.93	1.49E+003
M	3	334-	355	339.10	84.61	1.06	3.05E+002	65.46	1.21E+003
m	4	334-	355	350.29	87.41	1.07	1.37E+002	57.51	1.39E+003
	5	950-	960	954.70	238.55	0.78	2.22E+002	56.50	2.55E+002
	6	1347-	1360	1353.45	338.27	0.47	5.44E+001	40.43	1.35E+002
	7	1402-	1414	1407.96	351.90	0.72	1.10E+002	42.71	1.39E+002
	8	2031-	2053	2042.60	510.61	0.92	1.80E+002	50.21	1.21E+002
	9	2326-	2340	2332.56	583.12	1.33	1.52E+002	37.02	7.08E+001
	10	2428-	2448	2436.58	609.14	0.81	1.93E+002	42.02	7.21E+001
	11	3637-	3653	3644.82	911.29	0.67	1.19E+002	33.30	5.36E+001
	12	3869-	3886	3876.17	969.14	0.80	6.75E+001	32.61	6.35E+001
	13	4473-	4491	4482.24	1120.70	0.78	4.40E+001	30.38	5.80E+001
	14	5508-	5519	5513.62	1378.63	0.43	2.06E+001	14.43	1.34E+001
	15	5831-	5858	5845.27	1461.57	1.92	1.19E+003	71.98	3.50E+001
	16	7053-	7068	7060.45	1765.45	1.17	4.40E+001	17.57	1.20E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.995	511.00*	100.00	2.44976E-001	7.61013E-002
K-40	0.980	1460.81*	10.67	1.99779E+001	2.01836E+000
Eu-155	0.318	86.54*	30.90	5.48674E-001	2.54353E-001
		105.31	20.70		
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.13415E+000	3.64292E-001
		583.14*	84.20	2.57539E-001	7.10637E-002
		860.37	12.46		
Pb-212	0.677	74.81* @	10.70	9.43984E+000	2.16048E+000
		77.11 @	18.00		
		87.30* @	8.00	2.11925E+000	9.82439E-001
		238.63*	44.60	5.40124E-001	1.61350E-001
Bi-214	0.992	609.31*	46.30	6.02452E-001	1.50737E-001
		1120.29*	15.10	4.90801E-001	3.42671E-001
		1764.49*	15.80	5.16887E-001	2.12813E-001
Ac-228	0.999	338.32*	11.40	5.71265E-001	4.34155E-001
		911.07*	27.70	6.83575E-001	2.06167E-001
		969.11*	16.60	6.56446E-001	3.24420E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.995	1.893474E-001	7.761271E-002
K-40		0.980	1.997790E+001	2.018358E+000
Eu-155		0.318	4.088362E-001	2.577607E-001
TL-208		0.751	2.575389E-001	7.056632E-002
Pb-212	@	0.677	5.401245E-001	1.613502E-001
Bi-214		0.992	5.643843E-001	1.157736E-001
Ac-228		0.999	6.613072E-001	1.615143E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	5.8918E-001	18.24
M 3	84.61	5.0789E-001	21.48
7	351.90	1.8407E-001	38.67
14	1378.63	3.4252E-002	70.21

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0086E-001	7.51E-002	1.1835E-002
		1332.49	100.00	7.5122E-002		2.9340E-003
	Nb-94	702.63	100.00	9.4479E-002	8.97E-002	6.8745E-003
		871.10	100.00	8.9704E-002		-2.6682E-002
	Ag-108m	79.20	7.10	4.9243E+000	1.06E-001	-6.9012E+000
		433.93	89.90	1.1620E-001		1.1306E-001
		614.37	90.40	1.2695E-001		-7.6069E-002
		722.95	90.50	1.0619E-001		8.9097E-002
	Sb-125	176.33	6.89	2.0883E+000	3.52E-001	-1.5990E+000
		427.89	29.33	3.5208E-001		1.0235E-001
		463.38	10.35	1.0455E+000		1.6210E-001
		600.56	17.80	5.5909E-001		5.8001E-001
		606.64	5.02	2.5669E+000		-3.4325E-001
		635.90	11.32	7.8060E-001		-8.9519E-001
	Cs-134	563.23	8.38	1.1433E+000	1.12E-001	-3.0873E-001
		569.32	15.43	6.2616E-001		5.6976E-001
		604.70	97.60	1.2249E-001		-1.5995E-002
		795.84	85.40	1.1176E-001		-1.3753E-002
		801.93	8.73	1.0248E+000		-1.1904E+000
	Cs-137	661.65	85.12	1.2763E-001	1.28E-001	1.5412E-001
	Eu-152	121.78	28.40	7.1489E-001	3.25E-001	5.1843E-002
		244.69	7.49	1.7836E+000		2.1794E-001
		344.27	26.50	3.9103E-001		-2.9485E-001
		778.89	12.74	7.4819E-001		-2.7197E-001
		867.32	4.16	2.1545E+000		-8.0522E-001
		964.01	14.40	7.6850E-001		-8.7812E-002
		1085.78	10.00	9.4022E-001		2.1742E-001
		1112.02	13.30	7.2446E-001		-3.3445E-001
		1407.95	20.70	3.2476E-001		-7.0931E-002
	Eu-154	123.07	40.50	5.0344E-001	2.37E-001	3.5006E-001
		247.94	6.60	1.9029E+000		1.5846E-001
		591.81	4.83	2.0505E+000		1.3478E+000
		723.30	19.70	4.8649E-001		2.8242E-001
		756.87	4.33	2.0494E+000		-1.2932E+000
		873.19	11.50	7.7222E-001		-8.9078E-001
		996.32	10.30	8.9669E-001		-8.6879E-002
		1004.76	17.90	5.2448E-001		1.6847E-002
		1274.45	35.50	2.3666E-001		-2.3366E-002
+	Eu-155	86.54*	30.90	7.0680E-001	7.07E-001	5.4867E-001
		105.31	20.70	1.1982E+000		-6.4638E-003
	Am-241	59.54	35.90	1.3817E+000	1.38E+000	1.3292E-001
	Cm-243	228.19	10.56	1.2429E+000	8.56E-001	4.1522E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.5648E-001	8.56E-001	-1.6358E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 7:17:45 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-117-F-
Sample Title: OOL-09-01-117-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 7:07:41 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-117-F-
Title: OOL-09-01-117-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	292.21	72.88	0.85	2.84E+002	62.80	1.41E+003
m	2	285-	306	300.50	74.95	0.85	5.72E+002	76.27	1.51E+003
	3	334-	346	340.48	84.95	0.90	1.45E+002	122.07	1.41E+003
	4	948-	961	954.71	238.56	1.06	3.39E+002	64.91	2.74E+002
	5	1175-	1184	1180.71	295.07	0.74	6.55E+001	36.20	1.23E+002
	6	1344-	1359	1352.66	338.07	0.75	7.57E+001	48.05	1.74E+002
	7	1399-	1417	1407.23	351.72	1.21	1.88E+002	54.63	1.74E+002
	8	2033-	2055	2044.13	510.99	0.85	1.78E+002	51.72	1.34E+002
	9	2322-	2343	2332.46	583.10	1.02	1.95E+002	46.06	9.41E+001
	10	2431-	2448	2437.17	609.28	1.21	1.86E+002	39.59	6.80E+001
	11	2903-	2916	2908.43	727.13	0.89	4.19E+001	26.72	5.21E+001
	12	3635-	3654	3644.88	911.30	1.97	1.53E+002	38.33	6.51E+001
	13	3868-	3885	3876.52	969.23	0.41	9.03E+001	30.49	4.67E+001
	14	4476-	4493	4482.31	1120.72	0.69	6.12E+001	23.59	2.58E+001
	15	5832-	5860	5845.60	1461.65	1.99	1.05E+003	66.71	2.47E+001
	16	7053-	7071	7061.28	1765.66	0.87	5.19E+001	15.01	2.13E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	1.000	511.00*		100.00	2.43059E-001	7.78536E-002
K-40	0.976	1460.81*		10.67	1.75513E+001	1.80870E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	1.12527E+000	3.71964E-001
		583.14*		84.20	3.29905E-001	8.90025E-002
		860.37		12.46		
Bi-212	1.000	727.17*		11.80	5.37764E-001	3.48643E-001
Pb-212	0.520	74.81*	@	10.70	8.18074E+000	1.93908E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.23903E-001	2.03927E-001
Bi-214	0.989	609.31*		46.30	5.80734E-001	1.42837E-001
		1120.29*		15.10	6.82013E-001	2.72752E-001
		1764.49*		15.80	6.09481E-001	1.86635E-001
PB-214	0.582	74.82*	@	6.21	1.40956E+001	3.49427E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.93029E-001	2.27073E-001
		351.92*		37.20	6.10595E-001	2.05093E-001
Ac-228	0.998	338.32*		11.40	7.95086E-001	5.19967E-001
		911.07*		27.70	8.74930E-001	2.41341E-001
		969.11*		16.60	8.77766E-001	3.10405E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		1.000	1.717996E-001	8.015840E-002
K-40		0.976	1.755132E+001	1.808697E+000
TL-208		0.752	3.299053E-001	8.835070E-002
Bi-212		1.000	5.377636E-001	3.486432E-001
Pb-212	@	0.520	8.239026E-001	2.039267E-001
Bi-214		0.989	6.047201E-001	1.047337E-001
PB-214	@	0.582	5.128482E-001	1.522020E-001
Ac-228		0.998	8.664204E-001	1.788967E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.88	4.7401E-001	22.08
3	84.95	2.4204E-001	84.06

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.4069E-002	7.02E-002	-3.2810E-002
	1332.49	100.00	7.0195E-002		-1.2416E-002
Nb-94	702.63	100.00	1.0025E-001	9.00E-002	3.9588E-002
	871.10	100.00	9.0015E-002		8.8029E-002
Ag-108m	79.20	7.10	4.8076E+000	1.16E-001	-2.5523E+000
	433.93	89.90	1.1580E-001		-7.1344E-002
	614.37	90.40	1.2987E-001		-4.7096E-002
	722.95	90.50	1.1931E-001		-1.7545E-002
Sb-125	176.33	6.89	2.1286E+000	3.58E-001	1.8223E-001
	427.89	29.33	3.5814E-001		-6.2911E-002
	463.38	10.35	9.8811E-001		1.3254E-001
	600.56	17.80	5.5513E-001		-5.1494E-001
	606.64	5.02	2.6518E+000		-2.3414E+000
	635.90	11.32	8.3240E-001		4.2875E-001
Cs-134	563.23	8.38	1.2291E+000	1.06E-001	9.2393E-001
	569.32	15.43	6.5421E-001		2.1995E-001
	604.70	97.60	1.2680E-001		-1.5103E-001
	795.84	85.40	1.0565E-001		-4.0608E-003
	801.93	8.73	1.0178E+000		-6.4018E-002
Cs-137	661.65	85.12	1.2870E-001	1.29E-001	9.3088E-002
Eu-152	121.78	28.40	7.0845E-001	3.64E-001	1.8506E-001
	244.69	7.49	1.7287E+000		3.7470E-001
	344.27	26.50	4.2814E-001		-1.0598E-001
	778.89	12.74	7.1677E-001		2.1837E-001
	867.32	4.16	2.1620E+000		-1.9078E+000
	964.01	14.40	8.3019E-001		3.8171E-001
	1085.78	10.00	9.5358E-001		1.2378E+000
	1112.02	13.30	7.2696E-001		6.4051E-001
	1407.95	20.70	3.6447E-001		1.4011E-001
Eu-154	123.07	40.50	4.9238E-001	2.27E-001	2.2242E-002
	247.94	6.60	1.9077E+000		1.9118E-001
	591.81	4.83	2.0601E+000		7.8516E-001
	723.30	19.70	5.4573E-001		-1.7293E-001
	756.87	4.33	2.1170E+000		-3.8164E-001
	873.19	11.50	7.6671E-001		1.9314E-001
	996.32	10.30	8.4785E-001		4.6540E-001
	1004.76	17.90	5.0053E-001		-8.7393E-002
	1274.45	35.50	2.2715E-001		1.4146E-001
Eu-155	86.54	30.90	1.0157E+000	1.02E+000	4.3621E-001
	105.31	20.70	1.1768E+000		-3.6377E-002
Am-241	59.54	35.90	1.3155E+000	1.32E+000	-7.1861E-001
Cm-243	228.19	10.56	1.1789E+000	8.76E-001	-5.9245E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.7577E-001	8.76E-001	-2.4374E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 6:56:13 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-118-F-
Sample Title: OOL-09-01-118-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 6:46:09 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-118-F-
Title: OOL-09-01-118-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	292.17	72.87	0.88	3.81E+002	64.91	1.32E+003
m	2	284-	306	300.42	74.93	0.88	6.75E+002	77.78	1.45E+003
	3	331-	344	339.64	84.74	0.83	2.32E+002	127.58	1.45E+003
M	4	949-	977	954.73	238.56	1.06	3.07E+002	42.06	2.43E+002
m	5	949-	977	967.84	241.84	1.06	6.21E+001	26.93	2.59E+002
	6	1174-	1188	1181.08	295.17	0.85	8.99E+001	52.61	2.19E+002
	7	1347-	1359	1353.94	338.39	0.91	6.96E+001	42.73	1.53E+002
	8	1401-	1417	1407.71	351.84	1.42	1.78E+002	50.97	1.59E+002
	9	2325-	2340	2332.65	583.14	1.32	1.63E+002	43.65	1.11E+002
	10	2425-	2445	2436.72	609.17	1.45	1.85E+002	44.51	9.12E+001
	11	2902-	2915	2907.87	726.99	0.60	4.03E+001	26.90	5.37E+001
	12	3636-	3654	3645.67	911.50	1.58	1.55E+002	38.12	6.61E+001
	13	3869-	3885	3876.55	969.24	1.11	8.74E+001	31.10	5.26E+001
	14	4474-	4491	4481.75	1120.58	1.53	8.40E+001	25.75	2.70E+001
	15	5831-	5859	5846.05	1461.76	1.74	1.18E+003	69.31	1.45E+001
	16	7054-	7071	7062.58	1765.98	0.43	6.78E+001	17.66	4.21E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.969	1460.81*		10.67	1.98526E+001	1.98375E+000
TL-208	0.471	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.75863E-001	8.21460E-002
		860.37		12.46		
Bi-212	0.999	727.17*		11.80	5.17134E-001	3.50477E-001
Pb-212	0.520	74.81*	@	10.70	9.65978E+000	2.19600E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.46269E-001	1.55398E-001
Bi-214	0.983	609.31*		46.30	5.76987E-001	1.56087E-001
		1120.29*		15.10	9.36484E-001	3.03768E-001
		1764.49*		15.80	7.96586E-001	2.22297E-001
PB-214	0.732	74.82*	@	6.21	1.66441E+001	3.97199E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98*		7.49	9.02373E-001	4.19055E-001
		295.21*		19.20	5.39418E-001	3.28486E-001
		351.92*		37.20	5.81167E-001	1.92323E-001
Ac-228	0.997	338.32*		11.40	7.31384E-001	4.63447E-001
		911.07*		27.70	8.86709E-001	2.40821E-001
		969.11*		16.60	8.50121E-001	3.15226E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.969	1.985261E+001	1.983752E+000
TL-208		0.471	2.758625E-001	8.214600E-002
Bi-212		0.999	5.171344E-001	3.504768E-001
Pb-212	@	0.520	7.462688E-001	1.553984E-001
Bi-214		0.983	6.926265E-001	1.177536E-001
PB-214	@	0.732	6.155066E-001	1.543075E-001
Ac-228		0.997	8.525633E-001	1.768805E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.87	6.3467E-001	17.04
3	84.74	3.8720E-001	54.91

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.6158E-002	7.27E-002	-1.2369E-002
	1332.49	100.00	7.2703E-002		-1.0205E-001
Nb-94	702.63	100.00	9.3390E-002	9.34E-002	-5.7374E-002
	871.10	100.00	9.5729E-002		6.2980E-002
Ag-108m	79.20	7.10	4.8627E+000	1.16E-001	-4.2566E+000
	433.93	89.90	1.1560E-001		2.2566E-002
	614.37	90.40	1.3119E-001		-3.7767E-002
	722.95	90.50	1.1878E-001		-1.3084E-002
Sb-125	176.33	6.89	2.1458E+000	3.53E-001	-8.9323E-001
	427.89	29.33	3.5269E-001		-1.0872E-001
	463.38	10.35	1.0645E+000		6.7005E-001
	600.56	17.80	5.5909E-001		2.5714E-001
	606.64	5.02	2.6657E+000		4.9962E+000
	635.90	11.32	8.2093E-001		-1.8631E-001
Cs-134	563.23	8.38	1.1977E+000	1.23E-001	-3.1520E-001
	569.32	15.43	6.7131E-001		-2.3473E-001
	604.70	97.60	1.2965E-001		5.5413E-002
	795.84	85.40	1.2305E-001		6.4905E-002
	801.93	8.73	1.0820E+000		-1.3394E+000
Cs-137	661.65	85.12	1.2270E-001	1.23E-001	8.3396E-002
Eu-152	121.78	28.40	7.0610E-001	3.35E-001	1.8080E-003
	244.69	7.49	1.7422E+000		-3.0937E-001
	344.27	26.50	4.1170E-001		-3.1914E-001
	778.89	12.74	7.2363E-001		-6.8984E-001
	867.32	4.16	2.2781E+000		-3.1023E+000
	964.01	14.40	8.4530E-001		-7.5057E-002
	1085.78	10.00	9.2323E-001		-9.4287E-002
	1112.02	13.30	6.8851E-001		1.9148E-001
	1407.95	20.70	3.3516E-001		2.0792E-001
Eu-154	123.07	40.50	4.9321E-001	2.66E-001	9.3504E-002
	247.94	6.60	1.8883E+000		-1.1007E+000
	591.81	4.83	1.9514E+000		-9.4389E-001
	723.30	19.70	5.4694E-001		-1.4123E-001
	756.87	4.33	2.2081E+000		-1.3787E+000
	873.19	11.50	8.6023E-001		9.3679E-001
	996.32	10.30	8.7426E-001		-4.5229E-001
	1004.76	17.90	4.5907E-001		-3.9788E-002
	1274.45	35.50	2.6613E-001		-1.4193E-002
Eu-155	86.54	30.90	1.0143E+000	1.01E+000	-1.3459E-001
	105.31	20.70	1.1744E+000		5.1153E-001
Am-241	59.54	35.90	1.3311E+000	1.33E+000	-1.7406E-001
Cm-243	228.19	10.56	1.2447E+000	8.67E-001	3.4603E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.6744E-001	8.67E-001	1.5587E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 6:33:52 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-119-F-
Sample Title: OOL-09-01-119-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 6:23:50 PM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-119-F-
Title: OOL-09-01-119-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	291.71	72.76	0.81	3.06E+002	61.71	1.23E+003
m	2	284-	305	300.22	74.88	0.82	6.61E+002	77.34	1.44E+003
	3	331-	346	339.76	84.77	0.84	2.40E+002	144.09	1.71E+003
	4	947-	962	954.72	238.56	1.21	2.24E+002	72.01	3.72E+002
	5	1171-	1190	1180.86	295.11	0.57	6.32E+001	64.70	2.93E+002
	6	1346-	1360	1354.13	338.44	1.23	1.18E+002	44.97	1.42E+002
	7	1402-	1415	1407.25	351.73	0.85	1.45E+002	44.94	1.38E+002
	8	2037-	2050	2042.18	510.51	0.76	7.06E+001	42.08	1.40E+002
	9	2325-	2341	2333.10	583.26	1.45	1.94E+002	42.18	8.63E+001
	10	2429-	2446	2436.87	609.21	1.44	1.54E+002	39.83	7.96E+001
	11	2640-	2651	2645.03	661.26	0.27	2.77E+001	21.83	3.83E+001
	12	2902-	2916	2908.66	727.19	0.86	5.46E+001	27.68	5.04E+001
	13	3637-	3656	3645.60	911.48	1.38	1.60E+002	37.13	5.73E+001
M	14	3853-	3886	3859.80	965.05	1.47	2.07E+001	14.90	5.05E+001
m	15	3853-	3886	3876.09	969.12	1.47	7.34E+001	20.75	5.59E+001
	16	4473-	4490	4482.31	1120.72	0.55	5.62E+001	27.42	4.28E+001
	17	5831-	5858	5846.11	1461.78	1.87	1.30E+003	73.34	2.14E+001
	18	7054-	7069	7061.74	1765.77	0.89	5.68E+001	18.43	1.02E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.968	1460.81*	10.67	2.18329E+001	2.15357E+000
Cs-137	0.995	661.65*	85.12	4.82584E-002	3.85135E-002
TL-208	0.751	277.35	6.80		
		510.84*	21.60	4.45613E-001	2.74870E-001
		583.14*	84.20	3.27895E-001	8.31832E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	7.01073E-001	3.64635E-001
Pb-212	0.520	74.81* @	10.70	9.45611E+000	2.15895E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.45402E-001	1.94828E-001
Bi-214	0.987	609.31*	46.30	4.82005E-001	1.37822E-001
		1120.29*	15.10	6.26316E-001	3.12824E-001
		1764.49*	15.80	6.66869E-001	2.26533E-001
PB-214	0.582	74.82* @	6.21	1.62931E+001	3.90344E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.79500E-001	3.93447E-001
		351.92*	37.20	4.73393E-001	1.66373E-001
Ac-228	0.997	338.32*	11.40	1.24128E+000	5.11122E-001
		911.07*	27.70	9.13962E-001	2.37097E-001
		969.11*	16.60	7.13219E-001	2.15137E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
X	ANN		0.991		
	K-40		0.968	2.183293E+001	2.153570E+000
	Cs-137		0.995	4.825839E-002	3.851347E-002
	TL-208		0.751	3.377715E-001	7.961728E-002
	Bi-212		1.000	7.010732E-001	3.646353E-001
	Pb-212	@	0.520	5.454022E-001	1.948279E-001
	Bi-214		0.987	5.436572E-001	1.101960E-001
	PB-214	@	0.582	4.591506E-001	1.532359E-001
	Ac-228		0.997	8.426038E-001	1.521057E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.76	5.0999E-001	20.17
3	84.77	4.0078E-001	59.92
M 14	965.05	3.4417E-002	72.14

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0376E-001	7.88E-002	1.5912E-002
		1332.49	100.00	7.8828E-002		4.3897E-002
	Nb-94	702.63	100.00	1.0251E-001	8.72E-002	5.2079E-002
		871.10	100.00	8.7171E-002		-8.3758E-002
	Ag-108m	79.20	7.10	4.8976E+000	1.18E-001	-6.9565E+000
		433.93	89.90	1.1817E-001		-7.9251E-002
		614.37	90.40	1.2443E-001		1.3382E-002
		722.95	90.50	1.2217E-001		1.8103E-002
	Sb-125	176.33	6.89	2.1671E+000	3.69E-001	-1.0685E+000
		427.89	29.33	3.6938E-001		-1.6687E-001
		463.38	10.35	1.0747E+000		-1.2536E-001
		600.56	17.80	5.8481E-001		-9.4987E-002
		606.64	5.02	2.5489E+000		-4.7723E-001
		635.90	11.32	9.2702E-001		-4.4820E-001
	Cs-134	563.23	8.38	1.2187E+000	1.15E-001	1.6082E-001
		569.32	15.43	6.6139E-001		1.0089E-001
		604.70	97.60	1.2622E-001		-3.3781E-002
		795.84	85.40	1.1533E-001		5.3419E-002
		801.93	8.73	1.0213E+000		-1.1204E+000
+	Cs-137	661.65*	85.12	6.1085E-002	6.11E-002	4.8258E-002
	Eu-152	121.78	28.40	7.1953E-001	3.64E-001	8.5159E-002
		244.69	7.49	1.7476E+000		-5.2130E-001
		344.27	26.50	4.0663E-001		-1.1585E-001
		778.89	12.74	7.2816E-001		-9.2055E-001
		867.32	4.16	2.1167E+000		-2.9884E+000
		964.01	14.40	8.3358E-001		3.7823E-001
		1085.78	10.00	9.8934E-001		6.8141E-001
		1112.02	13.30	7.3440E-001		2.4512E-001
		1407.95	20.70	3.6447E-001		2.1216E-001
	Eu-154	123.07	40.50	4.9568E-001	2.47E-001	-3.3528E-001
		247.94	6.60	1.8835E+000		-1.2939E+000
		591.81	4.83	2.0408E+000		-7.5286E-001
		723.30	19.70	5.6833E-001		9.5961E-003
		756.87	4.33	2.3015E+000		7.2282E-001
		873.19	11.50	7.5837E-001		3.2997E-001
		996.32	10.30	9.2470E-001		9.2210E-001
		1004.76	17.90	5.0242E-001		-1.4853E-001
		1274.45	35.50	2.4690E-001		9.0705E-002
	Eu-155	86.54	30.90	1.0386E+000	1.04E+000	1.7573E-001
		105.31	20.70	1.1886E+000		-2.6747E-001
	Am-241	59.54	35.90	1.3187E+000	1.32E+000	6.5099E-002
	Cm-243	228.19	10.56	1.2346E+000	8.77E-001	-6.8337E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.7660E-001	8.77E-001	-7.6340E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 9:04:50 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-120-F-
Sample Title: OOL-09-01-120-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 8:54:48 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-120-F-
Title: OOL-09-01-120-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	304	292.17	73.24	0.86	1.56E+002	49.95	8.98E+002
m	2	285-	304	300.16	75.23	0.87	2.61E+002	57.98	9.00E+002
	3	948-	960	953.76	238.62	1.04	2.51E+002	59.77	2.56E+002
	4	1307-	1319	1311.43	328.02	0.26	3.94E+001	37.22	1.22E+002
M	5	1337-	1357	1341.82	335.62	0.60	2.20E+001	15.83	7.89E+001
m	6	1337-	1357	1351.97	338.16	0.60	5.11E+001	20.31	7.60E+001
	7	1400-	1414	1406.31	351.74	0.99	1.46E+002	43.25	1.16E+002
	8	2323-	2341	2331.08	582.91	0.84	1.39E+002	39.78	8.00E+001
	9	2428-	2444	2435.24	608.95	1.39	1.48E+002	36.92	6.56E+001
	10	2900-	2914	2906.80	726.82	0.98	4.48E+001	24.58	3.82E+001
	11	3633-	3653	3642.44	910.71	1.74	1.39E+002	33.81	4.38E+001
	12	3864-	3883	3873.44	968.46	0.85	9.50E+001	30.51	4.20E+001
	13	5830-	5854	5842.17	1460.59	1.71	8.39E+002	60.39	2.73E+001
	14	7051-	7066	7058.09	1764.53	1.37	4.50E+001	14.80	4.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.998	1460.81*	10.67	1.77889E+001	1.92742E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.93875E-001	9.24138E-002
		860.37	12.46		
Bi-212	0.996	727.17*	11.80	7.19426E-001	4.03241E-001
Pb-212	0.580	74.81* @	10.70	8.44958E+000	2.50081E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.82732E-001	2.23177E-001
Bi-214	0.693	609.31*	46.30	5.78626E-001	1.60658E-001
		1120.29	15.10		
		1764.49*	15.80	7.01694E-001	2.41255E-001
Ac-228	0.994	338.32*	11.40	6.78911E-001	2.89940E-001
		911.07*	27.70	9.99388E-001	2.68723E-001
		969.11*	16.60	1.15297E+000	3.89609E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.998	1.778889E+001	1.927424E+000
TL-208		0.471	2.938748E-001	9.241383E-002
Bi-212		0.996	7.194258E-001	4.032410E-001
Pb-212	@	0.580	7.827318E-001	2.231774E-001
Bi-214		0.693	6.164348E-001	1.337212E-001
Ac-228		0.994	9.127694E-001	1.758679E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.24	2.6070E-001	31.93
4	328.02	6.5696E-002	94.42
M 5	335.62	3.6589E-002	72.13
7	351.74	2.4329E-001	29.63

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1031E-001	8.22E-002	1.2808E-001
	1332.49	100.00	8.2161E-002		-6.8463E-002
Nb-94	702.63	100.00	1.2464E-001	9.84E-002	1.2062E-001
	871.10	100.00	9.8368E-002		6.9820E-004
Ag-108m	79.20	7.10	9.6329E+000	1.39E-001	-1.7644E+001
	433.93	89.90	1.4036E-001		2.7401E-002
	614.37	90.40	1.5998E-001		6.4677E-003
	722.95	90.50	1.3859E-001		2.9713E-002
Sb-125	176.33	6.89	2.7852E+000	4.29E-001	-1.2886E+000
	427.89	29.33	4.2910E-001		-1.3276E-001
	463.38	10.35	1.2701E+000		8.0925E-001
	600.56	17.80	6.6301E-001		8.2010E-002
	606.64	5.02	3.0640E+000		6.8117E+000
	635.90	11.32	9.4992E-001		-4.7665E-001
Cs-134	563.23	8.38	1.5007E+000	1.36E-001	4.2559E-001
	569.32	15.43	8.3213E-001		1.0509E+000
	604.70	97.60	1.5864E-001		-6.5411E-002
	795.84	85.40	1.3628E-001		3.2327E-002
	801.93	8.73	1.3437E+000		3.2619E-001
Cs-137	661.65	85.12	1.4487E-001	1.45E-001	3.0347E-002
Eu-152	121.78	28.40	9.7666E-001	4.17E-001	-8.6204E-002
	244.69	7.49	2.2584E+000		-3.6409E-001
	344.27	26.50	5.3302E-001		-1.7581E-001
	778.89	12.74	9.2324E-001		-9.6635E-001
	867.32	4.16	2.4683E+000		-3.9145E+000
	964.01	14.40	1.0200E+000		5.5884E-002
	1085.78	10.00	1.0350E+000		-3.8489E-001
	1112.02	13.30	8.1342E-001		-1.8088E+000
	1407.95	20.70	4.1667E-001		1.8550E-001
Eu-154	123.07	40.50	6.7681E-001	2.73E-001	5.1422E-002
	247.94	6.60	2.4880E+000		-1.0106E-001
	591.81	4.83	2.4383E+000		7.7227E-001
	723.30	19.70	6.3836E-001		5.7003E-001
	756.87	4.33	2.5738E+000		-1.7356E+000
	873.19	11.50	8.7524E-001		-1.2063E-001
	996.32	10.30	9.9594E-001		-2.9166E-001
	1004.76	17.90	5.5584E-001		-5.1897E-001
	1274.45	35.50	2.7251E-001		-1.1635E-001
Eu-155	86.54	30.90	1.6766E+000	1.67E+000	2.0654E+000
	105.31	20.70	1.6695E+000		-7.1301E-001
Am-241	59.54	35.90	3.7207E+000	3.72E+000	4.9752E+000
Cm-243	228.19	10.56	1.6324E+000	1.12E+000	2.1181E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1182E+000	1.12E+000	-2.8191E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 6:59:37 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-121-F-
Sample Title: OOL-09-01-121-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 6:49:34 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-121-F-
Title: OOL-09-01-121-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	291.55	73.08	0.70	1.63E+002	46.80	6.26E+002
m	2	286-	306	300.29	75.27	0.71	3.19E+002	57.62	7.71E+002
	3	329-	344	338.99	84.94	1.02	1.92E+002	113.59	1.05E+003
M	4	943-	975	953.98	238.67	1.32	3.52E+002	42.69	2.51E+002
m	5	943-	975	966.97	241.92	1.32	1.20E+002	29.64	2.20E+002
	6	1171-	1187	1180.65	295.33	0.47	8.71E+001	52.98	2.06E+002
	7	1347-	1356	1351.81	338.12	1.03	6.13E+001	35.25	1.16E+002
	8	1400-	1417	1406.30	351.74	0.85	1.10E+002	49.11	1.59E+002
	9	2032-	2052	2041.02	510.40	1.89	1.21E+002	49.30	1.41E+002
	10	2323-	2340	2331.01	582.89	1.62	1.47E+002	39.88	8.22E+001
	11	2426-	2444	2434.99	608.88	1.51	1.35E+002	41.71	9.42E+001
	12	3635-	3653	3642.58	910.75	1.53	1.53E+002	33.19	4.01E+001
	13	3865-	3882	3874.09	968.62	1.30	8.92E+001	28.14	3.58E+001
	14	4473-	4488	4479.78	1120.02	0.52	5.91E+001	22.92	2.59E+001
	15	5829-	5855	5842.26	1460.61	1.81	9.60E+002	61.16	3.25E+000
	16	7052-	7065	7058.77	1764.70	0.34	3.50E+001	14.45	7.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.989	511.00*		100.00	2.06177E-001	8.86647E-002
K-40	0.999	1460.81*		10.67	2.03561E+001	2.09730E+000
TL-208	0.750	277.35		6.80		
		510.84*		21.60	9.54523E-001	4.17821E-001
		583.14*		84.20	3.10457E-001	9.35205E-002
		860.37		12.46		
Pb-212	0.580	74.81*	@	10.70	1.02942E+001	2.74397E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.09924E+000	2.17807E-001
Bi-214	0.996	609.31*		46.30	5.25657E-001	1.75093E-001
		1120.29*		15.10	8.13561E-001	3.26904E-001
		1764.49*		15.80	5.45785E-001	2.31844E-001
PB-214	0.776	74.82*	@	6.21	1.77372E+001	4.90013E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98*		7.49	2.23844E+000	6.65823E-001
		295.21*		19.20	6.64054E-001	4.19357E-001
		351.92*		37.20	4.52860E-001	2.15461E-001
Ac-228	0.996	338.32*		11.40	8.14187E-001	4.85006E-001
		911.07*		27.70	1.09787E+000	2.69769E-001
		969.11*		16.60	1.08222E+000	3.59908E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.989	1.391181E-001	9.091042E-002
K-40		0.999	2.035608E+001	2.097299E+000
TL-208		0.750	3.104571E-001	9.297160E-002
Pb-212	@	0.580	1.099239E+000	2.178070E-001
Bi-214		0.996	5.763094E-001	1.284797E-001
PB-214	@	0.776	6.302063E-001	1.841686E-001
Ac-228		0.996	1.046264E+000	1.972113E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.08	2.7214E-001	28.66
3	84.94	3.2016E-001	59.13

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1863E-001	7.29E-002	9.2565E-002
	1332.49	100.00	7.2899E-002		-4.0101E-002
Nb-94	702.63	100.00	1.2107E-001	1.01E-001	5.0906E-002
	871.10	100.00	1.0148E-001		-5.9816E-002
Ag-108m	79.20	7.10	9.5537E+000	1.39E-001	-2.0295E+000
	433.93	89.90	1.4596E-001		3.8162E-002
	614.37	90.40	1.6304E-001		-3.9992E-003
	722.95	90.50	1.3894E-001		1.1675E-002
Sb-125	176.33	6.89	2.7600E+000	4.30E-001	1.2590E+000
	427.89	29.33	4.2989E-001		-7.6164E-002
	463.38	10.35	1.2746E+000		-2.8511E-001
	600.56	17.80	6.9021E-001		1.4729E-001
	606.64	5.02	3.1476E+000		6.0367E+000
	635.90	11.32	1.0220E+000		3.1003E-001
Cs-134	563.23	8.38	1.5106E+000	1.35E-001	-6.6862E-001
	569.32	15.43	7.9956E-001		1.9185E-001
	604.70	97.60	1.6290E-001		-1.0124E-001
	795.84	85.40	1.3499E-001		1.0305E-001
	801.93	8.73	1.2886E+000		-9.5634E-001
Cs-137	661.65	85.12	1.4634E-001	1.46E-001	1.0495E-002
Eu-152	121.78	28.40	9.8143E-001	3.49E-001	3.3356E-003
	244.69	7.49	2.2738E+000		3.4602E-001
	344.27	26.50	5.4324E-001		-5.7827E-001
	778.89	12.74	8.5649E-001		-8.9824E-001
	867.32	4.16	2.4683E+000		-1.5811E+000
	964.01	14.40	1.0178E+000		4.6610E-001
	1085.78	10.00	1.0112E+000		1.9886E-001
	1112.02	13.30	8.3363E-001		-6.3046E-001
	1407.95	20.70	3.4948E-001		-2.6373E-001
Eu-154	123.07	40.50	6.9240E-001	2.77E-001	8.2523E-002
	247.94	6.60	2.4596E+000		5.4752E-001
	591.81	4.83	2.3343E+000		-2.3154E-002
	723.30	19.70	6.4323E-001		6.4677E-001
	756.87	4.33	2.6247E+000		1.1110E+000
	873.19	11.50	9.0539E-001		-4.4369E-001
	996.32	10.30	1.0728E+000		8.1934E-001
	1004.76	17.90	6.1127E-001		4.2288E-001
	1274.45	35.50	2.7710E-001		5.7128E-002
Eu-155	86.54	30.90	1.6282E+000	1.63E+000	-4.2474E-001
	105.31	20.70	1.6957E+000		1.2745E-001
Am-241	59.54	35.90	3.6989E+000	3.70E+000	1.1090E+000
Cm-243	228.19	10.56	1.7056E+000	1.16E+000	-3.4532E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1555E+000	1.16E+000	6.8854E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 5:34:09 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-122-F-
Sample Title: OOL-09-01-122-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 5:24:07 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-122-F-
Title: OOL-09-01-122-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	304	292.09	73.22	0.92	2.09E+002	50.22	7.68E+002
m	2	286-	304	300.31	75.27	0.93	2.71E+002	55.70	7.67E+002
	3	330-	355	339.36	85.04	1.06	1.56E+002	167.67	1.68E+003
	4	943-	960	954.04	238.69	1.10	2.41E+002	69.87	3.17E+002
	5	1173-	1184	1179.61	295.07	1.04	7.04E+001	41.11	1.48E+002
	6	1346-	1362	1351.60	338.07	1.37	6.94E+001	45.93	1.52E+002
	7	1397-	1413	1406.38	351.76	1.01	1.13E+002	46.30	1.42E+002
	8	2320-	2338	2331.05	582.90	0.98	1.30E+002	43.12	1.05E+002
	9	2428-	2442	2435.30	608.96	1.55	1.42E+002	32.80	4.81E+001
	10	2900-	2912	2906.52	726.75	1.00	3.99E+001	25.57	4.91E+001
	11	3434-	3446	3439.97	860.10	0.40	1.67E+001	20.09	3.33E+001
	12	3633-	3652	3642.45	910.72	1.08	1.25E+002	31.20	3.68E+001
	13	3866-	3882	3873.16	968.39	0.75	5.88E+001	28.19	4.72E+001
	14	5830-	5854	5842.27	1460.61	1.70	8.75E+002	61.30	2.50E+001
	15	6344-	6357	6350.40	1587.63	0.80	1.96E+001	11.56	5.37E+000
	16	7052-	7066	7058.14	1764.55	0.43	4.12E+001	15.24	6.82E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.999	1460.81*		10.67	1.85586E+001	1.98700E+000
TL-208	0.622	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.75758E-001	9.79968E-002
		860.37*		12.46	2.63097E-001	3.18445E-001
Bi-212	0.994	727.17*		11.80	6.40222E-001	4.17017E-001
Pb-212	0.580	74.81*	@	10.70	8.74603E+000	2.48381E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.52854E-001	2.47841E-001
Bi-214	0.693	609.31*		46.30	5.53404E-001	1.44966E-001
		1120.29		15.10		
		1764.49*		15.80	6.42084E-001	2.46115E-001
PB-214	0.619	74.82*	@	6.21	1.50696E+001	4.41728E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.37083E-001	3.26332E-001
		351.92*		37.20	4.63060E-001	2.05330E-001
Ac-228	0.993	338.32*		11.40	9.20863E-001	6.26627E-001
		911.07*		27.70	8.99321E-001	2.46862E-001
		969.11*		16.60	7.13646E-001	3.50330E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.999	1.855862E+001	1.987001E+000
TL-208		0.622	2.746624E-001	9.366219E-002
Bi-212		0.994	6.402222E-001	4.170170E-001
Pb-212	@	0.580	7.528539E-001	2.478412E-001
Bi-214		0.693	5.762462E-001	1.249083E-001
PB-214	@	0.619	4.840538E-001	1.737905E-001
Ac-228		0.993	8.455281E-001	1.920806E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.22	3.4822E-001	24.04
3	85.04	2.5991E-001	107.52
15	1587.63	3.2717E-002	58.91

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1212E-001	9.10E-002	-3.8798E-002
	1332.49	100.00	9.1015E-002		3.4662E-002
Nb-94	702.63	100.00	1.1036E-001	1.04E-001	1.9373E-002
	871.10	100.00	1.0364E-001		-5.4825E-004
Ag-108m	79.20	7.10	9.0766E+000	1.40E-001	-1.4878E+001
	433.93	89.90	1.4010E-001		-1.0409E-001
	614.37	90.40	1.5743E-001		-1.3218E-001
	722.95	90.50	1.4819E-001		1.0044E-001
Sb-125	176.33	6.89	2.7444E+000	4.26E-001	1.7870E+000
	427.89	29.33	4.2592E-001		-5.4531E-002
	463.38	10.35	1.2679E+000		9.9189E-001
	600.56	17.80	6.4896E-001		-2.1216E-001
	606.64	5.02	2.9828E+000		4.8001E+000
	635.90	11.32	1.0220E+000		-3.5986E-001
Cs-134	563.23	8.38	1.4432E+000	1.26E-001	-9.0930E-001
	569.32	15.43	8.1057E-001		2.1979E-001
	604.70	97.60	1.5524E-001		-5.9717E-002
	795.84	85.40	1.2563E-001		4.2404E-002
	801.93	8.73	1.1414E+000		-1.3316E+000
Cs-137	661.65	85.12	1.4487E-001	1.45E-001	3.6386E-002
Eu-152	121.78	28.40	9.6735E-001	4.04E-001	8.5466E-001
	244.69	7.49	2.2481E+000		6.2375E-001
	344.27	26.50	5.3645E-001		2.9868E-001
	778.89	12.74	7.6359E-001		-6.9191E-001
	867.32	4.16	2.4889E+000		1.5626E+000
	964.01	14.40	9.9156E-001		2.3794E-001
	1085.78	10.00	1.0397E+000		9.2125E-002
	1112.02	13.30	7.7132E-001		-1.5301E+000
	1407.95	20.70	4.0353E-001		3.1743E-001
Eu-154	123.07	40.50	6.6388E-001	2.82E-001	-4.9497E-001
	247.94	6.60	2.4859E+000		-6.8135E-001
	591.81	4.83	2.4383E+000		-9.8956E-002
	723.30	19.70	6.8693E-001		8.1047E-001
	756.87	4.33	2.5738E+000		6.1997E-001
	873.19	11.50	9.3093E-001		5.9453E-001
	996.32	10.30	9.7799E-001		-3.2702E-002
	1004.76	17.90	5.8173E-001		-4.2973E-001
	1274.45	35.50	2.8161E-001		1.0694E-003
Eu-155	86.54	30.90	1.5993E+000	1.60E+000	8.1245E-002
	105.31	20.70	1.6534E+000		-5.3086E-001
Am-241	59.54	35.90	3.5987E+000	3.60E+000	2.2470E+000
Cm-243	228.19	10.56	1.6151E+000	1.08E+000	1.2332E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0817E+000	1.08E+000	-3.2224E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 5:18:05 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-123-F-
Sample Title: OOL-09-01-123-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 5:08:03 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-123-F-
Title: OOL-09-01-123-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	291.58	73.09	0.92	1.23E+002	45.21	7.52E+002
m	2	286-	306	300.37	75.29	0.92	2.88E+002	57.18	8.55E+002
	3	947-	962	953.67	238.59	1.02	2.44E+002	62.92	2.58E+002
	4	1347-	1363	1351.97	338.16	0.61	4.83E+001	44.08	1.44E+002
	5	1399-	1412	1406.50	351.79	0.84	8.16E+001	41.82	1.34E+002
	6	2033-	2052	2040.97	510.39	1.38	1.07E+002	40.29	9.00E+001
	7	2323-	2343	2330.64	582.80	0.92	1.67E+002	37.51	5.54E+001
	8	2428-	2445	2435.11	608.92	0.96	1.25E+002	33.54	5.15E+001
	9	3634-	3651	3641.63	910.51	0.52	9.40E+001	30.10	4.30E+001
M	10	3851-	3881	3856.14	964.13	1.38	2.06E+001	13.30	3.03E+001
m	11	3851-	3881	3873.30	968.42	1.38	7.31E+001	19.97	3.27E+001
	12	4472-	4486	4479.42	1119.94	0.34	5.07E+001	23.11	3.03E+001
	13	4729-	4740	4734.62	1183.73	0.47	1.43E+001	15.74	1.97E+001
	14	5830-	5854	5842.05	1460.56	2.06	7.54E+002	56.02	1.55E+001
	15	7053-	7066	7059.04	1764.77	0.69	3.90E+001	12.24	0.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.988	511.00*	100.00	1.82611E-001	7.30892E-002
K-40	0.998	1460.81*	10.67	1.59819E+001	1.75674E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	8.45422E-001	3.45348E-001
		583.14*	84.20	3.52350E-001	9.16298E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	9.28108E+000	2.59041E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.61033E-001	2.29660E-001
Bi-214	0.996	609.31*	46.30	4.85592E-001	1.43844E-001
		1120.29*	15.10	6.97284E-001	3.26361E-001
		1764.49*	15.80	6.08171E-001	2.00324E-001
Ac-228	0.990	338.32*	11.40	6.41438E-001	5.93766E-001
		911.07*	27.70	6.74939E-001	2.29688E-001
		969.11*	16.60	8.87647E-001	2.59629E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.988	1.065035E-001	7.568096E-002
K-40		0.998	1.598193E+001	1.756740E+000
TL-208		0.749	3.523502E-001	9.090749E-002
Pb-212	@	0.580	7.610331E-001	2.296601E-001
Bi-214		0.996	5.466063E-001	1.100046E-001
Ac-228		0.990	7.584995E-001	1.652348E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.09	2.0558E-001	36.66
5	351.79	1.3601E-001	51.24
M 10	964.13	3.4325E-002	64.57
13	1183.73	2.3909E-002	109.72

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.9267E-002	7.59E-002	6.5075E-002
	1332.49	100.00	7.5880E-002		-5.8679E-002
Nb-94	702.63	100.00	1.0704E-001	9.65E-002	-3.2399E-002
	871.10	100.00	9.6544E-002		-2.0449E-002
Ag-108m	79.20	7.10	9.2548E+000	1.27E-001	-5.7619E+000
	433.93	89.90	1.3039E-001		-2.2168E-003
	614.37	90.40	1.5130E-001		-7.4046E-002
	722.95	90.50	1.2707E-001		5.2592E-002
Sb-125	176.33	6.89	2.4827E+000	3.97E-001	-1.7521E+000
	427.89	29.33	3.9703E-001		-2.1343E-001
	463.38	10.35	1.1466E+000		4.1013E-001
	600.56	17.80	6.3276E-001		7.6172E-002
	606.64	5.02	2.8742E+000		4.8886E+000
	635.90	11.32	9.3098E-001		2.4429E-001
Cs-134	563.23	8.38	1.3130E+000	1.26E-001	-7.8814E-001
	569.32	15.43	7.1136E-001		2.8476E-002
	604.70	97.60	1.4820E-001		5.6752E-002
	795.84	85.40	1.2609E-001		1.8301E-002
	801.93	8.73	1.1988E+000		-4.6569E-001
Cs-137	661.65	85.12	1.2667E-001	1.27E-001	8.6207E-002
Eu-152	121.78	28.40	9.4554E-001	3.72E-001	5.2078E-001
	244.69	7.49	2.1658E+000		1.0730E+000
	344.27	26.50	4.8692E-001		1.6323E-001
	778.89	12.74	7.9692E-001		-1.0949E+000
	867.32	4.16	2.4053E+000		8.5977E-001
	964.01	14.40	9.6456E-001		-1.2679E-001
	1085.78	10.00	9.5653E-001		-2.7765E-001
	1112.02	13.30	7.6771E-001		-4.1981E-001
	1407.95	20.70	3.7213E-001		2.6805E-001
Eu-154	123.07	40.50	6.5150E-001	2.61E-001	1.1814E-001
	247.94	6.60	2.4514E+000		6.4459E-001
	591.81	4.83	2.1686E+000		-9.7579E-001
	723.30	19.70	5.7843E-001		3.5809E-002
	756.87	4.33	2.3864E+000		1.7880E-001
	873.19	11.50	8.1139E-001		-4.4592E-001
	996.32	10.30	9.3149E-001		-1.7294E-001
	1004.76	17.90	5.3140E-001		2.3349E-001
	1274.45	35.50	2.6147E-001		-8.3271E-002
Eu-155	86.54	30.90	1.6070E+000	1.61E+000	3.0838E+000
	105.31	20.70	1.6362E+000		-1.6014E-001
Am-241	59.54	35.90	3.5379E+000	3.54E+000	1.1719E-001
Cm-243	228.19	10.56	1.5116E+000	1.05E+000	-5.5585E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0496E+000	1.05E+000	-1.9245E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 7:21:32 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-124-F-
Sample Title: OOL-09-01-124-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 7:11:30 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-124-F-
Title: OOL-09-01-124-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	291.32	73.03	1.05	1.69E+002	50.00	8.60E+002
m	2	285-	306	299.90	75.17	1.06	3.36E+002	59.43	1.08E+003
	3	330-	346	338.79	84.89	1.31	1.23E+002	120.83	1.16E+003
	4	947-	961	953.76	238.62	0.96	2.28E+002	67.39	3.31E+002
	5	1172-	1184	1179.81	295.12	0.52	6.17E+001	40.24	1.36E+002
	6	1347-	1358	1351.86	338.13	0.69	3.87E+001	35.71	1.16E+002
	7	1402-	1413	1406.02	351.67	1.10	1.33E+002	39.96	1.09E+002
	8	2030-	2049	2041.16	510.44	0.93	1.13E+002	43.57	1.09E+002
	9	2326-	2339	2330.80	582.84	1.15	1.37E+002	35.37	6.75E+001
	10	2427-	2444	2435.29	608.96	1.32	1.47E+002	37.25	6.55E+001
	11	3635-	3651	3642.59	910.75	2.07	1.43E+002	28.92	2.35E+001
	12	3866-	3883	3873.60	968.50	0.38	6.20E+001	25.01	3.10E+001
	13	4470-	4485	4477.92	1119.56	1.00	2.77E+001	22.52	3.43E+001
	14	5830-	5854	5841.76	1460.48	1.96	7.97E+002	58.75	2.47E+001
	15	7050-	7063	7056.91	1764.24	0.34	3.47E+001	16.30	1.23E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.990	511.00*		100.00	1.93322E-001	7.88457E-002
K-40	0.997	1460.81*		10.67	1.69100E+001	1.85120E+000
TL-208	0.750	277.35		6.80		
		510.84*		21.60	8.95008E-001	3.72272E-001
		583.14*		84.20	2.88721E-001	8.37181E-002
		860.37		12.46		
Pb-212	0.580	74.81*	@	10.70	1.09020E+001	2.87644E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.12278E-001	2.38012E-001
Bi-214	0.994	609.31*		46.30	5.71473E-001	1.61439E-001
		1120.29*		15.10	3.81277E-001	3.12321E-001
		1764.49*		15.80	5.41574E-001	2.59864E-001
PB-214	0.619	74.82*	@	6.21	1.87844E+001	5.14035E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	4.70336E-001	3.16948E-001
		351.92*		37.20	5.47666E-001	1.87936E-001
Ac-228	0.995	338.32*		11.40	5.14234E-001	4.80847E-001
		911.07*		27.70	1.03030E+000	2.39181E-001
		969.11*		16.60	7.52729E-001	3.13650E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.990	1.309580E-001	8.086726E-002
K-40		0.997	1.691003E+001	1.851200E+000
TL-208		0.750	2.887214E-001	8.318767E-002
Pb-212	@	0.580	7.122777E-001	2.380122E-001
Bi-214		0.994	5.337524E-001	1.255611E-001
PB-214	@	0.619	5.275498E-001	1.616540E-001
Ac-228		0.995	8.722280E-001	1.768589E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.03	2.8135E-001	29.62
3	84.89	2.0510E-001	98.19

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1520E-001	8.73E-002	-7.6521E-003
	1332.49	100.00	8.7338E-002		6.5742E-002
Nb-94	702.63	100.00	1.1180E-001	9.37E-002	-1.1612E-001
	871.10	100.00	9.3737E-002		-5.5973E-002
Ag-108m	79.20	7.10	9.3162E+000	1.32E-001	-2.6907E+000
	433.93	89.90	1.3880E-001		5.0696E-002
	614.37	90.40	1.5969E-001		2.5039E-002
	722.95	90.50	1.3165E-001		8.0962E-002
Sb-125	176.33	6.89	2.6872E+000	4.27E-001	9.8297E-001
	427.89	29.33	4.2672E-001		-4.1133E-002
	463.38	10.35	1.2194E+000		-1.3898E-001
	600.56	17.80	6.6647E-001		-7.4655E-003
	606.64	5.02	3.0874E+000		5.0816E+000
	635.90	11.32	9.8367E-001		-3.5281E-001
Cs-134	563.23	8.38	1.3725E+000	1.31E-001	7.3034E-001
	569.32	15.43	7.6749E-001		7.7025E-001
	604.70	97.60	1.6055E-001		4.5791E-004
	795.84	85.40	1.3107E-001		-1.2170E-001
	801.93	8.73	1.2081E+000		-6.3658E-001
Cs-137	661.65	85.12	1.2878E-001	1.29E-001	-3.7195E-002
Eu-152	121.78	28.40	9.5133E-001	4.07E-001	-1.0437E-001
	244.69	7.49	2.2464E+000		-4.9292E-001
	344.27	26.50	5.2539E-001		8.1218E-002
	778.89	12.74	7.9365E-001		-9.2942E-001
	867.32	4.16	2.3406E+000		-3.5666E+000
	964.01	14.40	9.1773E-001		3.5873E-001
	1085.78	10.00	9.7176E-001		-2.2592E-001
	1112.02	13.30	7.4185E-001		-1.2855E-001
	1407.95	20.70	4.0686E-001		-2.3060E-001
Eu-154	123.07	40.50	6.5863E-001	2.66E-001	-3.1178E-002
	247.94	6.60	2.4555E+000		-9.3954E-001
	591.81	4.83	2.3210E+000		-7.2769E-001
	723.30	19.70	6.0831E-001		4.5481E-001
	756.87	4.33	2.4233E+000		3.8966E-001
	873.19	11.50	8.5975E-001		3.0081E-002
	996.32	10.30	1.0092E+000		4.0324E-001
	1004.76	17.90	5.6112E-001		-4.3083E-001
	1274.45	35.50	2.6626E-001		-8.2499E-002
Eu-155	86.54	30.90	1.6297E+000	1.63E+000	5.0363E-001
	105.31	20.70	1.6601E+000		-4.0997E-001
Am-241	59.54	35.90	3.5750E+000	3.57E+000	7.7514E-002
Cm-243	228.19	10.56	1.6057E+000	1.07E+000	6.0254E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0653E+000	1.07E+000	-6.1570E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 8:48:23 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-125-F-
Sample Title: OOL-09-01-125-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 8:38:20 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-125-F-
Title: OOL-09-01-125-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	305	291.71	73.12	0.78	1.70E+002	48.30	7.61E+002
m	2	282-	305	300.42	75.30	0.79	2.98E+002	57.20	8.38E+002
	3	334-	346	338.75	84.88	0.44	9.83E+001	100.15	9.50E+002
	4	948-	958	953.83	238.63	1.24	2.55E+002	53.93	2.11E+002
	5	1175-	1186	1179.99	295.17	0.85	4.51E+001	39.62	1.44E+002
	6	1347-	1357	1352.72	338.35	0.67	4.93E+001	34.52	1.10E+002
	7	1400-	1413	1406.49	351.79	1.05	7.33E+001	44.51	1.59E+002
	8	2032-	2051	2041.36	510.49	0.44	1.09E+002	45.67	1.24E+002
	9	2322-	2338	2330.83	582.85	1.20	1.37E+002	40.30	9.14E+001
	10	2428-	2444	2435.14	608.92	0.73	1.25E+002	37.38	7.60E+001
	11	3170-	3188	3178.83	794.82	1.03	5.96E+001	24.44	2.84E+001
	12	3435-	3446	3440.24	860.17	0.33	1.52E+001	19.65	3.38E+001
	13	3633-	3652	3642.84	910.81	1.36	1.38E+002	32.75	4.02E+001
	14	3867-	3881	3873.00	968.35	0.44	9.54E+001	24.58	2.16E+001
	15	4472-	4486	4479.77	1120.02	1.06	5.20E+001	22.74	2.80E+001
	16	5830-	5854	5842.18	1460.59	1.82	9.60E+002	61.91	9.30E+000
	17	7053-	7066	7059.42	1764.87	0.65	2.70E+001	14.46	9.99E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.992	511.00*		100.00	1.86618E-001	8.19525E-002
K-40	0.998	1460.81*		10.67	2.03549E+001	2.10720E+000
TL-208	0.901	277.35		6.80		
		510.84*		21.60	8.63973E-001	3.85915E-001
		583.14*		84.20	2.88867E-001	9.31633E-002
		860.37*		12.46	2.39991E-001	3.11300E-001
Pb-212	0.580	74.81*	@	10.70	9.61316E+000	2.63614E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.96405E-001	2.09491E-001
Bi-214	0.996	609.31*		46.30	4.87479E-001	1.57678E-001
		1120.29*		15.10	7.15640E-001	3.21835E-001
		1764.49*		15.80	4.21262E-001	2.29466E-001
PB-214	0.619	74.82*	@	6.21	1.65637E+001	4.69860E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.44290E-001	3.07676E-001
		351.92*		37.20	3.01252E-001	1.89629E-001
Ac-228	0.993	338.32*		11.40	6.54567E-001	4.69643E-001
		911.07*		27.70	9.89799E-001	2.61355E-001
		969.11*		16.60	1.15739E+000	3.22056E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.992	1.250832E-001	8.416867E-002
K-40		0.998	2.035493E+001	2.107198E+000
TL-208		0.901	2.848843E-001	8.883024E-002
Pb-212	@	0.580	7.964053E-001	2.094910E-001
Bi-214		0.996	5.012046E-001	1.205014E-001
PB-214	@	0.619	3.131001E-001	1.614310E-001
Ac-228		0.993	9.931282E-001	1.862901E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.12	2.8357E-001	28.39
3	84.88	1.6382E-001	101.89
11	794.82	9.9366E-002	40.99

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1863E-001	8.67E-002	3.5746E-002
	1332.49	100.00	8.6709E-002		-1.0315E-002
Nb-94	702.63	100.00	1.1532E-001	1.13E-001	3.5659E-002
	871.10	100.00	1.1341E-001		-7.7962E-004
Ag-108m	79.20	7.10	9.3731E+000	1.30E-001	-9.7048E+000
	433.93	89.90	1.2955E-001		-2.1026E-002
	614.37	90.40	1.6359E-001		-4.9177E-002
	722.95	90.50	1.3644E-001		1.0502E-001
Sb-125	176.33	6.89	2.8431E+000	4.35E-001	3.0267E+000
	427.89	29.33	4.3459E-001		2.0744E-001
	463.38	10.35	1.2679E+000		-2.4876E-001
	600.56	17.80	6.3094E-001		-4.4035E-001
	606.64	5.02	3.0308E+000		6.4505E+000
	635.90	11.32	1.0075E+000		1.6682E-001
Cs-134	563.23	8.38	1.4363E+000	1.36E-001	-2.7034E-001
	569.32	15.43	7.8086E-001		-2.4238E-001
	604.70	97.60	1.5376E-001		-4.9878E-002
	795.84	85.40	1.3585E-001		-7.4394E-004
	801.93	8.73	1.1753E+000		-7.3296E-001
Cs-137	661.65	85.12	1.5172E-001	1.52E-001	1.9536E-001
Eu-152	121.78	28.40	1.0027E+000	4.07E-001	-1.3745E-001
	244.69	7.49	2.2100E+000		-4.1444E+000
	344.27	26.50	5.5194E-001		-5.6181E-001
	778.89	12.74	9.3158E-001		4.8347E-001
	867.32	4.16	2.7422E+000		1.0139E-001
	964.01	14.40	1.0413E+000		3.6854E-001
	1085.78	10.00	9.9167E-001		-9.6294E-001
	1112.02	13.30	8.0312E-001		2.7288E-002
	1407.95	20.70	4.0686E-001		1.5324E-001
Eu-154	123.07	40.50	6.9796E-001	2.95E-001	-2.8741E-001
	247.94	6.60	2.4247E+000		-3.9709E+000
	591.81	4.83	2.4761E+000		-2.3104E+000
	723.30	19.70	6.2519E-001		3.7437E-001
	756.87	4.33	2.7317E+000		1.2319E+000
	873.19	11.50	9.6964E-001		-5.2327E-001
	996.32	10.30	1.0394E+000		4.2026E-001
	1004.76	17.90	5.5849E-001		-5.2376E-001
	1274.45	35.50	2.9470E-001		9.3667E-002
Eu-155	86.54	30.90	1.6390E+000	1.64E+000	1.7684E+000
	105.31	20.70	1.7080E+000		-4.5242E-002
Am-241	59.54	35.90	3.7241E+000	3.72E+000	2.5051E+000
Cm-243	228.19	10.56	1.6711E+000	1.16E+000	8.7851E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1606E+000	1.16E+000	9.9107E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 6:14:03 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-126-F-
Sample Title: OOL-09-01-126-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 6:04:01 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-126-F-
Title: OOL-09-01-126-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	272-	305	291.48	72.70	0.87	3.40E+002	64.83	1.42E+003
m	2	272-	305	300.38	74.92	0.88	7.00E+002	80.30	1.52E+003
M	3	331-	355	339.67	84.75	1.33	3.17E+002	63.92	1.60E+003
m	4	331-	355	348.81	87.04	1.33	2.00E+002	59.82	1.73E+003
	5	945-	961	955.03	238.64	0.89	3.21E+002	75.56	3.73E+002
	6	1176-	1189	1181.27	295.21	0.97	7.21E+001	48.56	1.96E+002
	7	1346-	1358	1353.38	338.25	0.72	5.75E+001	43.40	1.61E+002
	8	1401-	1413	1407.33	351.75	0.68	1.25E+002	42.89	1.35E+002
	9	1843-	1857	1851.23	462.75	0.48	2.70E+001	33.51	9.20E+001
	10	2032-	2048	2043.58	510.86	1.04	1.28E+002	45.87	1.34E+002
	11	2325-	2341	2333.16	583.27	0.44	1.88E+002	44.15	1.02E+002
	12	2430-	2448	2437.01	609.24	1.50	1.90E+002	38.82	5.90E+001
	13	3635-	3654	3645.60	911.48	1.47	1.72E+002	33.10	3.25E+001
	14	3869-	3886	3877.36	969.44	0.83	9.59E+001	30.70	4.61E+001
	15	4476-	4488	4482.31	1120.72	1.15	3.57E+001	24.86	4.73E+001
	16	5834-	5860	5846.37	1461.84	1.69	1.14E+003	69.41	2.78E+001
	17	7057-	7071	7063.81	1766.29	0.70	3.21E+001	16.99	1.39E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*	100.00	1.74534E-001	6.68860E-002
K-40	0.964	1460.81*	10.67	1.91090E+001	1.93632E+000
Eu-155	0.328	86.54*	30.90	8.05238E-001	2.88197E-001
		105.31	20.70		
TL-208	0.751	277.35	6.80		
		510.84*	21.60	8.08027E-001	3.16610E-001
		583.14*	84.20	3.18196E-001	8.54314E-002
		860.37	12.46		
Pb-212	0.677	74.81* @	10.70	1.00081E+001	2.27318E+000
		77.11 @	18.00		
		87.30* @	8.00	3.11023E+000	1.11316E+000
		238.63*	44.60	7.81318E-001	2.20801E-001
Bi-214	0.976	609.31*	46.30	5.93408E-001	1.41542E-001
		1120.29*	15.10	3.97503E-001	2.80308E-001
		1764.49*	15.80	3.76923E-001	2.03124E-001
PB-214	0.669	74.82* @	6.21	1.72443E+001	4.11193E+000
		77.11 @	10.50		
		87.30* @	4.67	5.32802E+000	1.94893E+000
		241.98	7.49		
		295.21*	19.20	4.32924E-001	3.00375E-001
		351.92*	37.20	4.08535E-001	1.55460E-001
Ac-228	0.996	338.32*	11.40	6.04620E-001	4.65783E-001
		911.07*	27.70	9.81781E-001	2.20538E-001
		969.11*	16.60	9.32971E-001	3.14095E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.999	1.058036E-001	6.934863E-002
K-40		0.964	1.910895E+001	1.936319E+000
Eu-155		0.328	5.404434E-001	2.945374E-001
TL-208		0.751	3.181956E-001	8.479971E-002
Pb-212	@	0.677	7.813175E-001	2.208014E-001
Bi-214		0.976	5.043155E-001	1.072860E-001
PB-214	@	0.669	4.136244E-001	1.366780E-001
Ac-228		0.996	9.185285E-001	1.682967E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.70	5.6636E-001	19.08
M 3	84.75	5.2794E-001	20.18
9	462.75	4.4961E-002	124.21

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	9.7185E-002	7.61E-002	-9.5837E-003
		1332.49	100.00	7.6066E-002		-1.1427E-002
	Nb-94	702.63	100.00	9.9227E-002	9.31E-002	5.1856E-002
		871.10	100.00	9.3068E-002		-6.2514E-002
	Ag-108m	79.20	7.10	4.9101E+000	1.12E-001	-9.1423E+000
		433.93	89.90	1.1173E-001		-6.0089E-002
		614.37	90.40	1.3053E-001		2.8147E-002
		722.95	90.50	1.1419E-001		-6.4360E-002
	Sb-125	176.33	6.89	2.1199E+000	3.53E-001	6.7246E-001
		427.89	29.33	3.5269E-001		1.3420E-001
		463.38	10.35	1.0082E+000		2.4292E-001
		600.56	17.80	5.6564E-001		3.6289E-001
		606.64	5.02	2.5525E+000		-2.4432E-001
		635.90	11.32	8.0693E-001		-9.3351E-001
	Cs-134	563.23	8.38	1.1544E+000	1.13E-001	-6.5724E-001
		569.32	15.43	6.1086E-001		-4.4467E-001
		604.70	97.60	1.2308E-001		-2.2668E-002
		795.84	85.40	1.1275E-001		-6.7872E-002
		801.93	8.73	1.0787E+000		-1.1833E+000
	Cs-137	661.65	85.12	1.2353E-001	1.24E-001	1.5130E-001
	Eu-152	121.78	28.40	7.1217E-001	3.57E-001	2.7451E-001
		244.69	7.49	1.7067E+000		1.7262E+000
		344.27	26.50	4.1615E-001		-4.8408E-001
		778.89	12.74	7.0286E-001		-1.9510E-001
		867.32	4.16	2.2281E+000		-3.5285E+000
		964.01	14.40	8.2850E-001		-1.1315E-001
		1085.78	10.00	9.2323E-001		1.8988E-001
		1112.02	13.30	7.0416E-001		3.1573E-002
		1407.95	20.70	3.5738E-001		8.3234E-002
	Eu-154	123.07	40.50	4.8948E-001	2.42E-001	-2.7614E-001
		247.94	6.60	1.8835E+000		6.6539E-002
		591.81	4.83	2.0553E+000		-3.0530E-001
		723.30	19.70	5.3839E-001		4.6256E-001
		756.87	4.33	2.1037E+000		-4.4653E-001
		873.19	11.50	8.3028E-001		-3.5807E-001
		996.32	10.30	8.8715E-001		-3.3468E-001
		1004.76	17.90	5.1541E-001		-2.2001E-001
		1274.45	35.50	2.4240E-001		-7.3943E-002
+	Eu-155	86.54*	30.90	7.9064E-001	7.91E-001	8.0524E-001
		105.31	20.70	1.1821E+000		-2.4430E-001
	Am-241	59.54	35.90	1.3260E+000	1.33E+000	-4.6848E-001
	Cm-243	228.19	10.56	1.2104E+000	8.77E-001	3.7632E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.7742E-001	8.77E-001	4.1080E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 5:55:24 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-127-F-
Sample Title: OOL-09-01-127-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 5:45:22 PM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-127-F-
Title: OOL-09-01-127-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.65	72.74	0.89	2.90E+002	62.61	1.37E+003
m	2	285-	305	300.55	74.97	0.89	6.92E+002	78.77	1.44E+003
	3	331-	345	339.69	84.75	0.86	2.65E+002	133.94	1.53E+003
	4	741-	749	744.38	185.96	0.46	4.48E+001	48.45	2.64E+002
	5	834-	846	837.40	209.22	0.72	6.41E+001	56.14	2.87E+002
	6	950-	961	954.79	238.58	0.85	3.26E+002	62.63	2.74E+002
	7	1173-	1186	1181.36	295.24	1.33	9.30E+001	47.55	1.80E+002
	8	1401-	1415	1408.21	351.97	0.65	1.57E+002	48.34	1.57E+002
	9	2035-	2052	2043.54	510.85	0.37	1.04E+002	47.87	1.51E+002
	10	2326-	2341	2333.01	583.24	1.15	2.04E+002	39.68	6.87E+001
	11	2429-	2445	2437.27	609.31	1.06	1.65E+002	41.85	9.21E+001
	12	3172-	3187	3178.86	794.76	1.49	4.85E+001	25.34	3.95E+001
	13	3636-	3657	3646.10	911.61	1.49	1.76E+002	33.98	3.30E+001
	14	3869-	3884	3876.49	969.22	0.78	6.37E+001	28.82	5.03E+001
	15	5831-	5859	5846.41	1461.85	1.78	1.20E+003	71.12	2.49E+001
	16	7056-	7069	7062.05	1765.85	1.61	3.39E+001	18.23	1.91E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*		100.00	1.41785E-001	6.80550E-002
K-40	0.963	1460.81*		10.67	2.01825E+001	2.02314E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	6.56411E-001	3.19597E-001
		583.14*		84.20	3.45812E-001	8.08539E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	9.89157E+000	2.24203E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.93434E-001	1.96614E-001
Bi-214	0.685	609.31*		46.30	5.14906E-001	1.45251E-001
		1120.29		15.10		
		1764.49*		15.80	3.98624E-001	2.17861E-001
PB-214	0.582	74.82*	@	6.21	1.70434E+001	4.05636E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.58359E-001	3.00435E-001
		351.92*		37.20	5.12127E-001	1.79219E-001
Ac-228	0.628	338.32		11.40		
		911.07*		27.70	1.00746E+000	2.26359E-001
		969.11*		16.60	6.19511E-001	2.87670E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.999	6.708951E-002	7.021796E-002
K-40		0.963	2.018246E+001	2.023144E+000
TL-208		0.752	3.458117E-001	8.006469E-002
Pb-212	@	0.520	7.934340E-001	1.966137E-001
Bi-214		0.685	4.791236E-001	1.208535E-001
PB-214	@	0.582	5.242606E-001	1.539139E-001
Ac-228		0.628	8.591086E-001	1.778902E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.74	4.8362E-001	21.58
3	84.75	4.4087E-001	50.63
4	185.96	7.4648E-002	108.18
5	209.22	1.0689E-001	87.53
12	794.76	8.0871E-002	52.23

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.5467E-002	7.61E-002	-6.5519E-002
	1332.49	100.00	7.6066E-002		-4.7484E-002
Nb-94	702.63	100.00	9.7671E-002	9.77E-002	-3.5313E-002
	871.10	100.00	9.8031E-002		-5.4651E-002
Ag-108m	79.20	7.10	4.9234E+000	1.11E-001	-9.7979E+000
	433.93	89.90	1.1459E-001		-2.6435E-002
	614.37	90.40	1.3572E-001		-7.3520E-002
	722.95	90.50	1.1112E-001		-5.1681E-002
Sb-125	176.33	6.89	2.0992E+000	3.58E-001	7.5846E-002
	427.89	29.33	3.5814E-001		6.5096E-004
	463.38	10.35	1.0542E+000		3.5776E-001
	600.56	17.80	5.6564E-001		1.5657E-001
	606.64	5.02	2.7204E+000		5.9787E+000
	635.90	11.32	8.3240E-001		2.0551E-001
Cs-134	563.23	8.38	1.2445E+000	1.19E-001	2.0525E-001
	569.32	15.43	6.4108E-001		1.8390E-001
	604.70	97.60	1.2984E-001		5.1728E-002
	795.84	85.40	1.1910E-001		1.2142E-001
	801.93	8.73	1.0521E+000		-5.6836E-001
Cs-137	661.65	85.12	1.2736E-001	1.27E-001	3.4731E-002
Eu-152	121.78	28.40	7.2319E-001	3.57E-001	4.5029E-002
	244.69	7.49	1.7783E+000		-4.1760E-001
	344.27	26.50	4.1226E-001		-3.3848E-001
	778.89	12.74	7.3266E-001		-8.7838E-001
	867.32	4.16	2.2781E+000		-4.7485E+000
	964.01	14.40	7.9732E-001		1.6302E-001
	1085.78	10.00	9.7000E-001		-3.0349E-001
	1112.02	13.30	7.5625E-001		-5.1667E-002
	1407.95	20.70	3.5738E-001		-4.9327E-002
Eu-154	123.07	40.50	5.0600E-001	2.62E-001	4.3642E-001
	247.94	6.60	1.8916E+000		2.0442E-001
	591.81	4.83	2.0887E+000		5.1646E-001
	723.30	19.70	5.1182E-001		-1.1375E-001
	756.87	4.33	2.2017E+000		-7.5981E-001
	873.19	11.50	8.7721E-001		9.4519E-001
	996.32	10.30	8.6774E-001		-7.4505E-001
	1004.76	17.90	4.8518E-001		-5.5800E-001
	1274.45	35.50	2.6199E-001		-2.8147E-002
Eu-155	86.54	30.90	1.0128E+000	1.01E+000	1.6326E-001
	105.31	20.70	1.1792E+000		4.4808E-001
Am-241	59.54	35.90	1.3172E+000	1.32E+000	-1.2536E+000
Cm-243	228.19	10.56	1.2113E+000	8.71E-001	3.1727E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.7078E-001	8.71E-001	8.2891E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 12:00:24 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-128
Sample Title: OOL-09-01-128-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 11:50:21 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-128
Title: OOL-09-01-128-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	307	300.28	74.90	0.68	3.85E+002	156.10	2.15E+003
2	331-	347	339.46	84.70	0.95	3.20E+002	145.80	1.67E+003
3	944-	963	953.80	238.33	1.26	2.77E+002	75.62	3.45E+002
4	1348-	1362	1352.48	338.03	0.69	7.66E+001	46.16	1.63E+002
5	1397-	1416	1407.30	351.74	0.95	1.34E+002	54.18	1.80E+002
6	2320-	2340	2331.02	582.74	1.35	1.91E+002	44.87	9.19E+001
7	2425-	2444	2434.53	608.62	1.44	1.69E+002	39.48	6.72E+001
8	3436-	3447	3441.12	860.35	1.39	2.17E+001	18.68	2.73E+001
9	3634-	3654	3644.33	911.16	2.12	1.29E+002	31.46	3.56E+001
10	3866-	3883	3875.23	968.91	1.25	7.34E+001	30.44	5.16E+001
11	4473-	4488	4479.49	1120.02	0.55	4.89E+001	24.14	3.41E+001
12	5828-	5856	5842.33	1460.83	2.07	1.08E+003	66.39	1.43E+001
13	7047-	7063	7056.51	1764.47	0.67	4.25E+001	16.63	9.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	1.81420E+001	1.84323E+000
TL-208	0.618	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.23393E-001	8.68260E-002
		860.37*	12.46	2.73051E-001	2.37073E-001
Pb-212	0.519	74.81* @	10.70	5.50660E+000	2.48119E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.71974E-001	2.11836E-001
Bi-214	0.990	609.31*	46.30	5.26799E-001	1.39300E-001
		1120.29*	15.10	5.45464E-001	2.75287E-001
		1764.49*	15.80	4.99369E-001	2.01660E-001
Ac-228	0.999	338.32*	11.40	8.04533E-001	5.01103E-001
		911.07*	27.70	7.40390E-001	1.99175E-001
		969.11*	16.60	7.13224E-001	3.05280E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	1.000	1.814203E+001	1.843234E+000
TL-208	0.618	3.174393E-001	8.153012E-002
Pb-212 @	0.519	6.719741E-001	2.118362E-001
Bi-214	0.990	5.220050E-001	1.058097E-001
Ac-228	0.999	7.394872E-001	1.582721E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.70	5.3406E-001	45.50
5	351.74	2.2332E-001	40.44

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0183E-001	7.46E-002	4.8817E-002
	1332.49	100.00	7.4645E-002		9.5729E-003
Nb-94	702.63	100.00	1.0569E-001	8.01E-002	8.8784E-002
	871.10	100.00	8.0122E-002		-7.7991E-002
Ag-108m	79.20	7.10	4.9446E+000	1.13E-001	-4.7768E+000
	433.93	89.90	1.1317E-001		5.1305E-003
	614.37	90.40	1.1401E-001		-1.7869E-002
	722.95	90.50	1.1336E-001		1.0281E-001
Sb-125	176.33	6.89	2.0143E+000	3.52E-001	-3.1107E-001
	427.89	29.33	3.5208E-001		6.8945E-002
	463.38	10.35	9.8069E-001		2.7716E-001
	600.56	17.80	5.3897E-001		2.9943E-001
	606.64	5.02	2.4902E+000		3.7370E+000
	635.90	11.32	7.8546E-001		-1.8523E-001
Cs-134	563.23	8.38	1.1735E+000	9.99E-002	1.0053E+000
	569.32	15.43	6.1086E-001		-3.0393E-001
	604.70	97.60	1.2269E-001		1.6357E-002
	795.84	85.40	9.9889E-002		-3.2938E-002
	801.93	8.73	9.6766E-001		3.1014E-001
Cs-137	661.65	85.12	1.1958E-001	1.20E-001	1.1440E-001
Eu-152	121.78	28.40	6.8331E-001	3.17E-001	-2.0092E-001
	244.69	7.49	1.6591E+000		-4.2469E-001
	344.27	26.50	3.8025E-001		-4.7168E-002
	778.89	12.74	6.7412E-001		-4.2899E-002
	867.32	4.16	1.9825E+000		-1.1770E+000
	964.01	14.40	8.1824E-001		-3.4704E-001
	1085.78	10.00	8.0954E-001		-1.5524E+000
	1112.02	13.30	7.0416E-001		-4.4722E-001
	1407.95	20.70	3.1672E-001		1.5837E-001
Eu-154	123.07	40.50	4.7538E-001	2.42E-001	5.2787E-002
	247.94	6.60	1.7114E+000		-2.2758E+000
	591.81	4.83	2.0114E+000		-1.0341E+000
	723.30	19.70	5.1828E-001		1.5725E-001
	756.87	4.33	2.2081E+000		-2.0679E-001
	873.19	11.50	7.4425E-001		-3.3964E-001
	996.32	10.30	8.2747E-001		-1.1695E-001
	1004.76	17.90	4.9484E-001		2.8943E-001
	1274.45	35.50	2.4240E-001		-8.8002E-002
Eu-155	86.54	30.90	1.0033E+000	1.00E+000	-2.5499E-001
	105.31	20.70	1.1736E+000		8.2383E-002
Am-241	59.54	35.90	1.3781E+000	1.38E+000	1.7031E-001
Cm-243	228.19	10.56	1.1962E+000	8.06E-001	9.1444E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.0575E-001	8.06E-001	-6.6774E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 8:42:15 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-129-F-
Sample Title: OOL-09-01-129-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 8:32:11 PM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-129-F-
Title: OOL-09-01-129-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	307	291.61	72.73	0.97	3.23E+002	65.31	1.27E+003
m	2	287-	307	300.36	74.92	0.97	6.65E+002	76.98	1.62E+003
	3	333-	345	339.73	84.76	0.98	1.55E+002	119.79	1.36E+003
	4	773-	783	779.36	194.71	0.77	3.95E+001	44.76	2.02E+002
	5	947-	961	954.38	238.47	0.99	1.61E+002	63.57	3.08E+002
	6	1345-	1359	1353.71	338.34	0.60	6.58E+001	41.70	1.34E+002
	7	1401-	1416	1407.32	351.74	1.18	1.72E+002	43.52	1.07E+002
	8	2034-	2049	2040.89	510.18	0.79	7.29E+001	45.31	1.50E+002
	9	2325-	2339	2331.40	582.83	1.54	1.34E+002	37.06	7.73E+001
	10	2429-	2447	2436.34	609.08	1.51	1.30E+002	39.57	8.08E+001
	11	2642-	2655	2647.64	661.92	0.61	3.08E+001	26.41	5.42E+001
	12	3636-	3654	3644.89	911.30	1.35	1.47E+002	32.28	3.70E+001
	13	3868-	3886	3875.41	968.95	0.67	7.82E+001	25.94	2.88E+001
	14	4475-	4489	4481.90	1120.62	0.36	3.25E+001	23.74	3.95E+001
	15	5832-	5858	5845.05	1461.51	1.97	1.02E+003	66.14	2.72E+001
	16	7054-	7068	7061.05	1765.60	0.68	2.73E+001	13.90	7.69E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.983	1460.81*	10.67	1.70890E+001	1.77344E+000
Cs-137	0.998	661.65*	85.12	5.37371E-002	4.65382E-002
TL-208	0.747	277.35	6.80		
		510.84*	21.60	4.60224E-001	2.95149E-001
		583.14*	84.20	2.26284E-001	6.92890E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	9.51514E+000	2.16592E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.90563E-001	1.66207E-001
Bi-214	0.989	609.31*	46.30	4.06693E-001	1.33314E-001
		1120.29*	15.10	3.62682E-001	2.67465E-001
		1764.49*	15.80	3.20859E-001	1.66492E-001
Ac-228	0.999	338.32*	11.40	6.91739E-001	4.51455E-001
		911.07*	27.70	8.41127E-001	2.08562E-001
		969.11*	16.60	7.60231E-001	2.64517E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
X	ANN		0.977		
	K-40		0.983	1.708896E+001	1.773442E+000
	Cs-137		0.998	5.373706E-002	4.653816E-002
	TL-208		0.747	2.385029E-001	6.745511E-002
	Pb-212	@	0.520	3.905631E-001	1.662067E-001
	Bi-214		0.989	3.717822E-001	9.698211E-002
	Ac-228		0.999	7.963480E-001	1.539593E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.73	5.3826E-001	20.22
3	84.76	2.5806E-001	77.37
4	194.71	6.5764E-002	113.45
7	351.74	2.8745E-001	25.24

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	9.3716E-002	7.02E-002	1.9193E-002
		1332.49	100.00	7.0195E-002		6.4168E-002
	Nb-94	702.63	100.00	8.6553E-002	8.46E-002	-4.7452E-002
		871.10	100.00	8.4559E-002		1.0522E-001
	Ag-108m	79.20	7.10	4.8429E+000	1.07E-001	-5.3723E-001
		433.93	89.90	1.0793E-001		-1.0854E-001
		614.37	90.40	1.1527E-001		-3.3253E-002
		722.95	90.50	1.0737E-001		4.8039E-002
	Sb-125	176.33	6.89	1.9279E+000	3.28E-001	1.7831E-001
		427.89	29.33	3.2797E-001		1.0821E-001
		463.38	10.35	9.6378E-001		9.3692E-002
		600.56	17.80	4.9764E-001		-3.5135E-001
		606.64	5.02	2.3839E+000		-3.9986E-001
		635.90	11.32	7.8546E-001		7.5020E-001
	Cs-134	563.23	8.38	1.0890E+000	1.07E-001	-3.6244E-001
		569.32	15.43	6.2161E-001		2.9319E-001
		604.70	97.60	1.1697E-001		-1.5891E-002
		795.84	85.40	1.0670E-001		1.0896E-002
		801.93	8.73	1.0521E+000		-3.4922E-001
+	Cs-137	661.65*	85.12	7.5252E-002	7.53E-002	5.3737E-002
	Eu-152	121.78	28.40	6.8046E-001	3.19E-001	7.3136E-002
		244.69	7.49	1.6333E+000		-1.8170E-001
		344.27	26.50	3.6790E-001		-1.2911E-001
		778.89	12.74	6.4915E-001		-1.0211E+000
		867.32	4.16	2.0625E+000		-3.2370E+000
		964.01	14.40	7.2303E-001		-1.8670E-001
		1085.78	10.00	8.5172E-001		-3.3269E-001
		1112.02	13.30	6.3916E-001		3.7256E-001
		1407.95	20.70	3.1943E-001		1.8210E-001
	Eu-154	123.07	40.50	4.7222E-001	2.23E-001	3.5758E-002
		247.94	6.60	1.7970E+000		1.0557E-001
		591.81	4.83	1.9050E+000		3.3646E-001
		723.30	19.70	4.9058E-001		2.0106E-001
		756.87	4.33	1.9433E+000		3.7227E-001
		873.19	11.50	7.2693E-001		-3.1619E-001
		996.32	10.30	8.3090E-001		6.5314E-002
		1004.76	17.90	4.7532E-001		-8.6561E-002
		1274.45	35.50	2.2347E-001		-7.4948E-002
	Eu-155	86.54	30.90	9.9884E-001	9.99E-001	4.3209E-001
		105.31	20.70	1.1569E+000		1.2032E-001
	Am-241	59.54	35.90	1.3490E+000	1.35E+000	2.0675E-001
	Cm-243	228.19	10.56	1.1722E+000	8.09E-001	-5.2512E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.0935E-001	8.09E-001	3.8771E-004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 2:15:09 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-130-F-
Sample Title: OOL-09-01-130-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 2:05:06 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-130-F-
Title: OOL-09-01-130-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	297-	306	300.50	75.32	0.69	2.28E+002	94.06	9.10E+002
2	946-	959	954.49	238.80	0.70	1.79E+002	62.48	3.03E+002
3	1346-	1360	1352.65	338.33	1.04	6.77E+001	42.41	1.38E+002
4	1399-	1418	1406.72	351.84	1.20	1.35E+002	52.94	1.70E+002
5	2323-	2338	2332.23	583.20	0.84	1.29E+002	36.40	7.20E+001
6	2426-	2445	2435.54	609.02	1.56	1.49E+002	43.25	9.56E+001
7	2639-	2651	2645.41	661.48	0.96	3.13E+001	25.76	5.37E+001
8	3635-	3653	3643.70	911.03	0.50	9.60E+001	34.76	6.30E+001
9	3869-	3883	3875.24	968.91	1.05	5.18E+001	25.66	4.13E+001
10	4473-	4486	4479.87	1120.05	0.41	3.71E+001	21.46	2.99E+001
11	5832-	5855	5844.09	1461.07	1.85	8.37E+002	58.70	1.50E+001
12	7055-	7068	7061.11	1765.29	0.67	3.30E+001	17.34	1.60E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.998	1460.81*	10.67	1.77551E+001	1.90184E+000
Cs-137	0.999	661.65*	85.12	6.81393E-002	5.66861E-002
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.72941E-001	8.47982E-002
		860.37	12.46		
Pb-212	0.579	74.81* @	10.70	7.33239E+000	3.35308E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.57346E-001	2.13607E-001
Bi-214	0.994	609.31*	46.30	5.82619E-001	1.83323E-001
		1120.29*	15.10	5.10472E-001	3.00182E-001
		1764.49*	15.80	5.14356E-001	2.75270E-001
Ac-228	1.000	338.32*	11.40	8.98770E-001	5.80469E-001
		911.07*	27.70	6.89366E-001	2.61950E-001
		969.11*	16.60	6.28232E-001	3.18414E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.998	1.775515E+001	1.901842E+000
Cs-137		0.999	6.813932E-002	5.668605E-002
TL-208		0.472	2.729414E-001	8.479819E-002
Pb-212	@	0.579	5.573459E-001	2.136071E-001
Bi-214		0.994	5.511383E-001	1.360196E-001
Ac-228		1.000	6.900415E-001	1.910247E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
4	351.84	2.2577E-001	39.08

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.2398E-001	8.98E-002	9.0702E-002
		1332.49	100.00	8.9807E-002		-2.3912E-002
	Nb-94	702.63	100.00	1.2527E-001	1.13E-001	1.4628E-001
		871.10	100.00	1.1263E-001		6.0007E-003
	Ag-108m	79.20	7.10	9.8762E+000	1.41E-001	-2.7628E+000
		433.93	89.90	1.4114E-001		9.9754E-002
		614.37	90.40	1.7702E-001		1.0208E-001
		722.95	90.50	1.4071E-001		9.5487E-002
	Sb-125	176.33	6.89	2.8567E+000	4.16E-001	1.7421E+000
		427.89	29.33	4.1625E-001		1.4213E-001
		463.38	10.35	1.2813E+000		-2.5478E-001
		600.56	17.80	6.6127E-001		-6.5641E-001
		606.64	5.02	3.2289E+000		4.6748E+000
		635.90	11.32	1.0618E+000		2.2197E-001
	Cs-134	563.23	8.38	1.5073E+000	1.43E-001	-6.9786E-001
		569.32	15.43	8.4618E-001		4.8641E-001
		604.70	97.60	1.6522E-001		1.4188E-003
		795.84	85.40	1.4251E-001		9.2794E-002
		801.93	8.73	1.2756E+000		-9.5601E-001
+	Cs-137	661.65*	85.12	9.1135E-002	9.11E-002	6.8139E-002
	Eu-152	121.78	28.40	1.0198E+000	4.48E-001	-6.2457E-003
		244.69	7.49	2.2806E+000		-4.8659E+000
		344.27	26.50	5.5260E-001		4.5553E-001
		778.89	12.74	8.6251E-001		-1.2280E+000
		867.32	4.16	2.6670E+000		-1.4825E+000
		964.01	14.40	9.5999E-001		-5.0853E-001
		1085.78	10.00	1.1207E+000		1.2227E+000
		1112.02	13.30	8.3695E-001		-2.2465E-001
		1407.95	20.70	4.4773E-001		-5.6919E-002
	Eu-154	123.07	40.50	7.1233E-001	3.02E-001	1.4291E-001
		247.94	6.60	2.5536E+000		-4.2895E+000
		591.81	4.83	2.5072E+000		3.4310E-001
		723.30	19.70	6.4485E-001		3.7677E-001
		756.87	4.33	2.8033E+000		2.3297E+000
		873.19	11.50	9.9345E-001		3.3427E-001
		996.32	10.30	9.8701E-001		-3.2693E-001
		1004.76	17.90	6.1842E-001		-1.7015E-001
		1274.45	35.50	3.0171E-001		-1.9285E-001
	Eu-155	86.54	30.90	1.7063E+000	1.71E+000	1.6207E+000
		105.31	20.70	1.8084E+000		6.8194E-001
	Am-241	59.54	35.90	3.9607E+000	3.96E+000	-2.0614E+000
	Cm-243	228.19	10.56	1.6666E+000	1.14E+000	-2.6952E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1391E+000	1.14E+000	3.6684E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 1:42:46 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-131-F-
Sample Title: OOL-09-01-131-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 1:32:44 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-131-F-
Title: OOL-09-01-131-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	308	291.68	73.12	0.95	1.76E+002	50.25	8.98E+002
m	2	282-	308	300.57	75.34	0.96	3.20E+002	58.33	1.00E+003
	3	949-	960	954.35	238.76	0.99	1.83E+002	50.81	1.91E+002
	4	1176-	1191	1180.41	295.27	0.57	5.71E+001	44.40	1.49E+002
	5	1402-	1413	1407.09	351.94	1.06	7.08E+001	35.36	1.01E+002
	6	2036-	2048	2041.98	510.64	0.56	4.77E+001	31.57	7.93E+001
	7	2324-	2338	2332.27	583.21	0.75	7.12E+001	28.51	4.88E+001
	8	2428-	2447	2436.55	609.27	1.59	1.39E+002	31.95	3.64E+001
	9	2640-	2654	2646.07	661.65	1.13	3.07E+001	29.15	6.53E+001
	10	2902-	2915	2908.79	727.32	0.31	2.62E+001	19.87	2.78E+001
	11	3636-	3653	3644.05	911.12	0.68	6.83E+001	26.61	3.57E+001
	12	3867-	3883	3875.24	968.91	1.21	6.46E+001	23.07	2.34E+001
	13	5834-	5857	5845.60	1461.44	2.00	5.78E+002	50.89	2.40E+001
	14	7055-	7068	7061.86	1765.47	0.68	4.18E+001	14.68	5.20E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.996	511.00*	100.00	8.13675E-002	5.50016E-002
K-40	0.987	1460.81*	10.67	1.22624E+001	1.46673E+000
Cs-137	1.000	661.65*	85.12	6.68376E-002	6.39946E-002
TL-208	0.752	277.35	6.80		
		510.84*	21.60	3.76702E-001	2.56489E-001
		583.14*	84.20	1.50695E-001	6.34095E-002
		860.37	12.46		
Bi-212	0.999	727.17*	11.80	4.20154E-001	3.22631E-001
Pb-212	0.579	74.81* @	10.70	1.02970E+001	2.75631E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.71840E-001	1.82082E-001
Bi-214	0.689	609.31*	46.30	5.40571E-001	1.41297E-001
		1120.29	15.10		
		1764.49*	15.80	6.52001E-001	2.38043E-001
PB-214	0.619	74.82* @	6.21	1.77419E+001	4.92073E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.35463E-001	3.46516E-001
		351.92*	37.20	2.90753E-001	1.53188E-001
Ac-228	0.634	338.32	11.40		
		911.07*	27.70	4.90548E-001	1.99251E-001
		969.11*	16.60	7.83704E-001	2.91812E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.996	4.881736E-002	5.667136E-002
K-40		0.987	1.226243E+001	1.466728E+000
Cs-137		1.000	6.683759E-002	6.399465E-002
TL-208		0.752	1.506953E-001	6.321902E-002
Bi-212		0.999	4.201545E-001	3.226310E-001
Pb-212	@	0.579	5.718404E-001	1.820824E-001
Bi-214		0.689	5.696031E-001	1.215038E-001
PB-214	@	0.619	3.144106E-001	1.401075E-001
Ac-228		0.634	5.837649E-001	1.645511E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.12	2.9370E-001	28.52

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0178E-001	9.10E-002	-3.7835E-004
		1332.49	100.00	9.1015E-002		3.0663E-002
	Nb-94	702.63	100.00	1.0361E-001	8.63E-002	7.4671E-002
		871.10	100.00	8.6294E-002		-9.8387E-003
	Ag-108m	79.20	7.10	9.4277E+000	1.20E-001	-2.2827E+000
		433.93	89.90	1.2670E-001		-7.1198E-002
		614.37	90.40	1.4208E-001		-3.1267E-002
		722.95	90.50	1.1985E-001		1.7944E-002
	Sb-125	176.33	6.89	2.4321E+000	3.98E-001	5.7544E-001
		427.89	29.33	3.9788E-001		-1.6915E-001
		463.38	10.35	1.1665E+000		-3.3080E-002
		600.56	17.80	5.8333E-001		2.3575E-001
		606.64	5.02	2.6922E+000		4.2895E+000
		635.90	11.32	9.0835E-001		2.3084E-001
	Cs-134	563.23	8.38	1.3130E+000	1.15E-001	4.5855E-002
		569.32	15.43	7.3596E-001		7.1585E-002
		604.70	97.60	1.3861E-001		-2.8781E-003
		795.84	85.40	1.1497E-001		-3.1937E-002
		801.93	8.73	1.2127E+000		-3.6618E-001
+	Cs-137	661.65*	85.12	1.0483E-001	1.05E-001	6.6838E-002
	Eu-152	121.78	28.40	9.1723E-001	3.25E-001	-4.7714E-001
		244.69	7.49	2.1188E+000		-1.0078E+000
		344.27	26.50	4.7312E-001		-9.0020E-001
		778.89	12.74	7.1782E-001		-4.3840E-001
		867.32	4.16	2.1458E+000		7.0933E-001
		964.01	14.40	8.5542E-001		-1.6140E-001
		1085.78	10.00	9.5653E-001		6.4487E-001
		1112.02	13.30	6.7468E-001		-6.6999E-001
		1407.95	20.70	3.2511E-001		-7.3357E-002
	Eu-154	123.07	40.50	6.3532E-001	2.46E-001	-4.3058E-001
		247.94	6.60	2.3997E+000		-1.3143E+000
		591.81	4.83	2.1758E+000		5.1647E-001
		723.30	19.70	5.5255E-001		1.0644E-001
		756.87	4.33	2.1923E+000		-1.1543E+000
		873.19	11.50	7.5975E-001		4.9711E-001
		996.32	10.30	8.9741E-001		4.1749E-001
		1004.76	17.90	5.2581E-001		4.9097E-001
		1274.45	35.50	2.4650E-001		-1.0575E-002
	Eu-155	86.54	30.90	1.6297E+000	1.63E+000	1.9580E+000
		105.31	20.70	1.6348E+000		4.6023E-001
	Am-241	59.54	35.90	3.9425E+000	3.94E+000	7.2110E-001
	Cm-243	228.19	10.56	1.4584E+000	1.09E+000	-1.8232E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0926E+000	1.09E+000	2.5766E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 2:46:46 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-132-F-
Sample Title: OOL-09-01-132-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 2:36:43 PM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-132-F-
Title: OOL-09-01-132-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	307	291.56	73.08	0.90	1.79E+002	52.53	9.82E+002
m	2	285-	307	300.59	75.34	0.90	4.58E+002	65.79	1.11E+003
	3	332-	345	339.09	84.97	0.65	1.02E+002	113.88	1.19E+003
	4	949-	963	954.65	238.84	1.23	2.70E+002	71.44	3.62E+002
	5	1171-	1190	1180.15	295.21	0.70	7.78E+001	66.16	3.01E+002
	6	1348-	1358	1352.97	338.41	0.91	7.11E+001	38.51	1.32E+002
	7	1401-	1413	1407.14	351.95	1.04	1.35E+002	44.52	1.45E+002
	8	2034-	2054	2042.59	510.79	1.59	1.55E+002	45.69	1.07E+002
	9	2325-	2343	2332.94	583.38	1.47	1.89E+002	41.75	7.88E+001
	10	2428-	2448	2436.84	609.35	0.89	1.77E+002	44.16	9.11E+001
	11	2903-	2919	2909.13	727.41	0.74	5.48E+001	27.71	4.62E+001
	12	3637-	3654	3645.74	911.54	1.12	1.27E+002	34.02	5.35E+001
M	13	3853-	3886	3859.62	965.00	1.70	3.50E+001	17.12	4.78E+001
m	14	3853-	3886	3877.15	969.39	1.70	9.41E+001	22.12	4.02E+001
	15	4474-	4490	4482.69	1120.75	1.26	5.44E+001	22.93	2.56E+001
	16	5834-	5860	5846.52	1461.67	1.71	9.45E+002	63.69	2.60E+001
	17	7056-	7072	7064.00	1766.01	0.68	6.54E+001	18.24	6.58E+000
	18	7389-	7402	7395.18	1848.80	0.84	1.55E+001	9.83	3.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*		100.00	2.64552E-001	8.58371E-002
K-40	0.976	1460.81*		10.67	2.00501E+001	2.11218E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	1.22478E+000	4.09788E-001
		583.14*		84.20	4.00283E-001	1.02537E-001
		860.37		12.46		
Bi-212	0.998	727.17*		11.80	8.78951E-001	4.56495E-001
Pb-212	0.579	74.81*	@	10.70	1.47407E+001	3.58172E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.40856E-001	2.58939E-001
Bi-214	0.984	609.31*		46.30	6.90023E-001	1.92093E-001
		1120.29*		15.10	7.48453E-001	3.25327E-001
		1764.49*		15.80	1.02055E+000	3.02271E-001
PB-214	0.619	74.82*	@	6.21	2.53986E+001	6.44093E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.93202E-001	5.14400E-001
		351.92*		37.20	5.56587E-001	2.05179E-001
Ac-228	0.996	338.32*		11.40	9.44286E-001	5.32354E-001
		911.07*		27.70	9.15554E-001	2.66086E-001
		969.11*		16.60	1.14287E+000	2.94019E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.999	1.780905E-001	8.860362E-002
K-40		0.976	2.005006E+001	2.112182E+000
TL-208		0.752	4.002826E-001	1.017041E-001
Bi-212		0.998	8.789509E-001	4.564947E-001
Pb-212	@	0.579	8.408563E-001	2.589393E-001
Bi-214		0.984	7.778152E-001	1.451049E-001
PB-214	@	0.619	5.616128E-001	1.905777E-001
Ac-228		0.996	1.009013E+000	1.849939E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.08	2.9780E-001	29.40
3	84.97	1.6998E-001	111.66
M 13	965.00	5.8372E-002	48.89
18	1848.80	2.5833E-002	63.40

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2558E-001	9.63E-002	-2.9298E-002
	1332.49	100.00	9.6250E-002		4.0229E-002
Nb-94	702.63	100.00	1.2872E-001	1.14E-001	5.0815E-002
	871.10	100.00	1.1380E-001		9.1167E-002
Ag-108m	79.20	7.10	1.0279E+001	1.52E-001	-1.3717E+000
	433.93	89.90	1.5182E-001		3.3242E-002
	614.37	90.40	1.8686E-001		7.0407E-002
	722.95	90.50	1.5212E-001		3.0759E-002
Sb-125	176.33	6.89	2.9038E+000	4.57E-001	9.3186E-002
	427.89	29.33	4.5664E-001		3.5672E-002
	463.38	10.35	1.2991E+000		-1.2635E-001
	600.56	17.80	7.3375E-001		2.6992E-001
	606.64	5.02	3.3212E+000		8.2139E-001
	635.90	11.32	1.1420E+000		-1.9817E-001
Cs-134	563.23	8.38	1.5781E+000	1.48E-001	1.6709E+000
	569.32	15.43	9.1632E-001		7.0975E-001
	604.70	97.60	1.6591E-001		-2.9729E-003
	795.84	85.40	1.4769E-001		1.4395E-001
	801.93	8.73	1.3353E+000		-2.5901E+000
Cs-137	661.65	85.12	1.4815E-001	1.48E-001	-1.3397E-001
Eu-152	121.78	28.40	1.0707E+000	4.39E-001	4.0735E-001
	244.69	7.49	2.4345E+000		-1.2772E+000
	344.27	26.50	5.9656E-001		-1.5655E-001
	778.89	12.74	9.0347E-001		-5.6133E-001
	867.32	4.16	2.8953E+000		-3.6854E+000
	964.01	14.40	1.1007E+000		2.1505E-001
	1085.78	10.00	1.1379E+000		-1.2767E-001
	1112.02	13.30	8.8203E-001		5.4468E-001
	1407.95	20.70	4.3866E-001		-6.1193E-002
Eu-154	123.07	40.50	7.4256E-001	3.03E-001	2.0742E-001
	247.94	6.60	2.7445E+000		-6.4799E-001
	591.81	4.83	2.7816E+000		1.9849E+000
	723.30	19.70	6.9592E-001		1.5641E-001
	756.87	4.33	2.9559E+000		2.1997E+000
	873.19	11.50	9.5225E-001		5.5844E-002
	996.32	10.30	1.0223E+000		-4.3725E-001
	1004.76	17.90	6.0159E-001		-4.9180E-002
	1274.45	35.50	3.0309E-001		-1.2380E-001
Eu-155	86.54	30.90	1.7786E+000	1.78E+000	1.8957E+000
	105.31	20.70	1.8507E+000		-4.6859E-001
Am-241	59.54	35.90	3.9338E+000	3.93E+000	-2.1042E+000
Cm-243	228.19	10.56	1.7830E+000	1.26E+000	-1.0499E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2589E+000	1.26E+000	3.1829E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 3:04:04 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-133-F-
Sample Title: OOL-09-01-133-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 2:54:01 PM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-133-F-
Title: OOL-09-01-133-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	305	292.44	73.31	1.02	2.64E+002	56.06	1.10E+003
m	2	283-	305	300.27	75.26	1.02	4.34E+002	64.99	1.18E+003
	3	333-	345	340.09	85.22	0.90	1.04E+002	108.34	1.12E+003
	4	950-	960	954.88	238.90	1.30	2.85E+002	60.63	2.80E+002
	5	1173-	1186	1180.55	295.31	0.69	7.23E+001	48.39	1.95E+002
	6	1401-	1415	1408.09	352.19	1.10	1.68E+002	47.59	1.46E+002
	7	2036-	2054	2043.06	510.91	1.71	1.35E+002	47.57	1.34E+002
	8	2322-	2341	2332.99	583.39	1.18	2.03E+002	44.62	8.96E+001
	9	2427-	2445	2437.51	609.51	1.25	1.76E+002	39.96	7.10E+001
	10	2904-	2919	2909.79	727.57	0.43	4.58E+001	29.84	6.02E+001
	11	3175-	3186	3180.38	795.21	0.35	1.73E+001	22.17	4.17E+001
	12	3639-	3655	3646.23	911.66	0.89	1.30E+002	34.38	5.69E+001
	13	3870-	3886	3876.69	969.27	1.30	9.13E+001	30.39	4.77E+001
	14	4476-	4491	4483.13	1120.86	1.65	7.74E+001	24.81	2.76E+001
	15	4533-	4545	4539.01	1134.83	0.33	2.42E+001	18.35	2.38E+001
	16	5835-	5860	5847.42	1461.90	1.82	9.65E+002	66.02	4.07E+001
	17	7056-	7073	7064.02	1766.02	0.82	5.60E+001	17.46	6.95E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	1.000	511.00*	100.00	2.30541E-001	8.70162E-002
K-40	0.963	1460.81*	10.67	2.04820E+001	2.17077E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.06732E+000	4.12175E-001
		583.14*	84.20	4.30319E-001	1.09749E-001
		860.37	12.46		
Bi-212	0.995	727.17*	11.80	7.35349E-001	4.86652E-001
Pb-212	0.579	74.81* @	10.70	1.40159E+001	3.45671E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.89826E-001	2.35039E-001
Bi-214	0.982	609.31*	46.30	6.86494E-001	1.77324E-001
		1120.29*	15.10	1.06427E+000	3.59512E-001
		1764.49*	15.80	8.74291E-001	2.85993E-001
PB-214	0.618	74.82* @	6.21	2.41498E+001	6.20865E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.51811E-001	3.80625E-001
		351.92*	37.20	6.90715E-001	2.27070E-001
Ac-228	0.629	338.32	11.40		
		911.07*	27.70	9.34268E-001	2.69323E-001
		969.11*	16.60	1.10893E+000	3.86840E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		1.000	1.375919E-001	9.013660E-002
K-40		0.963	2.048197E+001	2.170768E+000
TL-208		0.751	4.303190E-001	1.088498E-001
Bi-212		0.995	7.353487E-001	4.866523E-001
Pb-212	@	0.579	8.898262E-001	2.350389E-001
Bi-214		0.982	7.873111E-001	1.389883E-001
PB-214	@	0.618	6.542555E-001	1.950052E-001
Ac-228		0.629	9.912900E-001	2.210306E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.31	4.4043E-001	21.22
3	85.22	1.7325E-001	104.23
11	795.21	2.8863E-002	128.03
15	1134.83	4.0373E-002	75.77

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2277E-001	8.92E-002	5.6525E-002
	1332.49	100.00	8.9197E-002		4.2954E-002
Nb-94	702.63	100.00	1.2303E-001	1.15E-001	-3.3352E-002
	871.10	100.00	1.1457E-001		3.4202E-003
Ag-108m	79.20	7.10	1.0327E+001	1.50E-001	-1.1738E+001
	433.93	89.90	1.5929E-001		1.1118E-002
	614.37	90.40	1.8152E-001		-4.2698E-002
	722.95	90.50	1.5017E-001		-9.9875E-002
Sb-125	176.33	6.89	3.0293E+000	4.67E-001	4.2913E-001
	427.89	29.33	4.6690E-001		-3.1347E-001
	463.38	10.35	1.4048E+000		8.4886E-001
	600.56	17.80	7.4153E-001		4.5279E-001
	606.64	5.02	3.3342E+000		4.1414E+000
	635.90	11.32	1.1107E+000		-1.1006E+000
Cs-134	563.23	8.38	1.5527E+000	1.45E-001	-7.5733E-001
	569.32	15.43	8.5312E-001		-1.1242E-001
	604.70	97.60	1.7065E-001		2.1793E-002
	795.84	85.40	1.4492E-001		1.9977E-002
	801.93	8.73	1.3143E+000		4.3070E-001
Cs-137	661.65	85.12	1.5589E-001	1.56E-001	-2.4641E-002
Eu-152	121.78	28.40	1.0643E+000	4.04E-001	-1.0190E+000
	244.69	7.49	2.4154E+000		-5.1889E+000
	344.27	26.50	5.8667E-001		-1.0220E+000
	778.89	12.74	9.9308E-001		-8.6155E-001
	867.32	4.16	2.8689E+000		-8.8719E-001
	964.01	14.40	1.0497E+000		6.7691E-002
	1085.78	10.00	1.0810E+000		1.1481E-001
	1112.02	13.30	8.4683E-001		1.6620E-001
	1407.95	20.70	4.0353E-001		6.7068E-002
Eu-154	123.07	40.50	7.4507E-001	2.95E-001	6.0621E-001
	247.94	6.60	2.6423E+000		-9.8350E-001
	591.81	4.83	2.7200E+000		6.5712E-002
	723.30	19.70	6.8542E-001		-5.1242E-001
	756.87	4.33	2.7398E+000		-2.2334E+000
	873.19	11.50	1.0297E+000		-2.3570E-001
	996.32	10.30	1.0604E+000		2.3851E-001
	1004.76	17.90	6.2549E-001		-2.7415E-001
	1274.45	35.50	2.9470E-001		-4.4287E-001
Eu-155	86.54	30.90	1.8187E+000	1.82E+000	1.8160E+000
	105.31	20.70	1.8459E+000		-2.1913E+000
Am-241	59.54	35.90	4.0477E+000	4.05E+000	-1.1758E+000
Cm-243	228.19	10.56	1.8049E+000	1.20E+000	4.8956E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2044E+000	1.20E+000	6.6514E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 1:58:57 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-134-F-
Sample Title: OOL-09-01-134-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 1:48:54 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-134-F-
Title: OOL-09-01-134-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	309	291.59	73.09	1.02	2.60E+002	56.66	1.13E+003
m	2	282-	309	300.41	75.30	1.03	4.60E+002	65.04	1.16E+003
	3	948-	960	954.63	238.83	0.96	1.93E+002	60.96	2.92E+002
	4	1173-	1186	1179.80	295.12	1.16	8.84E+001	47.21	1.78E+002
	5	1399-	1415	1406.99	351.91	1.03	1.36E+002	45.44	1.28E+002
	6	2032-	2054	2042.53	510.78	1.80	1.63E+002	46.65	1.04E+002
	7	2323-	2340	2332.06	583.15	1.24	1.55E+002	41.78	9.19E+001
	8	2429-	2446	2436.30	609.21	1.70	1.34E+002	40.23	8.76E+001
	9	3172-	3186	3178.92	794.85	0.91	4.20E+001	23.92	3.70E+001
	10	3436-	3448	3442.13	860.64	0.62	1.77E+001	22.10	4.13E+001
	11	3637-	3655	3644.80	911.30	1.04	1.09E+002	32.86	5.10E+001
	12	3868-	3886	3876.33	969.18	1.20	7.84E+001	32.00	5.56E+001
	13	4476-	4487	4481.09	1120.35	0.37	3.32E+001	19.40	2.48E+001
	14	5327-	5340	5333.01	1333.31	1.08	2.66E+001	10.75	1.38E+000
	15	5833-	5859	5845.59	1461.44	1.71	8.39E+002	60.55	2.65E+001
	16	7054-	7072	7062.19	1765.56	0.48	5.00E+001	15.52	4.03E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.998	511.00*		100.00	2.77436E-001	8.80738E-002
K-40	0.987	1460.81*		10.67	1.78098E+001	1.93115E+000
TL-208	0.904	277.35		6.80		
		510.84*		21.60	1.28443E+000	4.21025E-001
		583.14*		84.20	3.27998E-001	9.81403E-002
		860.37*		12.46	2.78726E-001	3.50141E-001
Pb-212	0.579	74.81*	@	10.70	1.48190E+001	3.58224E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.03104E-001	2.12384E-001
Bi-214	0.992	609.31*		46.30	5.24070E-001	1.69676E-001
		1120.29*		15.10	4.56547E-001	2.71278E-001
		1764.49*		15.80	7.79429E-001	2.54330E-001
PB-214	0.619	74.82*	@	6.21	2.55335E+001	6.44459E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	6.74329E-001	3.77579E-001
		351.92*		37.20	5.59558E-001	2.08776E-001
Ac-228	0.634	338.32		11.40		
		911.07*		27.70	7.83145E-001	2.52621E-001
		969.11*		16.60	9.51849E-001	4.01140E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.998	2.073556E-001	9.038267E-002
K-40		0.987	1.780978E+001	1.931153E+000
TL-208		0.904	3.244466E-001	9.397454E-002
Pb-212	@	0.579	6.031044E-001	2.123837E-001
Bi-214		0.992	5.715790E-001	1.252127E-001
PB-214	@	0.619	5.864313E-001	1.827059E-001
Ac-228		0.634	8.310524E-001	2.137638E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.09	4.3279E-001	21.82
9	794.85	7.0037E-002	56.93
14	1333.31	4.4375E-002	40.37

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2072E-001	9.34E-002	-3.4049E-002
	1332.49	100.00	9.3380E-002		5.8243E-002
Nb-94	702.63	100.00	1.2995E-001	1.12E-001	-2.9544E-003
	871.10	100.00	1.1224E-001		-7.1263E-002
Ag-108m	79.20	7.10	1.0500E+001	1.40E-001	-2.1216E+000
	433.93	89.90	1.4036E-001		-6.5841E-002
	614.37	90.40	1.7575E-001		8.5794E-002
	722.95	90.50	1.4348E-001		2.8770E-002
Sb-125	176.33	6.89	2.8472E+000	4.58E-001	-4.3359E-001
	427.89	29.33	4.5812E-001		6.3223E-002
	463.38	10.35	1.2925E+000		4.3087E-001
	600.56	17.80	7.0177E-001		-1.6460E-001
	606.64	5.02	3.2110E+000		7.6164E+000
	635.90	11.32	1.0618E+000		-2.6603E-002
Cs-134	563.23	8.38	1.5875E+000	1.51E-001	1.8390E-001
	569.32	15.43	8.2322E-001		-3.1049E-001
	604.70	97.60	1.6337E-001		-7.8501E-002
	795.84	85.40	1.5078E-001		5.3520E-002
	801.93	8.73	1.3478E+000		-1.7880E-001
Cs-137	661.65	85.12	1.5030E-001	1.50E-001	-1.0798E-001
Eu-152	121.78	28.40	1.0482E+000	4.17E-001	7.0107E-001
	244.69	7.49	2.3441E+000		-1.4564E+000
	344.27	26.50	5.6050E-001		-9.7301E-001
	778.89	12.74	9.2324E-001		-1.8946E-001
	867.32	4.16	2.7422E+000		-2.5728E+000
	964.01	14.40	1.0371E+000		-6.1074E-002
	1085.78	10.00	1.1421E+000		-7.8602E-001
	1112.02	13.30	8.5009E-001		1.7652E-001
	1407.95	20.70	4.1667E-001		-3.6922E-002
Eu-154	123.07	40.50	7.2218E-001	2.71E-001	-1.3808E-001
	247.94	6.60	2.6328E+000		5.2388E-003
	591.81	4.83	2.6217E+000		2.2297E-001
	723.30	19.70	6.5918E-001		3.6825E-001
	756.87	4.33	2.6415E+000		-8.2828E-001
	873.19	11.50	9.8332E-001		3.8867E-001
	996.32	10.30	1.1052E+000		1.0922E+000
	1004.76	17.90	6.0403E-001		4.8980E-002
	1274.45	35.50	2.7096E-001		-8.6113E-002
Eu-155	86.54	30.90	1.7936E+000	1.79E+000	9.5762E-001
	105.31	20.70	1.8552E+000		-3.1631E-001
Am-241	59.54	35.90	4.1482E+000	4.15E+000	-3.2370E+000
Cm-243	228.19	10.56	1.7231E+000	1.18E+000	1.4753E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1777E+000	1.18E+000	1.3049E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 11:48:16 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-135-F-
Sample Title: OOL-09-01-135-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 11:38:14 AM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-135-F-
Title: OOL-09-01-135-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	305	291.52	73.07	0.98	2.45E+002	54.67	9.02E+002
m	2	286-	305	300.29	75.27	0.99	3.88E+002	62.76	1.06E+003
	3	333-	348	339.91	85.17	1.06	2.81E+002	118.16	1.11E+003
	4	948-	961	953.89	238.65	1.24	1.83E+002	58.45	2.54E+002
	5	1347-	1356	1351.47	338.03	0.82	3.43E+001	30.56	8.87E+001
	6	1395-	1416	1406.80	351.86	1.50	1.53E+002	54.54	1.65E+002
	7	2324-	2339	2330.09	582.66	1.23	7.98E+001	38.03	9.82E+001
	8	2427-	2444	2435.00	608.89	1.43	1.02E+002	38.78	8.91E+001
	9	3632-	3651	3642.08	910.62	1.08	1.04E+002	32.28	4.76E+001
	10	3865-	3882	3874.01	968.60	1.17	7.10E+001	27.82	3.90E+001
	11	4471-	4486	4477.81	1119.53	1.36	4.84E+001	21.78	2.46E+001
	12	5828-	5853	5840.80	1460.24	1.55	7.95E+002	56.20	6.50E+000
	13	7050-	7064	7056.35	1764.10	0.73	3.58E+001	12.83	2.17E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.990	1460.81*	10.67	1.68493E+001	1.81146E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.68674E-001	8.33588E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	1.25254E+001	3.18264E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.71646E-001	2.03134E-001
Bi-214	0.992	609.31*	46.30	3.97563E-001	1.58966E-001
		1120.29*	15.10	6.66203E-001	3.07748E-001
		1764.49*	15.80	5.58626E-001	2.07693E-001
Ac-228	0.994	338.32*	11.40	4.55464E-001	4.11848E-001
		911.07*	27.70	7.50021E-001	2.47368E-001
		969.11*	16.60	8.61452E-001	3.49573E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.990	1.684932E+001	1.811458E+000
TL-208	0.467	1.686739E-001	8.335882E-002
Pb-212 @	0.580	5.716457E-001	2.031340E-001
Bi-214	0.992	4.871818E-001	1.167908E-001
Ac-228	0.994	7.229112E-001	1.813062E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.07	4.0755E-001	22.36
3	85.17	4.6867E-001	42.02
6	351.86	2.5456E-001	35.71

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1988E-001	9.45E-002	9.8685E-002
	1332.49	100.00	9.4539E-002		7.2630E-002
Nb-94	702.63	100.00	1.0963E-001	1.10E-001	3.6289E-002
	871.10	100.00	1.1025E-001		-1.8699E-002
Ag-108m	79.20	7.10	9.8550E+000	1.31E-001	-1.0273E+001
	433.93	89.90	1.3774E-001		8.1666E-002
	614.37	90.40	1.5771E-001		-1.3155E-002
	722.95	90.50	1.3128E-001		7.6036E-003
Sb-125	176.33	6.89	2.6640E+000	4.28E-001	3.6375E-001
	427.89	29.33	4.2831E-001		3.4300E-001
	463.38	10.35	1.1714E+000		-3.4254E-001
	600.56	17.80	6.6127E-001		2.9133E-002
	606.64	5.02	2.9536E+000		3.7135E+000
	635.90	11.32	1.0104E+000		1.2792E-002
Cs-134	563.23	8.38	1.3319E+000	1.28E-001	7.5018E-001
	569.32	15.43	7.3596E-001		5.8983E-001
	604.70	97.60	1.5251E-001		1.4149E-002
	795.84	85.40	1.2793E-001		-2.7493E-002
	801.93	8.73	1.2035E+000		-2.6705E-001
Cs-137	661.65	85.12	1.4707E-001	1.47E-001	1.3757E-001
Eu-152	121.78	28.40	9.8143E-001	4.04E-001	-2.5556E-001
	244.69	7.49	2.1206E+000		2.5222E-001
	344.27	26.50	5.2539E-001		-2.2016E-002
	778.89	12.74	8.0341E-001		-9.0413E-001
	867.32	4.16	2.5497E+000		-4.6393E+000
	964.01	14.40	9.7591E-001		9.9484E-002
	1085.78	10.00	9.8673E-001		-1.2063E-001
	1112.02	13.30	7.6041E-001		-3.1525E-001
	1407.95	20.70	4.0353E-001		1.5996E-001
Eu-154	123.07	40.50	6.7464E-001	2.79E-001	1.1220E-001
	247.94	6.60	2.3232E+000		-3.1271E+000
	591.81	4.83	2.3410E+000		-1.5812E+000
	723.30	19.70	6.0660E-001		2.2540E-001
	756.87	4.33	2.5217E+000		7.4863E-002
	873.19	11.50	9.7308E-001		4.5632E-001
	996.32	10.30	9.8701E-001		-4.6246E-001
	1004.76	17.90	5.6374E-001		-1.1750E-001
	1274.45	35.50	2.7861E-001		-1.3738E-001
Eu-155	86.54	30.90	1.7172E+000	1.72E+000	2.3243E+000
	105.31	20.70	1.7498E+000		-1.0201E+000
Am-241	59.54	35.90	3.8310E+000	3.83E+000	-3.1690E+000
Cm-243	228.19	10.56	1.5702E+000	1.07E+000	-2.8560E-003

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0741E+000	1.07E+000	2.0939E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 10:34:54 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-136-F-
Sample Title: OOL-09-01-136-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 10:24:51 AM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-136-F-
Title: OOL-09-01-136-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	306	291.93	73.18	0.85	2.18E+002	56.89	9.23E+002
m	2	288-	306	300.47	75.31	0.86	3.59E+002	65.26	1.19E+003
	3	946-	960	954.40	238.78	0.65	1.79E+002	66.15	3.32E+002
	4	1176-	1186	1180.95	295.41	0.49	3.32E+001	40.21	1.61E+002
	5	1346-	1360	1353.52	338.55	0.70	6.88E+001	43.65	1.48E+002
	6	1402-	1414	1407.87	352.13	1.33	1.09E+002	42.20	1.33E+002
	7	2029-	2052	2042.02	510.65	2.06	1.78E+002	47.93	1.05E+002
	8	2323-	2338	2332.17	583.18	1.23	1.42E+002	33.72	5.15E+001
	9	2426-	2446	2437.40	609.49	1.64	1.50E+002	43.48	9.44E+001
	10	2638-	2653	2646.77	661.82	1.13	4.89E+001	32.88	7.51E+001
	11	3437-	3449	3443.12	860.89	0.93	3.47E+001	18.42	2.03E+001
	12	3639-	3655	3646.23	911.66	1.17	1.02E+002	32.94	5.70E+001
	13	3868-	3884	3877.42	969.45	1.16	7.40E+001	28.50	4.40E+001
	14	5833-	5859	5846.90	1461.77	1.73	8.70E+002	60.20	1.68E+001
	15	6349-	6362	6355.89	1589.00	1.15	1.02E+001	11.53	8.78E+000
	16	7056-	7071	7064.32	1766.09	0.36	4.60E+001	16.40	8.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.996	511.00*		100.00	3.03866E-001	9.15939E-002
K-40	0.971	1460.81*		10.67	1.84639E+001	1.96623E+000
Cs-137	0.999	661.65*		85.12	1.06606E-001	7.27190E-002
TL-208	0.903	277.35		6.80		
		510.84*		21.60	1.40679E+000	4.39334E-001
		583.14*		84.20	2.99300E-001	8.12659E-002
		860.37*		12.46	5.47061E-001	2.98078E-001
Pb-212	0.579	74.81*	@	10.70	1.15686E+001	3.09222E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.59389E-001	2.24207E-001
Bi-214	0.678	609.31*		46.30	5.83599E-001	1.84203E-001
		1120.29		15.10		
		1764.49*		15.80	7.17571E-001	2.65754E-001
PB-214	0.618	74.82*	@	6.21	1.99331E+001	5.52098E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.53443E-001	3.09696E-001
		351.92*		37.20	4.48313E-001	1.88895E-001
Ac-228	0.993	338.32*		11.40	9.13223E-001	5.97105E-001
		911.07*		27.70	7.32385E-001	2.51175E-001
		969.11*		16.60	8.98267E-001	3.58569E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.996	2.355522E-001	9.312533E-002
K-40		0.971	1.846387E+001	1.966234E+000
Cs-137		0.999	1.066061E-001	7.271901E-002
TL-208		0.903	3.162696E-001	7.786652E-002
Pb-212	@	0.579	5.593892E-001	2.242074E-001
Bi-214		0.678	6.270757E-001	1.513916E-001
PB-214	@	0.618	3.954740E-001	1.612646E-001
Ac-228		0.993	8.003832E-001	1.945025E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.18	3.6413E-001	26.04
15	1589.00	1.7039E-002	112.76

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.1821E-001	1.03E-001	9.1297E-003
		1332.49	100.00	1.0332E-001		2.2469E-002
	Nb-94	702.63	100.00	1.2464E-001	1.21E-001	8.6966E-003
		871.10	100.00	1.2056E-001		3.2615E-002
	Ag-108m	79.20	7.10	1.0773E+001	1.32E-001	-1.7728E+000
		433.93	89.90	1.4867E-001		3.3373E-002
		614.37	90.40	1.7162E-001		-2.0031E-002
		722.95	90.50	1.3203E-001		-1.0023E-002
	Sb-125	176.33	6.89	3.0637E+000	4.51E-001	2.8029E+000
		427.89	29.33	4.5067E-001		-3.2181E-001
		463.38	10.35	1.2902E+000		-1.0895E+000
		600.56	17.80	7.1314E-001		4.3826E-001
		606.64	5.02	3.2423E+000		6.0733E+000
		635.90	11.32	1.0478E+000		6.3264E-002
	Cs-134	563.23	8.38	1.5495E+000	1.40E-001	-6.6580E-001
		569.32	15.43	8.2501E-001		-1.0770E+000
		604.70	97.60	1.6360E-001		5.0057E-003
		795.84	85.40	1.4046E-001		3.4863E-002
		801.93	8.73	1.3395E+000		-2.6471E+000
+	Cs-137	661.65*	85.12	1.1517E-001	1.15E-001	1.0661E-001
	Eu-152	121.78	28.40	1.1002E+000	4.60E-001	2.7539E-001
		244.69	7.49	2.4058E+000		-2.3362E+000
		344.27	26.50	5.6893E-001		1.7865E-001
		778.89	12.74	9.1200E-001		1.0949E-001
		867.32	4.16	2.8512E+000		1.4583E+000
		964.01	14.40	1.0026E+000		6.7950E-001
		1085.78	10.00	1.0674E+000		3.1149E-001
		1112.02	13.30	8.5658E-001		-1.0463E-001
		1407.95	20.70	4.5952E-001		6.1966E-001
	Eu-154	123.07	40.50	7.6169E-001	3.11E-001	3.6764E-002
		247.94	6.60	2.6818E+000		-2.9022E+000
		591.81	4.83	2.6510E+000		1.9449E-001
		723.30	19.70	6.1002E-001		1.4357E-002
		756.87	4.33	2.6993E+000		-1.0907E+000
		873.19	11.50	1.0521E+000		9.7377E-001
		996.32	10.30	1.0728E+000		2.6503E-001
		1004.76	17.90	5.8926E-001		-1.5770E-001
		1274.45	35.50	3.1124E-001		-8.2158E-002
	Eu-155	86.54	30.90	1.8577E+000	1.86E+000	2.9753E-001
		105.31	20.70	1.9136E+000		-1.8367E+000
	Am-241	59.54	35.90	4.1798E+000	4.18E+000	-2.5983E+000
	Cm-243	228.19	10.56	1.7242E+000	1.22E+000	1.0062E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2161E+000	1.22E+000	2.9655E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 9:53:09 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-137
Sample Title: OOL-09-01-137-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 9:43:08 PM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-137
Title: OOL-09-01-137-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	200-	221	214.41	53.43	1.79	1.46E+003	196.44	2.28E+003
M	2	284-	305	291.94	72.81	0.83	3.61E+002	66.52	1.38E+003
m	3	284-	305	300.50	74.96	0.84	6.74E+002	79.81	1.60E+003
M	4	331-	356	338.96	84.57	1.29	4.01E+002	66.95	1.54E+003
m	5	331-	356	350.70	87.51	1.30	2.39E+002	61.90	1.71E+003
	6	947-	960	954.28	238.45	0.74	1.99E+002	64.71	3.24E+002
	7	1174-	1186	1180.70	295.07	0.69	4.26E+001	45.99	1.92E+002
	8	1348-	1358	1352.79	338.11	1.07	7.73E+001	38.82	1.32E+002
	9	1400-	1412	1407.29	351.73	0.85	1.19E+002	43.89	1.45E+002
	10	2322-	2340	2331.32	582.81	1.23	1.62E+002	44.52	1.05E+002
	11	2427-	2446	2436.51	609.12	0.71	1.72E+002	44.20	9.64E+001
	12	3230-	3241	3235.28	808.87	1.64	2.03E+001	17.32	2.27E+001
	13	3435-	3446	3440.40	860.17	1.05	3.69E+001	20.61	2.91E+001
	14	3634-	3653	3643.91	911.06	1.26	1.64E+002	36.65	5.27E+001
	15	3867-	3883	3875.20	968.90	0.37	8.03E+001	29.91	4.87E+001
	16	4475-	4487	4480.95	1120.38	0.57	3.29E+001	23.02	3.81E+001
	17	5831-	5857	5843.81	1461.20	1.92	1.01E+003	65.04	2.24E+001
	18	7052-	7066	7059.23	1765.15	0.94	4.66E+001	16.82	9.38E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.995	1460.81*	10.67	1.68848E+001	1.74892E+000
Eu-155	0.314	86.54*	30.90	9.54806E-001	3.10437E-001
		105.31	20.70		
TL-208	0.619	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.74860E-001	8.33982E-002
		860.37*	12.46	4.63095E-001	2.64961E-001
Pb-212	0.676	74.81* @	10.70	9.63707E+000	2.20682E+000
		77.11 @	18.00		
		87.30* @	8.00	3.68794E+000	1.19906E+000
		238.63*	44.60	4.84375E-001	1.74662E-001
Bi-214	0.996	609.31*	46.30	5.35828E-001	1.52989E-001
		1120.29*	15.10	3.66904E-001	2.59619E-001
		1764.49*	15.80	5.47712E-001	2.05121E-001
PB-214	0.669	74.82* @	6.21	1.66049E+001	3.98890E+000
		77.11 @	10.50		
		87.30* @	4.67	6.31766E+000	2.10879E+000
		241.98	7.49		
		295.21*	19.20	2.55593E-001	2.79313E-001
		351.92*	37.20	3.87367E-001	1.56908E-001
Ac-228	0.999	338.32*	11.40	8.12387E-001	4.27294E-001
		911.07*	27.70	9.40339E-001	2.36007E-001
		969.11*	16.60	7.80698E-001	3.02079E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.995	1.688478E+001	1.748923E+000
Eu-155		0.314	7.755712E-001	3.143823E-001
TL-208		0.619	2.918276E-001	7.955063E-002
Pb-212	@	0.676	4.843753E-001	1.746624E-001
Bi-214		0.996	5.084849E-001	1.108865E-001
PB-214	@	0.669	3.561765E-001	1.356759E-001
Ac-228		0.999	8.690886E-001	1.705252E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	53.43	2.4321E+000	13.46
M 2	72.81	6.0107E-001	18.44
M 4	84.57	6.6841E-001	16.69
12	808.87	3.3828E-002	85.32

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	9.7863E-002	8.57E-002	-2.7092E-002
		1332.49	100.00	8.5732E-002		8.6650E-002
	Nb-94	702.63	100.00	1.0151E-001	8.78E-002	3.9142E-003
		871.10	100.00	8.7811E-002		-1.1013E-001
	Ag-108m	79.20	7.10	5.0745E+000	1.16E-001	-6.9816E+000
		433.93	89.90	1.1620E-001		1.1224E-002
		614.37	90.40	1.2535E-001		-3.8555E-002
		722.95	90.50	1.1638E-001		1.0676E-001
	Sb-125	176.33	6.89	2.1318E+000	3.45E-001	1.7102E+000
		427.89	29.33	3.4528E-001		-4.9439E-003
		463.38	10.35	1.0172E+000		1.1495E-001
		600.56	17.80	5.3208E-001		-4.5717E-001
		606.64	5.02	2.6097E+000		-9.6274E-001
		635.90	11.32	8.3012E-001		3.1442E-001
	Cs-134	563.23	8.38	1.2109E+000	1.19E-001	2.7574E-001
		569.32	15.43	6.1549E-001		4.0908E-002
		604.70	97.60	1.2908E-001		5.0850E-003
		795.84	85.40	1.1941E-001		4.8400E-002
		801.93	8.73	1.0351E+000		-5.2751E-001
	Cs-137	661.65	85.12	1.2491E-001	1.25E-001	1.6634E-001
	Eu-152	121.78	28.40	7.0511E-001	3.50E-001	2.1197E-001
		244.69	7.49	1.7095E+000		-7.4221E-001
		344.27	26.50	4.3612E-001		3.5244E-002
		778.89	12.74	7.6769E-001		-4.5105E-002
		867.32	4.16	2.2497E+000		8.3131E-001
		964.01	14.40	8.1652E-001		-2.5689E-001
		1085.78	10.00	9.5358E-001		2.9024E-001
		1112.02	13.30	7.0416E-001		2.8537E-002
		1407.95	20.70	3.5015E-001		3.5169E-002
	Eu-154	123.07	40.50	4.9349E-001	2.53E-001	3.3889E-001
		247.94	6.60	1.8257E+000		-7.5893E-001
		591.81	4.83	1.9412E+000		2.2439E-001
		723.30	19.70	5.3094E-001		1.8719E-001
		756.87	4.33	2.1434E+000		-1.2446E+000
		873.19	11.50	7.8040E-001		2.6621E-001
		996.32	10.30	9.0299E-001		4.9415E-001
		1004.76	17.90	4.9864E-001		-3.7741E-002
		1274.45	35.50	2.5348E-001		-1.0536E-001
+	Eu-155	86.54*	30.90	7.7990E-001	7.80E-001	9.5481E-001
		105.31	20.70	1.1988E+000		5.2764E-001
	Am-241	59.54	35.90	1.4021E+000	1.40E+000	-4.4213E-001
	Cm-243	228.19	10.56	1.2113E+000	9.09E-001	-8.7455E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.0911E-001	9.09E-001	-1.0935E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 10:12:46 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-138
Sample Title: OOL-09-01-138-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 10:02:44 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-138
Title: OOL-09-01-138-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	197-	211	204.48	50.94	1.55	1.32E+003	146.98	1.50E+003
M	2	284-	306	292.09	72.85	0.93	4.03E+002	65.08	1.34E+003
m	3	284-	306	300.20	74.88	0.94	5.99E+002	74.58	1.47E+003
	4	334-	343	339.46	84.70	0.78	1.99E+002	95.30	9.59E+002
	5	931-	961	954.43	238.49	0.94	1.75E+002	109.98	6.08E+002
	6	1175-	1189	1179.71	294.82	1.22	7.37E+001	46.73	1.69E+002
	7	1400-	1415	1407.39	351.76	0.77	1.21E+002	45.45	1.38E+002
	8	1944-	1954	1949.30	487.28	0.74	1.91E+001	22.71	4.79E+001
	9	2323-	2341	2331.77	582.92	1.10	1.33E+002	41.36	9.25E+001
	10	2428-	2445	2436.18	609.03	1.48	1.59E+002	37.51	6.34E+001
	11	3635-	3652	3643.84	911.04	0.96	1.36E+002	33.33	4.71E+001
	12	3868-	3883	3874.86	968.81	0.83	6.50E+001	26.24	3.80E+001
	13	4474-	4488	4480.72	1120.33	0.72	6.01E+001	25.34	3.69E+001
	14	5830-	5856	5843.90	1461.22	1.73	1.15E+003	69.97	2.73E+001
	15	7053-	7067	7059.92	1765.32	1.10	3.78E+001	14.87	6.15E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.994	1460.81*	10.67	1.93517E+001	1.95757E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.24282E-001	7.58369E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	8.57869E+000	1.99179E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.26124E-001	2.75563E-001
Bi-214	0.994	609.31*	46.30	4.95171E-001	1.32060E-001
		1120.29*	15.10	6.70166E-001	2.91294E-001
		1764.49*	15.80	4.44684E-001	1.80326E-001
PB-214	0.581	74.82* @	6.21	1.47813E+001	3.59575E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.42098E-001	2.90057E-001
		351.92*	37.20	3.93480E-001	1.61953E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	7.77585E-001	2.10673E-001
		969.11*	16.60	6.32164E-001	2.63611E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.994	1.935171E+001	1.957571E+000
TL-208		0.470	2.242819E-001	7.583685E-002
Pb-212	@	0.520	4.261244E-001	2.755633E-001
Bi-214		0.994	5.002746E-001	1.000610E-001
PB-214	@	0.581	4.050349E-001	1.414042E-001
Ac-228		0.633	7.209065E-001	1.645738E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
	1	50.94	2.1967E+000	11.15
M	2	72.85	6.7117E-001	16.16
	4	84.70	3.3133E-001	47.94
	8	487.28	3.1828E-002	118.94

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0151E-001	7.07E-002	6.9838E-002
	1332.49	100.00	7.0704E-002		-1.8872E-002
Nb-94	702.63	100.00	9.3390E-002	8.39E-002	6.5827E-002
	871.10	100.00	8.3892E-002		-5.9010E-003
Ag-108m	79.20	7.10	4.7084E+000	1.09E-001	-1.7215E+000
	433.93	89.90	1.1214E-001		-4.1888E-002
	614.37	90.40	1.1751E-001		-7.9782E-002
	722.95	90.50	1.0912E-001		3.1072E-002
Sb-125	176.33	6.89	1.9422E+000	3.37E-001	-1.3220E+000
	427.89	29.33	3.3706E-001		-1.4368E-001
	463.38	10.35	9.8069E-001		1.9839E-001
	600.56	17.80	5.2087E-001		6.0047E-001
	606.64	5.02	2.4566E+000		5.9026E+000
	635.90	11.32	8.5708E-001		1.1409E+000
Cs-134	563.23	8.38	1.0978E+000	1.06E-001	3.6470E-001
	569.32	15.43	5.7734E-001		-6.6290E-002
	604.70	97.60	1.1781E-001		-2.1163E-002
	795.84	85.40	1.0565E-001		-4.8879E-004
	801.93	8.73	1.0248E+000		-3.9571E-001
Cs-137	661.65	85.12	1.1399E-001	1.14E-001	1.7456E-003
Eu-152	121.78	28.40	6.8025E-001	3.00E-001	1.5319E-001
	244.69	7.49	1.6362E+000		-7.6955E-001
	344.27	26.50	3.7721E-001		-2.9769E-001
	778.89	12.74	7.0286E-001		3.4350E-002
	867.32	4.16	2.0068E+000		-1.5042E+000
	964.01	14.40	7.6482E-001		1.3627E-001
	1085.78	10.00	8.4797E-001		-8.7045E-001
	1112.02	13.30	7.0929E-001		-6.1070E-001
	1407.95	20.70	2.9994E-001		-2.2909E-001
Eu-154	123.07	40.50	4.6657E-001	2.33E-001	-2.6143E-001
	247.94	6.60	1.7833E+000		-1.9276E-002
	591.81	4.83	1.9206E+000		-8.1847E-001
	723.30	19.70	5.0397E-001		2.9833E-001
	756.87	4.33	2.0563E+000		-7.3154E-001
	873.19	11.50	7.4993E-001		-1.0255E-001
	996.32	10.30	8.4785E-001		-1.3805E-001
	1004.76	17.90	4.8322E-001		1.8381E-001
	1274.45	35.50	2.3314E-001		1.3911E-002
Eu-155	86.54	30.90	9.7393E-001	9.74E-001	-7.0383E-001
	105.31	20.70	1.1504E+000		2.1152E-001
Am-241	59.54	35.90	1.3009E+000	1.30E+000	-3.3245E-001
Cm-243	228.19	10.56	1.1886E+000	8.45E-001	1.1545E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.4538E-001	8.45E-001	1.9591E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 5:30:33 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-139-F-
Sample Title: OOL-09-01-139-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 5:20:31 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-139-F-
Title: OOL-09-01-139-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	291.94	72.81	0.85	3.74E+002	66.53	1.44E+003
m	2	286-	306	300.44	74.94	0.86	6.73E+002	78.92	1.53E+003
	3	332-	345	339.89	84.80	1.18	2.77E+002	129.73	1.47E+003
	4	947-	962	954.90	238.60	1.32	3.62E+002	79.51	4.26E+002
	5	1175-	1190	1181.30	295.22	0.67	8.97E+001	57.71	2.56E+002
	6	1344-	1361	1352.94	338.14	0.52	8.14E+001	54.62	2.14E+002
	7	1402-	1417	1407.51	351.79	1.35	1.90E+002	50.60	1.58E+002
	8	2036-	2054	2043.42	510.82	1.51	1.56E+002	48.47	1.35E+002
	9	2326-	2340	2333.08	583.25	1.35	1.57E+002	41.06	9.77E+001
	10	2430-	2444	2437.79	609.44	1.51	1.71E+002	42.58	1.04E+002
	11	2900-	2917	2908.96	727.27	0.77	7.08E+001	32.96	6.52E+001
	12	3636-	3654	3645.13	911.36	0.96	1.48E+002	37.91	6.67E+001
	13	3868-	3886	3876.98	969.35	1.18	1.28E+002	35.43	5.89E+001
	14	4475-	4490	4481.53	1120.53	0.69	6.28E+001	26.79	4.13E+001
	15	5833-	5858	5846.40	1461.85	1.82	1.28E+003	73.93	3.25E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*		100.00	2.13419E-001	7.21626E-002
K-40	0.963	1460.81*		10.67	2.15471E+001	2.14036E+000
TL-208	0.751	277.35		6.80		
		510.84*		21.60	9.88050E-001	3.43693E-001
		583.14*		84.20	2.66290E-001	7.76598E-002
		860.37		12.46		
Bi-212	1.000	727.17*		11.80	9.07842E-001	4.36181E-001
Pb-212	0.520	74.81*	@	10.70	9.62348E+000	2.19811E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.81210E-001	2.37601E-001
Bi-214	0.699	609.31*		46.30	5.34967E-001	1.48404E-001
		1120.29*		15.10	6.99566E-001	3.07749E-001
		1764.49		15.80		
PB-214	0.582	74.82*	@	6.21	1.65815E+001	3.97408E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.38166E-001	3.57987E-001
		351.92*		37.20	6.19896E-001	1.94666E-001
Ac-228	0.998	338.32*		11.40	8.54803E-001	5.89320E-001
		911.07*		27.70	8.48973E-001	2.37941E-001
		969.11*		16.60	1.24574E+000	3.68411E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.999	1.559001E-001	7.406292E-002
K-40		0.963	2.154709E+001	2.140356E+000
TL-208		0.751	2.662904E-001	7.717338E-002
Bi-212		1.000	9.078424E-001	4.361812E-001
Pb-212	@	0.520	8.812097E-001	2.376015E-001
Bi-214		0.699	5.660216E-001	1.336737E-001
PB-214	@	0.582	6.012437E-001	1.710168E-001
Ac-228		0.998	9.543146E-001	1.892868E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	6.2376E-001	17.78
3	84.80	4.6174E-001	46.83

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0719E-001	7.84E-002	8.2547E-002
	1332.49	100.00	7.8375E-002		-1.7792E-002
Nb-94	702.63	100.00	1.0251E-001	9.34E-002	2.7510E-002
	871.10	100.00	9.3368E-002		3.9793E-002
Ag-108m	79.20	7.10	4.9631E+000	1.22E-001	-1.2209E+000
	433.93	89.90	1.2353E-001		-8.7280E-002
	614.37	90.40	1.4132E-001		-9.0046E-002
	722.95	90.50	1.2243E-001		-1.7106E-002
Sb-125	176.33	6.89	2.2574E+000	3.86E-001	9.4876E-001
	427.89	29.33	3.8644E-001		1.5554E-001
	463.38	10.35	1.0662E+000		8.2381E-001
	600.56	17.80	5.7082E-001		6.4672E-002
	606.64	5.02	2.7741E+000		4.6833E+000
	635.90	11.32	8.8745E-001		8.6198E-001
Cs-134	563.23	8.38	1.2317E+000	1.15E-001	3.3392E-001
	569.32	15.43	6.9069E-001		3.9710E-001
	604.70	97.60	1.2946E-001		-5.0242E-002
	795.84	85.40	1.1501E-001		-8.5965E-002
	801.93	8.73	1.0621E+000		-1.3569E+000
Cs-137	661.65	85.12	1.3340E-001	1.33E-001	-8.0891E-002
Eu-152	121.78	28.40	7.3838E-001	3.48E-001	-1.3669E-001
	244.69	7.49	1.8585E+000		-7.7842E-001
	344.27	26.50	4.5570E-001		4.6170E-005
	778.89	12.74	7.6982E-001		-5.5818E-001
	867.32	4.16	2.2425E+000		-2.5554E+000
	964.01	14.40	8.7951E-001		-2.6182E-001
	1085.78	10.00	1.0020E+000		2.2377E-001
	1112.02	13.30	7.5145E-001		2.7153E-001
	1407.95	20.70	3.4770E-001		3.2288E-001
Eu-154	123.07	40.50	5.1333E-001	2.60E-001	2.7542E-001
	247.94	6.60	2.0393E+000		9.5017E-002
	591.81	4.83	2.1586E+000		-1.1677E+000
	723.30	19.70	5.6949E-001		-3.4252E-002
	756.87	4.33	2.3497E+000		-7.9297E-002
	873.19	11.50	8.3028E-001		4.5110E-001
	996.32	10.30	9.3988E-001		7.9153E-001
	1004.76	17.90	5.1541E-001		4.1003E-002
	1274.45	35.50	2.5989E-001		7.8177E-002
Eu-155	86.54	30.90	1.0410E+000	1.04E+000	1.7268E-001
	105.31	20.70	1.2152E+000		-1.0552E+000
Am-241	59.54	35.90	1.3297E+000	1.33E+000	6.9470E-001
Cm-243	228.19	10.56	1.3397E+000	9.69E-001	-4.9961E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.6855E-001	9.69E-001	4.7535E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 5:14:58 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-140-F-
Sample Title: OOL-09-01-140-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 5:04:56 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-140-F-
Title: OOL-09-01-140-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	291.77	72.77	0.87	3.58E+002	65.60	1.39E+003
m	2	284-	305	300.31	74.91	0.87	6.03E+002	77.02	1.51E+003
M	3	332-	356	340.14	84.87	0.79	2.09E+002	61.46	1.08E+003
m	4	332-	356	350.37	87.43	0.79	1.10E+002	54.26	1.17E+003
	5	947-	961	954.74	238.56	1.06	2.29E+002	70.19	3.66E+002
	6	1178-	1189	1181.71	295.32	0.39	3.72E+001	43.37	1.78E+002
	7	1349-	1359	1353.69	338.33	0.83	5.42E+001	36.39	1.20E+002
	8	1398-	1416	1407.96	351.90	0.92	1.53E+002	58.05	2.14E+002
	9	1657-	1673	1668.36	417.02	0.55	3.60E+001	40.03	1.20E+002
	10	2035-	2053	2043.37	510.80	1.47	1.23E+002	49.61	1.53E+002
	11	2324-	2339	2333.16	583.27	0.98	1.89E+002	42.68	9.45E+001
	12	2427-	2446	2437.15	609.28	1.35	1.74E+002	44.52	9.75E+001
	13	3437-	3449	3442.51	860.69	0.76	3.35E+001	23.17	3.95E+001
	14	3636-	3655	3645.70	911.51	1.46	1.66E+002	37.62	5.76E+001
	15	3868-	3888	3876.80	969.30	1.20	9.42E+001	30.90	4.28E+001
	16	4475-	4491	4482.14	1120.68	0.83	5.68E+001	28.47	4.92E+001
	17	5832-	5859	5846.45	1461.86	1.66	1.20E+003	70.98	2.46E+001
	18	6002-	6015	6008.41	1502.36	0.77	1.23E+001	8.12	1.70E+000
	19	7055-	7073	7063.66	1766.25	0.80	6.50E+001	17.27	4.04E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*	100.00	1.67942E-001	7.13906E-002
K-40	0.962	1460.81*	10.67	2.01368E+001	2.01877E+000
Eu-155	0.317	86.54*	30.90	4.40230E-001	2.33878E-001
		105.31	20.70		
TL-208	0.902	277.35	6.80		
		510.84*	21.60	7.77510E-001	3.36556E-001
		583.14*	84.20	3.19077E-001	8.33311E-002
		860.37*	12.46	4.20934E-001	2.95550E-001
Pb-212	0.677	74.81* @	10.70	8.62917E+000	2.01877E+000
		77.11 @	18.00		
		87.30* @	8.00	1.70039E+000	9.03352E-001
		238.63*	44.60	5.57576E-001	1.91728E-001
Bi-214	0.977	609.31*	46.30	5.44848E-001	1.54366E-001
		1120.29*	15.10	6.33699E-001	3.24490E-001
		1764.49*	15.80	7.63379E-001	2.16787E-001
PB-214	0.670	74.82* @	6.21	1.48683E+001	3.64200E+000
		77.11 @	10.50		
		87.30* @	4.67	2.91287E+000	1.56307E+000
		241.98	7.49		
		295.21*	19.20	2.23089E-001	2.62974E-001
		351.92*	37.20	4.98137E-001	2.06596E-001
Ac-228	0.996	338.32*	11.40	5.70007E-001	3.92678E-001
		911.07*	27.70	9.52487E-001	2.41607E-001
		969.11*	16.60	9.16234E-001	3.15424E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.999	9.742143E-002	7.343265E-002
K-40		0.962	2.013684E+001	2.018773E+000
Eu-155		0.317	2.362871E-001	2.403281E-001
TL-208		0.902	3.264846E-001	7.961644E-002
Pb-212	@	0.677	5.575761E-001	1.917285E-001
Bi-214		0.977	6.203727E-001	1.172492E-001
PB-214	@	0.670	3.942692E-001	1.613847E-001
Ac-228		0.996	8.679876E-001	1.723440E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.77	5.9714E-001	18.31
M 3	84.87	3.4789E-001	29.44
9	417.02	6.0011E-002	111.18
18	1502.36	2.0506E-002	65.96

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0118E-001	7.37E-002	-2.9181E-002
		1332.49	100.00	7.3681E-002		-1.7135E-002
	Nb-94	702.63	100.00	1.0126E-001	8.94E-002	-8.0130E-003
		871.10	100.00	8.9391E-002		-8.1160E-002
	Ag-108m	79.20	7.10	4.9243E+000	1.07E-001	-9.3751E+000
		433.93	89.90	1.0750E-001		-1.1202E-001
		614.37	90.40	1.3075E-001		-1.7372E-002
		722.95	90.50	1.1878E-001		3.2800E-002
	Sb-125	176.33	6.89	2.1840E+000	3.46E-001	7.0777E-001
		427.89	29.33	3.4590E-001		6.4636E-002
		463.38	10.35	1.0899E+000		1.1106E+000
		600.56	17.80	5.8982E-001		5.7003E-001
		606.64	5.02	2.6726E+000		-2.2185E-001
		635.90	11.32	8.3240E-001		5.9146E-001
	Cs-134	563.23	8.38	1.2082E+000	1.13E-001	2.2742E-001
		569.32	15.43	6.2161E-001		-1.5034E-001
		604.70	97.60	1.2833E-001		1.5740E-002
		795.84	85.40	1.1275E-001		4.5314E-002
		801.93	8.73	1.0213E+000		-2.3356E-001
	Cs-137	661.65	85.12	1.2381E-001	1.24E-001	6.9309E-002
	Eu-152	121.78	28.40	7.1683E-001	3.11E-001	-6.3317E-002
		244.69	7.49	1.7876E+000		2.2497E-002
		344.27	26.50	4.4499E-001		1.9708E-001
		778.89	12.74	7.9702E-001		6.1852E-003
		867.32	4.16	2.1842E+000		6.8146E-001
		964.01	14.40	8.4696E-001		1.4686E-001
		1085.78	10.00	8.8106E-001		1.0052E-001
		1112.02	13.30	7.0157E-001		-4.1476E-001
		1407.95	20.70	3.1123E-001		9.2278E-002
	Eu-154	123.07	40.50	5.0046E-001	2.70E-001	3.4581E-001
		247.94	6.60	1.9173E+000		1.4524E-001
		591.81	4.83	2.0359E+000		-5.2418E-001
		723.30	19.70	5.4573E-001		-6.2339E-002
		756.87	4.33	2.0425E+000		-1.4366E-001
		873.19	11.50	7.9916E-001		-2.7460E-001
		996.32	10.30	8.7100E-001		-1.1879E+000
		1004.76	17.90	5.3339E-001		8.4283E-002
		1274.45	35.50	2.7021E-001		1.3342E-001
+	Eu-155	86.54*	30.90	6.4840E-001	6.48E-001	4.4023E-001
		105.31	20.70	1.1813E+000		-3.9083E-001
	Am-241	59.54	35.90	1.3212E+000	1.32E+000	-1.6153E-001
	Cm-243	228.19	10.56	1.2529E+000	8.83E-001	4.4290E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.8320E-001	8.83E-001	-5.8004E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 8:26:36 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-141-F-
Sample Title: OOL-09-01-141-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 8:16:34 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-141-F-
Title: OOL-09-01-141-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	307	291.99	73.19	0.73	1.28E+002	46.22	6.72E+002
m	2	288-	307	300.36	75.28	0.73	3.12E+002	57.78	7.63E+002
	3	329-	343	338.62	84.85	0.66	1.71E+002	105.88	9.54E+002
	4	947-	960	953.52	238.56	1.52	1.68E+002	55.73	2.31E+002
	5	1174-	1189	1179.97	295.16	0.95	5.19E+001	48.72	1.88E+002
	6	1346-	1362	1352.05	338.18	0.90	4.92E+001	43.73	1.43E+002
	7	1402-	1413	1406.34	351.75	1.25	1.24E+002	37.42	9.47E+001
	8	2035-	2048	2042.03	510.66	0.90	6.83E+001	35.71	9.37E+001
	9	2323-	2340	2331.14	582.93	1.36	1.22E+002	36.25	6.75E+001
	10	2423-	2443	2435.08	608.91	0.85	1.24E+002	41.03	8.65E+001
	11	2637-	2653	2645.11	661.41	0.58	6.85E+001	30.37	5.35E+001
	12	3635-	3654	3642.63	910.76	1.31	9.47E+001	27.22	2.83E+001
	13	3867-	3881	3873.59	968.50	1.04	7.03E+001	24.68	3.07E+001
	14	4470-	4486	4478.60	1119.73	1.75	3.11E+001	22.97	3.39E+001
	15	5829-	5854	5842.33	1460.63	1.93	8.25E+002	57.71	9.79E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.996	511.00*		100.00	1.16561E-001	6.29670E-002
K-40	0.999	1460.81*		10.67	1.75026E+001	1.87252E+000
Cs-137	0.998	661.65*		85.12	1.49175E-001	6.84384E-002
TL-208	0.752	277.35		6.80		
		510.84*		21.60	5.39635E-001	2.94826E-001
		583.14*		84.20	2.56950E-001	8.36365E-002
		860.37		12.46		
Pb-212	0.580	74.81*	@	10.70	1.00733E+001	2.71498E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.24863E-001	1.92309E-001
Bi-214	0.702	609.31*		46.30	4.85419E-001	1.70823E-001
		1120.29*		15.10	4.27277E-001	3.19118E-001
		1764.49		15.80		
PB-214	0.619	74.82*	@	6.21	1.73566E+001	4.84469E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.96049E-001	3.77534E-001
		351.92*		37.20	5.10438E-001	1.75792E-001
Ac-228	0.995	338.32*		11.40	6.53323E-001	5.89560E-001
		911.07*		27.70	6.80117E-001	2.10588E-001
		969.11*		16.60	8.53133E-001	3.12666E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.996	6.105994E-002	6.548231E-002
K-40		0.999	1.750260E+001	1.872521E+000
Cs-137		0.998	1.491748E-001	6.843844E-002
TL-208		0.752	2.569503E-001	8.321622E-002
Pb-212	@	0.580	5.248631E-001	1.923088E-001
Bi-214		0.702	4.724698E-001	1.506031E-001
PB-214	@	0.619	4.900561E-001	1.593627E-001
Ac-228		0.995	7.275916E-001	1.674703E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.19	2.1406E-001	35.98
3	84.85	2.8573E-001	61.76

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0178E-001	8.22E-002	-1.1201E-001
		1332.49	100.00	8.2161E-002		9.3923E-002
	Nb-94	702.63	100.00	1.1287E-001	1.07E-001	1.9890E-002
		871.10	100.00	1.0659E-001		-7.4693E-002
	Ag-108m	79.20	7.10	9.1786E+000	1.29E-001	-3.3616E+000
		433.93	89.90	1.2870E-001		-2.2526E-002
		614.37	90.40	1.5771E-001		-1.7856E-002
		722.95	90.50	1.3090E-001		1.2134E-001
	Sb-125	176.33	6.89	2.6829E+000	4.07E-001	-3.2774E-001
		427.89	29.33	4.0717E-001		-3.7956E-002
		463.38	10.35	1.2052E+000		4.3646E-001
		600.56	17.80	6.0476E-001		-5.5493E-001
		606.64	5.02	2.9487E+000		5.8232E+000
		635.90	11.32	1.0191E+000		9.3952E-001
	Cs-134	563.23	8.38	1.3615E+000	1.31E-001	6.6593E-002
		569.32	15.43	7.6362E-001		2.9508E-001
		604.70	97.60	1.4871E-001		-6.6990E-002
		795.84	85.40	1.3107E-001		1.1353E-001
		801.93	8.73	1.2219E+000		-1.1268E+000
+	Cs-137	661.65*	85.12	9.9760E-002	9.98E-002	1.4917E-001
	Eu-152	121.78	28.40	9.6051E-001	3.86E-001	9.6993E-001
		244.69	7.49	2.1097E+000		-1.7238E+000
		344.27	26.50	5.0253E-001		-2.7296E-001
		778.89	12.74	9.2044E-001		6.4124E-002
		867.32	4.16	2.6478E+000		-3.5465E+000
		964.01	14.40	9.5539E-001		-1.8523E-001
		1085.78	10.00	9.7176E-001		6.7787E-001
		1112.02	13.30	7.8562E-001		3.4575E-001
		1407.95	20.70	3.8642E-001		3.2009E-001
	Eu-154	123.07	40.50	6.6126E-001	2.73E-001	1.0977E-001
		247.94	6.60	2.3575E+000		-1.4033E+000
		591.81	4.83	2.3210E+000		-1.1920E+000
		723.30	19.70	5.9968E-001		6.1147E-001
		756.87	4.33	2.3864E+000		-8.2006E-001
		873.19	11.50	9.5225E-001		4.6283E-001
		996.32	10.30	1.0223E+000		1.9679E-001
		1004.76	17.90	5.4513E-001		-3.5332E-001
		1274.45	35.50	2.7251E-001		-1.6424E-001
	Eu-155	86.54	30.90	1.6185E+000	1.62E+000	-7.3388E-001
		105.31	20.70	1.6243E+000		-1.2827E+000
	Am-241	59.54	35.90	3.6034E+000	3.60E+000	2.7183E-001
	Cm-243	228.19	10.56	1.4979E+000	1.11E+000	-1.2269E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1087E+000	1.11E+000	9.8599E-003

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 4:56:27 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-142-F-
Sample Title: OOL-09-01-142-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 4:46:24 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-142-F-
Title: OOL-09-01-142-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	291.57	73.09	1.02	1.73E+002	49.04	9.07E+002
m	2	284-	305	300.10	75.22	1.02	4.14E+002	60.89	9.43E+002
M	3	330-	360	339.83	85.15	1.37	2.10E+002	53.26	1.20E+003
m	4	330-	360	350.89	87.92	1.38	1.62E+002	50.18	1.25E+003
	5	946-	959	954.10	238.70	0.99	2.60E+002	63.65	2.89E+002
	6	1175-	1187	1179.37	295.01	0.97	7.43E+001	41.48	1.38E+002
	7	1344-	1358	1352.56	338.31	1.00	4.50E+001	45.47	1.71E+002
	8	1399-	1413	1405.95	351.65	0.96	1.09E+002	42.77	1.28E+002
	9	2032-	2052	2041.78	510.59	0.72	1.10E+002	48.53	1.37E+002
	10	2323-	2339	2330.74	582.82	0.48	1.43E+002	40.40	8.95E+001
	11	2428-	2443	2435.39	608.98	1.01	1.54E+002	36.09	6.15E+001
	12	2901-	2915	2907.60	727.02	0.41	5.80E+001	23.07	2.80E+001
	13	3633-	3653	3642.87	910.82	0.74	1.52E+002	31.83	2.97E+001
M	14	3851-	3882	3856.41	964.20	1.74	1.52E+001	12.12	2.53E+001
m	15	3851-	3882	3872.81	968.30	1.74	7.78E+001	20.91	3.78E+001
	16	4471-	4487	4479.57	1119.97	0.42	6.38E+001	27.04	4.02E+001
	17	5831-	5855	5842.09	1460.57	1.71	8.38E+002	59.52	2.09E+001
	18	7049-	7064	7057.20	1764.31	0.37	5.13E+001	15.47	3.74E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.995	511.00*	100.00	1.86998E-001	8.66298E-002
K-40	0.998	1460.81*	10.67	1.77749E+001	1.91438E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	8.65733E-001	4.07248E-001
		583.14*	84.20	3.03396E-001	9.41181E-002
		860.37	12.46		
Bi-212	0.999	727.17*	11.80	9.31114E-001	3.86032E-001
Pb-212	0.725	74.81* @	10.70	1.33710E+001	3.27790E+000
		77.11 @	18.00		
		87.30* @	8.00	4.35405E+000	1.59564E+000
		238.63*	44.60	8.11964E-001	2.35853E-001
Bi-214	0.997	609.31*	46.30	6.02399E-001	1.59126E-001
		1120.29*	15.10	8.77460E-001	3.83459E-001
		1764.49*	15.80	7.99318E-001	2.54050E-001
PB-214	0.696	74.82* @	6.21	2.30387E+001	5.89033E+000
		77.11 @	10.50		
		87.30* @	4.67	7.45876E+000	2.79091E+000
		241.98	7.49		
		295.21*	19.20	5.66916E-001	3.30414E-001
		351.92*	37.20	4.45619E-001	1.90794E-001
Ac-228	0.993	338.32*	11.40	5.97765E-001	6.10910E-001
		911.07*	27.70	1.09355E+000	2.60945E-001
		969.11*	16.60	9.44873E-001	2.72483E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.995	1.214649E-001	8.895761E-002
K-40		0.998	1.777494E+001	1.914385E+000
TL-208		0.750	3.033959E-001	9.359728E-002
Bi-212		0.999	9.311145E-001	3.860315E-001
Pb-212	@	0.725	8.119636E-001	2.358531E-001
Bi-214		0.997	6.820548E-001	1.272186E-001
PB-214	@	0.696	4.759504E-001	1.652264E-001
Ac-228		0.993	9.855250E-001	1.800882E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.09	2.8828E-001	28.35
M 3	85.15	3.4934E-001	25.41
M 14	964.20	2.5321E-002	79.78

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1122E-001	8.28E-002	7.0501E-002
	1332.49	100.00	8.2827E-002		7.1477E-002
Nb-94	702.63	100.00	1.0816E-001	1.07E-001	4.7307E-005
	871.10	100.00	1.0741E-001		-8.4984E-002
Ag-108m	79.20	7.10	9.2876E+000	1.35E-001	-9.0731E+000
	433.93	89.90	1.4036E-001		5.3196E-002
	614.37	90.40	1.6899E-001		-2.4207E-002
	722.95	90.50	1.3462E-001		-2.4342E-002
Sb-125	176.33	6.89	2.6815E+000	4.13E-001	1.3230E+000
	427.89	29.33	4.1297E-001		6.8012E-003
	463.38	10.35	1.1714E+000		1.0412E+000
	600.56	17.80	6.4718E-001		-3.3651E-001
	606.64	5.02	3.1107E+000		6.8260E+000
	635.90	11.32	9.4679E-001		-5.8017E-001
Cs-134	563.23	8.38	1.4638E+000	1.36E-001	-1.7240E-001
	569.32	15.43	7.6749E-001		-8.3355E-001
	604.70	97.60	1.5816E-001		-5.3281E-002
	795.84	85.40	1.3628E-001		-6.9543E-002
	801.93	8.73	1.2800E+000		-6.9845E-001
Cs-137	661.65	85.12	1.3648E-001	1.36E-001	-9.7076E-003
Eu-152	121.78	28.40	9.7018E-001	3.42E-001	1.6776E-001
	244.69	7.49	2.2395E+000		-3.0006E+000
	344.27	26.50	5.2818E-001		-4.3067E-001
	778.89	12.74	8.4124E-001		-5.2175E-001
	867.32	4.16	2.4786E+000		-5.2134E+000
	964.01	14.40	9.5539E-001		1.6824E-001
	1085.78	10.00	9.2529E-001		6.8199E-002
	1112.02	13.30	7.5674E-001		-4.2945E-001
	1407.95	20.70	3.4157E-001		2.9504E-002
Eu-154	123.07	40.50	6.7008E-001	2.61E-001	2.9690E-002
	247.94	6.60	2.3829E+000		-3.3449E+000
	591.81	4.83	2.4128E+000		-1.3336E+000
	723.30	19.70	6.2186E-001		8.5559E-003
	756.87	4.33	2.5217E+000		-1.0303E+000
	873.19	11.50	9.6272E-001		-3.8452E-001
	996.32	10.30	1.0394E+000		1.8101E-001
	1004.76	17.90	5.7665E-001		2.1950E-001
	1274.45	35.50	2.6147E-001		-3.4191E-002
Eu-155	86.54	30.90	1.6450E+000	1.65E+000	2.8779E+000
	105.31	20.70	1.6516E+000		3.4381E-001
Am-241	59.54	35.90	3.5928E+000	3.59E+000	8.2609E-001
Cm-243	228.19	10.56	1.6186E+000	1.11E+000	-1.8242E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1076E+000	1.11E+000	6.3621E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 4:40:51 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-143-F-
Sample Title: OOL-09-01-143-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 4:30:48 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-143-F-
Title: OOL-09-01-143-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	309	291.39	73.04	1.14	1.88E+002	49.11	8.80E+002
m	2	284-	309	300.42	75.30	1.14	4.11E+002	58.43	1.02E+003
	3	332-	353	338.84	84.91	1.47	1.54E+002	143.48	1.38E+003
	4	948-	962	953.96	238.67	0.92	2.30E+002	61.02	2.55E+002
	5	1174-	1188	1180.03	295.18	1.07	7.21E+001	44.44	1.53E+002
	6	1401-	1414	1406.48	351.78	1.05	1.16E+002	39.11	1.02E+002
	7	2032-	2050	2042.10	510.67	1.01	6.81E+001	40.37	1.05E+002
	8	2324-	2339	2331.37	582.98	1.20	1.24E+002	35.56	6.80E+001
	9	2427-	2443	2435.96	609.13	1.32	1.26E+002	35.01	6.16E+001
	10	3066-	3077	3071.76	768.06	1.00	2.37E+001	18.90	2.73E+001
	11	3431-	3445	3438.27	859.68	0.72	3.86E+001	21.11	2.64E+001
	12	3634-	3652	3642.88	910.82	1.07	1.24E+002	32.75	4.54E+001
	13	3866-	3882	3873.61	968.50	1.29	6.28E+001	25.23	3.22E+001
	14	5829-	5855	5842.60	1460.69	1.92	8.20E+002	57.62	1.02E+001
	15	7049-	7064	7057.40	1764.36	1.50	3.70E+001	16.16	1.00E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	1.73893E+001	1.86440E+000
TL-208	0.902	277.35	6.80		
		510.84*	21.60	5.38058E-001	3.30199E-001
		583.14*	84.20	2.62246E-001	8.25988E-002
		860.37*	12.46	6.07929E-001	3.41018E-001
Pb-212	0.580	74.81* @	10.70	1.32409E+001	3.20658E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.17362E-001	2.21082E-001
Bi-214	0.694	609.31*	46.30	4.92837E-001	1.49437E-001
		1120.29	15.10		
		1764.49*	15.80	5.76425E-001	2.58517E-001
PB-214	0.619	74.82* @	6.21	2.28144E+001	5.76791E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.49776E-001	3.51355E-001
		351.92*	37.20	4.75787E-001	1.79244E-001
Ac-228	0.630	338.32	11.40		
		911.07*	27.70	8.87600E-001	2.56424E-001
		969.11*	16.60	7.62182E-001	3.16460E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
X	ANN		0.997		
	K-40		1.000	1.738928E+001	1.864395E+000
	TL-208		0.902	2.957255E-001	7.800533E-002
	Pb-212	@	0.580	7.173616E-001	2.210816E-001
	Bi-214		0.694	5.137721E-001	1.293769E-001
	PB-214	@	0.619	4.910663E-001	1.596675E-001
	Ac-228		0.630	8.378919E-001	1.992298E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.04	3.1348E-001	26.11
3	84.91	2.5728E-001	92.95
10	768.06	3.9510E-002	79.74

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0848E-001	8.08E-002	-1.3822E-001
	1332.49	100.00	8.0810E-002		1.3740E-002
Nb-94	702.63	100.00	1.0741E-001	9.75E-002	5.8718E-002
	871.10	100.00	9.7461E-002		-5.0378E-003
Ag-108m	79.20	7.10	8.9861E+000	1.27E-001	-2.8363E+000
	433.93	89.90	1.3480E-001		2.6135E-002
	614.37	90.40	1.5570E-001		-1.8011E-002
	722.95	90.50	1.2746E-001		9.9822E-002
Sb-125	176.33	6.89	2.6479E+000	4.25E-001	4.6975E-001
	427.89	29.33	4.2513E-001		2.6118E-001
	463.38	10.35	1.1516E+000		-5.3387E-001
	600.56	17.80	6.7163E-001		5.4188E-001
	606.64	5.02	2.9682E+000		4.5352E+000
	635.90	11.32	1.0336E+000		-2.4985E-002
Cs-134	563.23	8.38	1.4672E+000	1.33E-001	-9.4273E-001
	569.32	15.43	8.2858E-001		3.9719E-001
	604.70	97.60	1.5670E-001		4.4356E-002
	795.84	85.40	1.3326E-001		6.7037E-002
	801.93	8.73	1.2712E+000		-1.6320E+000
Cs-137	661.65	85.12	1.2710E-001	1.27E-001	4.3568E-003
Eu-152	121.78	28.40	9.3766E-001	3.97E-001	-1.9188E-001
	244.69	7.49	2.1316E+000		0.0000E+000
	344.27	26.50	5.0979E-001		-8.8172E-001
	778.89	12.74	7.8707E-001		-5.9424E-001
	867.32	4.16	2.3732E+000		-7.8243E-001
	964.01	14.40	9.0074E-001		1.2988E-001
	1085.78	10.00	9.9167E-001		-2.6881E-001
	1112.02	13.30	7.1501E-001		-1.4411E+000
	1407.95	20.70	3.9678E-001		2.0193E-001
Eu-154	123.07	40.50	6.4759E-001	2.66E-001	-4.2134E-001
	247.94	6.60	2.4018E+000		8.5835E-001
	591.81	4.83	2.4636E+000		1.3838E+000
	723.30	19.70	5.8203E-001		2.1908E-001
	756.87	4.33	2.6247E+000		-2.7570E+000
	873.19	11.50	8.7907E-001		4.5060E-001
	996.32	10.30	9.9149E-001		5.9037E-002
	1004.76	17.90	5.4513E-001		-8.9287E-002
	1274.45	35.50	2.6626E-001		-2.0885E-001
Eu-155	86.54	30.90	1.5869E+000	1.59E+000	1.0447E+000
	105.31	20.70	1.6502E+000		-2.7619E-001
Am-241	59.54	35.90	3.6211E+000	3.62E+000	1.3931E+000
Cm-243	228.19	10.56	1.4991E+000	1.06E+000	-5.8965E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0597E+000	1.06E+000	-2.1680E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 4:23:34 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-144-F-
Sample Title: OOL-09-01-144-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 4:13:30 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-144-F-
Title: OOL-09-01-144-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	281-	307	291.03	72.95	1.03	1.68E+002	50.02	1.02E+003
m	2	281-	307	300.11	75.22	1.03	3.66E+002	61.20	1.13E+003
	3	330-	345	339.38	85.04	0.79	2.02E+002	113.02	1.03E+003
	4	946-	961	953.96	238.67	0.94	2.08E+002	71.80	3.74E+002
	5	1176-	1185	1180.50	295.30	1.06	5.03E+001	36.17	1.28E+002
	6	1343-	1358	1353.28	338.49	0.69	5.51E+001	45.60	1.62E+002
	7	1398-	1413	1406.80	351.86	1.38	1.74E+002	45.29	1.20E+002
	8	2029-	2052	2041.61	510.55	0.63	1.60E+002	47.72	1.08E+002
	9	2323-	2339	2331.23	582.95	0.39	1.45E+002	39.57	8.34E+001
	10	2426-	2443	2435.41	608.99	1.14	1.60E+002	37.45	6.30E+001
	11	3635-	3650	3643.25	910.92	1.35	1.28E+002	30.86	3.98E+001
	12	3866-	3880	3873.41	968.45	0.39	6.28E+001	26.85	4.32E+001
	13	4389-	4400	4394.97	1098.83	1.06	2.66E+001	14.30	1.04E+001
	14	4472-	4487	4478.68	1119.75	1.24	5.69E+001	20.72	1.81E+001
	15	5829-	5855	5842.35	1460.63	2.01	8.84E+002	61.52	2.34E+001
	16	7051-	7066	7058.41	1764.61	1.70	4.62E+001	14.05	1.82E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.993	511.00*		100.00	2.73091E-001	8.94673E-002
K-40	0.999	1460.81*		10.67	1.87419E+001	2.00132E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	1.26431E+000	4.26876E-001
		583.14*		84.20	3.05711E-001	9.26751E-002
		860.37		12.46		
Pb-212	0.580	74.81*	@	10.70	1.18237E+001	3.04726E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.48493E-001	2.45938E-001
Bi-214	0.996	609.31*		46.30	6.23865E-001	1.65033E-001
		1120.29*		15.10	7.82246E-001	2.96818E-001
		1764.49*		15.80	7.20144E-001	2.30673E-001
PB-214	0.619	74.82*	@	6.21	2.03726E+001	5.45482E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.83636E-001	2.83361E-001
		351.92*		37.20	7.15094E-001	2.21116E-001
Ac-228	0.995	338.32*		11.40	7.31410E-001	6.16246E-001
		911.07*		27.70	9.20424E-001	2.45633E-001
		969.11*		16.60	7.61837E-001	3.35575E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.993	2.070573E-001	9.165417E-002
K-40		0.999	1.874193E+001	2.001323E+000
TL-208		0.752	3.057108E-001	9.213800E-002
Pb-212	@	0.580	6.484932E-001	2.459381E-001
Bi-214		0.996	6.778152E-001	1.222968E-001
PB-214	@	0.619	5.896483E-001	1.743223E-001
Ac-228		0.995	8.525645E-001	1.886881E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.95	2.7934E-001	29.85
3	85.04	3.3669E-001	55.95
13	1098.83	4.4268E-002	53.84

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2317E-001	8.35E-002	1.7114E-002
	1332.49	100.00	8.3487E-002		-3.8344E-002
Nb-94	702.63	100.00	1.1907E-001	1.10E-001	-2.3786E-002
	871.10	100.00	1.1025E-001		-1.6409E-002
Ag-108m	79.20	7.10	9.4458E+000	1.39E-001	-3.6320E+000
	433.93	89.90	1.3853E-001		-1.1631E-001
	614.37	90.40	1.5998E-001		-1.0338E-001
	722.95	90.50	1.4140E-001		1.4561E-001
Sb-125	176.33	6.89	2.7160E+000	4.35E-001	-3.0489E+000
	427.89	29.33	4.3459E-001		-7.8626E-002
	463.38	10.35	1.2288E+000		4.5371E-001
	600.56	17.80	6.5602E-001		-2.8689E-001
	606.64	5.02	3.0921E+000		4.2166E+000
	635.90	11.32	9.8667E-001		-4.6522E-001
Cs-134	563.23	8.38	1.4048E+000	1.42E-001	-2.4645E-001
	569.32	15.43	8.1420E-001		-5.4720E-001
	604.70	97.60	1.6220E-001		-4.4852E-003
	795.84	85.40	1.4210E-001		9.9925E-002
	801.93	8.73	1.2886E+000		-1.4550E+000
Cs-137	661.65	85.12	1.5451E-001	1.55E-001	1.2311E-001
Eu-152	121.78	28.40	9.7947E-001	4.54E-001	-2.4486E-001
	244.69	7.49	2.3375E+000		-4.3122E-001
	344.27	26.50	5.3781E-001		1.2030E-001
	778.89	12.74	8.6251E-001		-6.0352E-002
	867.32	4.16	2.6478E+000		-1.6276E+000
	964.01	14.40	9.5999E-001		-2.2114E-001
	1085.78	10.00	1.0720E+000		6.1585E-002
	1112.02	13.30	8.2696E-001		4.9401E-001
	1407.95	20.70	4.5366E-001		-1.1784E-001
Eu-154	123.07	40.50	6.8251E-001	2.86E-001	-1.6001E-001
	247.94	6.60	2.5595E+000		-1.8656E+000
	591.81	4.83	2.4447E+000		6.2477E-002
	723.30	19.70	6.5761E-001		8.4133E-001
	756.87	4.33	2.7398E+000		-3.1731E-001
	873.19	11.50	9.7650E-001		1.3625E-001
	996.32	10.30	1.0309E+000		-1.4112E-001
	1004.76	17.90	6.0159E-001		9.0677E-002
	1274.45	35.50	2.8604E-001		9.3946E-002
Eu-155	86.54	30.90	1.6598E+000	1.66E+000	5.5811E-001
	105.31	20.70	1.6983E+000		-4.3568E-001
Am-241	59.54	35.90	3.6093E+000	3.61E+000	3.9268E-001
Cm-243	228.19	10.56	1.6677E+000	1.18E+000	-7.1547E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1817E+000	1.18E+000	1.3487E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 4:06:06 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-145-F-
Sample Title: OOL-09-01-145-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 3:56:03 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-145-F-
Title: OOL-09-01-145-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	291.19	72.99	0.88	1.40E+002	47.15	7.24E+002
m	2	286-	306	300.02	75.20	0.88	2.82E+002	57.23	8.85E+002
	3	946-	961	953.92	238.66	0.83	2.58E+002	66.95	3.01E+002
	4	1171-	1186	1181.18	295.47	0.39	6.83E+001	49.26	1.88E+002
	5	1347-	1357	1351.72	338.10	0.59	3.14E+001	34.74	1.18E+002
	6	1401-	1412	1406.61	351.82	1.07	1.20E+002	38.29	1.04E+002
	7	2034-	2052	2041.23	510.46	0.83	9.35E+001	41.51	1.05E+002
	8	2323-	2339	2330.57	582.78	1.20	1.19E+002	38.88	8.61E+001
	9	2428-	2442	2435.57	609.03	1.20	1.31E+002	33.91	5.83E+001
	10	2957-	2969	2962.89	740.85	0.74	2.19E+001	19.34	2.81E+001
	11	3433-	3445	3439.02	859.86	1.07	2.32E+001	20.00	3.08E+001
	12	3635-	3652	3642.90	910.83	1.36	1.04E+002	28.65	3.35E+001
	13	3866-	3883	3873.39	968.44	1.25	6.44E+001	26.77	3.76E+001
	14	4473-	4485	4478.81	1119.78	0.68	4.72E+001	20.90	2.48E+001
	15	5830-	5853	5842.63	1460.70	1.72	8.20E+002	59.28	2.38E+001
	16	7053-	7066	7059.14	1764.80	0.33	3.96E+001	14.05	4.38E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.990	511.00*		100.00	1.59578E-001	7.40748E-002
K-40	1.000	1460.81*		10.67	1.73974E+001	1.88810E+000
TL-208	0.899	277.35		6.80		
		510.84*		21.60	7.38787E-001	3.48206E-001
		583.14*		84.20	2.51424E-001	8.84990E-002
		860.37*		12.46	3.66448E-001	3.18498E-001
Pb-212	0.580	74.81*	@	10.70	9.12535E+000	2.57482E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.04762E-001	2.43967E-001
Bi-214	0.996	609.31*		46.30	5.09596E-001	1.46400E-001
		1120.29*		15.10	6.49316E-001	2.95619E-001
		1764.49*		15.80	6.17833E-001	2.27570E-001
PB-214	0.619	74.82*	@	6.21	1.57232E+001	4.58095E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.20872E-001	3.85896E-001
		351.92*		37.20	4.93035E-001	1.77556E-001
Ac-228	0.994	338.32*		11.40	4.16609E-001	4.65722E-001
		911.07*		27.70	7.50348E-001	2.23185E-001
		969.11*		16.60	7.81776E-001	3.35110E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.990	1.035013E-001	7.631225E-002
K-40		1.000	1.739738E+001	1.888104E+000
TL-208		0.899	2.596141E-001	8.492397E-002
Pb-212	@	0.580	8.047624E-001	2.439672E-001
Bi-214		0.996	5.572493E-001	1.136588E-001
PB-214	@	0.619	4.978982E-001	1.613006E-001
Ac-228		0.994	7.128723E-001	1.725396E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.99	2.3383E-001	33.61
10	740.85	3.6542E-002	88.22

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1122E-001	8.15E-002	5.8465E-002
	1332.49	100.00	8.1488E-002		1.6374E-002
Nb-94	702.63	100.00	1.1840E-001	1.07E-001	2.0579E-002
	871.10	100.00	1.0659E-001		-4.5720E-002
Ag-108m	79.20	7.10	9.2034E+000	1.40E-001	3.5143E-001
	433.93	89.90	1.4036E-001		2.7226E-002
	614.37	90.40	1.5771E-001		-6.3626E-002
	722.95	90.50	1.4484E-001		8.4618E-002
Sb-125	176.33	6.89	2.6582E+000	4.35E-001	-1.5076E+000
	427.89	29.33	4.3459E-001		-3.9487E-002
	463.38	10.35	1.1860E+000		-9.3523E-001
	600.56	17.80	6.7505E-001		-5.5627E-001
	606.64	5.02	3.0451E+000		5.4504E+000
	635.90	11.32	1.0278E+000		5.7695E-002
Cs-134	563.23	8.38	1.4154E+000	1.31E-001	1.5782E-001
	569.32	15.43	8.1601E-001		2.8044E-001
	604.70	97.60	1.5670E-001		5.6288E-002
	795.84	85.40	1.3062E-001		8.2163E-002
	801.93	8.73	1.2668E+000		-4.9623E-001
Cs-137	661.65	85.12	1.4225E-001	1.42E-001	-2.1814E-003
Eu-152	121.78	28.40	9.5593E-001	4.45E-001	-6.3750E-002
	244.69	7.49	2.1765E+000		-9.1025E-001
	344.27	26.50	5.2887E-001		5.5218E-002
	778.89	12.74	8.8907E-001		-1.0184E-001
	867.32	4.16	2.4265E+000		-1.8927E-001
	964.01	14.40	8.9087E-001		-9.4454E-002
	1085.78	10.00	1.0160E+000		-8.4587E-001
	1112.02	13.30	8.4683E-001		-8.4494E-001
	1407.95	20.70	4.4473E-001		4.6405E-002
Eu-154	123.07	40.50	6.6207E-001	2.74E-001	-4.4265E-002
	247.94	6.60	2.4226E+000		-4.7274E-001
	591.81	4.83	2.6857E+000		1.0669E+000
	723.30	19.70	6.6545E-001		5.7416E-001
	756.87	4.33	2.4324E+000		-5.2822E-001
	873.19	11.50	9.6964E-001		-6.9795E-001
	996.32	10.30	1.0728E+000		8.0486E-001
	1004.76	17.90	5.8425E-001		-3.9179E-001
	1274.45	35.50	2.7405E-001		-7.5898E-002
Eu-155	86.54	30.90	1.6290E+000	1.63E+000	2.2827E+000
	105.31	20.70	1.6926E+000		-4.1993E-001
Am-241	59.54	35.90	3.6011E+000	3.60E+000	1.4372E-001
Cm-243	228.19	10.56	1.5606E+000	1.07E+000	-7.2249E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0741E+000	1.07E+000	-6.1955E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 3:27:02 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-146-F-
Sample Title: OOL-09-01-146-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 3:17:00 PM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-146-F-
Title: OOL-09-01-146-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	308	291.50	72.70	1.36	4.50E+002	76.72	2.23E+003
m	2	283-	308	300.40	74.93	1.37	7.73E+002	84.97	2.78E+003
	3	332-	345	339.87	84.80	1.09	1.19E+002	139.81	1.79E+003
	4	949-	963	954.25	238.44	1.07	1.48E+002	67.55	3.60E+002
	5	1400-	1416	1407.12	351.69	1.85	1.43E+002	47.25	1.40E+002
	6	2323-	2342	2331.93	582.97	1.36	1.32E+002	40.12	8.19E+001
	7	2426-	2444	2436.87	609.21	1.04	9.29E+001	42.26	1.10E+002
	8	3633-	3653	3643.70	911.01	0.41	1.37E+002	32.78	3.94E+001
	9	3869-	3884	3875.42	968.95	0.48	4.84E+001	26.94	4.66E+001
	10	5830-	5857	5843.93	1461.23	2.14	9.38E+002	63.49	2.46E+001
	11	6365-	6378	6371.22	1593.09	0.28	1.43E+001	11.29	6.74E+000
	12	6916-	6929	6922.21	1730.88	0.92	1.11E+001	8.66	2.89E+000
	13	7052-	7066	7059.83	1765.30	1.26	3.59E+001	16.28	1.11E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.994	1460.81*	10.67	1.57409E+001	1.66074E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.23514E-001	7.38612E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.10606E+001	2.48537E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.60605E-001	1.73657E-001
Bi-214	0.694	609.31*	46.30	2.90216E-001	1.36723E-001
		1120.29	15.10		
		1764.49*	15.80	4.21424E-001	1.95848E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	7.81659E-001	2.08039E-001
		969.11*	16.60	4.70307E-001	2.66473E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.994	1.574091E+001	1.660738E+000
TL-208		0.470	2.235136E-001	7.386118E-002
Pb-212	@	0.520	3.606049E-001	1.736574E-001
Bi-214		0.694	3.332080E-001	1.121075E-001
Ac-228		0.633	6.637520E-001	1.639826E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.70	7.4972E-001	17.05
3	84.80	1.9833E-001	117.49
5	351.69	2.3845E-001	33.02
11	1593.09	2.3770E-002	79.14
12	1730.88	1.8512E-002	78.00

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.5467E-002	7.07E-002	3.7802E-002
	1332.49	100.00	7.0704E-002		7.5751E-002
Nb-94	702.63	100.00	9.4208E-002	7.94E-002	-5.0015E-002
	871.10	100.00	7.9416E-002		-6.4160E-002
Ag-108m	79.20	7.10	5.2761E+000	1.07E-001	-3.7547E+000
	433.93	89.90	1.1152E-001		-7.2825E-002
	614.37	90.40	1.2627E-001		4.2008E-002
	722.95	90.50	1.0678E-001		-3.4358E-002
Sb-125	176.33	6.89	2.2380E+000	3.52E-001	9.4294E-002
	427.89	29.33	3.5208E-001		-1.4403E-001
	463.38	10.35	1.0332E+000		1.0516E+000
	600.56	17.80	5.3760E-001		1.9316E-001
	606.64	5.02	2.4603E+000		3.0272E+000
	635.90	11.32	7.9508E-001		-4.5338E-001
Cs-134	563.23	8.38	1.1571E+000	1.13E-001	-1.0978E+000
	569.32	15.43	6.4549E-001		1.0458E-001
	604.70	97.60	1.1884E-001		3.3513E-002
	795.84	85.40	1.1275E-001		1.5513E-001
	801.93	8.73	1.0248E+000		3.0502E-001
Cs-137	661.65	85.12	1.2949E-001	1.29E-001	1.4669E-001
Eu-152	121.78	28.40	7.2759E-001	2.91E-001	-2.2307E-002
	244.69	7.49	1.8292E+000		2.9807E-002
	344.27	26.50	4.1725E-001		-1.7458E-001
	778.89	12.74	6.3367E-001		3.0116E-002
	867.32	4.16	1.9743E+000		-9.1593E-001
	964.01	14.40	7.6297E-001		-3.1631E-002
	1085.78	10.00	7.8144E-001		-3.1152E-001
	1112.02	13.30	6.2179E-001		-2.6926E-001
	1407.95	20.70	2.9115E-001		1.6620E-001
Eu-154	123.07	40.50	5.0613E-001	2.23E-001	1.8937E-001
	247.94	6.60	2.0243E+000		-1.5396E+000
	591.81	4.83	2.0016E+000		1.5180E+000
	723.30	19.70	4.9598E-001		6.3334E-002
	756.87	4.33	2.0902E+000		-5.2126E-001
	873.19	11.50	6.9090E-001		-3.0465E-001
	996.32	10.30	8.2402E-001		-1.5006E-001
	1004.76	17.90	4.7332E-001		7.3219E-003
	1274.45	35.50	2.2347E-001		-1.6399E-001
Eu-155	86.54	30.90	1.0952E+000	1.10E+000	6.2054E-001
	105.31	20.70	1.2437E+000		1.1211E-001
Am-241	59.54	35.90	1.5212E+000	1.52E+000	1.2564E+000
Cm-243	228.19	10.56	1.2456E+000	9.16E-001	-6.5194E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.1626E-001	9.16E-001	2.2361E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 4:54:48 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-147-F-
Sample Title: OOL-09-01-147-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 4:44:46 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-147-F-
Title: OOL-09-01-147-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	291.84	72.79	0.97	4.13E+002	68.88	1.57E+003
m	2	285-	306	300.23	74.89	0.97	7.14E+002	80.00	1.77E+003
	3	332-	346	339.23	84.64	0.90	1.83E+002	141.00	1.73E+003
	4	949-	961	954.78	238.57	0.67	2.10E+002	62.90	3.10E+002
	5	1175-	1188	1181.33	295.23	0.80	8.25E+001	46.92	1.78E+002
	6	1349-	1360	1353.53	338.29	0.71	6.12E+001	38.17	1.26E+002
	7	1401-	1412	1407.83	351.87	1.15	1.41E+002	40.94	1.18E+002
	8	2033-	2054	2044.34	511.05	2.12	1.92E+002	50.79	1.25E+002
	9	2326-	2343	2332.80	583.18	0.82	1.37E+002	41.04	9.24E+001
	10	2427-	2447	2437.38	609.34	1.67	1.74E+002	43.64	8.87E+001
	11	2640-	2654	2646.89	661.73	0.31	3.85E+001	31.59	7.65E+001
	12	3437-	3448	3442.61	860.72	0.62	1.81E+001	21.23	3.79E+001
	13	3635-	3654	3645.54	911.47	1.75	1.30E+002	37.48	6.75E+001
M	14	3855-	3886	3860.95	965.34	1.35	2.71E+001	14.23	3.50E+001
m	15	3855-	3886	3876.98	969.34	1.35	9.65E+001	22.09	4.61E+001
	16	4474-	4491	4482.71	1120.82	0.61	8.09E+001	26.48	3.01E+001
	17	5832-	5860	5846.18	1461.79	1.58	1.06E+003	64.89	7.07E+000
	18	7058-	7073	7064.75	1766.53	0.54	4.72E+001	18.30	1.28E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	1.000	511.00*		100.00	2.61236E-001	7.78045E-002
K-40	0.967	1460.81*		10.67	1.78470E+001	1.80903E+000
Cs-137	1.000	661.65*		85.12	6.71491E-002	5.57043E-002
TL-208	0.902	277.35		6.80		
		510.84*		21.60	1.20942E+000	3.73502E-001
		583.14*		84.20	2.31115E-001	7.56965E-002
		860.37*		12.46	2.27890E-001	2.68226E-001
Pb-212	0.520	74.81*	@	10.70	1.02283E+001	2.30879E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.11233E-001	1.72645E-001
Bi-214	0.969	609.31*		46.30	5.44180E-001	1.51856E-001
		1120.29*		15.10	9.01789E-001	3.10401E-001
		1764.49*		15.80	5.55048E-001	2.22096E-001
PB-214	0.582	74.82*	@	6.21	1.76236E+001	4.17877E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	4.94989E-001	2.93668E-001
		351.92*		37.20	4.58637E-001	1.53808E-001
Ac-228	0.997	338.32*		11.40	6.43539E-001	4.13574E-001
		911.07*		27.70	7.41280E-001	2.30869E-001
		969.11*		16.60	9.38788E-001	2.36183E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		1.000	2.113658E-001	7.936546E-002
K-40		0.967	1.784700E+001	1.809034E+000
Cs-137		1.000	6.714914E-002	5.570430E-002
TL-208		0.902	2.308790E-001	7.251384E-002
Pb-212	@	0.520	5.112329E-001	1.726448E-001
Bi-214		0.969	5.973020E-001	1.162344E-001
PB-214	@	0.582	4.664625E-001	1.362511E-001
Ac-228		0.997	8.110873E-001	1.533303E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	6.8825E-001	16.68
3	84.64	3.0569E-001	76.87
M 14	965.34	4.5211E-002	52.45

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	8.7488E-002	7.42E-002	-9.5513E-002
		1332.49	100.00	7.4164E-002		5.7136E-003
	Nb-94	702.63	100.00	9.5019E-002	9.03E-002	3.4291E-002
		871.10	100.00	9.0325E-002		2.2962E-002
	Ag-108m	79.20	7.10	5.0130E+000	1.14E-001	-3.2066E+000
		433.93	89.90	1.1439E-001		-4.2475E-002
		614.37	90.40	1.2876E-001		3.1076E-002
		722.95	90.50	1.1419E-001		6.5985E-002
	Sb-125	176.33	6.89	2.1307E+000	3.58E-001	-6.4749E-001
		427.89	29.33	3.5754E-001		3.3925E-001
		463.38	10.35	9.7883E-001		5.0387E-001
		600.56	17.80	5.2651E-001		-3.9330E-001
		606.64	5.02	2.5705E+000		-5.9504E-001
		635.90	11.32	8.3012E-001		2.1846E-001
	Cs-134	563.23	8.38	1.1516E+000	1.14E-001	1.4646E-001
		569.32	15.43	6.4108E-001		-1.4901E-001
		604.70	97.60	1.2328E-001		4.9600E-003
		795.84	85.40	1.1405E-001		7.0217E-002
		801.93	8.73	1.1078E+000		-5.4905E-001
+	Cs-137	661.65*	85.12	9.0152E-002	9.02E-002	6.7149E-002
	Eu-152	121.78	28.40	7.2185E-001	3.55E-001	-8.6353E-001
		244.69	7.49	1.7941E+000		4.9312E-001
		344.27	26.50	4.0946E-001		9.9218E-004
		778.89	12.74	7.2135E-001		-6.4720E-002
		867.32	4.16	2.3131E+000		6.4919E-001
		964.01	14.40	8.3358E-001		-7.8505E-003
		1085.78	10.00	9.3346E-001		4.7289E-001
		1112.02	13.30	6.7249E-001		-2.8801E-001
		1407.95	20.70	3.5499E-001		2.0415E-001
	Eu-154	123.07	40.50	5.0761E-001	2.17E-001	4.0907E-002
		247.94	6.60	1.9331E+000		1.0367E+000
		591.81	4.83	2.0114E+000		4.8174E-001
		723.30	19.70	5.3343E-001		4.2189E-001
		756.87	4.33	2.1303E+000		4.5009E-001
		873.19	11.50	7.6947E-001		6.5469E-001
		996.32	10.30	7.9585E-001		-5.5080E-001
		1004.76	17.90	4.6929E-001		-1.1982E-001
		1274.45	35.50	2.1720E-001		-2.2720E-001
	Eu-155	86.54	30.90	1.0560E+000	1.06E+000	3.3863E-001
		105.31	20.70	1.2008E+000		2.8270E-001
	Am-241	59.54	35.90	1.3927E+000	1.39E+000	-2.2080E-001
	Cm-243	228.19	10.56	1.2000E+000	8.77E-001	-8.4688E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.7742E-001	8.77E-001	-2.7037E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 4:37:45 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-148-F-
Sample Title: OOL-09-01-148-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 4:27:42 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-148-F-
Title: OOL-09-01-148-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	305	291.91	72.81	0.86	3.99E+002	66.33	1.15E+003
m	2	288-	305	300.33	74.91	0.87	7.79E+002	80.88	1.48E+003
M	3	334-	356	340.00	84.83	1.11	2.68E+002	63.35	1.33E+003
m	4	334-	356	349.71	87.26	1.11	2.07E+002	61.53	1.64E+003
	5	949-	960	954.61	238.53	0.96	3.42E+002	66.86	3.28E+002
	6	1176-	1189	1180.78	295.09	1.19	9.02E+001	52.09	2.23E+002
	7	1345-	1361	1353.40	338.26	0.72	1.07E+002	54.82	2.16E+002
	8	1397-	1414	1407.49	351.78	0.99	1.58E+002	57.08	2.12E+002
	9	2033-	2055	2044.62	511.12	1.42	1.96E+002	57.47	1.70E+002
	10	2326-	2342	2332.49	583.11	0.97	2.09E+002	42.55	8.25E+001
	11	2428-	2444	2437.24	609.30	1.23	1.96E+002	41.83	8.29E+001
	12	3437-	3448	3442.62	860.72	0.83	3.10E+001	22.22	3.90E+001
	13	3636-	3655	3645.72	911.51	1.34	1.82E+002	37.96	5.51E+001
	14	3868-	3886	3876.98	969.34	1.15	9.75E+001	35.26	6.65E+001
	15	4475-	4489	4482.75	1120.83	1.14	4.55E+001	27.49	5.25E+001
	16	5832-	5859	5846.02	1461.75	1.99	1.35E+003	74.82	2.45E+001
	17	7057-	7072	7064.91	1766.57	0.86	5.36E+001	18.34	1.14E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	1.000	511.00*	100.00	2.67062E-001	8.63502E-002
K-40	0.969	1460.81*	10.67	2.25860E+001	2.21786E+000
Eu-155	0.322	86.54*	30.90	8.33363E-001	2.96252E-001
		105.31	20.70		
TL-208	0.902	277.35	6.80		
		510.84*	21.60	1.23640E+000	4.12324E-001
		583.14*	84.20	3.54502E-001	8.55334E-002
		860.37*	12.46	3.89484E-001	2.83243E-001
Pb-212	0.677	74.81* @	10.70	1.11522E+001	2.47333E+000
		77.11 @	18.00		
		87.30* @	8.00	3.21886E+000	1.14428E+000
		238.63*	44.60	8.30689E-001	2.08274E-001
Bi-214	0.968	609.31*	46.30	6.12306E-001	1.50820E-001
		1120.29*	15.10	5.07011E-001	3.11177E-001
		1764.49*	15.80	6.29505E-001	2.24529E-001
PB-214	0.669	74.82* @	6.21	1.92155E+001	4.48409E+000
		77.11 @	10.50		
		87.30* @	4.67	5.51411E+000	2.00399E+000
		241.98	7.49		
		295.21*	19.20	5.41065E-001	3.25557E-001
		351.92*	37.20	5.13459E-001	2.04730E-001
Ac-228	0.996	338.32*	11.40	1.12661E+000	6.02481E-001
		911.07*	27.70	1.04122E+000	2.48094E-001
		969.11*	16.60	9.48043E-001	3.56977E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		1.000	1.898672E-001	8.811283E-002
K-40		0.969	2.258600E+001	2.217860E+000
Eu-155		0.322	5.395243E-001	3.022363E-001
TL-208		0.902	3.573823E-001	8.118610E-002
Pb-212	@	0.677	8.306889E-001	2.082741E-001
Bi-214		0.968	6.022389E-001	1.161491E-001
PB-214	@	0.669	5.212214E-001	1.717339E-001
Ac-228		0.996	1.022747E+000	1.929903E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	6.6538E-001	16.62
M 3	84.83	4.4607E-001	23.67

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0750E-001	7.84E-002	9.4150E-002
		1332.49	100.00	7.8375E-002		8.1477E-002
	Nb-94	702.63	100.00	1.1063E-001	9.94E-002	4.5748E-002
		871.10	100.00	9.9441E-002		6.3945E-002
	Ag-108m	79.20	7.10	5.0209E+000	1.21E-001	-7.3405E+000
		433.93	89.90	1.3166E-001		1.5112E-001
		614.37	90.40	1.3886E-001		-6.1126E-002
		722.95	90.50	1.2062E-001		9.0210E-002
	Sb-125	176.33	6.89	2.3944E+000	3.96E-001	1.4872E+000
		427.89	29.33	3.9577E-001		-1.1234E-001
		463.38	10.35	1.1064E+000		4.8173E-001
		600.56	17.80	5.9724E-001		-1.5534E-001
		606.64	5.02	2.8071E+000		7.5466E+000
		635.90	11.32	9.3916E-001		-1.2576E-001
	Cs-134	563.23	8.38	1.2747E+000	1.21E-001	5.4595E-001
		569.32	15.43	6.8245E-001		-4.0163E-001
		604.70	97.60	1.3317E-001		-4.7114E-002
		795.84	85.40	1.2063E-001		5.8656E-002
		801.93	8.73	1.0213E+000		-1.3974E+000
	Cs-137	661.65	85.12	1.2628E-001	1.26E-001	1.3572E-001
	Eu-152	121.78	28.40	7.5822E-001	3.64E-001	3.9944E-002
		244.69	7.49	1.9232E+000		-6.6145E-001
		344.27	26.50	4.2975E-001		-1.3727E-001
		778.89	12.74	7.5039E-001		-6.4201E-001
		867.32	4.16	2.3131E+000		-1.1410E+000
		964.01	14.40	8.9846E-001		-3.6344E-001
		1085.78	10.00	9.7972E-001		2.7573E-001
		1112.02	13.30	7.8898E-001		6.9366E-002
		1407.95	20.70	3.6447E-001		1.9435E-001
	Eu-154	123.07	40.50	5.2665E-001	2.61E-001	2.1456E-001
		247.94	6.60	2.0866E+000		-7.5523E-001
		591.81	4.83	2.1904E+000		-2.0500E-001
		723.30	19.70	5.4451E-001		2.6503E-002
		756.87	4.33	2.4317E+000		1.0043E+000
		873.19	11.50	8.5532E-001		9.8913E-002
		996.32	10.30	8.7100E-001		-1.4525E+000
		1004.76	17.90	4.8126E-001		3.2796E-001
		1274.45	35.50	2.6094E-001		-1.9973E-001
+	Eu-155	86.54*	30.90	7.6691E-001	7.67E-001	8.3336E-001
		105.31	20.70	1.2638E+000		5.8464E-001
	Am-241	59.54	35.90	1.3181E+000	1.32E+000	-2.0197E-001
	Cm-243	228.19	10.56	1.3665E+000	9.92E-001	2.4055E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.9218E-001	9.92E-001	8.9124E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 4:21:25 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-149-F-
Sample Title: OOL-09-01-149-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 4:11:23 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-149-F-
Title: OOL-09-01-149-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	307	291.90	72.80	0.84	3.25E+002	64.09	1.18E+003
m	2	287-	307	300.45	74.94	0.85	6.83E+002	77.52	1.45E+003
	3	331-	344	339.82	84.79	0.65	2.34E+002	126.59	1.43E+003
	4	948-	960	954.81	238.58	0.92	2.75E+002	60.92	2.62E+002
	5	1177-	1185	1180.94	295.13	0.88	6.54E+001	34.66	1.15E+002
	6	1400-	1414	1407.65	351.83	1.19	1.32E+002	45.36	1.40E+002
	7	2326-	2341	2332.52	583.11	1.16	1.38E+002	41.20	1.01E+002
	8	2427-	2444	2436.89	609.21	1.38	1.59E+002	40.61	8.32E+001
	9	3174-	3187	3179.52	794.93	0.88	3.30E+001	21.35	3.10E+001
	10	3634-	3656	3645.14	911.37	1.46	1.73E+002	36.66	4.56E+001
	11	3870-	3884	3876.98	969.34	0.84	5.81E+001	26.45	4.29E+001
	12	5831-	5860	5845.12	1461.53	1.78	1.14E+003	67.77	1.10E+001
	13	7053-	7070	7061.65	1765.75	1.34	6.10E+001	21.43	1.80E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.982	1460.81*	10.67	1.91889E+001	1.92510E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.34366E-001	7.61148E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	9.76157E+000	2.21127E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.67700E-001	1.81374E-001
Bi-214	0.687	609.31*	46.30	4.95825E-001	1.40758E-001
		1120.29	15.10		
		1764.49*	15.80	7.16762E-001	2.61830E-001
PB-214	0.582	74.82* @	6.21	1.68195E+001	4.00093E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.92292E-001	2.18206E-001
		351.92*	37.20	4.28568E-001	1.64182E-001
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	9.92426E-001	2.38853E-001
		969.11*	16.60	5.64734E-001	2.63892E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.982	1.918894E+001	1.925102E+000
TL-208		0.471	2.343661E-001	7.611479E-002
Pb-212	@	0.520	6.676995E-001	1.813738E-001
Bi-214		0.687	5.453606E-001	1.239780E-001
PB-214	@	0.582	4.154548E-001	1.311934E-001
Ac-228		0.632	7.998283E-001	1.770867E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.80	5.4088E-001	19.75
3	84.79	3.8973E-001	54.13
9	794.93	5.5000E-002	64.70

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.6844E-002	8.06E-002	1.2133E-001
	1332.49	100.00	8.0613E-002		4.2765E-002
Nb-94	702.63	100.00	9.6089E-002	8.12E-002	-1.9532E-002
	871.10	100.00	8.1168E-002		-4.4478E-002
Ag-108m	79.20	7.10	4.9287E+000	1.10E-001	-4.8796E-001
	433.93	89.90	1.1173E-001		-9.1198E-002
	614.37	90.40	1.2303E-001		-1.8012E-002
	722.95	90.50	1.0998E-001		6.8104E-002
Sb-125	176.33	6.89	2.0706E+000	3.49E-001	-6.9356E-001
	427.89	29.33	3.4900E-001		-1.4994E-001
	463.38	10.35	9.6567E-001		-5.7488E-001
	600.56	17.80	5.7082E-001		1.4088E-001
	606.64	5.02	2.5920E+000		3.2820E+000
	635.90	11.32	7.8303E-001		-2.4264E-001
Cs-134	563.23	8.38	1.1544E+000	1.01E-001	3.5064E-001
	569.32	15.43	6.1086E-001		1.5835E-001
	604.70	97.60	1.3040E-001		2.4677E-002
	795.84	85.40	1.0100E-001		1.8875E-003
	801.93	8.73	9.4907E-001		-4.4367E-001
Cs-137	661.65	85.12	1.1726E-001	1.17E-001	5.9995E-002
Eu-152	121.78	28.40	7.0924E-001	3.40E-001	-4.3491E-001
	244.69	7.49	1.7109E+000		-8.4866E-001
	344.27	26.50	4.1226E-001		7.0750E-003
	778.89	12.74	7.3041E-001		-1.6564E-001
	867.32	4.16	2.0389E+000		-1.0372E+000
	964.01	14.40	8.0084E-001		-2.2865E-002
	1085.78	10.00	9.1288E-001		-5.7596E-001
	1112.02	13.30	6.4766E-001		-1.1565E+000
	1407.95	20.70	3.4024E-001		-4.9358E-002
Eu-154	123.07	40.50	5.0087E-001	2.40E-001	5.4248E-001
	247.94	6.60	1.8257E+000		-4.2671E-001
	591.81	4.83	2.0114E+000		3.4095E-001
	723.30	19.70	4.9999E-001		2.4182E-001
	756.87	4.33	2.2459E+000		-3.1022E-001
	873.19	11.50	6.7844E-001		-7.0741E-001
	996.32	10.30	8.5785E-001		1.2785E-001
	1004.76	17.90	4.7532E-001		-5.8017E-002
	1274.45	35.50	2.4012E-001		-9.9234E-002
Eu-155	86.54	30.90	1.0121E+000	1.01E+000	-1.1890E-001
	105.31	20.70	1.1805E+000		-6.9086E-002
Am-241	59.54	35.90	1.3727E+000	1.37E+000	8.2761E-001
Cm-243	228.19	10.56	1.2346E+000	8.68E-001	3.2375E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.6827E-001	8.68E-001	-4.1945E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 4:03:09 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-150-F-
Sample Title: OOL-09-01-150-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 3:53:07 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-150-F-
Title: OOL-09-01-150-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	313	291.92	72.81	0.99	3.30E+002	63.33	1.48E+003
m	2	284-	313	300.53	74.96	1.00	7.37E+002	76.12	1.46E+003
m	3	284-	313	309.53	77.21	1.00	1.03E+002	56.26	1.24E+003
	4	331-	345	339.61	84.73	1.11	1.91E+002	133.11	1.53E+003
	5	948-	961	954.67	238.55	0.87	2.04E+002	64.99	3.25E+002
	6	1177-	1188	1181.87	295.36	0.98	5.37E+001	38.35	1.30E+002
	7	1347-	1358	1353.38	338.25	0.53	5.92E+001	36.69	1.16E+002
	8	1401-	1416	1407.55	351.80	1.29	1.03E+002	45.90	1.48E+002
	9	2033-	2053	2042.54	510.60	2.10	1.15E+002	49.07	1.41E+002
	10	2326-	2342	2331.87	582.95	1.58	1.40E+002	37.60	7.13E+001
	11	2429-	2446	2437.01	609.24	1.57	1.54E+002	37.49	6.51E+001
	12	2639-	2653	2646.23	661.56	0.77	3.94E+001	30.00	6.76E+001
	13	3634-	3654	3645.56	911.47	1.48	1.27E+002	35.13	5.29E+001
	14	3869-	3885	3877.32	969.43	0.42	4.75E+001	29.61	5.75E+001
	15	5831-	5859	5845.70	1461.67	1.68	1.04E+003	68.06	3.61E+001
	16	7056-	7069	7062.87	1766.06	0.49	3.12E+001	16.94	1.58E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.994	511.00*	100.00	1.57184E-001	7.02291E-002
K-40	0.974	1460.81*	10.67	1.74272E+001	1.81493E+000
Cs-137	1.000	661.65*	85.12	6.87635E-002	5.29799E-002
TL-208	0.751	277.35	6.80		
		510.84*	21.60	7.27703E-001	3.30521E-001
		583.14*	84.20	2.36354E-001	7.06752E-002
		860.37	12.46		
Pb-212	0.843	74.81* @	10.70	1.05321E+001	2.33357E+000
		77.11* @	18.00	8.38946E-001	4.87614E-001
		87.30 @	8.00		
		238.63*	44.60	4.94811E-001	1.76018E-001
Bi-214	0.681	609.31*	46.30	4.80602E-001	1.31179E-001
		1120.29	15.10		
		1764.49*	15.80	3.67081E-001	2.02379E-001
PB-214	0.762	74.82* @	6.21	1.81470E+001	4.23111E+000
		77.11* @	10.50	1.43819E+000	8.42779E-001
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.22068E-001	2.36475E-001
		351.92*	37.20	3.35423E-001	1.59643E-001
Ac-228	0.996	338.32*	11.40	6.22391E-001	3.97686E-001
		911.07*	27.70	7.27753E-001	2.17786E-001
		969.11*	16.60	4.61462E-001	2.91915E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.994	1.061316E-001	7.184989E-002
K-40		0.974	1.742719E+001	1.814932E+000
Cs-137		1.000	6.876354E-002	5.297994E-002
TL-208		0.751	2.363536E-001	7.025421E-002
Pb-212	@	0.843	4.948109E-001	1.760182E-001
Bi-214		0.681	4.470172E-001	1.100772E-001
PB-214	@	0.762	3.312416E-001	1.323140E-001
Ac-228		0.996	6.308957E-001	1.598384E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	5.5057E-001	19.17
4	84.73	3.1762E-001	69.85

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	9.1569E-002	7.51E-002	-6.1665E-003
		1332.49	100.00	7.5122E-002		9.2297E-003
	Nb-94	702.63	100.00	1.0050E-001	8.05E-002	-1.5234E-003
		871.10	100.00	8.0472E-002		-8.7710E-003
	Ag-108m	79.20	7.10	4.7794E+000	1.04E-001	-2.1695E+000
		433.93	89.90	1.0685E-001		-1.0803E-001
		614.37	90.40	1.1726E-001		-4.9284E-002
		722.95	90.50	1.0378E-001		5.2322E-002
	Sb-125	176.33	6.89	2.0672E+000	3.50E-001	3.1021E-001
		427.89	29.33	3.4962E-001		2.0674E-001
		463.38	10.35	1.0244E+000		1.0237E+000
		600.56	17.80	5.2510E-001		-6.5304E-002
		606.64	5.02	2.4148E+000		8.5528E-002
		635.90	11.32	7.4822E-001		-7.0139E-002
	Cs-134	563.23	8.38	1.1151E+000	1.13E-001	1.3298E-001
		569.32	15.43	6.0619E-001		-2.6935E-001
		604.70	97.60	1.1529E-001		-2.9166E-002
		795.84	85.40	1.1340E-001		1.1663E-001
		801.93	8.73	1.0419E+000		-5.5184E-001
+	Cs-137	661.65*	85.12	8.4878E-002	8.49E-002	6.8764E-002
	Eu-152	121.78	28.40	6.8958E-001	3.17E-001	-1.5821E-001
		244.69	7.49	1.7314E+000		1.9141E-001
		344.27	26.50	4.0322E-001		-6.7731E-002
		778.89	12.74	6.8142E-001		1.1013E-002
		867.32	4.16	1.9906E+000		-2.8150E+000
		964.01	14.40	7.7216E-001		1.1205E-001
		1085.78	10.00	8.3282E-001		2.1519E-001
		1112.02	13.30	7.2446E-001		3.7355E-001
		1407.95	20.70	3.1672E-001		-8.5840E-003
	Eu-154	123.07	40.50	4.7923E-001	2.33E-001	4.6943E-002
		247.94	6.60	1.8753E+000		-2.7443E-001
		591.81	4.83	2.0982E+000		2.2534E+000
		723.30	19.70	4.7959E-001		2.1036E-001
		756.87	4.33	2.1170E+000		2.0265E-001
		873.19	11.50	7.2400E-001		4.6988E-001
		996.32	10.30	8.1007E-001		-4.6490E-001
		1004.76	17.90	4.6929E-001		4.7629E-002
		1274.45	35.50	2.3314E-001		-5.2403E-002
	Eu-155	86.54	30.90	1.0089E+000	1.01E+000	3.5599E-001
		105.31	20.70	1.1376E+000		-1.5449E-001
	Am-241	59.54	35.90	1.3781E+000	1.38E+000	3.5571E-001
	Cm-243	228.19	10.56	1.2113E+000	8.41E-001	7.2139E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.4107E-001	8.41E-001	7.2885E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 10:29:23 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-151
Sample Title: OOL-09-01-151-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 10:19:20 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-151
Title: OOL-09-01-151-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	291.75	72.77	0.83	3.66E+002	67.69	1.42E+003
m	2	284-	306	300.34	74.91	0.84	6.16E+002	78.78	1.64E+003
M	3	334-	357	339.47	84.70	0.88	2.37E+002	64.54	1.22E+003
m	4	334-	357	350.28	87.40	0.89	1.20E+002	56.53	1.31E+003
	5	947-	960	954.22	238.43	0.45	1.86E+002	60.92	2.83E+002
	6	1174-	1189	1181.13	295.18	1.19	6.12E+001	47.10	1.71E+002
	7	1348-	1360	1352.64	338.07	1.03	3.92E+001	37.33	1.22E+002
	8	1399-	1415	1407.13	351.69	0.85	1.15E+002	49.45	1.65E+002
	9	2032-	2053	2042.55	510.60	1.02	1.28E+002	46.34	1.15E+002
	10	2324-	2339	2332.31	583.06	1.28	1.02E+002	37.17	8.58E+001
	11	2377-	2386	2381.85	595.45	0.72	1.96E+001	18.38	2.94E+001
	12	2428-	2443	2435.92	608.97	1.40	1.71E+002	35.72	5.36E+001
	13	3636-	3653	3643.67	911.00	1.50	1.11E+002	25.97	1.98E+001
	14	3867-	3884	3874.44	968.71	0.45	7.56E+001	25.70	2.94E+001
	15	4433-	4444	4438.73	1109.82	0.35	1.64E+001	14.92	1.56E+001
	16	4471-	4485	4479.35	1119.98	0.92	3.44E+001	24.94	4.36E+001
	17	5831-	5855	5843.33	1461.08	1.75	8.50E+002	59.28	1.56E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.994	511.00*	100.00	1.74973E-001	6.74978E-002
K-40	0.997	1460.81*	10.67	1.42636E+001	1.52388E+000
Eu-155	0.318	86.54*	30.90	4.79040E-001	2.45235E-001
		105.31	20.70		
TL-208	0.751	277.35	6.80		
		510.84*	21.60	8.10062E-001	3.19416E-001
		583.14*	84.20	1.73009E-001	6.68082E-002
		860.37	12.46		
Pb-212	0.676	74.81* @	10.70	8.81225E+000	2.06248E+000
		77.11 @	18.00		
		87.30* @	8.00	1.85029E+000	9.47222E-001
		238.63*	44.60	4.51639E-001	1.64126E-001
Bi-214	0.696	609.31*	46.30	5.35201E-001	1.29545E-001
		1120.29*	15.10	3.83567E-001	2.81027E-001
		1764.49	15.80		
PB-214	0.669	74.82* @	6.21	1.51838E+001	3.72072E+000
		77.11 @	10.50		
		87.30* @	4.67	3.16966E+000	1.64022E+000
		241.98	7.49		
		295.21*	19.20	3.67506E-001	2.89362E-001
		351.92*	37.20	3.74835E-001	1.72792E-001
Ac-228	0.998	338.32*	11.40	4.11593E-001	3.97487E-001
		911.07*	27.70	6.36465E-001	1.65668E-001
		969.11*	16.60	7.34796E-001	2.61489E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.994	1.376035E-001	6.901242E-002
K-40		0.997	1.426358E+001	1.523880E+000
Eu-155		0.318	3.057501E-001	2.498841E-001
TL-208		0.751	1.730088E-001	6.656989E-002
Pb-212	@	0.676	4.516393E-001	1.641263E-001
Bi-214		0.696	5.086272E-001	1.176467E-001
PB-214	@	0.669	3.729222E-001	1.473674E-001
Ac-228		0.998	6.367227E-001	1.320031E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.77	6.1076E-001	18.47
M 3	84.70	3.9483E-001	27.24
11	595.45	3.2619E-002	93.90
15	1109.82	2.7396E-002	90.76

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	8.4389E-002	6.71E-002	8.8256E-003
		1332.49	100.00	6.7052E-002		-5.6174E-002
	Nb-94	702.63	100.00	9.0039E-002	8.12E-002	-1.4464E-003
		871.10	100.00	8.1168E-002		-3.3490E-002
	Ag-108m	79.20	7.10	5.1496E+000	1.11E-001	-2.1478E+000
		433.93	89.90	1.1378E-001		-3.3854E-002
		614.37	90.40	1.1477E-001		-5.3200E-002
		722.95	90.50	1.1055E-001		1.9719E-002
	Sb-125	176.33	6.89	2.0005E+000	3.40E-001	-8.8249E-001
		427.89	29.33	3.4025E-001		2.1728E-002
		463.38	10.35	9.4073E-001		2.1341E-001
		600.56	17.80	5.3069E-001		-4.0420E-002
		606.64	5.02	2.5416E+000		5.5308E+000
		635.90	11.32	7.5076E-001		9.0704E-002
	Cs-134	563.23	8.38	1.1093E+000	1.04E-001	-7.8055E-002
		569.32	15.43	6.0619E-001		-3.4394E-001
		604.70	97.60	1.2871E-001		1.0214E-002
		795.84	85.40	1.0353E-001		-5.2771E-003
		801.93	8.73	9.8947E-001		-4.4094E-001
	Cs-137	661.65	85.12	1.1958E-001	1.20E-001	7.5051E-002
	Eu-152	121.78	28.40	6.9099E-001	3.22E-001	-1.6489E-001
		244.69	7.49	1.6145E+000		-3.9020E-001
		344.27	26.50	3.8568E-001		5.7763E-002
		778.89	12.74	6.7166E-001		-5.2977E-001
		867.32	4.16	1.8989E+000		-1.6275E+000
		964.01	14.40	7.4423E-001		1.2809E-001
		1085.78	10.00	8.5915E-001		-6.0844E-001
		1112.02	13.30	6.3054E-001		9.2194E-003
		1407.95	20.70	3.2211E-001		1.9099E-001
	Eu-154	123.07	40.50	4.8065E-001	2.38E-001	-3.0298E-001
		247.94	6.60	1.7292E+000		-2.7685E-001
		591.81	4.83	1.9103E+000		2.1791E+000
		723.30	19.70	5.0264E-001		7.5714E-003
		756.87	4.33	2.1037E+000		9.0774E-001
		873.19	11.50	6.7844E-001		-6.1818E-001
		996.32	10.30	7.0828E-001		-1.6947E-001
		1004.76	17.90	4.2009E-001		-9.7741E-002
		1274.45	35.50	2.3782E-001		-3.9545E-002
+	Eu-155	86.54*	30.90	6.8696E-001	6.87E-001	4.7904E-001
		105.31	20.70	1.2068E+000		5.4883E-001
	Am-241	59.54	35.90	1.4914E+000	1.49E+000	-1.0844E-001
	Cm-243	228.19	10.56	1.1545E+000	8.26E-001	-8.0724E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.2625E-001	8.26E-001	-1.6794E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 10:54:16 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-152-F-
Sample Title: OOL-09-01-152-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 10:44:13 AM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-152-F-
Title: OOL-09-01-152-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	306	292.14	73.23	1.02	2.78E+002	56.34	1.17E+003
m	2	283-	306	300.48	75.32	1.02	5.22E+002	67.18	1.15E+003
	3	330-	346	339.45	85.06	1.09	2.44E+002	131.93	1.37E+003
	4	949-	961	954.97	238.92	0.98	2.16E+002	60.95	2.81E+002
	5	1175-	1188	1181.37	295.51	0.63	5.88E+001	48.53	1.99E+002
	6	1347-	1358	1353.85	338.63	0.55	5.29E+001	38.04	1.29E+002
	7	1402-	1419	1407.77	352.11	0.74	9.94E+001	50.94	1.76E+002
M	8	1825-	1858	1830.52	457.78	0.37	1.75E+001	1.53	2.48E+001
m	9	1825-	1858	1852.21	463.21	0.38	2.51E+001	1.47	3.42E+001
	10	2326-	2343	2333.82	583.60	0.82	1.41E+002	37.82	7.14E+001
	11	2429-	2448	2437.72	609.57	1.37	1.42E+002	43.07	9.75E+001
	12	2481-	2492	2486.27	621.70	0.45	2.05E+001	20.95	3.75E+001
	13	3638-	3655	3647.23	911.91	0.31	9.76E+001	34.59	6.54E+001
	14	3871-	3886	3878.39	969.70	1.39	4.65E+001	27.75	5.05E+001
	15	5838-	5862	5849.65	1462.46	1.62	7.89E+002	57.82	1.93E+001
	16	7060-	7073	7066.36	1766.60	0.44	3.65E+001	12.47	1.53E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.916	1460.81*	10.67	1.67381E+001	1.82820E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.97485E-001	8.88798E-002
		860.37	12.46		
Pb-212	0.578	74.81* @	10.70	1.68277E+001	3.94484E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.73169E-001	2.17469E-001
Bi-214	0.665	609.31*	46.30	5.52217E-001	1.81265E-001
		1120.29	15.10		
		1764.49*	15.80	5.68938E-001	2.02661E-001
PB-214	0.618	74.82* @	6.21	2.89946E+001	7.11549E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.48626E-001	3.77896E-001
		351.92*	37.20	4.08480E-001	2.20150E-001
Ac-228	0.985	338.32*	11.40	7.03123E-001	5.17020E-001
		911.07*	27.70	7.01056E-001	2.61216E-001
		969.11*	16.60	5.64093E-001	3.42083E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.916	1.673812E+001	1.828205E+000
TL-208		0.467	2.974854E-001	8.887980E-002
Pb-212	@	0.578	6.731694E-001	2.174687E-001
Bi-214		0.665	5.596486E-001	1.351073E-001
PB-214	@	0.618	4.186526E-001	1.902244E-001
Ac-228		0.985	6.579008E-001	1.926573E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.23	4.6372E-001	20.25
3	85.06	4.0746E-001	53.96
M 8	457.78	2.9157E-002	8.72
m 9	463.21	4.1915E-002	5.84
12	621.70	3.4195E-002	102.11

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1988E-001	9.16E-002	1.1410E-001
	1332.49	100.00	9.1612E-002		5.2964E-002
Nb-94	702.63	100.00	1.1251E-001	1.13E-001	-9.7337E-002
	871.10	100.00	1.1572E-001		2.1313E-002
Ag-108m	79.20	7.10	1.0353E+001	1.43E-001	-6.2429E+000
	433.93	89.90	1.4344E-001		-7.4474E-003
	614.37	90.40	1.7928E-001		7.4131E-002
	722.95	90.50	1.5308E-001		8.1541E-002
Sb-125	176.33	6.89	2.8445E+000	4.63E-001	-4.6518E-001
	427.89	29.33	4.6326E-001		1.4077E-001
	463.38	10.35	1.2194E+000		-7.8900E-002
	600.56	17.80	6.6820E-001		-4.6124E-001
	606.64	5.02	3.1975E+000		-3.8707E-001
	635.90	11.32	1.0421E+000		-3.9625E-001
Cs-134	563.23	8.38	1.5559E+000	1.42E-001	2.2689E-001
	569.32	15.43	8.3743E-001		-2.1519E-002
	604.70	97.60	1.5888E-001		1.5163E-002
	795.84	85.40	1.4169E-001		1.1194E-001
	801.93	8.73	1.2843E+000		-1.7891E+000
Cs-137	661.65	85.12	1.4995E-001	1.50E-001	2.8146E-003
Eu-152	121.78	28.40	1.0542E+000	3.76E-001	9.2938E-002
	244.69	7.49	2.3109E+000		-1.2439E+000
	344.27	26.50	5.6246E-001		-8.2559E-001
	778.89	12.74	9.3434E-001		1.2652E-001
	867.32	4.16	2.8778E+000		-1.6556E+000
	964.01	14.40	9.5539E-001		1.0298E-001
	1085.78	10.00	1.1548E+000		-1.5804E-001
	1112.02	13.30	8.4026E-001		-6.6767E-001
	1407.95	20.70	3.7576E-001		2.7927E-001
Eu-154	123.07	40.50	7.3372E-001	2.73E-001	-4.5166E-001
	247.94	6.60	2.6022E+000		-2.4030E+000
	591.81	4.83	2.3869E+000		-2.3958E+000
	723.30	19.70	7.0626E-001		6.0968E-001
	756.87	4.33	2.6747E+000		1.1398E+000
	873.19	11.50	1.0199E+000		5.6439E-001
	996.32	10.30	1.0394E+000		-8.3042E-002
	1004.76	17.90	6.4166E-001		3.6160E-001
	1274.45	35.50	2.7251E-001		-1.6562E-001
Eu-155	86.54	30.90	1.8081E+000	1.81E+000	-1.8433E-001
	105.31	20.70	1.8264E+000		9.9266E-002
Am-241	59.54	35.90	3.9885E+000	3.99E+000	-4.8567E-001
Cm-243	228.19	10.56	1.7154E+000	1.17E+000	9.3377E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1747E+000	1.17E+000	1.2941E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 3:19:54 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-01-153-F-
Sample Title: OOL-09-01-153-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 3:09:51 PM
Live Time: 600.0 seconds
Real Time: 602.3 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-01-153-F-
Title: OOL-09-01-153-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	293-	309	301.04	75.16	1.27	8.36E+002	223.00	3.85E+003
2	331-	345	340.03	84.91	0.81	3.05E+002	173.90	2.62E+003
3	946-	961	954.91	238.67	1.27	1.12E+002	70.55	3.94E+002
4	2035-	2053	2044.69	511.19	1.55	1.28E+002	47.53	1.36E+002
5	2324-	2342	2331.93	583.02	0.85	1.09E+002	41.24	9.77E+001
6	2425-	2444	2436.90	609.27	1.37	1.10E+002	39.11	8.24E+001
7	3634-	3652	3644.64	911.28	0.63	1.14E+002	32.96	4.99E+001
8	5326-	5339	5332.36	1333.32	0.83	2.43E+001	18.28	2.17E+001
9	5831-	5859	5845.35	1461.61	1.91	7.32E+002	58.17	3.24E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.999	511.00*	100.00	1.79527E-001	7.11716E-002
K-40	0.980	1460.81*	10.67	1.26588E+001	1.43652E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	8.31143E-001	3.36417E-001
		583.14*	84.20	1.90854E-001	7.61522E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.23595E+001	4.09136E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.80538E-001	1.82459E-001
Bi-214	0.398	609.31*	46.30	3.53079E-001	1.33257E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN	0.999	1.383024E-001	7.303529E-002
K-40	0.980	1.265882E+001	1.436517E+000
TL-208	0.751	1.908540E-001	7.589782E-002
Pb-212 @	0.521	2.805377E-001	1.824592E-001
Bi-214	0.398	3.530791E-001	1.332567E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.91	5.0908E-001	56.93
7	911.28	1.9011E-001	28.90
8	1333.32	4.0507E-002	75.22

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	9.7741E-002	9.09E-002	-1.4956E-002
	1332.49	100.00	9.0909E-002		9.7386E-002
Nb-94	702.63	100.00	1.0576E-001	9.77E-002	3.3471E-002
	871.10	100.00	9.7682E-002		4.1337E-002
Ag-108m	79.20	7.10	7.6678E+000	1.18E-001	-3.0071E+000
	433.93	89.90	1.2761E-001		3.5045E-002
	614.37	90.40	1.3279E-001		-4.8993E-002
	722.95	90.50	1.1812E-001		-4.0087E-002
Sb-125	176.33	6.89	2.6003E+000	3.75E-001	1.7942E+000
	427.89	29.33	3.7497E-001		-5.9167E-002
	463.38	10.35	1.0838E+000		8.1771E-001
	600.56	17.80	5.8069E-001		6.4955E-001
	606.64	5.02	2.5141E+000		5.7398E+000
	635.90	11.32	8.8848E-001		-5.6106E-001
Cs-134	563.23	8.38	1.2407E+000	1.13E-001	-7.9057E-001
	569.32	15.43	6.6424E-001		3.4908E-001
	604.70	97.60	1.2694E-001		5.0817E-002
	795.84	85.40	1.1298E-001		7.3008E-002
	801.93	8.73	1.0758E+000		-2.4191E-001
Cs-137	661.65	85.12	1.4122E-001	1.41E-001	8.9264E-002
Eu-152	121.78	28.40	9.3922E-001	3.51E-001	1.6670E-001
	244.69	7.49	1.9108E+000		-1.4311E+000
	344.27	26.50	4.4944E-001		-6.0279E-001
	778.89	12.74	7.7013E-001		-8.5119E-001
	867.32	4.16	2.4811E+000		1.0363E+000
	964.01	14.40	8.0869E-001		1.1067E+000
	1085.78	10.00	8.9793E-001		1.5081E-002
	1112.02	13.30	6.9938E-001		-8.4695E-001
	1407.95	20.70	3.5089E-001		4.3158E-001
Eu-154	123.07	40.50	6.4657E-001	2.24E-001	-4.8428E-001
	247.94	6.60	2.1282E+000		-2.7967E-001
	591.81	4.83	2.2025E+000		6.4234E-001
	723.30	19.70	5.3875E-001		-4.4669E-001
	756.87	4.33	2.2987E+000		5.0055E-001
	873.19	11.50	8.4717E-001		-9.5939E-002
	996.32	10.30	8.7194E-001		5.1122E-002
	1004.76	17.90	5.5614E-001		4.5861E-001
	1274.45	35.50	2.2396E-001		-1.5727E-002
Eu-155	86.54	30.90	1.4842E+000	1.48E+000	-1.4574E-002
	105.31	20.70	1.5939E+000		5.4916E-001
Am-241	59.54	35.90	2.1606E+000	2.16E+000	7.0773E-001
Cm-243	228.19	10.56	1.4186E+000	9.59E-001	1.7442E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.5868E-001	9.59E-001	-5.7145E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 1:51:27 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-01-154-F-
Sample Title: OOL-09-01-154-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 1:41:23 PM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-01-154-F-
Title: OOL-09-01-154-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	270-	294	279.79	69.85	1.32	6.84E+002	98.80	4.14E+003
m	2	270-	294	287.88	71.87	1.32	8.53E+002	103.04	4.30E+003
	3	373-	387	380.63	95.06	0.46	2.71E+002	179.00	2.78E+003
M	4	398-	454	421.71	105.34	3.51	3.33E+003	213.36	8.28E+003
m	5	398-	454	441.19	110.21	3.50	6.91E+003	247.43	1.02E+004
M	6	528-	550	533.66	133.33	1.52	1.87E+002	57.14	1.08E+003
m	7	528-	550	543.76	135.86	1.53	2.65E+002	58.89	1.45E+003
M	8	574-	609	581.26	145.24	1.26	2.95E+002	56.19	8.52E+002
m	9	574-	609	603.83	150.88	1.27	8.92E+001	45.80	9.31E+002
	10	649-	662	654.75	163.61	1.62	1.68E+002	84.83	6.17E+002
	11	908-	923	914.59	228.59	0.74	7.99E+001	61.69	3.00E+002
	12	1342-	1355	1349.65	337.38	0.97	4.95E+001	38.26	1.21E+002
	13	1948-	1990	1958.66	489.68	0.38	1.22E+002	77.89	2.21E+002
	14	2326-	2344	2335.05	583.80	0.60	6.13E+001	35.81	8.08E+001
	15	2528-	2544	2537.31	634.38	1.89	6.15E+001	29.40	5.15E+001
	16	2783-	2795	2788.50	697.19	0.38	2.85E+001	19.68	2.75E+001
	17	3487-	3503	3495.26	873.93	0.51	6.30E+001	27.33	4.20E+001
	18	5592-	5618	5604.10	1401.28	2.59	5.70E+002	51.32	2.66E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
TL-208	0.462	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.06952E-001	6.40593E-002
		860.37	12.46		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
TL-208	0.462	1.069521E-001	6.405926E-002

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	69.85	1.1394E+000	14.45
m 2	71.87	1.4224E+000	12.07
3	95.06	4.5098E-001	66.15
M 4	105.34	5.5546E+000	6.40
m 5	110.21	1.1516E+001	3.58
M 6	133.33	3.1172E-001	30.55
m 7	135.86	4.4170E-001	22.22
M 8	145.24	4.9192E-001	19.04
m 9	150.88	1.4873E-001	51.32
10	163.61	2.7955E-001	50.57
11	228.59	1.3313E-001	77.23
12	337.38	8.2495E-002	77.30
13	489.68	2.0271E-001	64.04
15	634.38	1.0243E-001	47.83
16	697.19	4.7485E-002	69.07
17	873.93	1.0492E-001	43.42
18	1401.28	9.5072E-001	9.00

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

F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	8.7440E-002	6.51E-002	6.8568E-003
	1332.49	100.00	6.5131E-002		4.0169E-002
Nb-94	702.63	100.00	9.4349E-002	9.43E-002	-2.5219E-002
	871.10	100.00	1.0917E-001		1.1879E-001
Ag-108m	79.20	7.10	7.8785E+000	9.36E-002	-8.8654E+000
	433.93	89.90	1.0422E-001		-3.1615E-002
	614.37	90.40	9.3563E-002		-9.6528E-003
	722.95	90.50	9.8220E-002		-5.8191E-002
Sb-125	176.33	6.89	2.3587E+000	3.30E-001	6.1180E-001
	427.89	29.33	3.3006E-001		8.0887E-002
	463.38	10.35	9.3144E-001		-3.5779E-001
	600.56	17.80	5.1783E-001		-1.8684E-001
	606.64	5.02	1.8423E+000		2.3930E-002
	635.90	11.32	9.4551E-001		7.9781E-001
Cs-134	563.23	8.38	1.3502E+000	9.74E-002	1.7639E+000
	569.32	15.43	6.0721E-001		1.9866E-001
	604.70	97.60	9.7391E-002		1.4912E-002
	795.84	85.40	1.0041E-001		4.3040E-002
	801.93	8.73	9.7995E-001		7.0366E-002
Cs-137	661.65	85.12	1.1016E-001	1.10E-001	1.0317E-002
Eu-152	121.78	28.40	9.0308E-001	3.70E-001	-1.8778E+000
	244.69	7.49	1.6500E+000		-7.6424E-001
	344.27	26.50	3.6974E-001		-5.2041E-002
	778.89	12.74	6.5416E-001		-1.6218E-001
	867.32	4.16	2.3017E+000		-2.0796E-001
	964.01	14.40	6.1045E-001		4.7580E-001
	1085.78	10.00	7.4935E-001		-8.3523E-001
	1112.02	13.30	6.5054E-001		-4.3423E-002
	1407.95	20.70	9.3667E-001		-4.4264E-003
Eu-154	123.07	40.50	6.4825E-001	2.15E-001	3.3742E-001
	247.94	6.60	1.8462E+000		-1.3614E+000
	591.81	4.83	1.9047E+000		-1.6811E+000
	723.30	19.70	4.4809E-001		-3.8684E-001
	756.87	4.33	2.0577E+000		2.5952E-001
	873.19	11.50	9.2341E-001		-4.2368E-002
	996.32	10.30	7.6404E-001		1.0121E-001
	1004.76	17.90	4.6096E-001		2.8880E-001
	1274.45	35.50	2.1455E-001		1.6043E-001
Eu-155	86.54	30.90	1.5657E+000	1.57E+000	2.3330E+000
	105.31	20.70	2.7793E+000		6.7178E-001
Am-241	59.54	35.90	2.4267E+000	2.43E+000	2.2994E-001
Cm-243	228.19	10.56	1.3539E+000	8.10E-001	9.8620E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	8.0991E-001	8.10E-001	-6.7408E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 2:40:51 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-01-154-F-
Sample Title: OOL-09-01-154-F-G-R
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 2:30:47 PM
Live Time: 600.0 seconds
Real Time: 602.4 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-01-154-F-
Title: OOL-09-01-154-F-G-R
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	309	291.65	72.81	1.39	5.36E+002	99.71	3.83E+003
m	2	285-	309	300.40	75.00	1.40	1.02E+003	108.64	4.92E+003
	3	331-	347	339.30	84.73	1.21	2.23E+002	205.75	3.44E+003
	4	684-	696	691.08	172.70	0.75	5.74E+001	69.04	4.49E+002
	5	1507-	1516	1511.81	377.94	0.54	3.19E+001	21.89	4.11E+001
	6	2032-	2055	2043.90	510.99	1.58	1.26E+002	44.33	9.64E+001
	7	2324-	2343	2331.44	582.90	0.70	8.58E+001	35.55	6.92E+001
	8	2426-	2444	2437.08	609.31	1.29	8.26E+001	31.98	5.44E+001
	9	2637-	2652	2644.52	661.19	0.98	5.50E+001	29.40	5.50E+001
	10	3637-	3652	3644.58	911.27	1.55	4.70E+001	23.44	3.20E+001
	11	5830-	5858	5844.09	1461.29	2.15	6.19E+002	52.63	2.19E+001
	12	7055-	7068	7061.14	1765.63	0.91	3.50E+001	14.46	7.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	1.000	511.00*	100.00	1.76646E-001	6.68093E-002
K-40	0.993	1460.81*	10.67	1.07118E+001	1.25755E+000
Cs-137	0.993	661.65*	85.12	9.89569E-002	5.41751E-002
TL-208	0.750	277.35	6.80		
		510.84*	21.60	8.17804E-001	3.16431E-001
		583.14*	84.20	1.49743E-001	6.50402E-002
		860.37	12.46		
Bi-214	0.690	609.31*	46.30	2.66003E-001	1.08080E-001
		1120.29	15.10		
		1764.49*	15.80	4.24658E-001	1.80532E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN	1.000	1.443011E-001	6.826232E-002
K-40	0.993	1.071180E+001	1.257551E+000
Cs-137	0.993	9.895690E-002	5.417509E-002
TL-208	0.750	1.497435E-001	6.485687E-002
Bi-214	0.690	3.078636E-001	9.273213E-002

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	8.9258E-001	18.62
m 2	75.00	1.6918E+000	10.70
3	84.73	3.7202E-001	92.18
4	172.70	9.5723E-002	120.21
5	377.94	5.3099E-002	68.70
10	911.27	7.8333E-002	49.87

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
	Co-60	1173.22	100.00	8.7845E-002	7.13E-002	-6.1475E-002
		1332.49	100.00	7.1309E-002		8.8435E-003
	Nb-94	702.63	100.00	8.4248E-002	8.09E-002	-3.7856E-002
		871.10	100.00	8.0934E-002		-1.2886E-002
	Ag-108m	79.20	7.10	8.0750E+000	1.06E-001	-1.7086E+000
		433.93	89.90	1.0886E-001		2.1800E-002
		614.37	90.40	1.1467E-001		-3.5548E-002
		722.95	90.50	1.0614E-001		3.0486E-002
	Sb-125	176.33	6.89	2.4859E+000	3.31E-001	8.3849E-001
		427.89	29.33	3.3145E-001		-2.0347E-002
		463.38	10.35	8.7749E-001		-3.2051E-002
		600.56	17.80	5.3132E-001		6.1929E-001
		606.64	5.02	2.1366E+000		1.5036E+000
		635.90	11.32	7.5304E-001		2.8767E-001
	Cs-134	563.23	8.38	1.0800E+000	1.03E-001	-5.2395E-001
		569.32	15.43	5.8691E-001		-7.4445E-001
		604.70	97.60	1.1049E-001		3.9006E-002
		795.84	85.40	1.0275E-001		5.2961E-002
		801.93	8.73	9.2810E-001		5.2170E-002
+	Cs-137	661.65*	85.12	8.2065E-002	8.21E-002	9.8957E-002
	Eu-152	121.78	28.40	9.5143E-001	3.03E-001	-6.4759E-001
		244.69	7.49	1.7548E+000		-2.8063E+000
		344.27	26.50	3.8475E-001		-2.3556E-001
		778.89	12.74	6.7277E-001		-3.1473E-001
		867.32	4.16	1.9616E+000		-2.7100E+000
		964.01	14.40	6.7207E-001		1.3529E-001
		1085.78	10.00	8.1892E-001		-8.4215E-003
		1112.02	13.30	6.9102E-001		-6.3109E-001
		1407.95	20.70	3.0332E-001		2.1285E-001
	Eu-154	123.07	40.50	6.6097E-001	2.08E-001	-4.2273E-001
		247.94	6.60	1.9594E+000		1.3370E-001
		591.81	4.83	1.9213E+000		1.1384E+000
		723.30	19.70	4.8910E-001		2.4123E-001
		756.87	4.33	1.9135E+000		1.3246E-001
		873.19	11.50	6.8443E-001		-2.2147E-001
		996.32	10.30	8.2910E-001		1.8672E-001
		1004.76	17.90	4.6751E-001		-3.2465E-002
		1274.45	35.50	2.0754E-001		-1.6907E-001
	Eu-155	86.54	30.90	1.5694E+000	1.57E+000	4.7945E-001
		105.31	20.70	1.6267E+000		-3.0553E-001
	Am-241	59.54	35.90	2.4418E+000	2.44E+000	-2.4653E+000
	Cm-243	228.19	10.56	1.2330E+000	8.16E-001	-1.6565E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	8.1563E-001	8.16E-001	-4.6529E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 11:18:14 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-155-F-
Sample Title: OOL-09-01-155-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 11:08:11 AM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-155-F-
Title: OOL-09-01-155-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	291.72	73.13	0.95	2.69E+002	63.07	1.44E+003
m	2	285-	306	300.52	75.33	0.95	4.00E+002	69.99	1.60E+003
	3	331-	346	339.53	85.08	0.86	2.61E+002	144.90	1.73E+003
	4	946-	961	953.58	238.57	0.36	6.26E+001	61.15	3.02E+002
	5	1402-	1412	1406.57	351.81	0.34	5.83E+001	34.18	1.01E+002
	6	2035-	2052	2041.29	510.47	0.41	9.26E+001	37.11	8.14E+001
	7	2324-	2338	2331.75	583.08	0.92	7.01E+001	28.28	4.79E+001
	8	2430-	2442	2436.00	609.14	0.42	5.61E+001	26.46	4.79E+001
	9	2639-	2652	2644.99	661.38	0.91	9.67E+001	31.56	5.83E+001
	10	3636-	3651	3642.87	910.82	0.91	6.22E+001	26.44	3.88E+001
	11	3867-	3882	3874.10	968.62	0.91	4.34E+001	23.96	3.46E+001
	12	4475-	4486	4480.88	1120.30	0.70	2.09E+001	16.07	1.81E+001
	13	5831-	5855	5843.60	1460.94	1.78	5.18E+002	46.23	9.40E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.991	511.00*	100.00	1.58049E-001	6.68611E-002
K-40	0.999	1460.81*	10.67	1.09794E+001	1.32363E+000
Cs-137	0.998	661.65*	85.12	2.10650E-001	7.30753E-002
TL-208	0.752	277.35	6.80		
		510.84*	21.60	7.31710E-001	3.15257E-001
		583.14*	84.20	1.48184E-001	6.28514E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	1.28781E+001	3.38378E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.95258E-001	1.93136E-001
Bi-214	0.707	609.31*	46.30	2.18984E-001	1.06663E-001
		1120.29*	15.10	2.88162E-001	2.23205E-001
		1764.49	15.80		
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	4.46776E-001	1.96710E-001
		969.11*	16.60	5.27346E-001	2.96054E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.991	1.260416E-001	6.821747E-002
K-40	0.999	1.097944E+001	1.323635E+000
Cs-137	0.998	2.106497E-001	7.307530E-002
TL-208	0.752	1.481841E-001	6.266564E-002
Pb-212 @	0.580	1.952583E-001	1.931355E-001
Bi-214	0.707	2.318448E-001	9.623865E-002
Ac-228	0.632	4.714519E-001	1.638407E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.13	4.4896E-001	23.41
3	85.08	4.3487E-001	55.53
5	351.81	9.7157E-002	58.63

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0178E-001	1.02E-001	1.6275E-002
		1332.49	100.00	1.0279E-001		8.0350E-002
	Nb-94	702.63	100.00	1.0853E-001	1.00E-001	4.2277E-002
		871.10	100.00	1.0016E-001		4.9165E-002
	Ag-108m	79.20	7.10	1.1965E+001	1.14E-001	-2.6116E-001
		433.93	89.90	1.2842E-001		-6.8711E-002
		614.37	90.40	1.4112E-001		2.2114E-002
		722.95	90.50	1.1434E-001		6.4159E-002
	Sb-125	176.33	6.89	2.8472E+000	4.08E-001	-2.7364E-001
		427.89	29.33	4.0801E-001		-5.4627E-002
		463.38	10.35	1.0578E+000		-6.8678E-001
		600.56	17.80	6.4181E-001		-1.6221E-001
		606.64	5.02	2.5709E+000		2.5144E+000
		635.90	11.32	8.8511E-001		-6.1334E-001
	Cs-134	563.23	8.38	1.4259E+000	1.17E-001	8.3896E-001
		569.32	15.43	6.9446E-001		-5.6350E-001
		604.70	97.60	1.3210E-001		-8.6972E-002
		795.84	85.40	1.1698E-001		-6.1306E-002
		801.93	8.73	1.0702E+000		-4.3421E-001
+	Cs-137	661.65*	85.12	9.7251E-002	9.73E-002	2.1065E-001
	Eu-152	121.78	28.40	1.1146E+000	3.72E-001	-6.0250E-001
		244.69	7.49	2.0801E+000		-7.1047E-001
		344.27	26.50	4.8692E-001		-5.5145E-001
		778.89	12.74	8.0341E-001		8.9889E-002
		867.32	4.16	2.5497E+000		1.4217E+000
		964.01	14.40	8.7838E-001		2.9822E-001
		1085.78	10.00	9.2529E-001		5.1665E-001
		1112.02	13.30	6.8704E-001		-3.0940E-001
		1407.95	20.70	3.7213E-001		-3.2473E-001
	Eu-154	123.07	40.50	7.6622E-001	2.19E-001	-1.3001E-001
		247.94	6.60	2.3639E+000		-7.6864E-001
		591.81	4.83	2.3608E+000		3.1521E-001
		723.30	19.70	5.2332E-001		9.4928E-002
		756.87	4.33	2.4685E+000		1.3830E+000
		873.19	11.50	9.0168E-001		-9.8491E-002
		996.32	10.30	8.9243E-001		1.1561E+000
		1004.76	17.90	4.8472E-001		2.4190E-001
		1274.45	35.50	2.1911E-001		8.0303E-002
	Eu-155	86.54	30.90	2.0531E+000	2.05E+000	1.6352E+000
		105.31	20.70	2.0485E+000		-2.5760E-001
	Am-241	59.54	35.90	4.9719E+000	4.97E+000	-2.1147E+000
	Cm-243	228.19	10.56	1.5424E+000	1.01E+000	4.6055E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0106E+000	1.01E+000	1.0119E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 10:32:19 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-01-156-F-
Sample Title: OOL-09-01-156-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 10:22:16 AM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: GRN7780
Log Number: OOL-09-01-156-F-
Title: OOL-09-01-156-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	293-	306	297.52	74.34	1.21	4.00E+002	131.73	1.49E+003
2	5825-	5854	5839.89	1459.94	2.82	6.30E+002	53.17	2.24E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.976	1460.81*	10.67	1.38166E+001	1.61645E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.976	1.381659E+001	1.616450E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	74.34	6.6640E-001	32.95

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0983E-001	8.34E-002	-5.6902E-002
	1332.49	100.00	8.3385E-002		-1.3038E-002
Nb-94	702.63	100.00	1.2668E-001	1.15E-001	1.3016E-001
	871.10	100.00	1.1515E-001		1.1434E-001
Ag-108m	79.20	7.10	1.2921E+001	1.35E-001	-2.3385E+001
	433.93	89.90	1.5369E-001		-1.1151E-002
	614.37	90.40	1.5007E-001		-2.8941E-001
	722.95	90.50	1.3505E-001		6.7617E-002
Sb-125	176.33	6.89	3.1304E+000	4.73E-001	1.0187E+000
	427.89	29.33	4.7348E-001		-1.3944E-001
	463.38	10.35	1.3095E+000		4.5265E-001
	600.56	17.80	6.8894E-001		-1.2788E+000
	606.64	5.02	3.1300E+000		5.9119E+000
	635.90	11.32	9.7981E-001		-3.8534E-001
Cs-134	563.23	8.38	1.5870E+000	1.30E-001	8.4769E-001
	569.32	15.43	8.7749E-001		-3.8228E-003
	604.70	97.60	1.5254E-001		6.2591E-002
	795.84	85.40	1.2977E-001		2.5846E-003
	801.93	8.73	1.3122E+000		-2.7749E-002
Cs-137	661.65	85.12	1.6876E-001	1.69E-001	3.2943E-001
Eu-152	121.78	28.40	1.1620E+000	3.77E-001	-1.7222E-001
	244.69	7.49	2.4081E+000		-1.9727E+000
	344.27	26.50	5.5834E-001		-4.6043E-001
	778.89	12.74	8.8814E-001		-5.1822E-001
	867.32	4.16	2.6375E+000		-4.2372E+000
	964.01	14.40	9.4190E-001		1.1307E+000
	1085.78	10.00	1.0684E+000		6.5134E-003
	1112.02	13.30	8.3305E-001		-1.6499E+000
	1407.95	20.70	3.7704E-001		-2.9421E-001
Eu-154	123.07	40.50	8.0363E-001	2.87E-001	-5.2556E-001
	247.94	6.60	2.6019E+000		-9.4209E-006
	591.81	4.83	2.6164E+000		-1.3728E+000
	723.30	19.70	6.1510E-001		5.0096E-002
	756.87	4.33	2.4890E+000		9.2058E-002
	873.19	11.50	1.0017E+000		-5.0587E-001
	996.32	10.30	1.0297E+000		5.0780E-001
	1004.76	17.90	5.6430E-001		-5.8139E-002
	1274.45	35.50	2.8733E-001		2.3442E-002
Eu-155	86.54	30.90	2.3281E+000	2.16E+000	4.4843E+000
	105.31	20.70	2.1592E+000		6.6454E-001
Am-241	59.54	35.90	5.9977E+000	6.00E+000	5.3008E+000
Cm-243	228.19	10.56	1.7149E+000	1.14E+000	-7.2768E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1447E+000	1.14E+000	8.4552E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 10:53:53 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-157
Sample Title: OOL-09-01-157-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 10:43:50 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-157
Title: OOL-09-01-157-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	308	291.61	72.73	0.98	5.39E+002	78.83	1.89E+003
m	2	286-	308	300.35	74.92	0.98	1.08E+003	92.79	2.17E+003
	3	332-	344	339.91	84.81	1.25	4.08E+002	141.49	1.82E+003
	4	945-	959	954.37	238.47	0.92	2.60E+002	70.88	3.64E+002
	5	1173-	1188	1180.56	295.04	0.87	8.05E+001	58.31	2.68E+002
	6	1347-	1357	1352.33	337.99	1.04	7.65E+001	38.12	1.27E+002
	7	1397-	1416	1406.73	351.59	1.04	1.62E+002	61.05	2.31E+002
	8	2033-	2052	2041.66	510.38	0.42	1.29E+002	56.30	1.98E+002
	9	2322-	2337	2331.64	582.89	1.47	1.91E+002	39.52	7.17E+001
	10	2430-	2444	2435.63	608.90	1.07	1.50E+002	43.27	1.12E+002
	11	2636-	2653	2644.04	661.02	0.43	8.43E+001	38.06	8.97E+001
	12	2901-	2911	2906.06	726.54	0.53	2.99E+001	22.75	4.31E+001
	13	3636-	3652	3643.44	910.94	0.81	1.29E+002	34.90	6.02E+001
	14	3867-	3882	3874.84	968.81	1.31	8.61E+001	28.12	3.99E+001
	15	4472-	4488	4479.98	1120.14	0.85	4.51E+001	30.06	5.99E+001
	16	5828-	5855	5842.44	1460.86	1.66	1.01E+003	64.63	1.72E+001
	17	7049-	7066	7057.89	1764.81	0.70	6.31E+001	21.09	1.59E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.987	511.00*	100.00	1.75804E-001	8.03855E-002
K-40	1.000	1460.81*	10.67	1.69536E+001	1.74903E+000
Cs-137	0.986	661.65*	85.12	1.47163E-001	6.86397E-002
TL-208	0.749	277.35	6.80		
		510.84*	21.60	8.13909E-001	3.78045E-001
		583.14*	84.20	3.23667E-001	7.90528E-002
		860.37	12.46		
Bi-212	0.986	727.17*	11.80	3.83649E-001	2.95241E-001
Pb-212	0.520	74.81* @	10.70	1.54644E+001	3.30900E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.32586E-001	1.98800E-001
Bi-214	0.996	609.31*	46.30	4.68834E-001	1.46935E-001
		1120.29*	15.10	5.02347E-001	3.39358E-001
		1764.49*	15.80	7.41450E-001	2.58613E-001
PB-214	0.580	74.82* @	6.21	2.66456E+001	6.02068E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.82889E-001	3.59209E-001
		351.92*	37.20	5.28122E-001	2.17515E-001
Ac-228	0.998	338.32*	11.40	8.03686E-001	4.19879E-001
		911.07*	27.70	7.37084E-001	2.17011E-001
		969.11*	16.60	8.37169E-001	2.87077E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.987	1.058923E-001	8.214751E-002
K-40		1.000	1.695359E+001	1.749028E+000
Cs-137		0.986	1.471632E-001	6.863974E-002
TL-208		0.749	3.236668E-001	7.834596E-002
Bi-212		0.986	3.836486E-001	2.952407E-001
Pb-212	@	0.520	6.325864E-001	1.987999E-001
Bi-214		0.996	5.312633E-001	1.195627E-001
PB-214	@	0.580	5.159857E-001	1.860617E-001
Ac-228		0.998	7.778678E-001	1.600453E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.73	8.9824E-001	14.63
3	84.81	6.8043E-001	34.66

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0533E-001	8.24E-002	1.1104E-001
		1332.49	100.00	8.2357E-002		1.4181E-002
	Nb-94	702.63	100.00	1.0593E-001	1.01E-001	-2.9843E-002
		871.10	100.00	1.0138E-001		2.8252E-002
	Ag-108m	79.20	7.10	5.6775E+000	1.25E-001	-1.9713E+000
		433.93	89.90	1.2575E-001		1.7461E-002
		614.37	90.40	1.3141E-001		-3.0676E-003
		722.95	90.50	1.2546E-001		1.0260E-001
	Sb-125	176.33	6.89	2.4277E+000	4.08E-001	4.8495E-001
		427.89	29.33	4.0752E-001		4.7053E-001
		463.38	10.35	1.1420E+000		4.6965E-001
		600.56	17.80	5.7467E-001		1.8788E-002
		606.64	5.02	2.7574E+000		3.9438E+000
		635.90	11.32	9.4517E-001		1.7983E-001
	Cs-134	563.23	8.38	1.3211E+000	1.22E-001	-7.6399E-001
		569.32	15.43	6.8521E-001		-1.3675E-001
		604.70	97.60	1.3802E-001		-1.6053E-001
		795.84	85.40	1.2215E-001		-4.5583E-003
		801.93	8.73	1.1393E+000		-1.0218E+000
+	Cs-137	661.65*	85.12	1.0295E-001	1.03E-001	1.4716E-001
	Eu-152	121.78	28.40	8.0488E-001	3.48E-001	-4.9329E-001
		244.69	7.49	1.9109E+000		3.2552E-001
		344.27	26.50	4.3980E-001		-3.8743E-002
		778.89	12.74	7.8667E-001		-9.3662E-001
		867.32	4.16	2.3408E+000		-2.1333E+000
		964.01	14.40	8.3862E-001		1.5582E-001
		1085.78	10.00	9.5358E-001		3.7115E-001
		1112.02	13.30	7.4419E-001		-5.4745E-001
		1407.95	20.70	3.4770E-001		3.4830E-001
	Eu-154	123.07	40.50	5.6086E-001	2.53E-001	-2.2319E-001
		247.94	6.60	2.0720E+000		2.5445E-001
		591.81	4.83	2.1768E+000		7.2245E-001
		723.30	19.70	5.6949E-001		4.3361E-002
		756.87	4.33	2.4660E+000		-1.1697E+000
		873.19	11.50	8.6512E-001		3.5081E-001
		996.32	10.30	8.5785E-001		-7.6612E-001
		1004.76	17.90	5.4215E-001		-3.4307E-002
		1274.45	35.50	2.5348E-001		4.7183E-002
	Eu-155	86.54	30.90	1.2007E+000	1.20E+000	-6.3187E-001
		105.31	20.70	1.3794E+000		7.0143E-001
	Am-241	59.54	35.90	1.5980E+000	1.60E+000	-1.3062E-001
	Cm-243	228.19	10.56	1.3707E+000	9.63E-001	-9.3342E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.6255E-001	9.63E-001	4.2675E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 10:11:08 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-01-158-F-
Sample Title: OOL-09-01-158-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 10:01:05 AM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: GRN7780
Log Number: OOL-09-01-158-F-
Title: OOL-09-01-158-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1401-	1416	1408.46	352.07	0.29	7.55E+001	51.11	2.00E+002
2	3629-	3651	3640.37	910.06	1.75	1.20E+002	37.45	6.33E+001
3	5823-	5854	5838.89	1459.69	2.83	9.40E+002	65.70	3.64E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.960	1460.81*	10.67	2.06182E+001	2.20574E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.960	2.061818E+001	2.205736E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	352.07	1.2589E-001	67.66
2	910.06	1.9956E-001	31.28

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2479E-001	9.81E-002	1.5834E-002
	1332.49	100.00	9.8144E-002		5.0347E-003
Nb-94	702.63	100.00	1.2734E-001	1.23E-001	-1.4027E-002
	871.10	100.00	1.2325E-001		4.5965E-002
Ag-108m	79.20	7.10	1.1713E+001	1.54E-001	-1.7747E+001
	433.93	89.90	1.5568E-001		2.5839E-002
	614.37	90.40	1.6293E-001		-1.6524E-001
	722.95	90.50	1.5381E-001		9.4008E-002
Sb-125	176.33	6.89	3.0429E+000	4.76E-001	-1.7778E+000
	427.89	29.33	4.7574E-001		-6.6472E-002
	463.38	10.35	1.3279E+000		-1.9280E-002
	600.56	17.80	7.4352E-001		-6.5862E-001
	606.64	5.02	3.2690E+000		3.2862E+000
	635.90	11.32	1.0952E+000		-1.0854E+000
Cs-134	563.23	8.38	1.6166E+000	1.39E-001	6.9737E-002
	569.32	15.43	9.0037E-001		2.9618E-001
	604.70	97.60	1.6578E-001		1.5585E-001
	795.84	85.40	1.3886E-001		2.2998E-003
	801.93	8.73	1.2759E+000		-1.3297E+000
Cs-137	661.65	85.12	1.5286E-001	1.53E-001	7.5344E-002
Eu-152	121.78	28.40	1.0675E+000	4.17E-001	3.7395E-001
	244.69	7.49	2.4407E+000		-4.2057E+000
	344.27	26.50	5.8621E-001		-1.4454E+000
	778.89	12.74	9.5310E-001		4.0025E-001
	867.32	4.16	2.9514E+000		-1.2357E-001
	964.01	14.40	1.0809E+000		1.1341E+000
	1085.78	10.00	1.1292E+000		5.8677E-001
	1112.02	13.30	8.6416E-001		-1.4561E+000
	1407.95	20.70	4.1713E-001		3.0570E-001
Eu-154	123.07	40.50	7.2981E-001	3.04E-001	-5.3068E-001
	247.94	6.60	2.6368E+000		-1.8282E+000
	591.81	4.83	2.6967E+000		-1.2989E+000
	723.30	19.70	7.0664E-001		7.8997E-002
	756.87	4.33	2.8306E+000		-4.9127E-001
	873.19	11.50	1.0526E+000		-3.6453E-001
	996.32	10.30	1.1687E+000		7.7229E-001
	1004.76	17.90	6.9627E-001		4.1991E-001
	1274.45	35.50	3.0392E-001		1.3526E-001
Eu-155	86.54	30.90	2.0057E+000	1.94E+000	1.5738E+000
	105.31	20.70	1.9413E+000		8.8898E-002
Am-241	59.54	35.90	5.2001E+000	5.20E+000	-2.9872E-001
Cm-243	228.19	10.56	1.7208E+000	1.18E+000	-4.7866E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1826E+000	1.18E+000	-8.2194E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 3:44:23 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-159-F-
Sample Title: OOL-09-01-159-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 3:34:20 PM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-159-F-
Title: OOL-09-01-159-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	291.82	72.78	0.90	3.61E+002	67.64	1.64E+003
m	2	284-	305	300.52	74.96	0.91	7.11E+002	81.17	1.59E+003
	3	331-	344	339.72	84.76	0.85	2.31E+002	134.91	1.64E+003
	4	947-	960	955.06	238.64	1.26	2.42E+002	62.54	2.82E+002
	5	1173-	1186	1180.17	294.94	1.19	9.21E+001	47.43	1.79E+002
	6	1344-	1359	1354.12	338.44	1.62	7.79E+001	46.20	1.59E+002
	7	1401-	1416	1407.91	351.89	1.09	1.17E+002	48.36	1.63E+002
	8	2324-	2342	2332.74	583.17	1.11	1.51E+002	41.38	8.72E+001
	9	2431-	2446	2437.51	609.37	1.05	1.56E+002	38.10	7.17E+001
	10	2902-	2918	2910.47	727.64	0.32	4.28E+001	30.86	6.42E+001
	11	3637-	3654	3645.63	911.49	1.60	1.30E+002	33.03	4.73E+001
	12	3871-	3885	3877.36	969.44	0.60	6.01E+001	29.92	5.89E+001
	13	5833-	5861	5847.13	1462.03	1.90	1.06E+003	67.05	2.48E+001
	14	7057-	7071	7063.99	1766.34	0.84	4.35E+001	15.83	7.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.949	1460.81*		10.67	1.77346E+001	1.82393E+000
TL-208	0.471	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.55244E-001	7.75113E-002
		860.37		12.46		
Bi-212	0.992	727.17*		11.80	5.48615E-001	4.01187E-001
Pb-212	0.520	74.81*	@	10.70	1.01599E+001	2.30481E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.87820E-001	1.77809E-001
Bi-214	0.674	609.31*		46.30	4.88169E-001	1.33316E-001
		1120.29		15.10		
		1764.49*		15.80	5.11166E-001	1.92906E-001
PB-214	0.582	74.82*	@	6.21	1.75058E+001	4.16962E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.52776E-001	2.99377E-001
		351.92*		37.20	3.80634E-001	1.69860E-001
Ac-228	0.996	338.32*		11.40	8.19112E-001	5.02277E-001
		911.07*		27.70	7.42178E-001	2.07404E-001
		969.11*		16.60	5.84735E-001	2.97310E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.949	1.773459E+001	1.823927E+000
TL-208		0.471	2.552439E-001	7.751131E-002
Bi-212		0.992	5.486145E-001	4.011873E-001
Pb-212	@	0.520	5.878196E-001	1.778092E-001
Bi-214		0.674	4.956025E-001	1.096736E-001
PB-214	@	0.582	4.225546E-001	1.477367E-001
Ac-228		0.996	7.038584E-001	1.611149E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.78	6.0224E-001	18.72
3	84.76	3.8454E-001	58.47

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.1931E-002	8.11E-002	-1.0921E-001
	1332.49	100.00	8.1053E-002		6.0657E-002
Nb-94	702.63	100.00	9.1171E-002	9.06E-002	6.6086E-002
	871.10	100.00	9.0634E-002		-1.3016E-002
Ag-108m	79.20	7.10	5.1429E+000	1.19E-001	-1.1112E+001
	433.93	89.90	1.1934E-001		-6.1951E-002
	614.37	90.40	1.3250E-001		-6.3634E-002
	722.95	90.50	1.2140E-001		5.8227E-002
Sb-125	176.33	6.89	2.1618E+000	3.54E-001	1.1078E+000
	427.89	29.33	3.5391E-001		-1.1477E-001
	463.38	10.35	1.0559E+000		2.1931E-001
	600.56	17.80	5.4170E-001		-4.8211E-001
	606.64	5.02	2.5741E+000		-5.5363E-001
	635.90	11.32	8.3240E-001		7.4734E-001
Cs-134	563.23	8.38	1.1762E+000	1.12E-001	-2.7709E-001
	569.32	15.43	6.3813E-001		-1.2059E-001
	604.70	97.60	1.2189E-001		-5.8903E-002
	795.84	85.40	1.1242E-001		6.2335E-002
	801.93	8.73	1.0317E+000		-9.5189E-001
Cs-137	661.65	85.12	1.2436E-001	1.24E-001	9.1916E-002
Eu-152	121.78	28.40	7.2357E-001	2.97E-001	3.2990E-001
	244.69	7.49	1.7770E+000		4.6658E-001
	344.27	26.50	4.1504E-001		-3.4470E-001
	778.89	12.74	6.7412E-001		-4.5476E-001
	867.32	4.16	2.0547E+000		-1.3398E+000
	964.01	14.40	7.6850E-001		-1.5344E-001
	1085.78	10.00	8.2514E-001		-1.1821E-001
	1112.02	13.30	6.6978E-001		-9.9326E-001
	1407.95	20.70	2.9704E-001		-1.7588E-001
Eu-154	123.07	40.50	5.0019E-001	2.33E-001	-1.5488E-001
	247.94	6.60	1.9268E+000		8.3099E-001
	591.81	4.83	2.0553E+000		1.0600E+000
	723.30	19.70	5.6129E-001		2.7219E-001
	756.87	4.33	2.3136E+000		-2.7540E-001
	873.19	11.50	8.1488E-001		5.1194E-001
	996.32	10.30	8.7750E-001		1.9663E-001
	1004.76	17.90	4.6523E-001		-4.8615E-001
	1274.45	35.50	2.3314E-001		-1.2749E-001
Eu-155	86.54	30.90	1.0816E+000	1.08E+000	1.6653E-002
	105.31	20.70	1.2387E+000		-5.3871E-001
Am-241	59.54	35.90	1.4765E+000	1.48E+000	8.9833E-001
Cm-243	228.19	10.56	1.2253E+000	8.79E-001	1.3780E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.7908E-001	8.79E-001	1.6645E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 3:25:08 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-160-F-
Sample Title: OOL-09-01-160-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 3:15:04 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-160-F-
Title: OOL-09-01-160-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	306	291.98	72.82	0.93	3.79E+002	69.10	1.41E+003
m	2	287-	306	300.57	74.97	0.93	7.52E+002	81.03	1.65E+003
M	3	332-	354	339.36	84.67	1.18	3.25E+002	66.95	1.55E+003
m	4	332-	354	349.90	87.31	1.19	1.09E+002	59.38	1.56E+003
	5	948-	962	955.33	238.71	0.99	1.78E+002	64.44	3.14E+002
	6	1176-	1188	1181.37	295.24	1.13	6.99E+001	42.32	1.50E+002
	7	1347-	1362	1353.78	338.35	0.87	6.83E+001	44.88	1.52E+002
	8	1401-	1414	1409.03	352.17	0.63	1.16E+002	42.83	1.31E+002
	9	2034-	2048	2041.95	510.45	0.79	8.98E+001	41.77	1.24E+002
	10	2326-	2340	2333.68	583.40	1.07	1.16E+002	35.88	7.62E+001
	11	2429-	2445	2437.94	609.48	1.19	1.80E+002	37.49	5.95E+001
	12	3440-	3451	3445.30	861.39	0.50	1.96E+001	20.76	3.64E+001
	13	3639-	3656	3646.62	911.74	0.87	1.06E+002	32.56	5.19E+001
	14	4477-	4493	4484.83	1121.35	0.46	5.18E+001	26.12	4.02E+001
	15	5835-	5861	5848.70	1462.42	1.82	9.23E+002	62.80	2.36E+001
	16	7060-	7074	7066.93	1767.07	0.53	3.77E+001	15.50	8.34E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.989	511.00*	100.00	1.22455E-001	5.93236E-002
K-40	0.913	1460.81*	10.67	1.54908E+001	1.63795E+000
Eu-155	0.321	86.54*	30.90	4.39509E-001	2.53447E-001
		105.31	20.70		
TL-208	0.897	277.35	6.80		
		510.84*	21.60	5.66920E-001	2.78521E-001
		583.14*	84.20	1.95947E-001	6.58773E-002
		860.37*	12.46	2.46606E-001	2.62620E-001
Pb-212	0.677	74.81* @	10.70	1.07443E+001	2.40331E+000
		77.11 @	18.00		
		87.30* @	8.00	1.69760E+000	9.78938E-001
		238.63*	44.60	4.33528E-001	1.70795E-001
Bi-214	0.691	609.31*	46.30	5.60600E-001	1.35903E-001
		1120.29*	15.10	5.77389E-001	2.97684E-001
		1764.49	15.80		
PB-214	0.669	74.82* @	6.21	1.85127E+001	4.35358E+000
		77.11 @	10.50		
		87.30* @	4.67	2.90810E+000	1.69131E+000
		241.98	7.49		
		295.21*	19.20	4.19634E-001	2.63644E-001
		351.92*	37.20	3.76895E-001	1.53091E-001
Ac-228	0.533	338.32*	11.40	7.17354E-001	4.84880E-001
		911.07*	27.70	6.07198E-001	1.99039E-001
		969.11	16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.989	7.948753E-002	6.089403E-002
K-40		0.913	1.549078E+001	1.637951E+000
Eu-155		0.321	2.686922E-001	2.580383E-001
TL-208		0.897	1.989222E-001	6.361261E-002
Pb-212	@	0.677	4.335283E-001	1.707951E-001
Bi-214		0.691	5.634957E-001	1.236285E-001
PB-214	@	0.669	3.875833E-001	1.312168E-001
Ac-228		0.533	6.230829E-001	1.841296E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.82	6.3119E-001	18.25
M 3	84.67	5.4124E-001	20.61
16	1767.07	6.2763E-002	41.17

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	8.5953E-002	7.32E-002	-2.6236E-002
		1332.49	100.00	7.3194E-002		3.9192E-002
	Nb-94	702.63	100.00	9.2840E-002	7.98E-002	4.2285E-003
		871.10	100.00	7.9770E-002		8.9459E-004
	Ag-108m	79.20	7.10	5.0460E+000	1.05E-001	-2.1753E+000
		433.93	89.90	1.0985E-001		-1.0795E-002
		614.37	90.40	1.2489E-001		-1.2595E-001
		722.95	90.50	1.0499E-001		-2.1722E-002
	Sb-125	176.33	6.89	2.0850E+000	3.25E-001	3.5224E-001
		427.89	29.33	3.2466E-001		-4.0397E-002
		463.38	10.35	9.8811E-001		1.0514E+000
		600.56	17.80	5.1084E-001		2.3405E-001
		606.64	5.02	2.4939E+000		4.7026E+000
		635.90	11.32	7.7079E-001		4.7840E-001
	Cs-134	563.23	8.38	1.1236E+000	9.76E-002	1.6786E-001
		569.32	15.43	6.2009E-001		-1.3468E-001
		604.70	97.60	1.1655E-001		2.0282E-002
		795.84	85.40	9.7636E-002		-7.4367E-002
		801.93	8.73	9.8587E-001		-9.2627E-001
	Cs-137	661.65	85.12	1.2298E-001	1.23E-001	2.4115E-002
	Eu-152	121.78	28.40	7.0747E-001	3.22E-001	-1.4759E-001
		244.69	7.49	1.6232E+000		1.1453E+000
		344.27	26.50	4.0207E-001		1.0441E-001
		778.89	12.74	6.0967E-001		-4.1345E-001
		867.32	4.16	2.0389E+000		9.3400E-001
		964.01	14.40	7.4042E-001		-1.2449E+000
		1085.78	10.00	8.6284E-001		5.1846E-002
		1112.02	13.30	6.9377E-001		1.3617E-001
		1407.95	20.70	3.2211E-001		1.2707E-001
	Eu-154	123.07	40.50	4.8961E-001	2.20E-001	-1.2518E-001
		247.94	6.60	1.6970E+000		-4.0949E-001
		591.81	4.83	1.9050E+000		7.9185E-001
		723.30	19.70	4.9329E-001		3.9344E-001
		756.87	4.33	2.0970E+000		-2.7562E-001
		873.19	11.50	6.9398E-001		1.9266E-002
		996.32	10.30	8.2402E-001		-2.1615E-001
		1004.76	17.90	4.7929E-001		2.7818E-001
		1274.45	35.50	2.1973E-001		1.2251E-002
+	Eu-155	86.54*	30.90	7.4915E-001	7.49E-001	4.3951E-001
		105.31	20.70	1.2157E+000		8.3728E-001
	Am-241	59.54	35.90	1.4434E+000	1.44E+000	-1.4830E+000
	Cm-243	228.19	10.56	1.1416E+000	8.36E-001	-2.6522E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.3587E-001	8.36E-001	6.0759E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 1:32:45 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-161-F-
Sample Title: OOL-09-01-161-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 1:22:44 PM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-161-F-
Title: OOL-09-01-161-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	308	291.90	72.80	1.17	4.28E+002	77.06	1.97E+003
m	2	286-	308	300.75	75.02	1.18	7.86E+002	86.60	2.55E+003
	3	331-	346	339.54	84.72	1.28	2.17E+002	158.88	2.11E+003
	4	949-	961	955.19	238.68	0.92	1.35E+002	58.84	2.90E+002
	5	1350-	1362	1354.77	338.60	0.36	3.77E+001	40.18	1.44E+002
	6	2036-	2053	2042.58	510.60	1.35	1.29E+002	46.55	1.33E+002
	7	2326-	2340	2333.21	583.28	1.25	1.33E+002	37.03	7.78E+001
	8	2430-	2447	2437.53	609.37	0.53	1.30E+002	39.48	8.47E+001
	9	2639-	2657	2647.51	661.88	1.47	9.50E+001	37.99	8.30E+001
	10	3635-	3657	3646.02	911.59	1.28	1.44E+002	36.52	5.19E+001
M	11	3855-	3887	3860.07	965.11	1.24	2.92E+001	14.09	2.71E+001
m	12	3855-	3887	3878.02	969.60	1.24	4.92E+001	17.94	4.67E+001
	13	4478-	4490	4484.58	1121.29	0.77	4.53E+001	22.49	3.27E+001
	14	5834-	5861	5847.55	1462.14	1.68	9.27E+002	63.52	2.75E+001
	15	7059-	7072	7065.08	1766.61	0.54	2.90E+001	16.87	1.60E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.995	511.00*	100.00	1.75578E-001	6.78000E-002
K-40	0.940	1460.81*	10.67	1.55583E+001	1.64984E+000
Cs-137	0.998	661.65*	85.12	1.65912E-001	6.91312E-002
TL-208	0.751	277.35	6.80		
		510.84*	21.60	8.12860E-001	3.20832E-001
		583.14*	84.20	2.25531E-001	6.92086E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.12254E+001	2.52399E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.28585E-001	1.52046E-001
Bi-214	0.962	609.31*	46.30	4.07016E-001	1.33095E-001
		1120.29*	15.10	5.05425E-001	2.56482E-001
		1764.49*	15.80	3.40788E-001	2.01173E-001
Ac-228	0.992	338.32*	11.40	3.96679E-001	4.26845E-001
		911.07*	27.70	8.25009E-001	2.29539E-001
		969.11*	16.60	4.78331E-001	1.81529E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.995	1.268629E-001	6.941031E-002
K-40		0.940	1.555832E+001	1.649843E+000
Cs-137		0.998	1.659120E-001	6.913121E-002
TL-208		0.751	2.255312E-001	6.881723E-002
Pb-212	@	0.520	3.285851E-001	1.520455E-001
Bi-214		0.962	4.055584E-001	1.018699E-001
Ac-228		0.992	5.901928E-001	1.350675E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.80	7.1366E-001	18.00
3	84.72	3.6123E-001	73.30
M 11	965.11	4.8606E-002	48.31

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	9.9868E-002	7.79E-002	3.9745E-002
		1332.49	100.00	7.7919E-002		-1.4372E-002
	Nb-94	702.63	100.00	9.5288E-002	9.34E-002	-7.5391E-002
		871.10	100.00	9.3368E-002		7.6580E-002
	Ag-108m	79.20	7.10	5.4637E+000	1.03E-001	-4.2193E+000
		433.93	89.90	1.1640E-001		-8.4757E-002
		614.37	90.40	1.3009E-001		5.6415E-002
		722.95	90.50	1.0317E-001		2.1984E-002
	Sb-125	176.33	6.89	2.1924E+000	3.62E-001	1.6767E-001
		427.89	29.33	3.6232E-001		-2.4265E-001
		463.38	10.35	1.0190E+000		6.4755E-001
		600.56	17.80	5.5909E-001		2.8789E-001
		606.64	5.02	2.5087E+000		-5.4644E-001
		635.90	11.32	7.7079E-001		-6.6626E-001
	Cs-134	563.23	8.38	1.2109E+000	1.13E-001	-6.6579E-001
		569.32	15.43	6.5277E-001		-4.6847E-001
		604.70	97.60	1.1843E-001		-2.8631E-002
		795.84	85.40	1.1308E-001		3.6134E-002
		801.93	8.73	1.0419E+000		-7.5542E-002
+	Cs-137	661.65*	85.12	1.0093E-001	1.01E-001	1.6591E-001
	Eu-152	121.78	28.40	7.5639E-001	3.43E-001	2.2098E-001
		244.69	7.49	1.7544E+000		1.4612E+000
		344.27	26.50	4.1226E-001		-1.7629E-002
		778.89	12.74	6.9579E-001		-9.3705E-002
		867.32	4.16	2.2568E+000		-4.9058E+000
		964.01	14.40	7.2693E-001		-9.1360E-002
		1085.78	10.00	8.5544E-001		-1.2557E+000
		1112.02	13.30	7.0416E-001		-1.3305E-001
		1407.95	20.70	3.4274E-001		1.3651E-001
	Eu-154	123.07	40.50	5.2458E-001	2.12E-001	-9.1700E-002
		247.94	6.60	1.8737E+000		2.8514E-001
		591.81	4.83	1.9766E+000		-9.7069E-001
		723.30	19.70	4.7399E-001		-2.2525E-001
		756.87	4.33	2.1369E+000		7.0571E-001
		873.19	11.50	7.8040E-001		-1.3961E-001
		996.32	10.30	8.3773E-001		2.9172E-001
		1004.76	17.90	4.9674E-001		1.7941E-001
		1274.45	35.50	2.1203E-001		2.1568E-002
	Eu-155	86.54	30.90	1.1258E+000	1.13E+000	1.7220E-001
		105.31	20.70	1.2665E+000		-1.0572E+000
	Am-241	59.54	35.90	1.6827E+000	1.68E+000	-5.8474E-001
	Cm-243	228.19	10.56	1.2300E+000	8.77E-001	3.4959E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.7660E-001	8.77E-001	-2.4711E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 2:06:09 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-162-F-
Sample Title: OOL-09-01-162-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 1:56:04 PM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-162-F-
Title: OOL-09-01-162-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	308	292.05	72.84	1.04	3.77E+002	73.01	2.02E+003
m	2	285-	308	300.60	74.98	1.05	5.77E+002	79.79	2.15E+003
	3	948-	963	955.68	238.80	0.93	1.68E+002	65.50	3.14E+002
	4	1350-	1359	1354.86	338.62	0.94	4.75E+001	33.06	1.05E+002
	5	1402-	1413	1407.95	351.90	1.36	7.36E+001	39.19	1.30E+002
	6	2033-	2054	2044.76	511.15	1.65	1.60E+002	48.17	1.18E+002
	7	2327-	2345	2333.85	583.45	1.82	1.49E+002	39.28	7.44E+001
	8	2432-	2446	2438.74	609.68	1.53	1.50E+002	34.46	5.38E+001
	9	3637-	3659	3647.77	912.02	1.42	1.46E+002	32.75	3.45E+001
M	10	3856-	3887	3861.49	965.47	1.42	3.91E+001	15.37	2.71E+001
m	11	3856-	3887	3878.83	969.81	1.42	6.93E+001	19.03	3.65E+001
	12	4477-	4492	4484.68	1121.31	1.33	6.66E+001	22.78	2.24E+001
	13	5839-	5862	5849.50	1462.62	2.05	8.22E+002	59.90	2.86E+001
	14	7059-	7076	7066.52	1766.97	0.91	5.39E+001	20.22	1.61E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*	100.00	2.18307E-001	7.20667E-002
K-40	0.892	1460.81*	10.67	1.37976E+001	1.50253E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	1.01068E+000	3.43700E-001
		583.14*	84.20	2.51487E-001	7.41044E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	8.24563E+000	1.97796E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.09424E-001	1.71715E-001
Bi-214	0.948	609.31*	46.30	4.69294E-001	1.22171E-001
		1120.29*	15.10	7.43152E-001	2.65971E-001
		1764.49*	15.80	6.33756E-001	2.45871E-001
Ac-228	0.979	338.32*	11.40	4.98769E-001	3.56157E-001
		911.07*	27.70	8.32982E-001	2.10511E-001
		969.11*	16.60	6.74124E-001	1.98074E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.999	1.639856E-001	7.380165E-002
K-40	0.892	1.379758E+001	1.502530E+000
TL-208	0.749	2.514869E-001	7.364980E-002
Pb-212 @	0.520	4.094238E-001	1.717146E-001
Bi-214	0.948	5.367802E-001	1.011823E-001
Ac-228	0.979	7.134952E-001	1.337050E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.84	6.2855E-001	19.36
5	351.90	1.2260E-001	53.28
M 10	965.47	6.5249E-002	39.27

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	8.8621E-002	7.46E-002	6.5422E-003
	1332.49	100.00	7.4645E-002		4.5974E-002
Nb-94	702.63	100.00	8.8604E-002	8.62E-002	-2.6824E-002
	871.10	100.00	8.6201E-002		4.1360E-002
Ag-108m	79.20	7.10	5.4059E+000	1.10E-001	-8.1218E-001
	433.93	89.90	1.1048E-001		7.6369E-003
	614.37	90.40	1.2965E-001		-4.2115E-003
	722.95	90.50	1.1392E-001		-3.3672E-002
Sb-125	176.33	6.89	2.1703E+000	3.36E-001	1.7826E+000
	427.89	29.33	3.3642E-001		2.1078E-001
	463.38	10.35	9.9731E-001		3.0599E-001
	600.56	17.80	5.0208E-001		-9.4826E-002
	606.64	5.02	2.3956E+000		-8.9838E-001
	635.90	11.32	7.6583E-001		1.8742E-001
Cs-134	563.23	8.38	1.1321E+000	1.01E-001	-1.9288E-001
	569.32	15.43	6.1856E-001		-2.8398E-001
	604.70	97.60	1.0713E-001		-9.8326E-002
	795.84	85.40	1.0100E-001		-1.0815E-002
	801.93	8.73	9.7863E-001		-8.2950E-001
Cs-137	661.65	85.12	1.2628E-001	1.26E-001	1.7892E-002
Eu-152	121.78	28.40	7.2165E-001	3.43E-001	-8.2910E-001
	244.69	7.49	1.6276E+000		3.3768E-001
	344.27	26.50	3.9688E-001		-3.4473E-001
	778.89	12.74	6.9103E-001		-2.2950E-001
	867.32	4.16	1.9988E+000		-1.6015E+000
	964.01	14.40	7.5553E-001		1.4448E-002
	1085.78	10.00	9.1288E-001		-1.4736E-001
	1112.02	13.30	6.2763E-001		1.9891E-001
	1407.95	20.70	3.4274E-001		6.1161E-002
Eu-154	123.07	40.50	5.0141E-001	2.34E-001	-6.5638E-002
	247.94	6.60	1.7764E+000		1.3780E-001
	591.81	4.83	1.8893E+000		3.9925E-001
	723.30	19.70	5.3591E-001		4.4422E-001
	756.87	4.33	2.0902E+000		4.3863E-001
	873.19	11.50	7.6394E-001		2.4698E-002
	996.32	10.30	7.8502E-001		1.4995E-001
	1004.76	17.90	4.6727E-001		6.9863E-002
	1274.45	35.50	2.3432E-001		3.8773E-002
Eu-155	86.54	30.90	1.0805E+000	1.08E+000	1.7565E+000
	105.31	20.70	1.2165E+000		-5.9459E-001
Am-241	59.54	35.90	1.5786E+000	1.58E+000	-4.8275E-001
Cm-243	228.19	10.56	1.1952E+000	8.16E-001	3.6568E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.1562E-001	8.16E-001	-7.7830E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 2:20:37 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-163-F-
Sample Title: OOL-09-01-163-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 2:10:33 PM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-163-F-
Title: OOL-09-01-163-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	308	291.90	72.80	1.30	5.40E+002	80.93	2.54E+003
m	2	283-	308	300.73	75.01	1.30	9.51E+002	90.23	2.93E+003
	3	334-	345	339.51	84.71	0.86	2.47E+002	127.66	1.59E+003
	4	946-	964	955.51	238.76	0.59	2.03E+002	78.48	4.14E+002
	5	1346-	1358	1353.17	338.20	0.63	4.49E+001	40.53	1.45E+002
	6	1403-	1417	1408.68	352.08	0.45	1.07E+002	46.25	1.55E+002
	7	2327-	2342	2334.37	583.58	1.42	1.24E+002	36.41	7.27E+001
	8	2430-	2448	2439.31	609.82	1.22	1.19E+002	37.80	7.50E+001
	9	2639-	2658	2647.55	661.89	0.90	1.18E+002	38.78	7.64E+001
	10	3557-	3568	3562.06	890.59	0.36	1.60E+001	16.91	2.30E+001
	11	3640-	3656	3648.20	912.13	1.54	1.01E+002	31.64	5.10E+001
	12	3871-	3888	3878.84	969.81	0.78	5.03E+001	33.23	7.27E+001
	13	4480-	4492	4485.91	1121.62	1.21	3.35E+001	19.44	2.45E+001
	14	5835-	5864	5850.46	1462.86	1.89	8.43E+002	60.44	2.25E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.863	1460.81*	10.67	1.41506E+001	1.52998E+000
Cs-137	0.998	661.65*	85.12	2.05336E-001	7.18844E-002
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.10486E-001	6.74446E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.35882E+001	2.95869E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.93970E-001	2.05954E-001
Bi-214	0.682	609.31*	46.30	3.71708E-001	1.26633E-001
		1120.29*	15.10	3.73531E-001	2.20345E-001
		1764.49	15.80		
Ac-228	0.976	338.32*	11.40	4.72136E-001	4.32282E-001
		911.07*	27.70	5.78241E-001	1.92914E-001
		969.11*	16.60	4.89031E-001	3.27170E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.863	1.415057E+001	1.529977E+000
Cs-137	0.998	2.053356E-001	7.188442E-002
TL-208	0.466	2.104856E-001	6.744456E-002
Pb-212 @	0.520	4.939704E-001	2.059539E-001
Bi-214	0.682	3.721607E-001	1.097928E-001
Ac-228	0.976	5.445278E-001	1.551108E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.80	9.0033E-001	14.98
3	84.71	4.1166E-001	51.68
6	352.08	1.7765E-001	43.39
10	890.59	2.6667E-002	105.69

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	9.1931E-002	8.06E-002	2.2686E-002
		1332.49	100.00	8.0613E-002		7.7261E-002
	Nb-94	702.63	100.00	9.2840E-002	8.46E-002	-1.1653E-002
		871.10	100.00	8.4559E-002		-2.5354E-003
	Ag-108m	79.20	7.10	5.5814E+000	1.04E-001	-2.3147E+000
		433.93	89.90	1.1358E-001		6.1935E-002
		614.37	90.40	1.2232E-001		-3.0541E-002
		722.95	90.50	1.0439E-001		-1.3785E-001
	Sb-125	176.33	6.89	2.2736E+000	3.53E-001	1.1090E+000
		427.89	29.33	3.5330E-001		2.5615E-001
		463.38	10.35	1.0082E+000		4.6724E-001
		600.56	17.80	5.6564E-001		-4.8823E-002
		606.64	5.02	2.4110E+000		-4.0696E-001
		635.90	11.32	8.3694E-001		-7.2563E-001
	Cs-134	563.23	8.38	1.0441E+000	1.09E-001	-1.1423E+000
		569.32	15.43	5.9673E-001		-5.0507E-001
		604.70	97.60	1.1140E-001		-2.2744E-002
		795.84	85.40	1.0943E-001		-5.1670E-003
		801.93	8.73	1.0655E+000		-5.7779E-001
+	Cs-137	661.65*	85.12	9.9766E-002	9.98E-002	2.0534E-001
	Eu-152	121.78	28.40	7.7325E-001	3.33E-001	-2.2577E-001
		244.69	7.49	1.7849E+000		-3.9883E-001
		344.27	26.50	4.0889E-001		-3.3336E-001
		778.89	12.74	7.0286E-001		-4.3229E-001
		867.32	4.16	2.0068E+000		-1.8558E+000
		964.01	14.40	7.6666E-001		3.4748E-001
		1085.78	10.00	8.8823E-001		-1.7232E-001
		1112.02	13.30	7.0673E-001		-4.8276E-002
		1407.95	20.70	3.3260E-001		2.7648E-001
	Eu-154	123.07	40.50	5.3800E-001	2.31E-001	7.8670E-002
		247.94	6.60	1.9815E+000		1.0240E+000
		591.81	4.83	2.1029E+000		-6.0247E-001
		723.30	19.70	4.8922E-001		-1.8670E-001
		756.87	4.33	2.1369E+000		-1.0818E+000
		873.19	11.50	7.3275E-001		-6.0750E-001
		996.32	10.30	8.5120E-001		-2.1720E-001
		1004.76	17.90	5.0803E-001		-1.4701E-001
		1274.45	35.50	2.3076E-001		-7.3507E-002
	Eu-155	86.54	30.90	1.1420E+000	1.14E+000	3.7031E-001
		105.31	20.70	1.3145E+000		-2.4926E-002
	Am-241	59.54	35.90	1.7438E+000	1.74E+000	-3.6921E-002
	Cm-243	228.19	10.56	1.2895E+000	9.24E-001	-1.1869E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.2414E-001	9.24E-001	2.5896E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 3:46:55 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-164-F-
Sample Title: OOL-09-01-164-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 3:36:52 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-164-F-
Title: OOL-09-01-164-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	305	291.30	73.02	1.07	1.55E+002	49.17	7.91E+002
m	2	286-	305	299.83	75.15	1.07	3.29E+002	59.35	1.07E+003
	3	330-	344	339.75	85.13	1.42	1.82E+002	103.54	9.07E+002
	4	930-	959	953.13	238.46	1.08	1.98E+002	103.46	5.42E+002
M	5	1161-	1184	1165.22	291.48	0.46	2.13E+001	14.97	7.06E+001
m	6	1161-	1184	1179.48	295.04	0.47	3.17E+001	17.73	7.90E+001
	7	1347-	1360	1351.67	338.08	0.44	6.74E+001	39.93	1.26E+002
	8	1400-	1413	1405.73	351.60	1.06	1.07E+002	41.98	1.27E+002
	9	2319-	2341	2329.73	582.57	1.35	1.64E+002	43.90	8.74E+001
	10	2424-	2440	2433.33	608.47	1.42	1.21E+002	37.46	7.81E+001
	11	3631-	3651	3640.15	910.14	1.48	1.28E+002	31.06	3.39E+001
	12	3863-	3879	3870.36	967.69	0.94	6.74E+001	28.86	4.76E+001
	13	5826-	5852	5837.69	1459.47	1.94	8.04E+002	56.39	5.93E+000
	14	7048-	7063	7054.06	1763.53	0.41	3.94E+001	14.67	5.58E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.944	1460.81*	10.67	1.70482E+001	1.82605E+000
TL-208	0.465	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.45937E-001	1.03183E-001
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	1.06608E+001	2.84070E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.18811E-001	3.36907E-001
Bi-214	0.676	609.31*	46.30	4.71282E-001	1.57189E-001
		1120.29	15.10		
		1764.49*	15.80	6.14561E-001	2.36741E-001
PB-214	0.618	74.82* @	6.21	1.83689E+001	5.07299E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	2.41434E-001	1.41199E-001
		351.92*	37.20	4.38915E-001	1.87362E-001
Ac-228	0.967	338.32*	11.40	8.94759E-001	5.48356E-001
		911.07*	27.70	9.19770E-001	2.46930E-001
		969.11*	16.60	8.17582E-001	3.60631E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.944	1.704815E+001	1.826047E+000
TL-208		0.465	3.459375E-001	1.031832E-001
Pb-212	@	0.580	6.188112E-001	3.369070E-001
Bi-214		0.676	5.151211E-001	1.309520E-001
PB-214	@	0.618	3.129652E-001	1.127631E-001
Ac-228		0.967	8.880754E-001	1.909879E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.02	2.5779E-001	31.79
3	85.13	3.0272E-001	57.00
M 5	291.48	3.5418E-002	70.45

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1256E-001	8.01E-002	-2.1400E-002
	1332.49	100.00	8.0126E-002		-3.2032E-002
Nb-94	702.63	100.00	1.1251E-001	1.04E-001	-3.6699E-002
	871.10	100.00	1.0449E-001		2.9554E-002
Ag-108m	79.20	7.10	9.2034E+000	1.31E-001	-5.9367E+000
	433.93	89.90	1.3067E-001		-1.0398E-002
	614.37	90.40	1.4271E-001		-9.8207E-002
	722.95	90.50	1.3128E-001		2.4847E-002
Sb-125	176.33	6.89	2.7189E+000	4.06E-001	-1.3803E+000
	427.89	29.33	4.0550E-001		-1.7379E-001
	463.38	10.35	1.2404E+000		8.6335E-001
	600.56	17.80	6.6820E-001		5.4670E-001
	606.64	5.02	3.1014E+000		6.7058E+000
	635.90	11.32	9.8967E-001		1.1924E+000
Cs-134	563.23	8.38	1.4398E+000	1.26E-001	9.5296E-001
	569.32	15.43	7.3192E-001		1.1017E-001
	604.70	97.60	1.5622E-001		-1.4202E-002
	795.84	85.40	1.2609E-001		-3.8446E-002
	801.93	8.73	1.2491E+000		1.3013E-001
Cs-137	661.65	85.12	1.4036E-001	1.40E-001	1.0246E-001
Eu-152	121.78	28.40	9.4988E-001	4.10E-001	-3.0831E-001
	244.69	7.49	2.1800E+000		-7.4707E-001
	344.27	26.50	5.5061E-001		1.1882E-001
	778.89	12.74	7.6359E-001		-9.7093E-001
	867.32	4.16	2.3624E+000		-2.0423E+000
	964.01	14.40	9.6684E-001		1.3239E+000
	1085.78	10.00	9.7678E-001		-6.0523E-001
	1112.02	13.30	7.7493E-001		-1.6205E+000
	1407.95	20.70	4.1016E-001		2.5967E-001
Eu-154	123.07	40.50	6.4821E-001	2.53E-001	-9.1194E-001
	247.94	6.60	2.3766E+000		-1.4905E+000
	591.81	4.83	2.4447E+000		2.2850E+000
	723.30	19.70	6.0142E-001		2.3651E-001
	756.87	4.33	2.4953E+000		-1.8552E+000
	873.19	11.50	9.1643E-001		5.1231E-001
	996.32	10.30	9.5037E-001		-1.3857E-001
	1004.76	17.90	5.5051E-001		-1.6407E-001
	1274.45	35.50	2.5327E-001		-7.9645E-002
Eu-155	86.54	30.90	1.5828E+000	1.58E+000	-9.3322E-001
	105.31	20.70	1.6780E+000		1.3242E+000
Am-241	59.54	35.90	3.5571E+000	3.56E+000	-1.3715E+000
Cm-243	228.19	10.56	1.5678E+000	1.08E+000	1.5686E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0774E+000	1.08E+000	-7.5811E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 3:28:30 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-165-F-
Sample Title: OOL-09-01-165-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 3:18:27 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-165-F-
Title: OOL-09-01-165-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	307	291.58	73.09	0.97	2.14E+002	51.25	7.19E+002
m	2	287-	307	299.87	75.16	0.98	3.33E+002	58.48	9.28E+002
	3	947-	960	953.40	238.53	1.05	2.07E+002	58.86	2.50E+002
	4	1174-	1186	1180.38	295.27	1.54	8.71E+001	39.27	1.19E+002
	5	1346-	1357	1352.23	338.22	0.91	5.69E+001	36.28	1.14E+002
	6	1400-	1412	1405.51	351.54	1.31	1.22E+002	41.19	1.20E+002
	7	2029-	2050	2039.73	510.08	1.33	1.31E+002	42.55	8.92E+001
	8	2318-	2338	2329.09	582.41	1.40	1.35E+002	39.45	7.38E+001
	9	2426-	2444	2433.63	608.54	1.02	1.63E+002	35.23	4.80E+001
	10	3631-	3647	3640.47	910.22	0.71	1.05E+002	28.08	3.20E+001
	11	3864-	3877	3870.79	967.79	0.34	4.10E+001	22.99	3.50E+001
	12	4470-	4484	4475.91	1119.06	0.58	4.92E+001	21.78	2.58E+001
	13	5826-	5850	5838.49	1459.67	1.48	7.92E+002	58.21	2.18E+001
	14	7048-	7062	7054.39	1763.61	0.97	3.31E+001	13.48	4.93E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.973	511.00*		100.00	2.23221E-001	7.86630E-002
K-40	0.959	1460.81*		10.67	1.67968E+001	1.83655E+000
TL-208	0.738	277.35		6.80		
		510.84*		21.60	1.03343E+000	3.73832E-001
		583.14*		84.20	2.85787E-001	9.13347E-002
		860.37		12.46		
Pb-212	0.580	74.81*	@	10.70	1.08054E+001	2.84217E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.45162E-001	2.09584E-001
Bi-214	0.974	609.31*		46.30	6.35709E-001	1.58139E-001
		1120.29*		15.10	6.76435E-001	3.08075E-001
		1764.49*		15.80	5.15480E-001	2.16349E-001
PB-214	0.618	74.82*	@	6.21	1.86180E+001	5.08021E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	6.64336E-001	3.19757E-001
		351.92*		37.20	4.99999E-001	1.88665E-001
Ac-228	0.972	338.32*		11.40	7.55240E-001	4.96030E-001
		911.07*		27.70	7.54239E-001	2.19588E-001
		969.11*		16.60	4.97611E-001	2.83887E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.973	1.614912E-001	8.107424E-002
K-40		0.959	1.679684E+001	1.836552E+000
TL-208		0.738	2.857865E-001	9.085860E-002
Pb-212	@	0.580	6.451624E-001	2.095840E-001
Bi-214		0.974	6.059472E-001	1.179429E-001
PB-214	@	0.618	5.424364E-001	1.624896E-001
Ac-228		0.972	6.687752E-001	1.639317E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.09	3.5629E-001	23.97

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0276E-001	8.08E-002	-1.5274E-001
	1332.49	100.00	8.0810E-002		2.5487E-002
Nb-94	702.63	100.00	1.1874E-001	9.42E-002	-7.5693E-002
	871.10	100.00	9.4211E-002		4.8628E-003
Ag-108m	79.20	7.10	9.3792E+000	1.29E-001	-2.0754E+000
	433.93	89.90	1.3507E-001		-3.8315E-002
	614.37	90.40	1.4208E-001		-4.4657E-002
	722.95	90.50	1.2938E-001		3.3645E-002
Sb-125	176.33	6.89	2.6199E+000	4.10E-001	-6.1033E-001
	427.89	29.33	4.0967E-001		-6.0431E-002
	463.38	10.35	1.1788E+000		6.9797E-001
	600.56	17.80	6.1799E-001		-2.2392E-001
	606.64	5.02	2.9780E+000		3.9318E+000
	635.90	11.32	9.5615E-001		-2.7746E-001
Cs-134	563.23	8.38	1.3431E+000	1.32E-001	-3.8356E-001
	569.32	15.43	7.5190E-001		1.5052E-001
	604.70	97.60	1.5573E-001		-1.5447E-002
	795.84	85.40	1.3239E-001		1.9961E-002
	801.93	8.73	1.1657E+000		-1.1192E+000
Cs-137	661.65	85.12	1.4112E-001	1.41E-001	5.5004E-002
Eu-152	121.78	28.40	9.5306E-001	3.61E-001	-1.1641E+000
	244.69	7.49	2.1133E+000		-8.1683E-001
	344.27	26.50	4.9218E-001		-4.3926E-001
	778.89	12.74	8.2570E-001		4.8055E-001
	867.32	4.16	2.1697E+000		-8.7178E-001
	964.01	14.40	8.9335E-001		9.4619E-001
	1085.78	10.00	9.6164E-001		-9.2630E-001
	1112.02	13.30	8.2359E-001		-1.1438E+000
	1407.95	20.70	3.6100E-001		-1.2037E-001
Eu-154	123.07	40.50	6.6669E-001	2.74E-001	-1.0388E-001
	247.94	6.60	2.3596E+000		-9.2633E-001
	591.81	4.83	2.3277E+000		-2.6431E-001
	723.30	19.70	5.9794E-001		5.4403E-001
	756.87	4.33	2.3012E+000		1.3005E+000
	873.19	11.50	8.3996E-001		-1.5090E-001
	996.32	10.30	9.5037E-001		-3.6898E-001
	1004.76	17.90	5.5849E-001		-2.2687E-002
	1274.45	35.50	2.7405E-001		2.6528E-001
Eu-155	86.54	30.90	1.6461E+000	1.65E+000	2.2829E+000
	105.31	20.70	1.6700E+000		-6.9292E-002
Am-241	59.54	35.90	3.6677E+000	3.67E+000	1.0522E+000
Cm-243	228.19	10.56	1.5216E+000	1.12E+000	-9.2518E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1214E+000	1.12E+000	6.3546E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 3:58:39 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-166-F-
Sample Title: OOL-09-01-166-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 3:48:36 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-166-F-
Title: OOL-09-01-166-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	292.43	72.94	1.54	3.83E+002	82.86	2.19E+003
m	2	284-	308	300.64	74.99	1.55	7.23E+002	88.36	2.96E+003
	3	945-	963	954.26	238.44	1.37	2.75E+002	76.94	3.75E+002
	4	1345-	1357	1352.78	338.10	1.13	6.71E+001	40.61	1.38E+002
	5	1399-	1416	1406.98	351.66	0.73	1.76E+002	50.62	1.51E+002
	6	2323-	2340	2333.29	583.31	1.84	1.56E+002	42.13	9.45E+001
	7	2427-	2446	2438.15	609.53	1.33	1.80E+002	42.39	8.23E+001
	8	3637-	3655	3645.05	911.34	1.40	1.39E+002	35.13	5.43E+001
	9	3734-	3745	3739.94	935.07	0.57	1.67E+001	18.31	2.73E+001
	10	3868-	3885	3876.57	969.24	0.28	7.36E+001	30.20	5.04E+001
	11	5830-	5859	5845.21	1461.55	2.06	9.66E+002	63.70	1.88E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.981	1460.81*	10.67	1.62064E+001	1.69210E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.63258E-001	7.91106E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.03308E+001	2.38623E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.68013E-001	2.14352E-001
Bi-214	0.397	609.31*	46.30	5.61164E-001	1.49329E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.998	338.32*	11.40	7.04538E-001	4.40758E-001
		911.07*	27.70	7.93884E-001	2.20835E-001
		969.11*	16.60	7.15931E-001	3.03054E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.981	1.620637E+001	1.692097E+000
TL-208	0.470	2.632578E-001	7.911059E-002
Pb-212 @	0.520	6.680129E-001	2.143515E-001
Bi-214	0.397	5.611636E-001	1.493292E-001
Ac-228	0.998	7.580702E-001	1.654281E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.94	6.3814E-001	21.64
5	351.66	2.9355E-001	28.74
9	935.07	2.7822E-002	109.70

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.3362E-002	6.76E-002	2.8071E-002
	1332.49	100.00	6.7587E-002		2.0560E-002
Nb-94	702.63	100.00	9.2840E-002	8.81E-002	-4.7113E-002
	871.10	100.00	8.8130E-002		1.2919E-002
Ag-108m	79.20	7.10	5.0831E+000	1.14E-001	-6.7815E+000
	433.93	89.90	1.1480E-001		3.0840E-002
	614.37	90.40	1.3075E-001		-1.3776E-002
	722.95	90.50	1.1447E-001		4.0771E-002
Sb-125	176.33	6.89	2.1003E+000	3.36E-001	3.9196E-001
	427.89	29.33	3.3578E-001		1.9130E-002
	463.38	10.35	1.0262E+000		2.7783E-003
	600.56	17.80	5.2087E-001		-5.6657E-002
	606.64	5.02	2.5813E+000		-5.6867E-002
	635.90	11.32	8.2783E-001		1.0994E-001
Cs-134	563.23	8.38	1.1461E+000	1.09E-001	-1.9209E-001
	569.32	15.43	6.3664E-001		8.0518E-001
	604.70	97.60	1.1843E-001		8.4036E-003
	795.84	85.40	1.0909E-001		1.0579E-001
	801.93	8.73	9.8947E-001		-3.1807E-001
Cs-137	661.65	85.12	1.2270E-001	1.23E-001	8.2836E-002
Eu-152	121.78	28.40	7.1953E-001	3.25E-001	-2.2218E-001
	244.69	7.49	1.6704E+000		-3.8849E-001
	344.27	26.50	4.2273E-001		1.0193E-001
	778.89	12.74	6.4659E-001		-2.7843E-001
	867.32	4.16	2.1545E+000		-1.5898E+000
	964.01	14.40	8.2339E-001		8.0922E-002
	1085.78	10.00	7.9762E-001		-1.0987E+000
	1112.02	13.30	6.7518E-001		2.1563E-001
	1407.95	20.70	3.2476E-001		2.7220E-002
Eu-154	123.07	40.50	5.0005E-001	2.45E-001	-5.8398E-002
	247.94	6.60	1.8291E+000		-1.9840E+000
	591.81	4.83	2.0553E+000		-4.1673E-001
	723.30	19.70	5.3467E-001		4.7996E-001
	756.87	4.33	2.0217E+000		-8.8350E-001
	873.19	11.50	7.4710E-001		-4.6121E-001
	996.32	10.30	7.6660E-001		2.7159E-001
	1004.76	17.90	4.3787E-001		-2.1307E-001
	1274.45	35.50	2.4466E-001		-1.1307E-001
Eu-155	86.54	30.90	1.0539E+000	1.05E+000	1.2490E+000
	105.31	20.70	1.1873E+000		6.8183E-002
Am-241	59.54	35.90	1.4338E+000	1.43E+000	-1.7875E-001
Cm-243	228.19	10.56	1.2104E+000	8.58E-001	-6.2976E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.5818E-001	8.58E-001	1.5738E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 8:44:59 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-01-167-F-
Sample Title: OOL-09-01-167-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 8:33:31 PM
Live Time: 679.4 seconds
Real Time: 681.5 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-01-167-F-
Title: OOL-09-01-167-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	309	300.57	75.04	1.21	5.46E+002	185.29	2.89E+003
2	333-	344	339.93	84.89	1.00	2.49E+002	132.84	1.73E+003
3	947-	964	954.15	238.48	1.42	2.68E+002	82.81	4.63E+002
4	1398-	1417	1406.61	351.63	1.63	1.80E+002	58.54	2.03E+002
5	2029-	2054	2042.00	510.52	1.85	2.22E+002	54.40	1.29E+002
6	2320-	2343	2331.73	582.97	1.79	1.77E+002	49.57	1.16E+002
7	2424-	2446	2435.41	608.90	0.68	1.97E+002	49.29	1.12E+002
8	2636-	2653	2644.71	661.23	1.55	7.22E+001	37.08	8.78E+001
9	3634-	3654	3643.17	910.92	1.04	1.41E+002	39.13	7.06E+001
10	3866-	3885	3874.46	968.75	0.89	8.68E+001	33.67	5.92E+001
11	4472-	4489	4480.38	1120.27	1.43	7.13E+001	28.64	4.37E+001
12	5828-	5857	5842.85	1460.98	2.11	1.02E+003	65.17	1.88E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.993	511.00*	100.00	2.75520E-001	7.72092E-002
K-40	0.999	1460.81*	10.67	1.55276E+001	1.60380E+000
Cs-137	0.995	661.65*	85.12	1.14743E-001	6.04714E-002
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.27556E+000	3.72320E-001
		583.14*	84.20	2.73230E-001	8.42784E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	7.14097E+000	2.79975E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.93145E-001	2.05753E-001
Bi-214	0.696	609.31*	46.30	5.59574E-001	1.56199E-001
		1120.29*	15.10	7.23843E-001	3.00898E-001
		1764.49	15.80		
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	7.38238E-001	2.21265E-001
		969.11*	16.60	7.69431E-001	3.09268E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN	0.993	2.165025E-001	7.930292E-002
K-40	0.999	1.552764E+001	1.603801E+000
Cs-137	0.995	1.147435E-001	6.047142E-002
TL-208	0.751	2.732301E-001	8.380670E-002
Pb-212 @	0.521	5.931449E-001	2.057528E-001
Bi-214	0.696	5.944439E-001	1.386331E-001
Ac-228	0.632	7.487985E-001	1.799517E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.89	3.6678E-001	53.31
4	351.63	2.6509E-001	32.50

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
	Co-60	1173.22	100.00	9.7356E-002	7.81E-002	7.5100E-002
		1332.49	100.00	7.8063E-002		4.2821E-002
	Nb-94	702.63	100.00	9.8042E-002	9.25E-002	-3.0502E-002
		871.10	100.00	9.2495E-002		4.6365E-002
	Ag-108m	79.20	7.10	6.1000E+000	1.12E-001	-3.1148E+000
		433.93	89.90	1.1866E-001		6.3158E-002
		614.37	90.40	1.2817E-001		3.1271E-002
		722.95	90.50	1.1180E-001		1.7002E-002
	Sb-125	176.33	6.89	2.2782E+000	3.52E-001	-1.5761E-001
		427.89	29.33	3.5155E-001		-6.4208E-002
		463.38	10.35	1.0519E+000		8.0869E-001
		600.56	17.80	5.7447E-001		-2.0655E-001
		606.64	5.02	2.5895E+000		5.8448E+000
		635.90	11.32	8.2749E-001		3.5437E-001
	Cs-134	563.23	8.38	1.1968E+000	1.05E-001	3.1754E-001
		569.32	15.43	6.4144E-001		-7.9292E-002
		604.70	97.60	1.3122E-001		-2.2049E-002
		795.84	85.40	1.0517E-001		3.3466E-002
		801.93	8.73	9.7159E-001		-1.2718E+000
+	Cs-137	661.65*	85.12	9.2702E-002	9.27E-002	1.1474E-001
	Eu-152	121.78	28.40	7.7002E-001	3.28E-001	-2.2294E-002
		244.69	7.49	1.7995E+000		-1.6748E+000
		344.27	26.50	4.1845E-001		-2.9411E-001
		778.89	12.74	7.2666E-001		-5.8248E-001
		867.32	4.16	2.1973E+000		-3.8840E+000
		964.01	14.40	8.2514E-001		4.0935E-001
		1085.78	10.00	8.4759E-001		-4.4717E-001
		1112.02	13.30	6.8250E-001		-7.9553E-001
		1407.95	20.70	3.2768E-001		3.4856E-001
	Eu-154	123.07	40.50	5.3495E-001	2.12E-001	2.2810E-002
		247.94	6.60	1.9614E+000		-1.4081E+000
		591.81	4.83	2.1905E+000		3.9226E+000
		723.30	19.70	5.1366E-001		1.4194E-001
		756.87	4.33	1.9894E+000		-2.7585E-001
		873.19	11.50	7.6445E-001		-6.4390E-001
		996.32	10.30	8.4040E-001		1.2193E-001
		1004.76	17.90	4.6829E-001		-2.0279E-001
		1274.45	35.50	2.1231E-001		-1.4785E-001
	Eu-155	86.54	30.90	1.1841E+000	1.18E+000	1.3105E+000
		105.31	20.70	1.2775E+000		-5.7076E-001
	Am-241	59.54	35.90	1.6648E+000	1.66E+000	1.4462E-001
	Cm-243	228.19	10.56	1.2848E+000	8.98E-001	-4.6792E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	8.9774E-001	8.98E-001	-5.3829E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 1:49:57 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-168-F-
Sample Title: OOL-09-01-168-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 1:39:52 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-168-F-
Title: OOL-09-01-168-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	307	292.03	72.84	0.97	3.07E+002	68.47	1.75E+003
m	2	285-	307	300.94	75.06	0.97	5.77E+002	78.56	1.75E+003
	3	950-	963	955.57	238.77	0.56	9.57E+001	55.87	2.55E+002
	4	1171-	1187	1181.79	295.34	1.12	9.23E+001	46.27	1.49E+002
	5	1401-	1418	1408.38	352.01	0.61	1.17E+002	47.28	1.42E+002
	6	2035-	2055	2044.19	511.01	1.93	1.46E+002	41.40	8.28E+001
	7	2327-	2342	2333.76	583.42	1.41	1.04E+002	30.84	4.75E+001
	8	2434-	2446	2438.86	609.70	0.66	9.79E+001	30.32	5.31E+001
	9	2641-	2656	2648.48	662.13	0.73	5.66E+001	29.13	5.44E+001
	10	3438-	3449	3443.87	861.03	1.08	1.45E+001	18.21	2.85E+001
M	11	3613-	3657	3619.36	904.92	1.81	1.70E+001	11.23	1.92E+001
m	12	3613-	3657	3647.37	911.92	1.82	9.87E+001	20.47	3.25E+001
	13	3870-	3887	3878.82	969.80	1.14	6.83E+001	24.95	2.87E+001
	14	4481-	4494	4486.12	1121.67	1.42	3.65E+001	22.31	3.25E+001
	15	5510-	5521	5515.13	1379.00	0.61	8.56E+000	11.41	9.44E+000
	16	5836-	5861	5849.01	1462.50	1.89	5.90E+002	49.82	1.31E+001
	17	7059-	7076	7067.20	1767.14	0.38	4.15E+001	17.52	1.15E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	1.000	511.00*		100.00	1.99441E-001	6.26109E-002
K-40	0.905	1460.81*		10.67	9.89581E+000	1.15781E+000
Cs-137	0.992	661.65*		85.12	9.87568E-002	5.21696E-002
TL-208	0.899	277.35		6.80		
		510.84*		21.60	9.23340E-001	2.99513E-001
		583.14*		84.20	1.76818E-001	5.70492E-002
		860.37*		12.46	1.81972E-001	2.29933E-001
Pb-212	0.520	74.81*	@	10.70	8.23267E+000	1.96481E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.32772E-001	1.40674E-001
Bi-214	0.683	609.31*		46.30	3.05883E-001	1.01905E-001
		1120.29*		15.10	4.06555E-001	2.52541E-001
		1764.49		15.80		
PB-214	0.582	74.82*	@	6.21	1.41851E+001	3.53856E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.53685E-001	2.92921E-001
		351.92*		37.20	3.80883E-001	1.66648E-001
Ac-228	0.616	338.32		11.40		
		911.07*		27.70	5.64845E-001	1.33947E-001
		969.11*		16.60	6.64248E-001	2.52415E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		1.000	1.611848E-001	6.373213E-002
K-40		0.905	9.895806E+000	1.157805E+000
Cs-137		0.992	9.875681E-002	5.216959E-002
TL-208		0.899	1.771138E-001	5.510243E-002
Pb-212	@	0.520	2.327721E-001	1.406744E-001
Bi-214		0.683	3.199796E-001	9.450099E-002
PB-214	@	0.582	4.231370E-001	1.448473E-001
Ac-228		0.616	5.866867E-001	1.183195E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.84	5.1173E-001	22.30
M 11	904.92	2.8401E-002	65.92
15	1379.00	1.4259E-002	133.35
17	1767.14	6.9230E-002	42.18

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	7.9500E-002	7.22E-002	7.6684E-002
		1332.49	100.00	7.2209E-002		4.7027E-002
	Nb-94	702.63	100.00	8.3838E-002	7.50E-002	1.8880E-002
		871.10	100.00	7.5033E-002		-1.0492E-002
	Ag-108m	79.20	7.10	5.2120E+000	8.86E-002	-6.3576E-001
		433.93	89.90	9.9178E-002		-5.3172E-002
		614.37	90.40	1.1922E-001		4.8702E-002
		722.95	90.50	8.8615E-002		-5.6908E-002
	Sb-125	176.33	6.89	1.9410E+000	3.06E-001	4.4061E-001
		427.89	29.33	3.0614E-001		9.6712E-002
		463.38	10.35	8.8868E-001		5.1478E-001
		600.56	17.80	4.9616E-001		4.6156E-001
		606.64	5.02	2.2147E+000		-2.8080E+000
		635.90	11.32	6.7577E-001		-1.9658E-001
	Cs-134	563.23	8.38	9.8407E-001	8.84E-002	7.0201E-001
		569.32	15.43	5.4864E-001		2.5767E-001
		604.70	97.60	1.0025E-001		-2.0688E-001
		795.84	85.40	8.8436E-002		-1.2625E-003
		801.93	8.73	8.4972E-001		-5.0980E-001
+	Cs-137	661.65*	85.12	7.8355E-002	7.84E-002	9.8757E-002
	Eu-152	121.78	28.40	6.7800E-001	2.97E-001	1.1759E-001
		244.69	7.49	1.4929E+000		1.0627E-001
		344.27	26.50	3.4719E-001		-4.0730E-001
		778.89	12.74	5.7021E-001		-1.6652E-001
		867.32	4.16	1.9243E+000		-1.2239E-001
		964.01	14.40	6.4858E-001		-2.3174E-001
		1085.78	10.00	8.1347E-001		1.0302E-001
		1112.02	13.30	6.2472E-001		-2.2226E-002
		1407.95	20.70	2.9704E-001		-1.2958E-001
	Eu-154	123.07	40.50	4.7107E-001	1.96E-001	-1.8043E-001
		247.94	6.60	1.5828E+000		2.0679E-001
		591.81	4.83	1.6889E+000		-8.3221E-002
		723.30	19.70	4.0547E-001		-2.7680E-001
		756.87	4.33	1.9066E+000		7.8907E-001
		873.19	11.50	6.1910E-001		-4.2613E-001
		996.32	10.30	6.5766E-001		-3.5316E-001
		1004.76	17.90	4.3129E-001		1.1018E-001
		1274.45	35.50	1.9567E-001		-1.1462E-001
	Eu-155	86.54	30.90	1.0517E+000	1.05E+000	1.5953E+000
		105.31	20.70	1.1689E+000		9.4037E-002
	Am-241	59.54	35.90	1.5577E+000	1.56E+000	2.3196E-001
	Cm-243	228.19	10.56	1.1030E+000	7.36E-001	8.1851E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	7.3580E-001	7.36E-001	1.9206E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 1:16:41 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-169-F-
Sample Title: OOL-09-01-169-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 1:06:36 PM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-169-F-
Title: OOL-09-01-169-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	308	292.03	72.84	0.97	3.81E+002	73.63	1.98E+003
m	2	285-	308	300.57	74.97	0.98	7.28E+002	85.02	2.15E+003
M	3	332-	358	339.13	84.61	1.32	3.41E+002	72.59	2.02E+003
m	4	332-	358	350.69	87.51	1.32	1.96E+002	67.09	2.43E+003
	5	870-	877	873.72	218.30	0.69	3.85E+001	37.71	1.63E+002
	6	950-	962	954.58	238.52	1.15	2.04E+002	64.78	3.33E+002
	7	1343-	1358	1353.15	338.20	0.58	7.09E+001	49.41	1.88E+002
	8	1402-	1414	1407.61	351.82	1.44	1.30E+002	43.69	1.39E+002
	9	2035-	2054	2043.61	510.86	2.00	1.65E+002	49.48	1.35E+002
	10	2326-	2342	2333.22	583.29	1.36	1.62E+002	40.53	8.44E+001
	11	2427-	2444	2437.55	609.38	0.88	1.46E+002	42.10	9.73E+001
	12	3637-	3654	3646.10	911.61	0.97	1.26E+002	32.00	4.29E+001
M	13	3853-	3884	3858.61	964.75	1.51	3.22E+001	15.70	4.07E+001
m	14	3853-	3884	3875.90	969.07	1.51	5.96E+001	19.54	6.29E+001
	15	4477-	4490	4482.99	1120.89	0.77	3.47E+001	23.20	3.83E+001
	16	5833-	5861	5846.63	1461.91	1.89	1.01E+003	65.22	2.09E+001
	17	7056-	7072	7063.56	1766.23	0.35	5.37E+001	15.38	2.34E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*	100.00	2.25247E-001	7.40718E-002
K-40	0.959	1460.81*	10.67	1.69947E+001	1.75784E+000
Eu-155	0.314	86.54*	30.90	7.82721E-001	3.09213E-001
		105.31	20.70		
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.04281E+000	3.53342E-001
		583.14*	84.20	2.73487E-001	7.72895E-002
		860.37	12.46		
Pb-212	0.676	74.81* @	10.70	1.04083E+001	2.37451E+000
		77.11 @	18.00		
		87.30* @	8.00	3.02326E+000	1.19434E+000
		238.63*	44.60	4.96245E-001	1.75649E-001
Bi-214	0.976	609.31*	46.30	4.54969E-001	1.42918E-001
		1120.29*	15.10	3.87331E-001	2.61881E-001
		1764.49*	15.80	6.30557E-001	1.91413E-001
Ac-228	0.995	338.32*	11.40	7.45344E-001	5.32141E-001
		911.07*	27.70	7.21723E-001	2.01072E-001
		969.11*	16.60	5.79334E-001	1.99450E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.999	1.661739E-001	7.590543E-002
K-40		0.959	1.699468E+001	1.757840E+000
Eu-155		0.314	6.542434E-001	3.125392E-001
TL-208		0.751	2.734870E-001	7.677386E-002
Pb-212	@	0.676	4.962446E-001	1.756493E-001
Bi-214		0.976	4.968717E-001	1.049250E-001
Ac-228		0.995	6.562604E-001	1.368406E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.84	6.3451E-001	19.34
M 3	84.61	5.6799E-001	21.30
5	218.30	6.4196E-002	97.92
8	351.82	2.1663E-001	33.61
M 13	964.75	5.3619E-002	48.79

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	9.8200E-002	7.79E-002	5.9950E-002
		1332.49	100.00	7.7919E-002		1.0081E-002
	Nb-94	702.63	100.00	9.9484E-002	9.06E-002	6.0572E-006
		871.10	100.00	9.0634E-002		-4.6827E-002
	Ag-108m	79.20	7.10	5.5806E+000	1.21E-001	-8.7356E-001
		433.93	89.90	1.2315E-001		-3.4211E-002
		614.37	90.40	1.3803E-001		-1.3368E-002
		722.95	90.50	1.2114E-001		1.7914E-002
	Sb-125	176.33	6.89	2.1997E+000	3.85E-001	4.6341E-003
		427.89	29.33	3.8477E-001		2.5440E-002
		463.38	10.35	1.0542E+000		5.8625E-001
		600.56	17.80	5.4576E-001		-2.6694E-001
		606.64	5.02	2.6378E+000		4.0463E+000
		635.90	11.32	8.0693E-001		-5.3113E-001
	Cs-134	563.23	8.38	1.1626E+000	1.12E-001	-1.5236E-001
		569.32	15.43	6.3961E-001		5.4544E-001
		604.70	97.60	1.2446E-001		1.7470E-002
		795.84	85.40	1.1209E-001		3.0231E-002
		801.93	8.73	1.0037E+000		-9.0768E-001
	Cs-137	661.65	85.12	1.3718E-001	1.37E-001	1.8887E-001
	Eu-152	121.78	28.40	7.7558E-001	3.43E-001	2.3482E-001
		244.69	7.49	1.8098E+000		-6.0712E-001
		344.27	26.50	4.3401E-001		2.3773E-003
		778.89	12.74	7.2363E-001		3.4598E-001
		867.32	4.16	2.3408E+000		-1.4186E+000
		964.01	14.40	8.2167E-001		-5.3957E-002
		1085.78	10.00	8.9535E-001		1.8453E-002
		1112.02	13.30	7.0157E-001		-3.0310E-001
		1407.95	20.70	3.4274E-001		2.5101E-001
	Eu-154	123.07	40.50	5.3484E-001	2.47E-001	-2.7825E-001
		247.94	6.60	1.9520E+000		-1.3730E+000
		591.81	4.83	2.0456E+000		2.4459E-001
		723.30	19.70	5.5536E-001		3.6237E-001
		756.87	4.33	2.1104E+000		-1.8387E+000
		873.19	11.50	7.8311E-001		-1.3147E-001
		996.32	10.30	8.1007E-001		-2.1752E-001
		1004.76	17.90	4.7929E-001		2.2256E-001
		1274.45	35.50	2.4690E-001		-2.7187E-001
+	Eu-155	86.54*	30.90	9.2857E-001	9.29E-001	7.8272E-001
		105.31	20.70	1.2917E+000		-2.1999E-001
	Am-241	59.54	35.90	1.6783E+000	1.68E+000	-6.6867E-002
	Cm-243	228.19	10.56	1.3252E+000	9.26E-001	3.2235E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.2649E-001	9.26E-001	-2.7900E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 11:46:27 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-170-F-
Sample Title: OOL-09-01-170-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 11:36:25 AM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-170-F-
Title: OOL-09-01-170-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	308	292.18	72.87	0.90	3.79E+002	71.54	1.59E+003
m	2	287-	308	300.80	75.03	0.90	7.57E+002	83.16	1.85E+003
	3	331-	345	339.69	84.76	1.11	3.00E+002	149.18	1.91E+003
	4	948-	961	955.95	238.87	0.93	2.48E+002	65.99	3.22E+002
M	5	1176-	1205	1181.72	295.32	0.80	5.33E+001	25.38	1.65E+002
m	6	1176-	1205	1201.32	300.23	0.80	3.27E+001	21.74	1.38E+002
	7	1402-	1416	1408.49	352.04	1.08	1.34E+002	50.74	1.86E+002
	8	2040-	2055	2045.87	511.43	1.63	1.02E+002	44.02	1.33E+002
	9	2326-	2344	2334.47	583.60	1.55	1.69E+002	42.95	9.19E+001
	10	2434-	2448	2439.21	609.79	0.97	1.76E+002	36.76	6.07E+001
	11	3070-	3083	3075.82	768.99	0.79	2.16E+001	26.24	5.64E+001
	12	3439-	3451	3445.11	861.34	1.13	3.58E+001	20.88	2.93E+001
	13	3638-	3656	3647.79	912.03	1.23	1.19E+002	35.30	5.97E+001
	14	3872-	3888	3880.06	970.11	0.79	6.71E+001	27.14	3.99E+001
	15	5511-	5522	5516.00	1379.22	1.06	1.90E+001	12.67	9.00E+000
	16	5837-	5864	5850.54	1462.88	1.94	9.31E+002	63.73	2.80E+001
	17	7061-	7078	7068.94	1767.57	1.47	5.10E+001	18.24	1.10E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.994	511.00*		100.00	1.39406E-001	6.29571E-002
K-40	0.861	1460.81*		10.67	1.56194E+001	1.65597E+000
TL-208	0.893	277.35		6.80		
		510.84*		21.60	6.45398E-001	2.96195E-001
		583.14*		84.20	2.86325E-001	8.16958E-002
		860.37*		12.46	4.49227E-001	2.67999E-001
Pb-212	0.519	74.81*	@	10.70	1.08029E+001	2.42759E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.03148E-001	1.86270E-001
Bi-214	0.393	609.31*		46.30	5.50624E-001	1.33322E-001
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.582	74.82*	@	6.21	1.86136E+001	4.39563E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.19634E-001	1.61567E-001
		351.92*		37.20	4.35745E-001	1.80617E-001
Ac-228	0.607	338.32		11.40		
		911.07*		27.70	6.83158E-001	2.16786E-001
		969.11*		16.60	6.52649E-001	2.72638E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.994	7.459560E-002	6.515391E-002
K-40		0.861	1.561937E+001	1.655966E+000
TL-208		0.893	3.000482E-001	7.766726E-002
Pb-212	@	0.519	6.031483E-001	1.862699E-001
Bi-214		0.393	5.506241E-001	1.333224E-001
PB-214	@	0.582	3.712455E-001	1.204190E-001
Ac-228		0.607	6.713404E-001	1.696825E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.87	6.3124E-001	18.89
3	84.76	4.9954E-001	49.77
m 6	300.23	5.4475E-002	66.52
11	768.99	3.6058E-002	121.30
15	1379.22	3.1667E-002	66.69
17	1767.57	8.5020E-002	35.75

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0280E-001	8.28E-002	3.2899E-002
	1332.49	100.00	8.2787E-002		4.9978E-002
Nb-94	702.63	100.00	1.0301E-001	9.19E-002	1.2943E-002
	871.10	100.00	9.1860E-002		-1.6302E-002
Ag-108m	79.20	7.10	5.4156E+000	1.17E-001	-7.9687E-001
	433.93	89.90	1.1679E-001		-5.3789E-002
	614.37	90.40	1.4294E-001		3.0659E-002
	722.95	90.50	1.2036E-001		1.0662E-001
Sb-125	176.33	6.89	2.2533E+000	3.53E-001	9.9963E-001
	427.89	29.33	3.5330E-001		-8.0074E-002
	463.38	10.35	1.0473E+000		9.1755E-001
	600.56	17.80	5.4441E-001		-2.8998E-001
	606.64	5.02	2.6308E+000		-3.0240E+000
	635.90	11.32	7.9984E-001		-3.9821E-001
Cs-134	563.23	8.38	1.2056E+000	1.12E-001	6.6239E-001
	569.32	15.43	6.3068E-001		-9.7111E-001
	604.70	97.60	1.1336E-001		-1.6774E-001
	795.84	85.40	1.1176E-001		8.8998E-002
	801.93	8.73	1.0754E+000		-4.1043E-001
Cs-137	661.65	85.12	1.2436E-001	1.24E-001	7.7069E-002
Eu-152	121.78	28.40	7.4660E-001	3.53E-001	-4.8827E-001
	244.69	7.49	1.7717E+000		-4.7407E-003
	344.27	26.50	4.1114E-001		-7.1569E-002
	778.89	12.74	7.5909E-001		2.0651E-001
	867.32	4.16	2.2781E+000		3.4254E-001
	964.01	14.40	7.4990E-001		4.4255E-001
	1085.78	10.00	9.0591E-001		6.7772E-001
	1112.02	13.30	6.9638E-001		-1.1294E+000
	1407.95	20.70	3.5258E-001		1.0623E-001
Eu-154	123.07	40.50	5.2199E-001	2.58E-001	-3.5921E-003
	247.94	6.60	1.9012E+000		-8.4518E-001
	591.81	4.83	2.0934E+000		-1.0725E-001
	723.30	19.70	5.6129E-001		6.5378E-001
	756.87	4.33	2.2522E+000		1.9045E+000
	873.19	11.50	7.8311E-001		-4.2751E-001
	996.32	10.30	8.4449E-001		-6.3351E-001
	1004.76	17.90	4.6929E-001		8.3496E-002
	1274.45	35.50	2.5777E-001		9.7892E-002
Eu-155	86.54	30.90	1.1195E+000	1.12E+000	-4.6714E-001
	105.31	20.70	1.3013E+000		9.2873E-001
Am-241	59.54	35.90	1.5708E+000	1.57E+000	2.3314E-001
Cm-243	228.19	10.56	1.2290E+000	8.73E-001	-1.2451E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.7328E-001	8.73E-001	1.9740E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 10:52:58 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-01-171-F-
Sample Title: OOL-09-01-171-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 10:42:54 AM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: GRN7780
Log Number: OOL-09-01-171-F-
Title: OOL-09-01-171-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5824-	5854	5838.88	1459.69	2.20	5.46E+002	49.60	1.94E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.960	1460.81*	10.67	1.19723E+001	1.45751E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.960	1.197227E+001	1.457507E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1365E-001	9.76E-002	4.8820E-002
	1332.49	100.00	9.7552E-002		-7.7483E-003
Nb-94	702.63	100.00	1.1585E-001	1.16E-001	4.2376E-002
	871.10	100.00	1.1908E-001		8.8031E-002
Ag-108m	79.20	7.10	1.2959E+001	1.29E-001	-2.1252E+001
	433.93	89.90	1.4358E-001		-1.0934E-001
	614.37	90.40	1.4387E-001		-1.5926E-001
	722.95	90.50	1.2911E-001		3.5863E-002
Sb-125	176.33	6.89	3.0178E+000	4.47E-001	6.5513E-001
	427.89	29.33	4.4701E-001		1.2907E-002
	463.38	10.35	1.2081E+000		8.1255E-002
	600.56	17.80	7.0647E-001		-4.2380E-001
	606.64	5.02	2.9271E+000		2.7695E+000
	635.90	11.32	1.0361E+000		-3.0535E-001
Cs-134	563.23	8.38	1.5294E+000	1.34E-001	-4.8937E-001
	569.32	15.43	8.0480E-001		1.3338E+000
	604.70	97.60	1.4822E-001		1.2873E-002
	795.84	85.40	1.3440E-001		1.0918E-001
	801.93	8.73	1.2851E+000		6.9315E-001
Cs-137	661.65	85.12	1.5286E-001	1.53E-001	6.6074E-002
Eu-152	121.78	28.40	1.0973E+000	3.61E-001	8.0853E-002
	244.69	7.49	2.2007E+000		-3.5608E+000
	344.27	26.50	5.2823E-001		-5.4968E-001
	778.89	12.74	8.9728E-001		4.6566E-001
	867.32	4.16	2.7560E+000		3.4507E-001
	964.01	14.40	8.8357E-001		6.6186E-001
	1085.78	10.00	1.0089E+000		3.4991E-001
	1112.02	13.30	8.2240E-001		-2.6876E-001
	1407.95	20.70	3.6126E-001		-1.7786E-001
Eu-154	123.07	40.50	7.5200E-001	2.68E-001	1.8825E-001
	247.94	6.60	2.4216E+000		-4.5833E-001
	591.81	4.83	2.4741E+000		-1.3212E+000
	723.30	19.70	5.8754E-001		8.9982E-002
	756.87	4.33	2.6259E+000		-1.0640E+000
	873.19	11.50	9.7702E-001		-2.6986E-001
	996.32	10.30	9.8816E-001		-9.7196E-001
	1004.76	17.90	6.0146E-001		-4.1902E-002
	1274.45	35.50	2.6798E-001		8.8684E-002
Eu-155	86.54	30.90	2.2361E+000	2.06E+000	2.4934E+000
	105.31	20.70	2.0604E+000		-1.3753E+000
Am-241	59.54	35.90	6.0981E+000	6.10E+000	-4.6001E+000
Cm-243	228.19	10.56	1.6597E+000	1.15E+000	-5.8390E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1458E+000	1.15E+000	-1.5453E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 11:13:48 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-01-171-F-
Sample Title: OOL-09-01-171-F-G-R
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 11:03:44 AM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: GRN7780
Log Number: OOL-09-01-171-F-
Title: OOL-09-01-171-F-G-R
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	3631-	3645	3639.96	909.95	0.61	3.78E+001	28.85	5.92E+001
2	5825-	5855	5839.82	1459.92	3.20	5.84E+002	48.08	3.71E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.975	1460.81*	10.67	1.28227E+001	1.48027E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.975	1.282270E+001	1.480266E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	909.95	6.2938E-002	76.41

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1318E-001	9.14E-002	-3.1319E-002
	1332.49	100.00	9.1404E-002		1.3085E-002
Nb-94	702.63	100.00	1.0944E-001	1.07E-001	-4.3908E-002
	871.10	100.00	1.0726E-001		-5.0519E-002
Ag-108m	79.20	7.10	1.2686E+001	1.28E-001	-1.8560E+001
	433.93	89.90	1.3413E-001		6.9074E-003
	614.37	90.40	1.4049E-001		-1.5705E-001
	722.95	90.50	1.2788E-001		7.9449E-002
Sb-125	176.33	6.89	2.9628E+000	4.16E-001	-8.5597E-001
	427.89	29.33	4.1622E-001		-5.1530E-002
	463.38	10.35	1.2256E+000		9.8320E-001
	600.56	17.80	6.7275E-001		-5.5454E-001
	606.64	5.02	2.8200E+000		1.5248E+000
	635.90	11.32	1.0392E+000		2.2379E-002
Cs-134	563.23	8.38	1.5500E+000	1.22E-001	1.8134E+000
	569.32	15.43	7.8302E-001		-1.3122E-001
	604.70	97.60	1.4489E-001		1.0411E-001
	795.84	85.40	1.2198E-001		7.9492E-002
	801.93	8.73	1.1290E+000		-8.5237E-001
Cs-137	661.65	85.12	1.6364E-001	1.64E-001	2.4382E-001
Eu-152	121.78	28.40	1.0763E+000	3.96E-001	-3.8685E-001
	244.69	7.49	2.3203E+000		-1.7727E+000
	344.27	26.50	5.3264E-001		-5.4015E-001
	778.89	12.74	8.0426E-001		-2.7558E-001
	867.32	4.16	2.6375E+000		3.4656E-001
	964.01	14.40	9.0174E-001		6.2755E-001
	1085.78	10.00	1.0292E+000		3.0684E-001
	1112.02	13.30	7.7447E-001		-9.4082E-001
	1407.95	20.70	3.9581E-001		2.4523E-001
Eu-154	123.07	40.50	7.3769E-001	2.58E-001	-2.7216E-001
	247.94	6.60	2.4701E+000		1.2174E-001
	591.81	4.83	2.3997E+000		1.4501E+000
	723.30	19.70	5.8377E-001		5.9315E-002
	756.87	4.33	2.6786E+000		6.1492E-001
	873.19	11.50	9.2174E-001		4.0063E-001
	996.32	10.30	9.9755E-001		-6.8985E-002
	1004.76	17.90	5.1536E-001		-1.7816E-001
	1274.45	35.50	2.5773E-001		4.7870E-003
Eu-155	86.54	30.90	2.1638E+000	2.05E+000	1.1038E+000
	105.31	20.70	2.0543E+000		8.0280E-001
Am-241	59.54	35.90	6.6112E+000	6.61E+000	4.3695E+000
Cm-243	228.19	10.56	1.6707E+000	1.10E+000	1.4238E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0950E+000	1.10E+000	-6.2963E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/14/2006 2:59:36 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-172-F-
Sample Title: OOL-09-01-172-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/14/2006 2:49:34 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-172-F-
Title: OOL-09-01-172-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	308	291.67	72.75	1.05	4.26E+002	89.55	2.57E+003
m	2	287-	308	300.28	74.90	1.06	1.02E+003	102.10	3.31E+003
	3	334-	345	339.34	84.67	1.26	2.50E+002	150.80	2.25E+003
	4	950-	960	954.54	238.51	0.72	4.93E+001	42.47	1.75E+002
	5	2038-	2053	2042.58	510.61	1.72	1.08E+002	32.72	5.56E+001
	6	2426-	2441	2436.11	609.02	0.45	6.83E+001	27.88	4.47E+001
	7	2637-	2652	2645.39	661.35	1.42	8.80E+001	33.15	6.60E+001
	8	2868-	2879	2872.91	718.25	0.48	1.68E+001	16.75	2.22E+001
	9	3637-	3651	3643.87	911.05	0.38	4.36E+001	22.54	3.04E+001
	10	3869-	3882	3875.29	968.92	0.32	2.55E+001	18.89	2.35E+001
	11	4686-	4697	4691.80	1173.11	0.63	2.20E+001	17.29	2.00E+001
	12	5830-	5855	5843.68	1461.17	1.99	4.77E+002	44.66	9.81E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.995	511.00*	100.00	1.47785E-001	4.89109E-002
K-40	0.996	1460.81*	10.67	8.00403E+000	9.90439E-001
Cs-137	0.997	661.65*	85.12	1.53559E-001	6.06213E-002
Pb-212	0.520	74.81* @	10.70	1.45927E+001	3.21184E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.19913E-001	1.04940E-001
Bi-214	0.396	609.31*	46.30	2.13111E-001	9.09259E-002
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	2.49481E-001	1.32149E-001
		969.11*	16.60	2.48216E-001	1.85497E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.995	1.477850E-001	4.891091E-002
K-40	0.996	8.004025E+000	9.904391E-001
Cs-137	0.997	1.535591E-001	6.062135E-002
Pb-212 @	0.520	1.199130E-001	1.049395E-001
Bi-214	0.396	2.131112E-001	9.092587E-002
Ac-228	0.633	2.490548E-001	1.076295E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.75	7.0942E-001	21.04
3	84.67	4.1644E-001	60.35
8	718.25	2.7927E-002	99.98
11	1173.11	3.6587E-002	78.74

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	8.5175E-002	7.27E-002	1.0113E-001
		1332.49	100.00	7.2703E-002		5.8340E-002
	Nb-94	702.63	100.00	8.4144E-002	8.08E-002	-2.3261E-002
		871.10	100.00	8.0821E-002		5.3438E-002
	Ag-108m	79.20	7.10	6.6501E+000	9.48E-002	2.2563E+000
		433.93	89.90	9.6318E-002		-1.0845E-001
		614.37	90.40	9.4812E-002		-1.2098E-001
		722.95	90.50	9.9102E-002		9.5968E-002
	Sb-125	176.33	6.89	2.1372E+000	2.97E-001	-1.8707E+000
		427.89	29.33	2.9680E-001		4.8409E-003
		463.38	10.35	8.4637E-001		1.6178E-001
		600.56	17.80	4.6692E-001		3.6580E-001
		606.64	5.02	1.8930E+000		1.5540E+000
		635.90	11.32	7.3016E-001		2.5770E-001
	Cs-134	563.23	8.38	9.2345E-001	9.55E-002	-1.5480E-001
		569.32	15.43	5.2920E-001		3.4398E-001
		604.70	97.60	9.5469E-002		-1.4916E-002
		795.84	85.40	9.6488E-002		-3.9831E-002
		801.93	8.73	8.8280E-001		-4.2085E-001
+	Cs-137	661.65*	85.12	8.5545E-002	8.55E-002	1.5356E-001
	Eu-152	121.78	28.40	8.2107E-001	3.03E-001	4.4939E-001
		244.69	7.49	1.5473E+000		4.0925E-001
		344.27	26.50	3.5315E-001		1.7275E-001
		778.89	12.74	5.4015E-001		-4.3548E-001
		867.32	4.16	1.9074E+000		-8.7359E-001
		964.01	14.40	6.2168E-001		7.7938E-002
		1085.78	10.00	7.3498E-001		-3.2517E-001
		1112.02	13.30	5.6628E-001		-2.4650E-001
		1407.95	20.70	3.0280E-001		1.8456E-001
	Eu-154	123.07	40.50	5.7105E-001	2.04E-001	2.4391E-001
		247.94	6.60	1.6604E+000		-1.3830E+000
		591.81	4.83	1.7753E+000		6.6432E-001
		723.30	19.70	4.5384E-001		3.9920E-001
		756.87	4.33	1.8766E+000		1.3833E+000
		873.19	11.50	6.9704E-001		-1.9567E-001
		996.32	10.30	7.7770E-001		5.2459E-001
		1004.76	17.90	4.2685E-001		-3.4928E-002
		1274.45	35.50	2.0402E-001		1.8377E-002
	Eu-155	86.54	30.90	1.3201E+000	1.32E+000	1.0861E-001
		105.31	20.70	1.4478E+000		-5.1162E-001
	Am-241	59.54	35.90	2.2151E+000	2.22E+000	-2.6908E+000
	Cm-243	228.19	10.56	1.1276E+000	7.93E-001	7.0841E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	7.9300E-001	7.93E-001	-1.1733E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/12/2006 3:00:02 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-01-173-F-
Sample Title: OOL-09-01-173-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/12/2006 2:49:58 PM
Live Time: 600.0 seconds
Real Time: 602.5 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-01-173-F-
Title: OOL-09-01-173-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	309	300.49	75.02	1.45	7.77E+002	215.59	3.90E+003
2	334-	346	339.48	84.78	0.68	1.51E+002	166.69	2.69E+003
3	947-	963	954.10	238.47	0.38	1.21E+002	63.60	2.95E+002
4	1397-	1415	1407.24	351.78	1.01	8.11E+001	48.46	1.57E+002
5	2324-	2341	2332.12	583.07	0.41	1.06E+002	36.44	7.27E+001
6	2428-	2443	2435.63	608.95	0.84	8.78E+001	32.88	6.42E+001
7	3635-	3653	3644.10	911.15	0.39	7.97E+001	30.09	4.53E+001
8	5830-	5859	5845.02	1461.52	2.00	7.37E+002	56.35	1.88E+001
9	7053-	7067	7060.03	1765.36	0.44	2.21E+001	15.99	1.49E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
K-40	0.984	1460.81*	10.67	1.27562E+001	1.42028E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.85542E-001	6.80399E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.15148E+001	3.91229E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.03153E-001	1.66522E-001
Bi-214	0.691	609.31*	46.30	2.82647E-001	1.11468E-001
		1120.29	15.10		
		1764.49*	15.80	2.67739E-001	1.95857E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
K-40	0.984	1.275618E+001	1.420284E+000
TL-208	0.471	1.855424E-001	6.803986E-002
Pb-212 @	0.521	3.031528E-001	1.665223E-001
Bi-214	0.691	2.789996E-001	9.687708E-002

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.78	2.5146E-001	110.48
4	351.78	1.3521E-001	59.74
7	911.15	1.3279E-001	37.76

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	8.8647E-002	8.36E-002	1.7720E-003
	1332.49	100.00	8.3566E-002		2.8548E-002
Nb-94	702.63	100.00	9.4925E-002	8.91E-002	-3.8780E-002
	871.10	100.00	8.9051E-002		-5.3380E-002
Ag-108m	79.20	7.10	8.1500E+000	1.13E-001	-4.0479E+000
	433.93	89.90	1.1309E-001		1.2880E-002
	614.37	90.40	1.2713E-001		-8.5345E-002
	722.95	90.50	1.1319E-001		9.0958E-002
Sb-125	176.33	6.89	2.5318E+000	3.53E-001	-2.4712E-001
	427.89	29.33	3.5293E-001		-7.1611E-002
	463.38	10.35	9.7436E-001		-5.5630E-001
	600.56	17.80	5.6148E-001		-1.0194E-001
	606.64	5.02	2.3141E+000		1.6210E+000
	635.90	11.32	8.0254E-001		-6.7074E-001
Cs-134	563.23	8.38	1.2048E+000	1.12E-001	3.6757E-001
	569.32	15.43	6.5356E-001		1.3164E-001
	604.70	97.60	1.1846E-001		-3.5711E-002
	795.84	85.40	1.1229E-001		5.7258E-002
	801.93	8.73	1.0617E+000		-5.3859E-001
Cs-137	661.65	85.12	1.1725E-001	1.17E-001	4.0135E-002
Eu-152	121.78	28.40	9.6455E-001	3.00E-001	-4.2143E-001
	244.69	7.49	1.7972E+000		-9.1936E-001
	344.27	26.50	4.3279E-001		-4.0704E-001
	778.89	12.74	7.4703E-001		-1.0544E-001
	867.32	4.16	2.1866E+000		-3.7097E-001
	964.01	14.40	7.6071E-001		4.1482E-001
	1085.78	10.00	9.2390E-001		-2.9495E-001
	1112.02	13.30	6.8822E-001		-3.8764E-001
	1407.95	20.70	3.0027E-001		9.2070E-002
Eu-154	123.07	40.50	6.6501E-001	2.37E-001	1.7897E-001
	247.94	6.60	2.0070E+000		-1.7147E-001
	591.81	4.83	2.0897E+000		-2.0210E-001
	723.30	19.70	5.1730E-001		3.1686E-001
	756.87	4.33	2.2987E+000		8.1099E-001
	873.19	11.50	7.7473E-001		5.9838E-001
	996.32	10.30	8.5081E-001		-8.6160E-001
	1004.76	17.90	4.9279E-001		1.7616E-001
	1274.45	35.50	2.3671E-001		1.7326E-001
Eu-155	86.54	30.90	1.5730E+000	1.57E+000	2.3863E+000
	105.31	20.70	1.6160E+000		-4.0933E-001
Am-241	59.54	35.90	2.4906E+000	2.49E+000	-6.0522E-002
Cm-243	228.19	10.56	1.3019E+000	8.82E-001	9.3509E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	8.8225E-001	8.82E-001	2.1199E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/14/2006 3:19:17 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-174-F-
Sample Title: OOL-09-01-174-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/14/2006 3:09:15 PM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-174-F-
Title: OOL-09-01-174-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	307	291.73	72.76	1.00	4.83E+002	92.84	2.84E+003
m	2	287-	307	300.16	74.87	1.00	1.02E+003	104.94	3.67E+003
	3	332-	345	339.83	84.79	0.90	4.44E+002	176.79	2.78E+003
	4	944-	961	954.03	238.39	1.18	6.60E+001	75.01	4.30E+002
	5	2035-	2053	2042.27	510.53	1.08	1.12E+002	43.52	1.12E+002
	6	2324-	2341	2332.26	583.05	0.84	9.40E+001	36.19	7.60E+001
	7	2377-	2388	2381.48	595.36	0.82	2.04E+001	23.61	4.76E+001
	8	2428-	2443	2435.80	608.94	1.70	1.13E+002	36.92	8.03E+001
	9	2636-	2653	2645.61	661.41	1.35	1.09E+002	32.64	5.17E+001
	10	3636-	3652	3643.07	910.85	0.41	8.09E+001	28.98	4.41E+001
	11	3868-	3883	3875.77	969.04	0.38	5.70E+001	24.72	3.40E+001
	12	5829-	5855	5843.52	1461.13	2.05	5.59E+002	48.62	1.31E+001
	13	7052-	7066	7059.11	1765.12	0.34	3.05E+001	14.16	7.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.992	511.00*	100.00	1.52915E-001	6.28598E-002
K-40	0.996	1460.81*	10.67	9.37384E+000	1.11400E+000
Cs-137	0.998	661.65*	85.12	1.90770E-001	6.12356E-002
TL-208	0.751	277.35	6.80		
		510.84*	21.60	7.07939E-001	2.96705E-001
		583.14*	84.20	1.59068E-001	6.46582E-002
		860.37	12.46		
Pb-212	0.519	74.81* @	10.70	1.46151E+001	3.23477E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.60434E-001	1.84047E-001
Bi-214	0.693	609.31*	46.30	3.51997E-001	1.23155E-001
		1120.29	15.10		
		1764.49*	15.80	3.58356E-001	1.70149E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	4.63045E-001	1.74209E-001
		969.11*	16.60	5.54298E-001	2.47217E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.992	1.185562E-001	6.438287E-002
K-40	0.996	9.373838E+000	1.114003E+000
Cs-137	0.998	1.907701E-001	6.123561E-002
TL-208	0.751	1.590677E-001	6.445005E-002
Pb-212 @	0.519	1.604339E-001	1.840468E-001
Bi-214	0.693	3.541830E-001	9.976411E-002
Ac-228	0.633	4.933233E-001	1.424038E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.76	8.0471E-001	19.23
3	84.79	7.4043E-001	39.80
7	595.36	3.4013E-002	115.69

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	9.0475E-002	7.56E-002	3.5979E-003
		1332.49	100.00	7.5596E-002		1.1310E-002
	Nb-94	702.63	100.00	9.6089E-002	7.80E-002	-1.2557E-002
		871.10	100.00	7.7984E-002		-3.2826E-002
	Ag-108m	79.20	7.10	6.8329E+000	1.05E-001	-6.3183E-002
		433.93	89.90	1.0465E-001		1.3685E-002
		614.37	90.40	1.1247E-001		-7.3025E-003
		722.95	90.50	1.0589E-001		4.3390E-002
	Sb-125	176.33	6.89	2.3539E+000	3.27E-001	1.1514E+000
		427.89	29.33	3.2731E-001		1.1193E-002
		463.38	10.35	9.2306E-001		-1.3329E-001
		600.56	17.80	5.3069E-001		-1.4955E-001
		606.64	5.02	2.3684E+000		2.6460E+000
		635.90	11.32	7.9028E-001		2.9981E-001
	Cs-134	563.23	8.38	1.0949E+000	1.05E-001	-6.8313E-001
		569.32	15.43	6.2767E-001		9.3615E-002
		604.70	97.60	1.1905E-001		-5.7145E-002
		795.84	85.40	1.0460E-001		1.4395E-001
		801.93	8.73	9.7863E-001		-2.2192E-001
+	Cs-137	661.65*	85.12	7.9151E-002	7.92E-002	1.9077E-001
	Eu-152	121.78	28.40	8.8113E-001	3.14E-001	-6.4653E-003
		244.69	7.49	1.7205E+000		3.4068E-001
		344.27	26.50	3.9630E-001		-1.1358E-002
		778.89	12.74	6.7412E-001		-2.5392E-001
		867.32	4.16	1.8555E+000		-1.9775E+000
		964.01	14.40	7.3081E-001		2.2735E-001
		1085.78	10.00	7.7734E-001		1.0981E+000
		1112.02	13.30	6.0691E-001		-1.6023E-001
		1407.95	20.70	3.1399E-001		2.0581E-001
	Eu-154	123.07	40.50	6.1109E-001	1.84E-001	7.6860E-002
		247.94	6.60	1.8639E+000		-7.2902E-001
		591.81	4.83	1.8841E+000		-4.9660E-001
		723.30	19.70	4.9193E-001		3.3100E-001
		756.87	4.33	2.0217E+000		-2.9216E-001
		873.19	11.50	7.0313E-001		3.0747E-001
		996.32	10.30	8.4112E-001		5.8325E-001
		1004.76	17.90	4.4219E-001		-5.4226E-001
		1274.45	35.50	1.8388E-001		-2.7624E-001
	Eu-155	86.54	30.90	1.4064E+000	1.41E+000	3.8853E-001
		105.31	20.70	1.5435E+000		-1.9007E-001
	Am-241	59.54	35.90	2.2616E+000	2.26E+000	2.1988E-001
	Cm-243	228.19	10.56	1.2547E+000	8.66E-001	-1.3155E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.6576E-001	8.66E-001	8.4346E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/14/2006 3:33:32 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-175-F-
Sample Title: OOL-09-01-175-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/14/2006 3:23:30 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-175-F-
Title: OOL-09-01-175-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	306	291.88	72.80	1.08	5.76E+002	91.93	2.72E+003
m	2	287-	306	300.24	74.89	1.09	1.10E+003	102.78	3.48E+003
	3	335-	344	339.70	84.76	1.16	2.68E+002	131.02	1.86E+003
	4	1398-	1413	1407.15	351.70	0.40	7.16E+001	41.77	1.27E+002
	5	2032-	2051	2042.24	510.52	0.84	1.08E+002	44.37	1.15E+002
	6	2327-	2337	2331.76	582.92	1.23	3.28E+001	25.75	5.82E+001
	7	2432-	2443	2436.31	609.07	1.14	4.57E+001	27.60	6.03E+001
	8	2636-	2655	2645.39	661.35	0.78	1.36E+002	35.70	5.54E+001
	9	3636-	3649	3643.47	910.95	0.71	5.01E+001	23.24	3.29E+001
	10	4473-	4487	4480.39	1120.24	1.11	3.95E+001	20.03	2.25E+001
	11	5322-	5335	5328.93	1332.44	0.85	3.24E+001	16.81	1.36E+001
	12	5831-	5856	5843.31	1461.08	2.06	4.77E+002	49.27	3.61E+001
	13	7053-	7066	7059.73	1765.27	1.37	3.31E+001	13.44	4.93E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.992	511.00*	100.00	1.46913E-001	6.37036E-002
K-40	0.998	1460.81*	10.67	7.99909E+000	1.04988E+000
Cs-137	0.997	661.65*	85.12	2.36613E-001	6.82599E-002
TL-208	0.750	277.35	6.80		
		510.84*	21.60	6.80153E-001	3.00109E-001
		583.14*	84.20	5.55310E-002	4.41632E-002
		860.37	12.46		
Bi-214	0.994	609.31*	46.30	1.42584E-001	8.79397E-002
		1120.29*	15.10	4.40332E-001	2.28184E-001
		1764.49*	15.80	3.88509E-001	1.62653E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.992	1.349184E-001	6.441267E-002
K-40	0.998	7.999088E+000	1.049878E+000
Cs-137	0.997	2.366132E-001	6.825987E-002
TL-208	0.750	5.553095E-002	4.412606E-002
Bi-214	0.994	2.231689E-001	7.326182E-002

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.80	9.6031E-001	15.96
m 2	74.89	1.8341E+000	9.34
3	84.76	4.4730E-001	48.82
4	351.70	1.1941E-001	58.30
9	910.95	8.3504E-002	46.38
11	1332.44	5.4058E-002	51.84

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	9.0475E-002	7.93E-002	5.5857E-002
		1332.49	100.00	7.9278E-002		8.7510E-002
	Nb-94	702.63	100.00	8.9181E-002	7.80E-002	3.3426E-002
		871.10	100.00	7.7984E-002		-1.5380E-002
	Ag-108m	79.20	7.10	6.6782E+000	9.75E-002	-3.7216E+000
		433.93	89.90	1.0663E-001		-1.8718E-002
		614.37	90.40	1.0556E-001		-8.7787E-002
		722.95	90.50	9.7491E-002		1.4346E-002
	Sb-125	176.33	6.89	2.2111E+000	3.12E-001	3.0922E-001
		427.89	29.33	3.1244E-001		7.4810E-002
		463.38	10.35	9.1908E-001		-2.1582E-002
		600.56	17.80	4.7166E-001		-2.7425E-001
		606.64	5.02	2.0170E+000		1.5023E+000
		635.90	11.32	7.5582E-001		3.2345E-001
	Cs-134	563.23	8.38	1.0949E+000	9.83E-002	-2.4475E-001
		569.32	15.43	5.7898E-001		-1.2338E-001
		604.70	97.60	9.8269E-002		-1.2983E-001
		795.84	85.40	1.0530E-001		5.4775E-002
		801.93	8.73	9.7499E-001		1.6694E-001
+	Cs-137	661.65*	85.12	8.5165E-002	8.52E-002	2.3661E-001
	Eu-152	121.78	28.40	8.5399E-001	2.76E-001	3.9694E-001
		244.69	7.49	1.7150E+000		2.4925E-001
		344.27	26.50	3.9044E-001		4.2302E-001
		778.89	12.74	6.0967E-001		5.6426E-002
		867.32	4.16	1.8379E+000		-2.4826E+000
		964.01	14.40	6.5295E-001		5.2240E-001
		1085.78	10.00	7.2619E-001		-1.1373E-002
		1112.02	13.30	5.9163E-001		-4.9282E-001
		1407.95	20.70	2.7583E-001		-1.2726E-001
	Eu-154	123.07	40.50	5.8975E-001	1.93E-001	2.2915E-001
		247.94	6.60	1.8721E+000		7.7401E-002
		591.81	4.83	1.8998E+000		1.8370E+000
		723.30	19.70	4.5824E-001		5.0414E-001
		756.87	4.33	1.7269E+000		1.0012E-001
		873.19	11.50	6.7844E-001		-3.8446E-001
		996.32	10.30	7.7402E-001		3.1190E-001
		1004.76	17.90	4.3129E-001		1.8659E-001
		1274.45	35.50	1.9279E-001		-8.0857E-002
	Eu-155	86.54	30.90	1.3277E+000	1.33E+000	2.5053E+000
		105.31	20.70	1.4806E+000		4.7812E-001
	Am-241	59.54	35.90	2.2653E+000	2.27E+000	1.8074E+000
	Cm-243	228.19	10.56	1.2123E+000	7.80E-001	2.9953E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	7.8004E-001	7.80E-001	1.0468E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/15/2006 8:55:40 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-176-F-
Sample Title: OOL-09-01-176-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/15/2006 8:45:37 AM
Live Time: 600.0 seconds
Real Time: 601.8 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-176-F-
Title: OOL-09-01-176-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	292.03	72.84	1.03	6.95E+002	92.21	3.30E+003
m	2	284-	308	300.49	74.95	1.03	1.23E+003	105.69	3.33E+003
M	3	333-	354	340.08	84.85	1.07	4.86E+002	85.75	2.54E+003
m	4	333-	354	349.74	87.27	1.07	1.89E+002	75.88	2.52E+003
	5	948-	959	955.02	238.63	1.15	1.11E+002	61.15	3.45E+002
	6	1348-	1360	1355.29	338.73	0.41	5.42E+001	42.20	1.56E+002
	7	1401-	1414	1408.42	352.02	1.16	7.38E+001	45.19	1.65E+002
	8	2328-	2342	2332.62	583.14	0.82	9.50E+001	35.78	8.10E+001
	9	2377-	2389	2384.31	596.06	1.11	3.96E+001	25.72	5.04E+001
	10	2430-	2446	2436.91	609.22	1.04	9.50E+001	36.13	7.60E+001
	11	2639-	2656	2647.05	661.77	1.39	1.51E+002	39.20	7.65E+001
	12	3468-	3479	3473.30	868.39	0.29	1.94E+001	20.22	3.46E+001
	13	3639-	3658	3646.36	911.67	0.66	1.12E+002	33.81	5.34E+001
	14	3870-	3886	3876.93	969.33	0.90	5.36E+001	28.93	5.24E+001
	15	5832-	5859	5847.41	1462.10	1.90	7.32E+002	59.05	3.87E+001
	16	7059-	7072	7065.67	1766.76	1.12	3.00E+001	13.45	6.03E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.943	1460.81*	10.67	1.22843E+001	1.40375E+000
Cs-137	0.999	661.65*	85.12	2.62718E-001	7.50994E-002
Eu-155	0.322	86.54*	30.90	7.57500E-001	3.38999E-001
		105.31	20.70		
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.60850E-001	6.40684E-002
		860.37	12.46		
Pb-212	0.677	74.81* @	10.70	1.75859E+001	3.76358E+000
		77.11 @	18.00		
		87.30* @	8.00	2.92584E+000	1.30938E+000
		238.63*	44.60	2.69851E-001	1.54581E-001
Bi-214	0.662	609.31*	46.30	2.96733E-001	1.18581E-001
		1120.29	15.10		
		1764.49*	15.80	3.52218E-001	1.61899E-001
Ac-228	0.992	338.32*	11.40	5.69264E-001	4.52536E-001
		911.07*	27.70	6.39016E-001	2.07019E-001
		969.11*	16.60	5.21216E-001	2.86504E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.943	1.228426E+001	1.403750E+000
Cs-137		0.999	2.627179E-001	7.509939E-002
Eu-155		0.322	6.876352E-001	3.413535E-001
TL-208		0.471	1.608502E-001	6.406840E-002
Pb-212	@	0.677	2.698510E-001	1.545813E-001
Bi-214		0.662	3.161062E-001	9.566521E-002
Ac-228		0.992	5.950617E-001	1.573308E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.84	1.1584E+000	13.27
M 3	84.85	8.0936E-001	17.66
7	352.02	1.2292E-001	61.27
9	596.06	6.5931E-002	65.03
12	868.39	3.2307E-002	104.33

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	9.5120E-002	8.32E-002	5.6036E-002
		1332.49	100.00	8.3214E-002		6.4340E-002
	Nb-94	702.63	100.00	9.2564E-002	9.22E-002	-8.1715E-002
		871.10	100.00	9.2163E-002		2.1022E-002
	Ag-108m	79.20	7.10	6.7798E+000	1.14E-001	2.5865E+000
		433.93	89.90	1.2202E-001		-1.1125E-002
		614.37	90.40	1.2185E-001		2.0649E-002
		722.95	90.50	1.1364E-001		1.1321E-001
	Sb-125	176.33	6.89	2.5131E+000	3.75E-001	2.2779E-001
		427.89	29.33	3.7516E-001		-2.1062E-001
		463.38	10.35	1.0262E+000		1.2736E-001
		600.56	17.80	5.6694E-001		-4.2037E-001
		606.64	5.02	2.3527E+000		7.8335E-001
		635.90	11.32	8.2554E-001		-3.3117E-001
	Cs-134	563.23	8.38	1.1816E+000	1.11E-001	-1.6217E-001
		569.32	15.43	6.6424E-001		-2.4075E-001
		604.70	97.60	1.1400E-001		-3.0273E-004
		795.84	85.40	1.1110E-001		-9.7482E-002
		801.93	8.73	1.0419E+000		-7.6547E-001
+	Cs-137	661.65*	85.12	9.5452E-002	9.55E-002	2.6272E-001
	Eu-152	121.78	28.40	8.9825E-001	3.50E-001	-1.0038E+000
		244.69	7.49	1.9011E+000		-2.6219E-001
		344.27	26.50	4.5972E-001		-3.4523E-002
		778.89	12.74	6.9815E-001		-5.7811E-001
		867.32	4.16	2.3613E+000		-7.9748E-001
		964.01	14.40	7.4612E-001		-4.1223E-001
		1085.78	10.00	8.3282E-001		-6.3850E-001
		1112.02	13.30	7.1692E-001		8.1763E-002
		1407.95	20.70	3.5015E-001		1.6274E-001
	Eu-154	123.07	40.50	6.2891E-001	2.41E-001	2.1727E-001
		247.94	6.60	2.1099E+000		7.0639E-001
		591.81	4.83	2.0982E+000		-7.9114E-001
		723.30	19.70	5.1441E-001		2.1261E-001
		756.87	4.33	2.3377E+000		2.1108E+000
		873.19	11.50	7.9118E-001		-2.6970E-001
		996.32	10.30	8.2055E-001		-7.8085E-001
		1004.76	17.90	4.8907E-001		-1.5034E-001
		1274.45	35.50	2.4127E-001		1.9816E-001
+	Eu-155	86.54*	30.90	9.4986E-001	9.50E-001	7.5750E-001
		105.31	20.70	1.5395E+000		-7.6306E-001
	Am-241	59.54	35.90	2.1072E+000	2.11E+000	7.8614E-001
	Cm-243	228.19	10.56	1.3682E+000	9.50E-001	-1.5927E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.5043E-001	9.50E-001	-5.1703E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 9:06:22 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-01-177-F-
Sample Title: OOL-09-01-177-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 8:55:31 PM
Live Time: 644.9 seconds
Real Time: 647.8 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-01-177-F-
Title: OOL-09-01-177-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	309	291.66	72.82	1.52	6.84E+002	103.64	3.47E+003
m	2	284-	309	300.23	74.96	1.52	1.38E+003	112.66	4.76E+003
	3	331-	348	339.20	84.70	1.38	4.47E+002	209.40	3.37E+003
	4	944-	961	954.17	238.49	1.58	3.17E+002	92.21	5.83E+002
	5	1398-	1413	1405.81	351.43	0.71	1.06E+002	59.33	2.70E+002
	6	2028-	2052	2040.71	510.19	1.99	2.32E+002	67.54	2.31E+002
	7	2321-	2340	2331.10	582.81	1.65	2.27E+002	52.45	1.40E+002
	8	2425-	2446	2435.63	608.95	0.87	1.82E+002	52.41	1.42E+002
	9	2634-	2653	2644.32	661.14	1.74	2.02E+002	46.85	1.05E+002
	10	2898-	2912	2906.30	726.65	0.76	4.42E+001	35.83	9.98E+001
	11	3635-	3656	3642.23	910.68	1.27	1.53E+002	46.31	1.06E+002
	12	3867-	3883	3874.39	968.74	1.62	8.06E+001	33.85	6.94E+001
	13	4471-	4486	4478.40	1119.78	0.89	7.42E+001	27.27	3.98E+001
	14	5827-	5856	5842.74	1460.95	2.10	1.04E+003	68.42	3.70E+001
	15	7052-	7068	7058.86	1765.06	0.55	5.88E+001	18.91	1.12E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.980	511.00*	100.00	3.02945E-001	9.74530E-002
K-40	0.999	1460.81*	10.67	1.68041E+001	1.75037E+000
Cs-137	0.992	661.65*	85.12	3.38067E-001	8.79763E-002
TL-208	0.747	277.35	6.80		
		510.84*	21.60	1.40252E+000	4.65483E-001
		583.14*	84.20	3.69147E-001	9.77832E-002
		860.37	12.46		
Bi-212	0.991	727.17*	11.80	5.44767E-001	4.45924E-001
Pb-212	0.521	74.81* @	10.70	1.90867E+001	4.05151E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.40102E-001	2.44569E-001
Bi-214	0.994	609.31*	46.30	5.44472E-001	1.70729E-001
		1120.29*	15.10	7.94029E-001	3.03673E-001
		1764.49*	15.80	6.63449E-001	2.23477E-001
Ac-228	0.630	338.32	11.40		
		911.07*	27.70	8.40363E-001	2.72487E-001
		969.11*	16.60	7.52747E-001	3.25849E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.980	2.232091E-001	9.968170E-002
K-40		0.999	1.680410E+001	1.750367E+000
Cs-137		0.992	3.380668E-001	8.797633E-002
TL-208		0.747	3.691465E-001	9.704037E-002
Bi-212		0.991	5.447670E-001	4.459235E-001
Pb-212	@	0.521	7.401022E-001	2.445695E-001
Bi-214		0.994	6.225470E-001	1.238685E-001
Ac-228		0.630	8.043071E-001	2.090314E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.82	1.0607E+000	15.15
3	84.70	6.9237E-001	46.89
5	351.43	1.6426E-001	56.01

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
	Co-60	1173.22	100.00	1.1024E-001	1.01E-001	2.3326E-002
		1332.49	100.00	1.0130E-001		1.6020E-001
	Nb-94	702.63	100.00	1.1687E-001	1.13E-001	3.7884E-002
		871.10	100.00	1.1302E-001		9.3501E-002
	Ag-108m	79.20	7.10	7.1377E+000	1.42E-001	-4.3555E+000
		433.93	89.90	1.4214E-001		-1.6482E-001
		614.37	90.40	1.4700E-001		-3.8710E-002
		722.95	90.50	1.4516E-001		1.5390E-001
	Sb-125	176.33	6.89	2.8245E+000	4.42E-001	-3.7294E-001
		427.89	29.33	4.4219E-001		-1.7623E-001
		463.38	10.35	1.2826E+000		5.7211E-001
		600.56	17.80	7.1144E-001		-2.5869E-001
		606.64	5.02	2.9913E+000		4.6906E+000
		635.90	11.32	1.0202E+000		-2.0968E-001
	Cs-134	563.23	8.38	1.5009E+000	1.38E-001	7.2919E-002
		569.32	15.43	8.0421E-001		-3.9495E-001
		604.70	97.60	1.5282E-001		-9.2162E-003
		795.84	85.40	1.3845E-001		9.5071E-002
		801.93	8.73	1.2652E+000		-1.3893E+000
+	Cs-137	661.65*	85.12	1.1043E-001	1.10E-001	3.3807E-001
	Eu-152	121.78	28.40	9.4230E-001	3.94E-001	6.7639E-001
		244.69	7.49	2.2204E+000		7.5670E-001
		344.27	26.50	5.2714E-001		-3.1940E-001
		778.89	12.74	9.2726E-001		-6.8879E-001
		867.32	4.16	2.7413E+000		-3.5683E+000
		964.01	14.40	9.3240E-001		-9.9388E-002
		1085.78	10.00	1.0318E+000		-2.7820E-002
		1112.02	13.30	8.0410E-001		-4.0297E-001
		1407.95	20.70	3.9383E-001		-5.0031E-002
	Eu-154	123.07	40.50	6.5394E-001	2.76E-001	2.6566E-001
		247.94	6.60	2.4263E+000		-2.0682E+000
		591.81	4.83	2.5953E+000		1.3208E+000
		723.30	19.70	6.6145E-001		4.7767E-001
		756.87	4.33	2.5863E+000		5.8109E-001
		873.19	11.50	9.7335E-001		8.0393E-001
		996.32	10.30	9.6697E-001		9.8100E-002
		1004.76	17.90	5.7002E-001		-3.2808E-001
		1274.45	35.50	2.7610E-001		1.3272E-001
	Eu-155	86.54	30.90	1.4309E+000	1.43E+000	3.7310E-002
		105.31	20.70	1.5158E+000		-1.4724E+000
	Am-241	59.54	35.90	2.0940E+000	2.09E+000	-5.2023E-001
	Cm-243	228.19	10.56	1.6121E+000	1.13E+000	-2.4086E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.1264E+000	1.13E+000	5.1823E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 8:23:39 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-01-178-F-
Sample Title: OOL-09-01-178-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 8:11:25 PM
Live Time: 729.8 seconds
Real Time: 732.5 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-01-178-F-
Title: OOL-09-01-178-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	309	291.75	72.84	1.48	6.23E+002	103.27	3.91E+003
m	2	283-	309	300.10	74.93	1.48	1.16E+003	110.89	4.90E+003
	3	947-	964	954.08	238.47	0.94	1.44E+002	83.57	5.11E+002
	4	1399-	1413	1406.52	351.61	0.78	1.17E+002	51.10	1.95E+002
	5	2323-	2339	2331.22	582.84	1.14	1.10E+002	41.76	1.10E+002
	6	2427-	2445	2435.35	608.88	0.53	1.20E+002	42.58	1.04E+002
	7	2637-	2654	2645.00	661.31	1.00	1.54E+002	41.81	9.24E+001
	8	3632-	3653	3642.64	910.78	1.49	1.18E+002	36.84	6.27E+001
	9	5829-	5856	5843.29	1461.09	2.35	7.74E+002	61.82	4.90E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
K-40	0.998	1460.81*	10.67	1.10097E+001	1.25213E+000
Cs-137	0.996	661.65*	85.12	2.27322E-001	6.74100E-002
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.57850E-001	6.33443E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.41930E+001	3.09380E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.97208E-001	1.78597E-001
Bi-214	0.394	609.31*	46.30	3.17179E-001	1.19298E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
K-40	0.998	1.100975E+001	1.252132E+000
Cs-137	0.996	2.273224E-001	6.740996E-002
TL-208	0.469	1.578500E-001	6.334427E-002
Pb-212 @	0.521	2.972076E-001	1.785974E-001
Bi-214	0.394	3.171786E-001	1.192977E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.84	8.5397E-001	16.57
4	351.61	1.6032E-001	43.68
8	910.78	1.6212E-001	31.14

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
	Co-60	1173.22	100.00	9.1671E-002	7.51E-002	1.2658E-001
		1332.49	100.00	7.5081E-002		1.0226E-001
	Nb-94	702.63	100.00	9.2861E-002	8.89E-002	-1.8578E-002
		871.10	100.00	8.8858E-002		7.2716E-002
	Ag-108m	79.20	7.10	6.3532E+000	1.13E-001	-4.5004E+000
		433.93	89.90	1.1631E-001		5.2677E-003
		614.37	90.40	1.1704E-001		-5.6136E-002
		722.95	90.50	1.1261E-001		6.1608E-002
	Sb-125	176.33	6.89	2.3137E+000	3.44E-001	4.8848E-001
		427.89	29.33	3.4383E-001		-1.6768E-001
		463.38	10.35	9.4111E-001		-6.6974E-001
		600.56	17.80	5.5981E-001		-9.7110E-002
		606.64	5.02	2.2866E+000		1.8718E+000
		635.90	11.32	8.0649E-001		2.5309E-001
	Cs-134	563.23	8.38	1.2176E+000	1.07E-001	6.4726E-001
		569.32	15.43	6.5337E-001		-3.7024E-001
		604.70	97.60	1.1734E-001		2.6359E-002
		795.84	85.40	1.0670E-001		7.2909E-002
		801.93	8.73	9.9822E-001		-8.7236E-001
+	Cs-137	661.65*	85.12	8.8521E-002	8.85E-002	2.2732E-001
	Eu-152	121.78	28.40	7.8859E-001	3.21E-001	-5.5331E-001
		244.69	7.49	1.8342E+000		6.5799E-001
		344.27	26.50	4.2403E-001		-2.0563E-001
		778.89	12.74	6.9538E-001		-5.6508E-002
		867.32	4.16	2.1069E+000		-2.2694E+000
		964.01	14.40	6.7549E-001		8.1815E-001
		1085.78	10.00	8.0618E-001		4.2456E-001
		1112.02	13.30	6.3945E-001		-8.5253E-001
		1407.95	20.70	3.2070E-001		1.7093E-001
	Eu-154	123.07	40.50	5.5192E-001	2.08E-001	2.6119E-001
		247.94	6.60	1.9772E+000		-5.9893E-001
		591.81	4.83	2.0668E+000		1.5231E+000
		723.30	19.70	5.1739E-001		3.5311E-001
		756.87	4.33	2.0587E+000		4.2418E-001
		873.19	11.50	7.7110E-001		-3.3783E-001
		996.32	10.30	8.0041E-001		2.9934E-001
		1004.76	17.90	4.4060E-001		1.6350E-002
		1274.45	35.50	2.0836E-001		-1.1123E-001
	Eu-155	86.54	30.90	1.2653E+000	1.27E+000	2.6664E+000
		105.31	20.70	1.3347E+000		-8.8108E-001
	Am-241	59.54	35.90	1.9664E+000	1.97E+000	3.5013E+000
	Cm-243	228.19	10.56	1.2747E+000	9.15E-001	1.2118E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.1487E-001	9.15E-001	3.5847E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 4:49:29 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-179-F-
Sample Title: OOL-09-01-179-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 4:39:27 PM
Live Time: 600.0 seconds
Real Time: 600.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

No peak analysis results available for reporting purposes

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

No peak search results available for nuclide analysis.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.9718E-002	2.11E-002	7.4211E-003
	1332.49	100.00	2.1117E-002		7.0321E-003
Nb-94	702.63	100.00	4.6625E-002	3.06E-002	1.8938E-002
	871.10	100.00	3.0571E-002		-3.3195E-003
Ag-108m	79.20	7.10	1.3134E+001	5.18E-002	-4.0346E+000
	433.93	89.90	6.4451E-002		3.0378E-002
	614.37	90.40	6.1169E-002		-2.1499E-002
	722.95	90.50	5.1812E-002		2.4229E-002
Sb-125	176.33	6.89	1.2120E+000	1.97E-001	5.0217E-001
	427.89	29.33	1.9664E-001		-6.5568E-002
	463.38	10.35	6.0086E-001		4.1469E-002
	600.56	17.80	3.3431E-001		-1.2401E-001
	606.64	5.02	1.2054E+000		-8.8944E-001
	635.90	11.32	5.3208E-001		1.8289E-002
Cs-134	563.23	8.38	5.9855E-001	4.34E-002	-6.1846E-001
	569.32	15.43	3.5774E-001		-1.4720E-002
	604.70	97.60	6.3937E-002		1.3868E-002
	795.84	85.40	4.3365E-002		-3.4506E-002
	801.93	8.73	4.4240E-001		9.5714E-002
Cs-137	661.65	85.12	6.4956E-002	6.50E-002	-6.4269E-004
Eu-152	121.78	28.40	4.1804E-001	6.32E-002	-3.0682E-001
	244.69	7.49	9.6716E-001		-1.8994E-001
	344.27	26.50	2.4958E-001		-8.0769E-003
	778.89	12.74	3.5942E-001		-1.5342E-001
	867.32	4.16	8.4596E-001		2.3555E-001
	964.01	14.40	1.4671E-001		5.5956E-002
	1085.78	10.00	2.7798E-001		5.4677E-002
	1112.02	13.30	2.1999E-001		-3.4731E-002
	1407.95	20.70	6.3168E-002		8.5840E-003
Eu-154	123.07	40.50	2.9061E-001	5.89E-002	-1.9228E-001
	247.94	6.60	1.1045E+000		-7.1389E-001
	591.81	4.83	1.2907E+000		1.3750E+000
	723.30	19.70	2.3804E-001		1.1131E-001
	756.87	4.33	8.4681E-001		-4.4935E-001
	873.19	11.50	2.8295E-001		-1.1604E-001
	996.32	10.30	2.3720E-001		2.6515E-002
	1004.76	17.90	1.3682E-001		1.9850E-002
	1274.45	35.50	5.8862E-002		1.5314E-003
Eu-155	86.54	30.90	1.4273E+000	7.85E-001	-7.3405E-001
	105.31	20.70	7.8493E-001		2.8056E-001
Am-241	59.54	35.90	1.8271E+001	1.83E+001	3.0412E+001
Cm-243	228.19	10.56	7.0441E-001	4.51E-001	1.1867E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	4.5089E-001	4.51E-001	-7.4674E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 4:13:00 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-180-F-
Sample Title: OOL-09-01-180-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 4:02:58 PM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-180-F-
Title: OOL-09-01-180-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	307	290.97	72.57	1.72	3.31E+002	91.02	2.54E+003
m	2	283-	307	300.14	74.86	1.72	7.97E+002	96.73	3.36E+003
	3	945-	961	954.57	238.52	0.87	2.57E+002	75.50	3.92E+002
	4	1398-	1417	1408.58	352.06	1.43	1.71E+002	52.85	1.58E+002
	5	2038-	2054	2045.62	511.37	0.38	8.53E+001	47.92	1.63E+002
	6	2323-	2341	2332.14	583.02	0.47	1.69E+002	45.67	1.10E+002
	7	2431-	2448	2436.58	609.14	1.71	1.71E+002	40.41	7.81E+001
	8	3634-	3655	3646.34	911.67	1.76	1.54E+002	34.43	4.13E+001
	9	5832-	5861	5845.85	1461.71	2.50	9.98E+002	66.47	3.10E+001
	10	7056-	7069	7062.95	1766.08	0.61	3.24E+001	17.19	1.56E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.972	1460.81*	10.67	1.67400E+001	1.75503E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	5.38595E-001	3.14436E-001
		583.14*	84.20	2.86313E-001	8.58035E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.14081E+001	2.63034E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.23748E-001	2.07961E-001
Bi-214	0.680	609.31*	46.30	5.33625E-001	1.42284E-001
		1120.29	15.10		
		1764.49*	15.80	3.80487E-001	2.05498E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
X	ANN		0.995		
	K-40		0.972	1.674003E+001	1.755031E+000
	TL-208		0.750	3.037972E-001	8.277691E-002
	Pb-212	@	0.520	6.237482E-001	2.079612E-001
	Bi-214		0.680	4.840012E-001	1.169805E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.57	5.5241E-001	27.46
	4	352.06	2.8546E-001	30.86
	8	911.67	2.5623E-001	22.40

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.1931E-002	8.45E-002	-3.4043E-002
	1332.49	100.00	8.4483E-002		4.9202E-002
Nb-94	702.63	100.00	1.0101E-001	9.40E-002	5.1919E-002
	871.10	100.00	9.3964E-002		3.4972E-002
Ag-108m	79.20	7.10	5.2069E+000	1.15E-001	-8.1890E+000
	433.93	89.90	1.2278E-001		2.4718E-002
	614.37	90.40	1.3315E-001		-3.3487E-002
	722.95	90.50	1.1529E-001		-6.3584E-002
Sb-125	176.33	6.89	2.1692E+000	3.76E-001	-1.0051E+000
	427.89	29.33	3.7573E-001		-2.2031E-002
	463.38	10.35	1.0525E+000		9.5070E-001
	600.56	17.80	5.3760E-001		-3.0573E-001
	606.64	5.02	2.6343E+000		-2.5996E+000
	635.90	11.32	8.8532E-001		-7.4164E-001
Cs-134	563.23	8.38	1.1626E+000	1.20E-001	4.0475E-001
	569.32	15.43	6.6707E-001		8.1054E-001
	604.70	97.60	1.2486E-001		-1.6040E-001
	795.84	85.40	1.2033E-001		-3.3957E-002
	801.93	8.73	1.0521E+000		-7.8029E-001
Cs-137	661.65	85.12	1.2186E-001	1.22E-001	1.7951E-002
Eu-152	121.78	28.40	7.4007E-001	3.08E-001	1.3194E-001
	244.69	7.49	1.7902E+000		-9.2597E-001
	344.27	26.50	4.2814E-001		-1.9749E-002
	778.89	12.74	6.7900E-001		-3.4521E-001
	867.32	4.16	2.2781E+000		-3.0112E+000
	964.01	14.40	8.1824E-001		-1.5479E-001
	1085.78	10.00	9.5358E-001		-3.8315E-001
	1112.02	13.30	6.9898E-001		-1.6418E-001
	1407.95	20.70	3.0845E-001		-9.2699E-002
Eu-154	123.07	40.50	5.1227E-001	2.52E-001	5.6444E-002
	247.94	6.60	1.9077E+000		-1.0018E-001
	591.81	4.83	2.0065E+000		-2.3773E+000
	723.30	19.70	5.3591E-001		1.7711E-001
	756.87	4.33	2.2584E+000		-3.3218E-002
	873.19	11.50	8.0967E-001		-1.4860E-001
	996.32	10.30	8.7100E-001		-5.0943E-001
	1004.76	17.90	5.3162E-001		4.6154E-001
	1274.45	35.50	2.5240E-001		5.2502E-002
Eu-155	86.54	30.90	1.0801E+000	1.08E+000	1.8153E+000
	105.31	20.70	1.2352E+000		3.9569E-001
Am-241	59.54	35.90	1.4656E+000	1.47E+000	4.3017E-002
Cm-243	228.19	10.56	1.2364E+000	8.87E-001	-2.3386E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.8730E-001	8.87E-001	-4.0497E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/14/2006 2:04:13 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-181-F-
Sample Title: OOL-09-01-181-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/14/2006 1:54:09 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-181-F-
Title: OOL-09-01-181-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	313	292.61	72.98	0.96	5.72E+002	80.03	1.92E+003
m	2	287-	313	300.63	74.99	0.97	1.12E+003	92.88	2.18E+003
m	3	287-	313	308.98	77.08	0.97	1.67E+002	67.36	1.81E+003
	4	332-	345	340.42	84.94	0.96	4.15E+002	154.06	2.08E+003
	5	948-	962	954.87	238.60	0.66	2.22E+002	80.40	5.02E+002
	6	1179-	1189	1182.02	295.40	0.90	7.56E+001	44.71	1.84E+002
	7	1349-	1361	1353.91	338.39	0.39	5.69E+001	44.80	1.76E+002
	8	1402-	1416	1408.13	351.94	1.18	1.49E+002	49.62	1.70E+002
	9	2037-	2054	2044.92	511.19	2.02	1.40E+002	50.39	1.60E+002
	10	2326-	2344	2334.23	583.54	1.18	1.85E+002	47.73	1.21E+002
	11	2428-	2445	2438.85	609.70	1.27	1.76E+002	41.91	8.46E+001
	12	2638-	2657	2648.81	662.21	1.74	1.21E+002	40.84	8.82E+001
	13	3640-	3660	3647.73	912.01	1.52	1.69E+002	38.78	6.13E+001
	14	3802-	3813	3807.20	951.89	0.83	1.56E+001	17.32	2.44E+001
	15	3871-	3888	3879.46	969.97	0.58	1.10E+002	33.81	5.76E+001
	16	4475-	4491	4485.33	1121.48	0.53	4.48E+001	26.05	4.22E+001
	17	4723-	4734	4728.63	1182.32	0.44	2.02E+001	18.19	2.58E+001
	18	5329-	5340	5334.51	1333.84	0.54	2.29E+001	16.24	1.81E+001
	19	5836-	5862	5849.09	1462.52	1.98	9.52E+002	64.97	3.36E+001
	20	6353-	6366	6359.41	1590.14	0.90	2.35E+001	14.23	1.05E+001
	21	7057-	7072	7065.49	1766.71	0.55	5.61E+001	17.07	6.92E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*	100.00	1.91578E-001	7.34786E-002
K-40	0.903	1460.81*	10.67	1.59783E+001	1.69158E+000
Cs-137	0.989	661.65*	85.12	2.10920E-001	7.55055E-002
TL-208	0.747	277.35	6.80		
		510.84*	21.60	8.86934E-001	3.47805E-001
		583.14*	84.20	3.14004E-001	9.05488E-002
		860.37	12.46		
Pb-212	0.843	74.81* @	10.70	1.60697E+001	3.41788E+000
		77.11* @	18.00	1.36292E+000	6.12335E-001
		87.30 @	8.00		
		238.63*	44.60	5.38919E-001	2.12933E-001
Bi-214	0.953	609.31*	46.30	5.51017E-001	1.47436E-001
		1120.29*	15.10	4.99465E-001	2.95331E-001
		1764.49*	15.80	6.59013E-001	2.11131E-001
PB-214	0.762	74.82* @	6.21	2.76886E+001	6.22267E+000
		77.11* @	10.50	2.33643E+000	1.06412E+000
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.53754E-001	2.79020E-001
		351.92*	37.20	4.83783E-001	1.80703E-001
Ac-228	0.977	338.32*	11.40	5.97887E-001	4.80051E-001
		911.07*	27.70	9.65673E-001	2.48187E-001
		969.11*	16.60	1.07343E+000	3.47469E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.999	1.237529E-001	7.600497E-002
K-40		0.903	1.597831E+001	1.691585E+000
Cs-137		0.989	2.109196E-001	7.550545E-002
TL-208		0.747	3.140040E-001	8.996871E-002
Pb-212	@	0.843	5.389187E-001	2.129333E-001
Bi-214		0.953	5.739406E-001	1.118717E-001
PB-214	@	0.762	4.749102E-001	1.516728E-001
Ac-228		0.977	9.412965E-001	1.861564E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.98	9.5379E-001	13.99
4	84.94	6.9242E-001	37.08
14	951.89	2.6021E-002	110.94
17	1182.32	3.3596E-002	90.22
18	1333.84	3.8150E-002	70.94
20	1590.14	3.9216E-002	60.46

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0312E-001	8.78E-002	1.2269E-002
		1332.49	100.00	8.7772E-002		5.1145E-002
	Nb-94	702.63	100.00	1.0617E-001	9.63E-002	5.1848E-002
		871.10	100.00	9.6310E-002		-2.3775E-002
	Ag-108m	79.20	7.10	5.8215E+000	1.24E-001	-1.2075E+000
		433.93	89.90	1.3114E-001		1.6975E-002
		614.37	90.40	1.4374E-001		-8.7840E-002
		722.95	90.50	1.2370E-001		-1.5041E-001
	Sb-125	176.33	6.89	2.5823E+000	4.05E-001	-3.5395E-001
		427.89	29.33	4.0488E-001		-8.3323E-002
		463.38	10.35	1.1872E+000		9.5378E-001
		600.56	17.80	6.0457E-001		3.4357E-002
		606.64	5.02	2.6760E+000		5.3755E+000
		635.90	11.32	9.1884E-001		3.9151E-001
	Cs-134	563.23	8.38	1.3566E+000	1.20E-001	4.1015E-001
		569.32	15.43	7.0554E-001		-3.9383E-001
		604.70	97.60	1.2525E-001		-4.6659E-002
		795.84	85.40	1.2033E-001		5.5154E-002
		801.93	8.73	1.0917E+000		-8.9242E-001
+	Cs-137	661.65*	85.12	1.0641E-001	1.06E-001	2.1092E-001
	Eu-152	121.78	28.40	8.4519E-001	3.50E-001	-1.5740E-001
		244.69	7.49	2.0916E+000		8.3165E-001
		344.27	26.50	4.6171E-001		-6.2621E-002
		778.89	12.74	7.2816E-001		-1.2556E+000
		867.32	4.16	2.3270E+000		-2.5710E+000
		964.01	14.40	8.2509E-001		-2.4233E-001
		1085.78	10.00	9.6018E-001		-2.7152E-001
		1112.02	13.30	7.1944E-001		-6.1289E-002
		1407.95	20.70	3.5015E-001		1.6159E-001
	Eu-154	123.07	40.50	5.9078E-001	2.49E-001	3.7936E-001
		247.94	6.60	2.2005E+000		-3.2540E+000
		591.81	4.83	2.2526E+000		1.3914E+000
		723.30	19.70	5.7986E-001		-1.9082E-001
		756.87	4.33	2.2334E+000		-1.1365E+000
		873.19	11.50	8.5285E-001		4.7930E-001
		996.32	10.30	8.7426E-001		-4.0160E-001
		1004.76	17.90	5.3162E-001		3.9547E-001
		1274.45	35.50	2.4911E-001		2.3511E-001
	Eu-155	86.54	30.90	1.2365E+000	1.24E+000	2.1767E-001
		105.31	20.70	1.3991E+000		-1.0839E+000
	Am-241	59.54	35.90	1.7272E+000	1.73E+000	2.0195E-002
	Cm-243	228.19	10.56	1.4346E+000	1.04E+000	1.2895E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0357E+000	1.04E+000	-1.3699E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 4:34:44 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-182-F-
Sample Title: OOL-09-01-182-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 4:24:41 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-182-F-
Title: OOL-09-01-182-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	293-	308	300.82	75.03	1.14	6.76E+002	296.43	7.37E+003
2	2902-	2913	2907.43	726.88	0.73	2.41E+001	25.56	5.79E+001
3	3641-	3652	3646.22	911.64	0.31	2.65E+001	25.66	5.75E+001
4	5831-	5862	5846.90	1461.97	2.00	4.88E+002	45.93	1.21E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.954	1460.81*	10.67	8.18409E+000	1.01617E+000
Bi-212	0.997	727.17*	11.80	3.08874E-001	3.29873E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.954	8.184093E+000	1.016173E+000
Bi-212	0.997	3.088743E-001	3.298726E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	75.03	1.1274E+000	43.82
3	911.64	4.4201E-002	96.74

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	8.6724E-002	8.67E-002	-4.2387E-002
	1332.49	100.00	8.9369E-002		1.0556E-001
Nb-94	702.63	100.00	1.1245E-001	9.51E-002	7.9694E-003
	871.10	100.00	9.5145E-002		-4.2584E-002
Ag-108m	79.20	7.10	9.3014E+000	1.28E-001	-4.5467E+000
	433.93	89.90	1.6002E-001		1.6128E-002
	614.37	90.40	1.4153E-001		-8.9305E-002
	722.95	90.50	1.2769E-001		5.4775E-002
Sb-125	176.33	6.89	3.1510E+000	4.90E-001	-1.1731E+000
	427.89	29.33	4.8996E-001		-2.0171E-001
	463.38	10.35	1.3974E+000		1.0562E+000
	600.56	17.80	6.5238E-001		-1.3016E-001
	606.64	5.02	2.6760E+000		2.0310E+000
	635.90	11.32	9.6881E-001		-1.7391E-001
Cs-134	563.23	8.38	1.5980E+000	1.20E-001	4.3379E-001
	569.32	15.43	8.5031E-001		7.8588E-001
	604.70	97.60	1.3077E-001		-1.1415E-001
	795.84	85.40	1.2002E-001		4.6018E-002
	801.93	8.73	1.1699E+000		-9.9319E-001
Cs-137	661.65	85.12	1.7077E-001	1.71E-001	3.1599E-001
Eu-152	121.78	28.40	1.1052E+000	3.33E-001	4.2374E-001
	244.69	7.49	2.4514E+000		-5.9519E-002
	344.27	26.50	5.9963E-001		-4.6097E-001
	778.89	12.74	8.1328E-001		-4.3675E-001
	867.32	4.16	2.3062E+000		-4.3846E+000
	964.01	14.40	6.5512E-001		-1.5990E-001
	1085.78	10.00	8.2127E-001		1.0200E-001
	1112.02	13.30	6.5047E-001		-2.8913E-001
	1407.95	20.70	3.3260E-001		1.4822E-001
Eu-154	123.07	40.50	7.6720E-001	2.08E-001	3.0531E-001
	247.94	6.60	2.7508E+000		1.3820E+000
	591.81	4.83	2.5747E+000		1.0377E+000
	723.30	19.70	5.7986E-001		9.4096E-002
	756.87	4.33	2.5714E+000		5.7687E-001
	873.19	11.50	8.3535E-001		8.6239E-001
	996.32	10.30	8.5120E-001		-3.0205E-001
	1004.76	17.90	4.9674E-001		2.3411E-001
	1274.45	35.50	2.0807E-001		-3.1813E-001
Eu-155	86.54	30.90	1.7450E+000	1.75E+000	1.9952E+000
	105.31	20.70	1.9321E+000		7.6830E-002
Am-241	59.54	35.90	4.1940E+000	4.19E+000	-3.3133E+000
Cm-243	228.19	10.56	1.7163E+000	1.23E+000	4.2279E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2259E+000	1.23E+000	-3.9675E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 7:14:02 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-01-183-F-
Sample Title: OOL-09-01-183-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 7:03:40 PM
Live Time: 618.2 seconds
Real Time: 620.9 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-01-183-F-
Title: OOL-09-01-183-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	309	300.86	75.12	1.19	7.37E+002	211.25	3.73E+003
2	330-	345	339.47	84.77	0.80	4.66E+002	190.33	2.98E+003
3	2324-	2341	2330.92	582.77	0.45	7.92E+001	41.46	1.13E+002
4	2426-	2444	2436.15	609.08	1.41	1.06E+002	39.06	8.62E+001
5	2635-	2653	2644.31	661.14	1.61	1.15E+002	43.80	1.14E+002
6	3636-	3652	3643.81	911.08	1.29	5.63E+001	29.14	5.27E+001
7	3870-	3885	3876.66	969.30	0.53	4.17E+001	25.80	4.33E+001
8	5829-	5857	5844.29	1461.34	2.32	5.52E+002	48.93	1.49E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
K-40	0.991	1460.81*	10.67	9.27020E+000	1.11285E+000
Cs-137	0.992	661.65*	85.12	2.01062E-001	8.00938E-002
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.34193E-001	7.23549E-002
		860.37	12.46		
Bi-214	0.397	609.31*	46.30	3.30555E-001	1.28690E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	3.23348E-001	1.71290E-001
		969.11*	16.60	4.06551E-001	2.54995E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
K-40	0.991	9.270201E+000	1.112848E+000
Cs-137	0.992	2.010623E-001	8.009376E-002
TL-208	0.468	1.341929E-001	7.235488E-002
Bi-214	0.397	3.305546E-001	1.286897E-001
Ac-228	0.633	3.492183E-001	1.421879E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	75.12	1.1919E+000	28.67
2	84.77	7.5415E-001	40.82

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
	Co-60	1173.22	100.00	9.6591E-002	8.15E-002	1.3138E-001
		1332.49	100.00	8.1540E-002		2.8436E-002
	Nb-94	702.63	100.00	1.0063E-001	8.61E-002	2.0048E-003
		871.10	100.00	8.6098E-002		7.2937E-003
	Ag-108m	79.20	7.10	7.6029E+000	1.10E-001	-1.3768E+000
		433.93	89.90	1.3093E-001		-2.9889E-002
		614.37	90.40	1.2753E-001		7.5009E-002
		722.95	90.50	1.1043E-001		1.7052E-002
	Sb-125	176.33	6.89	2.7379E+000	4.02E-001	1.0611E+000
		427.89	29.33	4.0161E-001		-3.4439E-001
		463.38	10.35	1.0927E+000		-4.3538E-002
		600.56	17.80	6.3938E-001		-6.6230E-002
		606.64	5.02	2.5294E+000		1.3784E+000
		635.90	11.32	9.1969E-001		-1.3104E-001
	Cs-134	563.23	8.38	1.4106E+000	1.14E-001	1.2317E+000
		569.32	15.43	7.3373E-001		-4.3999E-001
		604.70	97.60	1.3275E-001		-4.1588E-002
		795.84	85.40	1.1363E-001		-1.8643E-002
		801.93	8.73	1.0875E+000		-4.4983E-001
+	Cs-137	661.65*	85.12	1.1739E-001	1.17E-001	2.0106E-001
	Eu-152	121.78	28.40	9.5569E-001	3.41E-001	3.1086E-001
		244.69	7.49	2.1345E+000		-1.6998E+000
		344.27	26.50	4.9686E-001		-2.1509E-001
		778.89	12.74	7.0184E-001		-9.4746E-001
		867.32	4.16	2.1297E+000		-4.4609E+000
		964.01	14.40	7.6842E-001		-2.2127E-001
		1085.78	10.00	9.3143E-001		3.1082E-001
		1112.02	13.30	6.4850E-001		-2.8508E-001
		1407.95	20.70	3.4055E-001		1.0453E-001
	Eu-154	123.07	40.50	6.6517E-001	2.27E-001	8.1796E-001
		247.94	6.60	2.3780E+000		1.3020E+000
		591.81	4.83	2.1879E+000		-1.6390E+000
		723.30	19.70	5.1256E-001		7.6880E-003
		756.87	4.33	2.2932E+000		-5.5761E-001
		873.19	11.50	7.3756E-001		-3.1057E-001
		996.32	10.30	8.6624E-001		-2.4139E-001
		1004.76	17.90	5.0905E-001		-3.1112E-002
		1274.45	35.50	2.2731E-001		9.0668E-002
	Eu-155	86.54	30.90	1.5014E+000	1.50E+000	3.5971E-002
		105.31	20.70	1.6020E+000		1.4309E-001
	Am-241	59.54	35.90	2.3435E+000	2.34E+000	-9.6994E-001
	Cm-243	228.19	10.56	1.4979E+000	1.01E+000	2.3383E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0134E+000	1.01E+000	-5.4116E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/15/2006 9:55:29 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-184-F-
Sample Title: OOL-09-01-184-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/15/2006 9:45:25 AM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-184-F-
Title: OOL-09-01-184-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	308	292.14	72.86	1.03	6.52E+002	90.70	2.75E+003
m	2	286-	308	300.47	74.95	1.04	1.12E+003	100.00	3.01E+003
	3	332-	344	340.18	84.88	0.78	2.23E+002	157.63	2.38E+003
	4	948-	964	954.97	238.62	1.14	1.76E+002	77.07	4.37E+002
	5	1402-	1414	1407.59	351.81	1.26	9.43E+001	41.74	1.35E+002
	6	2033-	2052	2043.46	510.83	1.53	1.36E+002	50.96	1.53E+002
	7	2325-	2341	2333.35	583.32	1.32	1.34E+002	40.72	9.52E+001
	8	2430-	2447	2437.29	609.31	1.61	1.09E+002	39.48	8.92E+001
	9	2638-	2657	2647.48	661.88	1.35	1.55E+002	40.91	8.00E+001
	10	3453-	3464	3458.49	864.69	0.34	2.14E+001	18.43	2.56E+001
	11	3636-	3655	3645.51	911.46	1.15	1.24E+002	34.07	5.04E+001
M	12	3856-	3884	3861.14	965.38	1.75	2.24E+001	14.02	3.32E+001
m	13	3856-	3884	3877.20	969.40	1.76	7.41E+001	18.83	3.98E+001
	14	4478-	4489	4483.28	1120.96	0.35	1.77E+001	20.94	3.83E+001
	15	5835-	5860	5847.08	1462.02	1.86	8.24E+002	59.69	2.50E+001
	16	7057-	7071	7063.81	1766.29	0.90	4.53E+001	14.69	3.75E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*	100.00	1.86104E-001	7.39347E-002
K-40	0.950	1460.81*	10.67	1.38231E+001	1.50175E+000
Cs-137	0.998	661.65*	85.12	2.70582E-001	7.82011E-002
TL-208	0.751	277.35	6.80		
		510.84*	21.60	8.61592E-001	3.49448E-001
		583.14*	84.20	2.26504E-001	7.49560E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.60529E+001	3.45611E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.29080E-001	1.99078E-001
Bi-214	0.974	609.31*	46.30	3.39913E-001	1.30195E-001
		1120.29*	15.10	1.96912E-001	2.34407E-001
		1764.49*	15.80	5.31728E-001	1.80672E-001
Ac-228	0.630	338.32	11.40		
		911.07*	27.70	7.07300E-001	2.11267E-001
		969.11*	16.60	7.20133E-001	1.97986E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.999	1.371789E-001	7.566991E-002
K-40		0.950	1.382315E+001	1.501750E+000
Cs-137		0.998	2.705820E-001	7.820107E-002
TL-208		0.751	2.265040E-001	7.459164E-002
Pb-212	@	0.520	4.290797E-001	1.990782E-001
Bi-214		0.974	3.702728E-001	9.630133E-002
Ac-228		0.630	7.141327E-001	1.444642E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.86	1.0859E+000	13.92
3	84.88	3.7248E-001	70.53
5	351.81	1.5719E-001	44.25
10	864.69	3.5647E-002	86.15
M 12	965.38	3.7293E-002	62.66

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	9.7863E-002	8.11E-002	2.8347E-002
		1332.49	100.00	8.1053E-002		-1.6853E-002
	Nb-94	702.63	100.00	9.3936E-002	9.39E-002	-5.7859E-002
		871.10	100.00	9.5145E-002		5.8978E-002
	Ag-108m	79.20	7.10	6.4702E+000	1.12E-001	-2.8879E+000
		433.93	89.90	1.1719E-001		-5.6786E-002
		614.37	90.40	1.2466E-001		5.1748E-003
		722.95	90.50	1.1197E-001		8.9143E-002
	Sb-125	176.33	6.89	2.4343E+000	3.47E-001	-1.2830E+000
		427.89	29.33	3.4715E-001		-1.1025E-001
		463.38	10.35	1.0455E+000		-1.7424E-001
		600.56	17.80	6.0820E-001		4.5683E-001
		606.64	5.02	2.4528E+000		-1.0354E+000
		635.90	11.32	8.2783E-001		-3.3223E-001
	Cs-134	563.23	8.38	1.2109E+000	1.16E-001	-3.1942E-001
		569.32	15.43	6.6990E-001		1.7037E-001
		604.70	97.60	1.1925E-001		-5.3736E-002
		795.84	85.40	1.1629E-001		5.7257E-002
		801.93	8.73	1.0178E+000		-9.1120E-001
+	Cs-137	661.65*	85.12	1.0095E-001	1.01E-001	2.7058E-001
	Eu-152	121.78	28.40	8.7419E-001	3.19E-001	3.4823E-004
		244.69	7.49	1.9220E+000		-6.3293E-001
		344.27	26.50	4.3875E-001		-1.2820E-001
		778.89	12.74	7.4819E-001		-1.3163E-001
		867.32	4.16	2.3681E+000		-2.7986E+000
		964.01	14.40	7.7581E-001		-5.1886E-002
		1085.78	10.00	8.8106E-001		1.6537E-002
		1112.02	13.30	6.7249E-001		-2.0611E-001
		1407.95	20.70	3.1943E-001		5.2323E-002
	Eu-154	123.07	40.50	6.0271E-001	2.28E-001	-1.3739E-001
		247.94	6.60	2.1085E+000		-1.3784E+000
		591.81	4.83	2.1216E+000		-1.7086E+000
		723.30	19.70	5.1828E-001		3.7059E-001
		756.87	4.33	2.1825E+000		-1.6427E+000
		873.19	11.50	8.3788E-001		1.5972E-001
		996.32	10.30	8.2402E-001		-1.4961E-001
		1004.76	17.90	4.8322E-001		5.0798E-001
		1274.45	35.50	2.2836E-001		-2.3126E-002
	Eu-155	86.54	30.90	1.3191E+000	1.32E+000	-5.3460E-002
		105.31	20.70	1.4821E+000		-2.8918E-001
	Am-241	59.54	35.90	2.0978E+000	2.10E+000	-3.7258E-001
	Cm-243	228.19	10.56	1.3607E+000	9.66E-001	-1.6261E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.6555E-001	9.66E-001	-8.4817E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/15/2006 8:39:28 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-185-F-
Sample Title: OOL-09-01-185-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/15/2006 8:29:24 AM
Live Time: 600.0 seconds
Real Time: 601.9 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-185-F-
Title: OOL-09-01-185-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	292.08	72.85	0.98	7.70E+002	95.13	3.02E+003
m	2	284-	306	300.52	74.96	0.99	1.24E+003	106.94	3.22E+003
	3	332-	346	340.36	84.92	0.65	4.31E+002	192.97	3.21E+003
	4	947-	974	954.85	238.59	1.38	3.30E+002	124.96	8.24E+002
	5	1350-	1363	1354.30	338.48	0.70	7.59E+001	50.39	2.08E+002
	6	1399-	1417	1408.41	352.01	0.54	8.80E+001	63.53	2.85E+002
	7	2035-	2050	2044.54	511.10	0.91	1.43E+002	48.21	1.54E+002
	8	2326-	2342	2333.16	583.27	1.34	1.55E+002	43.99	1.11E+002
	9	2432-	2447	2437.89	609.46	1.18	1.10E+002	40.12	1.01E+002
	10	2639-	2655	2646.83	661.71	1.27	1.43E+002	41.40	9.43E+001
	11	3636-	3656	3646.41	911.68	1.34	1.30E+002	38.68	7.10E+001
M	12	3855-	3886	3860.09	965.12	1.31	2.16E+001	15.05	4.34E+001
m	13	3855-	3886	3877.53	969.48	1.31	6.47E+001	20.51	6.10E+001
	14	5834-	5861	5847.25	1462.06	1.72	1.08E+003	66.99	2.02E+001
	15	7056-	7072	7063.90	1766.31	1.08	4.03E+001	18.20	1.47E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	1.000	511.00*	100.00	1.95157E-001	7.08790E-002
K-40	0.947	1460.81*	10.67	1.81138E+001	1.84763E+000
Cs-137	1.000	661.65*	85.12	2.49185E-001	7.79919E-002
TL-208	0.751	277.35	6.80		
		510.84*	21.60	9.03504E-001	3.36337E-001
		583.14*	84.20	2.61572E-001	8.18778E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.77474E+001	3.79966E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.03416E-001	3.28864E-001
Bi-214	0.674	609.31*	46.30	3.44625E-001	1.32292E-001
		1120.29	15.10		
		1764.49*	15.80	4.73081E-001	2.19087E-001
Ac-228	0.992	338.32*	11.40	7.98136E-001	5.44201E-001
		911.07*	27.70	7.44207E-001	2.37385E-001
		969.11*	16.60	6.28989E-001	2.09989E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		1.000	1.386573E-001	7.302891E-002
K-40		0.947	1.811384E+001	1.847635E+000
Cs-137		1.000	2.491851E-001	7.799189E-002
TL-208		0.751	2.615723E-001	8.143287E-002
Pb-212	@	0.520	8.034156E-001	3.288643E-001
Bi-214		0.674	3.789474E-001	1.132474E-001
Ac-228		0.992	6.887090E-001	1.510988E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.85	1.2840E+000	12.35
3	84.92	7.1867E-001	44.75
6	352.01	1.4659E-001	72.23
M 12	965.12	3.6026E-002	69.63

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0932E-001	9.40E-002	3.2355E-003
		1332.49	100.00	9.3987E-002		9.9532E-002
	Nb-94	702.63	100.00	1.0399E-001	1.00E-001	2.7832E-002
		871.10	100.00	1.0000E-001		2.2475E-002
	Ag-108m	79.20	7.10	6.7901E+000	1.21E-001	-1.0207E+001
		433.93	89.90	1.3184E-001		4.1559E-002
		614.37	90.40	1.3886E-001		2.5693E-002
		722.95	90.50	1.2114E-001		1.6960E-002
	Sb-125	176.33	6.89	2.7170E+000	4.10E-001	-4.2479E-001
		427.89	29.33	4.1015E-001		1.7883E-001
		463.38	10.35	1.1515E+000		1.5966E-001
		600.56	17.80	6.2368E-001		-1.1400E-002
		606.64	5.02	2.6026E+000		-1.6321E+000
		635.90	11.32	9.3916E-001		-2.7298E-001
	Cs-134	563.23	8.38	1.2945E+000	1.25E-001	4.2619E-001
		569.32	15.43	6.9205E-001		-1.4690E-001
		604.70	97.60	1.2525E-001		-4.3047E-002
		795.84	85.40	1.2599E-001		7.0214E-002
		801.93	8.73	1.1937E+000		3.8509E-003
+	Cs-137	661.65*	85.12	1.0475E-001	1.05E-001	2.4919E-001
	Eu-152	121.78	28.40	9.5093E-001	3.50E-001	8.6367E-001
		244.69	7.49	2.0370E+000		-1.3841E+000
		344.27	26.50	4.7446E-001		-6.6251E-003
		778.89	12.74	8.0722E-001		1.1895E-001
		867.32	4.16	2.4084E+000		-2.2454E+000
		964.01	14.40	8.3019E-001		-4.0661E-001
		1085.78	10.00	9.7325E-001		7.8157E-003
		1112.02	13.30	6.8851E-001		-6.5728E-001
		1407.95	20.70	3.5015E-001		-6.9056E-002
	Eu-154	123.07	40.50	6.5673E-001	2.58E-001	1.0511E-001
		247.94	6.60	2.2129E+000		-2.9606E+000
		591.81	4.83	2.1494E+000		-1.7350E+000
		723.30	19.70	5.6129E-001		2.2049E-001
		756.87	4.33	2.5441E+000		1.0947E+000
		873.19	11.50	8.5532E-001		1.8089E-001
		996.32	10.30	8.9352E-001		-1.0421E-001
		1004.76	17.90	5.0242E-001		-6.9791E-002
		1274.45	35.50	2.5777E-001		-6.9064E-002
	Eu-155	86.54	30.90	1.4391E+000	1.44E+000	1.8801E-001
		105.31	20.70	1.6094E+000		2.6215E-001
	Am-241	59.54	35.90	2.1031E+000	2.10E+000	-2.3419E-001
	Cm-243	228.19	10.56	1.5419E+000	1.06E+000	-1.5572E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0612E+000	1.06E+000	-6.3670E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/14/2006 3:44:08 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-186-F-
Sample Title: OOL-09-01-186-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/14/2006 3:40:41 PM
Live Time: 206.1 seconds
Real Time: 206.7 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-186-F-
Title: OOL-09-01-186-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	307	291.93	72.81	0.94	2.25E+002	53.56	9.75E+002
m	2	285-	307	300.19	74.88	0.95	3.58E+002	59.41	9.70E+002
	3	2326-	2336	2330.99	582.73	0.30	2.25E+001	17.62	2.45E+001
	4	2640-	2652	2645.90	661.48	1.08	3.80E+001	18.16	1.80E+001
	5	5833-	5852	5842.48	1460.87	1.46	1.31E+002	24.67	7.61E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	6.41445E+000	1.31155E+000
Cs-137	0.999	661.65*	85.12	1.92947E-001	9.50097E-002
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.10762E-001	8.79898E-002
		860.37	12.46		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	1.000	6.414451E+000	1.311552E+000
Cs-137	0.999	1.929475E-001	9.500965E-002
TL-208	0.467	1.107619E-001	8.798981E-002

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	1.0931E+000	23.77
m 2	74.88	1.7390E+000	16.57

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.5207E-001	1.52E-001	5.2141E-002
		1332.49	100.00	1.6630E-001		1.3945E-001
	Nb-94	702.63	100.00	1.6424E-001	1.60E-001	7.2394E-002
		871.10	100.00	1.5960E-001		3.6065E-002
	Ag-108m	79.20	7.10	1.1039E+001	1.77E-001	-7.3256E+000
		433.93	89.90	2.1080E-001		-4.7149E-002
		614.37	90.40	1.7662E-001		-1.5979E-001
		722.95	90.50	1.8845E-001		8.0251E-002
	Sb-125	176.33	6.89	3.7814E+000	6.19E-001	-9.5695E-001
		427.89	29.33	6.1949E-001		-7.9180E-001
		463.38	10.35	1.7759E+000		1.1034E+000
		600.56	17.80	9.3267E-001		-5.6717E-001
		606.64	5.02	4.0429E+000		2.0911E+000
		635.90	11.32	1.5165E+000		-1.2193E+000
	Cs-134	563.23	8.38	1.8054E+000	1.92E-001	-2.5009E+000
		569.32	15.43	1.1251E+000		5.5339E-001
		604.70	97.60	1.9723E-001		4.2112E-002
		795.84	85.40	1.9216E-001		1.5190E-002
		801.93	8.73	1.8156E+000		-1.9668E+000
+	Cs-137	661.65*	85.12	1.2937E-001	1.29E-001	1.9295E-001
	Eu-152	121.78	28.40	1.4546E+000	4.53E-001	-1.1760E-001
		244.69	7.49	2.9696E+000		1.1027E-001
		344.27	26.50	7.5598E-001		4.4331E-001
		778.89	12.74	1.2714E+000		-7.1344E-001
		867.32	4.16	4.0477E+000		2.0671E+000
		964.01	14.40	1.2911E+000		-4.8604E-002
		1085.78	10.00	1.3268E+000		-1.5329E+000
		1112.02	13.30	9.7162E-001		-9.1903E-001
		1407.95	20.70	4.5319E-001		2.7485E-001
	Eu-154	123.07	40.50	1.0149E+000	4.42E-001	4.1694E-001
		247.94	6.60	3.3199E+000		-5.1966E-001
		591.81	4.83	3.4707E+000		4.9289E-001
		723.30	19.70	8.4542E-001		-3.5126E-001
		756.87	4.33	3.6187E+000		1.5691E+000
		873.19	11.50	1.3339E+000		-7.1798E-001
		996.32	10.30	1.3901E+000		1.8195E-001
		1004.76	17.90	8.1218E-001		-6.0504E-001
		1274.45	35.50	4.4230E-001		2.5078E-001
	Eu-155	86.54	30.90	2.2343E+000	2.23E+000	1.1121E+000
		105.31	20.70	2.5003E+000		1.4486E+000
	Am-241	59.54	35.90	3.7951E+000	3.80E+000	2.4579E+000
	Cm-243	228.19	10.56	2.1890E+000	1.57E+000	1.0025E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.5694E+000	1.57E+000	1.0039E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/15/2006 8:22:12 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-186-F-
Sample Title: OOL-09-01-186-F-G-R
Description:

Sample Type:
Geometry:

Acquisition Started: 6/15/2006 8:12:09 AM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-186-F-
Title: OOL-09-01-186-F-G-R
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	307	291.80	72.78	1.14	5.36E+002	88.18	2.89E+003
m	2	285-	307	300.21	74.88	1.14	9.06E+002	97.68	3.47E+003
	3	332-	347	339.80	84.78	1.23	2.69E+002	181.65	2.77E+003
	4	949-	960	954.83	238.59	0.49	6.08E+001	46.69	2.01E+002
	5	1403-	1415	1407.92	351.89	0.34	4.43E+001	35.52	1.07E+002
	6	2432-	2444	2437.21	609.29	1.11	8.97E+001	27.62	4.13E+001
	7	2637-	2656	2646.96	661.75	1.06	1.76E+002	36.34	4.75E+001
	8	3637-	3655	3646.77	911.77	0.78	6.36E+001	26.54	3.54E+001
	9	3870-	3884	3877.15	969.39	2.13	4.35E+001	19.84	2.05E+001
	10	4558-	4569	4563.22	1140.96	0.98	1.85E+001	13.61	1.15E+001
	11	5836-	5859	5846.74	1461.93	1.59	4.60E+002	45.23	1.80E+001
	12	7056-	7070	7063.00	1766.09	0.73	2.11E+001	12.76	6.86E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.957	1460.81*	10.67	7.71644E+000	9.82874E-001
Cs-137	1.000	661.65*	85.12	3.08024E-001	7.30684E-002
Pb-212	0.521	74.81* @	10.70	1.29662E+001	2.90075E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.47750E-001	1.15847E-001
Bi-214	0.680	609.31*	46.30	2.80185E-001	9.28835E-002
		1120.29	15.10		
		1764.49*	15.80	2.48442E-001	1.52036E-001
Ac-228	0.624	338.32	11.40		
		911.07*	27.70	3.64171E-001	1.57610E-001
		969.11*	16.60	4.22979E-001	1.97920E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.957	7.716444E+000	9.828737E-001
Cs-137	1.000	3.080243E-001	7.306840E-002
Pb-212 @	0.521	1.477498E-001	1.158474E-001
Bi-214	0.680	2.715577E-001	7.926212E-002
Ac-228	0.624	3.869919E-001	1.232932E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.78	8.9323E-001	16.45
3	84.78	4.4860E-001	67.49
5	351.89	7.3813E-002	80.20
10	1140.96	3.0833E-002	73.59

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	8.7488E-002	7.12E-002	-1.0760E-002
		1332.49	100.00	7.1210E-002		-1.9252E-002
	Nb-94	702.63	100.00	8.6849E-002	7.00E-002	3.9938E-002
		871.10	100.00	6.9956E-002		-3.7806E-002
	Ag-108m	79.20	7.10	6.4446E+000	8.90E-002	1.7318E+000
		433.93	89.90	1.0354E-001		3.1045E-002
		614.37	90.40	1.0417E-001		-3.5509E-002
		722.95	90.50	8.8974E-002		-7.5507E-002
	Sb-125	176.33	6.89	2.0392E+000	3.09E-001	-5.0554E-001
		427.89	29.33	3.0896E-001		5.5144E-002
		463.38	10.35	9.3096E-001		4.9977E-001
		600.56	17.80	4.8864E-001		-5.7323E-002
		606.64	5.02	2.0984E+000		3.0657E+000
		635.90	11.32	7.2755E-001		3.8686E-001
	Cs-134	563.23	8.38	1.0410E+000	9.13E-002	1.3869E-001
		569.32	15.43	5.5553E-001		5.8742E-002
		604.70	97.60	1.0196E-001		-9.2097E-002
		795.84	85.40	9.1340E-002		-3.0316E-002
		801.93	8.73	8.8684E-001		-1.5030E-001
+	Cs-137	661.65*	85.12	7.9006E-002	7.90E-002	3.0802E-001
	Eu-152	121.78	28.40	7.9448E-001	2.69E-001	4.0651E-001
		244.69	7.49	1.5102E+000		-4.4611E-001
		344.27	26.50	3.7165E-001		-5.4221E-002
		778.89	12.74	6.2312E-001		-3.9119E-001
		867.32	4.16	1.8379E+000		1.0082E+000
		964.01	14.40	6.1708E-001		-2.9000E-001
		1085.78	10.00	7.0826E-001		-1.5881E-001
		1112.02	13.30	5.3966E-001		-1.3918E-001
		1407.95	20.70	2.6943E-001		2.0816E-001
	Eu-154	123.07	40.50	5.5011E-001	1.81E-001	2.0844E-002
		247.94	6.60	1.6696E+000		-1.7025E-001
		591.81	4.83	1.8305E+000		-6.9672E-001
		723.30	19.70	4.0878E-001		-4.8436E-001
		756.87	4.33	1.8073E+000		-3.4354E-001
		873.19	11.50	6.1910E-001		4.3344E-001
		996.32	10.30	7.1635E-001		-9.9516E-001
		1004.76	17.90	4.3350E-001		1.7768E-001
		1274.45	35.50	1.8081E-001		-1.1992E-001
	Eu-155	86.54	30.90	1.2800E+000	1.28E+000	2.9177E-001
		105.31	20.70	1.3806E+000		-8.9722E-002
	Am-241	59.54	35.90	2.1220E+000	2.12E+000	-1.8865E+000
	Cm-243	228.19	10.56	1.1051E+000	7.86E-001	-8.6771E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	7.8562E-001	7.86E-001	1.3447E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 2:21:08 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-09-01-187-F-
Sample Title: OOL-09-01-187-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 2:19:48 PM
Live Time: 78.6 seconds
Real Time: 78.7 seconds

Energy Calibration Date: 4/7/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7722Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BRN7722
Log Number: OOL-09-01-187-F-
Title: OOL-09-01-187-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	309	300.53	75.33	0.57	6.06E+001	46.69	1.78E+002
2	950-	960	954.84	238.89	0.64	3.52E+001	22.60	4.08E+001
3	2431-	2442	2436.33	609.22	1.34	2.46E+001	12.86	7.37E+000
4	3639-	3650	3644.25	911.17	0.29	1.43E+001	11.80	8.67E+000
5	5835-	5855	5844.47	1461.16	0.95	1.13E+002	20.84	0.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.996	1460.81*	10.67	1.83079E+001	3.68673E+000
Pb-212	0.578	74.81* @	10.70	1.48950E+001	1.18455E+001
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.37684E-001	5.54346E-001
Bi-214	0.402	609.31*	46.30	7.33822E-001	3.93560E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.996	1.830793E+001	3.686733E+000
Pb-212	@	0.578	8.376838E-001	5.543459E-001
Bi-214		0.402	7.338217E-001	3.935600E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
4	911.17	1.8236E-001	82.35

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	4.0074E-001	3.72E-001	-1.5181E-001
	1332.49	100.00	3.7228E-001		2.9854E-001
Nb-94	702.63	100.00	3.3744E-001	3.37E-001	-3.5877E-003
	871.10	100.00	3.5383E-001		2.2196E-002
Ag-108m	79.20	7.10	2.9627E+001	4.70E-001	-1.5825E+001
	433.93	89.90	4.9466E-001		1.3273E-001
	614.37	90.40	5.2418E-001		-6.1769E-001
	722.95	90.50	4.6969E-001		1.3503E-001
Sb-125	176.33	6.89	8.8482E+000	1.44E+000	-4.3637E+000
	427.89	29.33	1.4392E+000		-8.7460E-001
	463.38	10.35	4.0990E+000		1.0150E+000
	600.56	17.80	2.2389E+000		-1.2233E+000
	606.64	5.02	9.6791E+000		2.6585E+000
	635.90	11.32	3.2080E+000		-1.0809E+000
Cs-134	563.23	8.38	4.9154E+000	3.88E-001	2.1670E+000
	569.32	15.43	2.4285E+000		-1.3996E+000
	604.70	97.60	4.9733E-001		-5.1883E-001
	795.84	85.40	3.8770E-001		1.8472E-001
	801.93	8.73	4.3159E+000		3.1611E+000
Cs-137	661.65	85.12	4.1626E-001	4.16E-001	-6.0328E-001
Eu-152	121.78	28.40	3.1186E+000	1.23E+000	9.7090E-001
	244.69	7.49	7.2863E+000		-2.7915E+000
	344.27	26.50	1.6438E+000		-1.5489E+000
	778.89	12.74	2.5225E+000		-7.4902E-001
	867.32	4.16	8.8645E+000		5.6343E+000
	964.01	14.40	3.0991E+000		4.0706E-001
	1085.78	10.00	3.3597E+000		2.5217E+000
	1112.02	13.30	2.6069E+000		2.0246E+000
	1407.95	20.70	1.2333E+000		5.7493E-001
Eu-154	123.07	40.50	2.1338E+000	8.99E-001	4.0838E-001
	247.94	6.60	8.1484E+000		-3.6320E-001
	591.81	4.83	8.9867E+000		2.9001E+000
	723.30	19.70	2.1280E+000		2.2682E-001
	756.87	4.33	9.3533E+000		3.7060E+000
	873.19	11.50	3.0095E+000		-1.7399E-001
	996.32	10.30	3.2900E+000		-1.1162E+000
	1004.76	17.90	1.6308E+000		-1.1696E+000
	1274.45	35.50	8.9916E-001		-3.4615E-002
Eu-155	86.54	30.90	5.2854E+000	5.29E+000	2.8426E+000
	105.31	20.70	5.8589E+000		-1.8936E+000
Am-241	59.54	35.90	1.1895E+001	1.19E+001	-7.3136E+000
Cm-243	228.19	10.56	5.5893E+000	3.55E+000	-1.0534E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.5496E+000	3.55E+000	-1.1269E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 2:38:32 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-188-F-
Sample Title: OOL-09-01-188-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 2:28:36 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-188-F-
Title: OOL-09-01-188-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	308	291.94	72.81	1.10	4.52E+002	77.46	2.00E+003
m	2	286-	308	300.46	74.95	1.10	8.32E+002	88.06	2.49E+003
	3	332-	345	340.46	84.95	1.41	3.02E+002	144.93	1.88E+003
	4	949-	963	955.56	238.77	1.15	3.48E+002	81.59	4.77E+002
	5	1350-	1359	1354.72	338.59	0.44	9.40E+001	41.97	1.60E+002
	6	1400-	1419	1408.83	352.12	0.64	1.58E+002	64.40	2.63E+002
	7	2034-	2055	2044.47	511.08	0.45	2.03E+002	57.93	1.79E+002
	8	2327-	2344	2335.13	583.77	1.60	2.13E+002	47.07	1.12E+002
	9	2429-	2451	2439.50	609.87	1.23	2.27E+002	53.43	1.33E+002
	10	2644-	2658	2649.59	662.41	0.60	3.96E+001	32.59	8.14E+001
	11	2901-	2919	2911.96	728.02	0.39	6.47E+001	38.77	9.53E+001
	12	3178-	3191	3183.74	795.98	0.74	5.30E+001	25.70	4.30E+001
	13	3638-	3659	3648.29	912.15	2.16	2.09E+002	41.83	6.57E+001
M	14	3858-	3891	3863.39	965.95	1.54	3.58E+001	17.06	4.81E+001
m	15	3858-	3891	3880.10	970.12	1.54	1.28E+002	25.17	6.50E+001
	16	4479-	4497	4486.29	1121.72	1.57	8.35E+001	30.73	4.75E+001
	17	5836-	5864	5850.80	1462.95	1.72	1.35E+003	73.90	1.48E+001
	18	7064-	7079	7070.14	1767.88	0.82	4.88E+001	16.72	8.21E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	1.000	511.00*	100.00	2.77298E-001	8.74992E-002
K-40	0.852	1460.81*	10.67	2.26865E+001	2.21606E+000
Cs-137	0.980	661.65*	85.12	6.91641E-002	5.74794E-002
TL-208	0.742	277.35	6.80		
		510.84*	21.60	1.28379E+000	4.18437E-001
		583.14*	84.20	3.61081E-001	9.25141E-002
		860.37	12.46		
Bi-212	0.975	727.17*	11.80	8.29733E-001	5.07036E-001
Pb-212	0.520	74.81* @	10.70	1.18969E+001	2.65013E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.45453E-001	2.38602E-001
Bi-214	0.679	609.31*	46.30	7.07645E-001	1.88250E-001
		1120.29*	15.10	9.31183E-001	3.56646E-001
		1764.49	15.80		
Ac-228	0.969	338.32*	11.40	9.87517E-001	4.67527E-001
		911.07*	27.70	1.19854E+000	2.76220E-001
		969.11*	16.60	1.24215E+000	2.77175E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		1.000	1.993041E-001	8.971611E-002
K-40		0.852	2.268650E+001	2.216064E+000
Cs-137		0.980	6.916409E-002	5.747940E-002
TL-208		0.742	3.610814E-001	9.176270E-002
Bi-212		0.975	8.297330E-001	5.070363E-001
Pb-212	@	0.520	8.454535E-001	2.386017E-001
Bi-214		0.679	7.563541E-001	1.664815E-001
Ac-228		0.969	1.185583E+000	1.804866E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	7.5264E-001	17.15
3	84.95	5.0350E-001	47.97
6	352.12	2.6349E-001	40.73
12	795.98	8.8255E-002	48.53
M 14	965.95	5.9586E-002	47.71
18	1767.88	8.1316E-002	34.27

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0216E-001	9.05E-002	2.0031E-002
		1332.49	100.00	9.0547E-002		3.6016E-002
	Nb-94	702.63	100.00	1.1109E-001	9.77E-002	7.7824E-002
		871.10	100.00	9.7746E-002		5.4530E-002
	Ag-108m	79.20	7.10	5.6412E+000	1.33E-001	1.1778E-001
		433.93	89.90	1.3647E-001		-5.2590E-002
		614.37	90.40	1.5488E-001		-3.2871E-002
		722.95	90.50	1.3251E-001		-1.4307E-003
	Sb-125	176.33	6.89	2.5185E+000	4.11E-001	2.0441E+000
		427.89	29.33	4.1067E-001		-3.3159E-001
		463.38	10.35	1.1994E+000		5.0042E-001
		600.56	17.80	6.4220E-001		1.5612E-001
		606.64	5.02	3.0095E+000		-5.2812E-001
		635.90	11.32	9.0850E-001		1.2723E-002
	Cs-134	563.23	8.38	1.3283E+000	1.28E-001	1.2308E+000
		569.32	15.43	7.0953E-001		-7.3911E-001
		604.70	97.60	1.3299E-001		-1.0208E-001
		795.84	85.40	1.2801E-001		5.6002E-002
		801.93	8.73	1.1729E+000		-4.6893E-002
+	Cs-137	661.65*	85.12	9.3128E-002	9.31E-002	6.9164E-002
	Eu-152	121.78	28.40	8.1532E-001	3.89E-001	5.6871E-001
		244.69	7.49	2.0724E+000		-6.9995E-001
		344.27	26.50	4.8355E-001		-8.9822E-001
		778.89	12.74	8.5062E-001		-1.9470E-002
		867.32	4.16	2.4742E+000		-3.1928E+000
		964.01	14.40	9.0313E-001		1.1466E-001
		1085.78	10.00	9.9570E-001		1.8410E-001
		1112.02	13.30	7.5145E-001		6.0089E-001
		1407.95	20.70	3.8928E-001		2.7407E-001
	Eu-154	123.07	40.50	5.6158E-001	2.57E-001	-1.7849E-001
		247.94	6.60	2.2170E+000		-2.5378E-001
		591.81	4.83	2.3300E+000		1.2489E+000
		723.30	19.70	6.1739E-001		-1.5738E-001
		756.87	4.33	2.3616E+000		-8.9215E-002
		873.19	11.50	8.7961E-001		6.2790E-001
		996.32	10.30	9.6949E-001		3.9409E-001
		1004.76	17.90	5.6591E-001		2.1201E-001
		1274.45	35.50	2.5670E-001		5.8719E-002
	Eu-155	86.54	30.90	1.1571E+000	1.16E+000	-3.7082E-001
		105.31	20.70	1.3718E+000		3.4588E-001
	Am-241	59.54	35.90	1.5441E+000	1.54E+000	7.8350E-001
	Cm-243	228.19	10.56	1.4235E+000	1.01E+000	1.5342E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0088E+000	1.01E+000	2.4202E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 2:59:12 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-01-189-F-
Sample Title: OOL-09-01-189-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 2:49:10 PM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-01-189-F-
Title: OOL-09-01-189-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	291.95	72.82	1.24	4.49E+002	73.77	2.03E+003
m	2	284-	308	300.09	74.85	1.24	7.83E+002	83.98	2.49E+003
	3	332-	344	339.63	84.74	1.27	2.01E+002	129.81	1.59E+003
	4	946-	960	954.03	238.39	1.28	3.37E+002	76.63	4.14E+002
	5	1175-	1187	1180.30	294.97	0.38	6.01E+001	49.62	2.20E+002
	6	1347-	1361	1352.57	338.05	1.13	1.12E+002	53.17	2.15E+002
	7	1398-	1413	1406.82	351.62	1.40	1.57E+002	58.87	2.48E+002
	8	2032-	2051	2042.61	510.61	1.68	1.44E+002	53.74	1.73E+002
	9	2322-	2340	2331.43	582.84	1.26	2.54E+002	52.42	1.36E+002
	10	2425-	2447	2436.37	609.08	1.80	2.65E+002	51.40	1.09E+002
	11	3633-	3653	3643.13	910.86	2.10	1.69E+002	41.95	7.99E+001
M	12	3851-	3883	3856.64	964.26	1.63	3.31E+001	16.75	5.20E+001
m	13	3851-	3883	3874.13	968.63	1.63	1.06E+002	23.58	7.15E+001
	14	5828-	5855	5842.46	1460.86	1.96	1.27E+003	73.50	3.13E+001
	15	6346-	6359	6352.30	1588.36	0.54	2.18E+001	12.78	7.19E+000
	16	7050-	7068	7057.89	1764.81	0.47	6.06E+001	18.21	7.36E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.995	511.00*		100.00	1.96487E-001	7.79749E-002
K-40	1.000	1460.81*		10.67	2.12287E+001	2.11508E+000
TL-208	0.749	277.35		6.80		
		510.84*		21.60	9.09661E-001	3.68560E-001
		583.14*		84.20	4.29943E-001	1.04886E-001
		860.37		12.46		
Pb-212	0.519	74.81*	@	10.70	1.12116E+001	2.50521E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.19515E-001	2.26280E-001
Bi-214	0.697	609.31*		46.30	8.28187E-001	1.90161E-001
		1120.29		15.10		
		1764.49*		15.80	7.12412E-001	2.25514E-001
PB-214	0.580	74.82*	@	6.21	1.93179E+001	4.53862E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.60805E-001	3.03815E-001
		351.92*		37.20	5.10692E-001	2.09832E-001
Ac-228	0.996	338.32*		11.40	1.17814E+000	5.88407E-001
		911.07*		27.70	9.67557E-001	2.64637E-001
		969.11*		16.60	1.03391E+000	2.53608E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.995	1.036189E-001	8.114301E-002
K-40		1.000	2.122871E+001	2.115076E+000
TL-208		0.749	4.299434E-001	1.039457E-001
Pb-212	@	0.519	8.195149E-001	2.262798E-001
Bi-214		0.697	7.800756E-001	1.453754E-001
PB-214	@	0.580	4.622852E-001	1.726557E-001
Ac-228		0.996	1.017685E+000	1.748333E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.82	7.4898E-001	16.42
3	84.74	3.3489E-001	64.60
M 12	964.26	5.5214E-002	50.57
15	1588.36	3.6351E-002	58.57

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.9537E-002	7.42E-002	-7.1718E-002
	1332.49	100.00	7.4164E-002		-1.9888E-002
Nb-94	702.63	100.00	1.0713E-001	1.00E-001	-2.0809E-002
	871.10	100.00	1.0000E-001		4.6383E-002
Ag-108m	79.20	7.10	5.2295E+000	1.27E-001	-1.8049E+000
	433.93	89.90	1.2685E-001		-6.7400E-002
	614.37	90.40	1.3782E-001		1.8758E-002
	722.95	90.50	1.3577E-001		5.6996E-002
Sb-125	176.33	6.89	2.3363E+000	3.94E-001	-3.9684E-001
	427.89	29.33	3.9414E-001		-2.2721E-002
	463.38	10.35	1.2159E+000		1.2574E+000
	600.56	17.80	6.4106E-001		3.3316E-001
	606.64	5.02	3.0339E+000		-3.0773E-001
	635.90	11.32	9.8041E-001		4.0087E-001
Cs-134	563.23	8.38	1.3613E+000	1.26E-001	3.1297E-001
	569.32	15.43	6.9205E-001		8.6508E-002
	604.70	97.60	1.5065E-001		-2.9677E-002
	795.84	85.40	1.2628E-001		1.0247E-001
	801.93	8.73	1.1393E+000		-1.3311E+000
Cs-137	661.65	85.12	1.3340E-001	1.33E-001	-1.0155E-001
Eu-152	121.78	28.40	7.7146E-001	3.74E-001	6.5292E-001
	244.69	7.49	1.9643E+000		4.4050E-001
	344.27	26.50	4.5721E-001		-1.6801E-001
	778.89	12.74	7.9496E-001		-3.4634E-001
	867.32	4.16	2.4350E+000		-1.2864E+000
	964.01	14.40	9.3516E-001		3.2438E-002
	1085.78	10.00	9.9253E-001		7.4869E-002
	1112.02	13.30	7.5863E-001		-2.5655E-001
	1407.95	20.70	3.7369E-001		-2.8327E-001
Eu-154	123.07	40.50	5.3063E-001	2.58E-001	-2.5591E-001
	247.94	6.60	2.1229E+000		-5.2603E-001
	591.81	4.83	2.1904E+000		-2.4402E-001
	723.30	19.70	6.2694E-001		4.5449E-001
	756.87	4.33	2.4027E+000		2.1642E+000
	873.19	11.50	8.7961E-001		6.4206E-001
	996.32	10.30	9.0299E-001		-6.7249E-002
	1004.76	17.90	5.4041E-001		-8.4714E-002
	1274.45	35.50	2.5777E-001		-1.4739E-001
Eu-155	86.54	30.90	1.1036E+000	1.10E+000	2.3873E-001
	105.31	20.70	1.2765E+000		2.2257E-001
Am-241	59.54	35.90	1.3949E+000	1.39E+000	-3.9003E-001
Cm-243	228.19	10.56	1.4251E+000	9.94E-001	4.3024E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.9364E-001	9.94E-001	9.6592E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/20/2006 5:11:45 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-01-190-F-G
Sample ID: OOL-09-01-190
Sample Title: OOL-09-01-190-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 3:31:49 PM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-01-190-F-G
Log Number: OOL-09-01-190
Title: OOL-09-01-190-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	291.74	72.76	1.43	3.83E+002	79.07	2.35E+003
m	2	284-	308	300.45	74.94	1.43	8.45E+002	88.77	3.00E+003
	3	945-	962	954.93	238.61	0.90	2.39E+002	76.24	3.88E+002
	4	2322-	2341	2331.85	582.94	0.80	1.43E+002	41.09	8.47E+001
	5	2429-	2447	2436.04	609.00	1.84	1.19E+002	39.73	8.64E+001
	6	2637-	2655	2646.55	661.64	1.97	1.06E+002	37.71	7.82E+001
	7	3636-	3656	3643.79	911.03	1.53	1.42E+002	33.04	3.91E+001
M	8	3851-	3882	3857.24	964.41	1.06	3.01E+001	13.53	2.41E+001
m	9	3851-	3882	3875.00	968.85	1.06	4.44E+001	16.04	2.95E+001
	10	5831-	5859	5844.30	1461.32	1.91	7.93E+002	59.91	3.14E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-01-190-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.991	1460.81*	10.67	1.32950E+001	1.47256E+000
Cs-137	1.000	661.65*	85.12	1.84615E-001	6.93190E-002
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.42492E-001	7.63600E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.20846E+001	2.68735E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.82089E-001	2.06607E-001
Bi-214	0.396	609.31*	46.30	3.70199E-001	1.32162E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	8.12236E-001	2.10930E-001
		969.11*	16.60	4.31293E-001	1.62324E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-01-190-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.991	1.329499E+001	1.472562E+000
Cs-137	1.000	1.846150E-001	6.931896E-002
TL-208	0.470	2.424916E-001	7.635996E-002
Pb-212 @	0.520	5.820890E-001	2.066074E-001
Bi-214	0.396	3.701990E-001	1.321623E-001
Ac-228	0.633	5.729843E-001	1.286412E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.76	6.3887E-001	20.63
M 8	964.41	5.0154E-002	44.98

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-01-190-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	8.9367E-002	6.60E-002	2.0472E-002
		1332.49	100.00	6.5969E-002		3.6393E-002
	Nb-94	702.63	100.00	9.5556E-002	8.42E-002	1.1970E-002
		871.10	100.00	8.4226E-002		-1.5699E-002
	Ag-108m	79.20	7.10	5.2835E+000	1.04E-001	-2.3468E+000
		433.93	89.90	1.2107E-001		7.2838E-002
		614.37	90.40	1.2558E-001		1.5236E-002
		722.95	90.50	1.0439E-001		2.3737E-002
	Sb-125	176.33	6.89	2.2826E+000	3.53E-001	1.9655E+000
		427.89	29.33	3.5269E-001		-8.1445E-002
		463.38	10.35	1.0028E+000		3.5089E-002
		600.56	17.80	5.4170E-001		-2.1766E-001
		606.64	5.02	2.4186E+000		-8.8458E-001
		635.90	11.32	8.2783E-001		4.5119E-001
	Cs-134	563.23	8.38	1.1626E+000	1.05E-001	5.9090E-001
		569.32	15.43	6.2917E-001		-5.2580E-002
		604.70	97.60	1.1634E-001		-1.8442E-002
		795.84	85.40	1.0460E-001		-1.0442E-002
		801.93	8.73	1.0385E+000		-1.0163E+000
+	Cs-137	661.65*	85.12	9.8103E-002	9.81E-002	1.8462E-001
	Eu-152	121.78	28.40	7.4827E-001	3.22E-001	3.1672E-001
		244.69	7.49	1.7928E+000		-4.1412E-001
		344.27	26.50	4.1226E-001		-6.1159E-001
		778.89	12.74	7.3490E-001		4.1639E-001
		867.32	4.16	2.0468E+000		-2.1873E+000
		964.01	14.40	7.6112E-001		-1.1901E-001
		1085.78	10.00	8.4797E-001		1.9830E-001
		1112.02	13.30	6.3342E-001		-9.3190E-001
		1407.95	20.70	3.2211E-001		2.1311E-001
	Eu-154	123.07	40.50	5.1768E-001	2.23E-001	1.0726E-001
		247.94	6.60	1.9552E+000		4.7735E-001
		591.81	4.83	2.0065E+000		5.5357E-001
		723.30	19.70	4.8649E-001		4.2726E-001
		756.87	4.33	2.1695E+000		3.3701E-002
		873.19	11.50	7.2984E-001		1.0620E-001
		996.32	10.30	7.8865E-001		-2.0543E-001
		1004.76	17.90	4.9484E-001		1.1527E-001
		1274.45	35.50	2.2347E-001		-1.8779E-001
	Eu-155	86.54	30.90	1.1010E+000	1.10E+000	2.0105E+000
		105.31	20.70	1.2475E+000		-1.3709E-001
	Am-241	59.54	35.90	1.5951E+000	1.60E+000	1.7392E-001
	Cm-243	228.19	10.56	1.2583E+000	8.94E-001	5.0957E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.9382E-001	8.94E-001	3.1450E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/13/2006 6:31:06 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-01-191-F-
Sample Title: OOL-09-01-191-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/13/2006 6:10:59 PM
Live Time: 1200.0 seconds
Real Time: 1204.2 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-01-191-F-
Title: OOL-09-01-191-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	309	291.83	72.86	1.42	9.52E+002	121.02	4.08E+003
m	2	287-	309	300.13	74.94	1.42	1.94E+003	133.04	6.39E+003
	3	331-	347	338.97	84.65	1.32	5.22E+002	241.46	4.67E+003
	4	945-	963	953.68	238.36	1.66	4.75E+002	122.92	1.02E+003
	5	1170-	1191	1180.20	295.01	1.34	1.33E+002	109.29	7.91E+002
	6	1385-	1417	1406.63	351.63	1.33	2.11E+002	135.94	8.96E+002
	7	2030-	2052	2042.32	510.60	2.12	3.13E+002	77.60	3.23E+002
	8	2318-	2343	2331.31	582.87	1.60	4.24E+002	76.99	2.63E+002
	9	2423-	2445	2435.83	609.00	1.27	3.72E+002	66.11	1.98E+002
	10	2635-	2651	2645.03	661.31	1.17	1.50E+002	54.89	2.03E+002
	11	2898-	2915	2906.45	726.69	0.90	1.17E+002	45.96	1.33E+002
	12	3433-	3444	3438.47	859.73	0.35	4.06E+001	32.56	9.24E+001
	13	3634-	3655	3643.20	910.92	1.37	2.91E+002	55.26	1.31E+002
	14	3865-	3887	3874.25	968.70	1.53	1.79E+002	52.02	1.36E+002
	15	4473-	4491	4481.07	1120.45	0.85	1.08E+002	41.22	9.87E+001
	16	5324-	5338	5330.13	1332.77	0.61	3.08E+001	25.21	4.52E+001
	17	5505-	5521	5512.34	1378.33	0.59	5.42E+001	23.53	2.88E+001
	18	5781-	5794	5787.84	1447.23	0.43	1.39E+001	13.47	1.21E+001
	19	5828-	5858	5843.74	1461.20	2.11	1.96E+003	92.87	5.81E+001
	20	7049-	7072	7060.13	1765.38	1.16	1.44E+002	26.21	8.77E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.995	511.00*	100.00	2.20379E-001	6.22173E-002
K-40	0.995	1460.81*	10.67	1.69728E+001	1.59177E+000
Cs-137	0.996	661.65*	85.12	1.35192E-001	5.18980E-002
TL-208	0.900	277.35	6.80		
		510.84*	21.60	1.02027E+000	2.99852E-001
		583.14*	84.20	3.69822E-001	8.26602E-002
		860.37*	12.46	2.63335E-001	2.13699E-001
Bi-212	0.993	727.17*	11.80	7.74924E-001	3.17559E-001
Pb-212	0.520	74.81* @	10.70	1.44359E+001	2.99685E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.95585E-001	1.80281E-001
Bi-214	0.993	609.31*	46.30	5.99633E-001	1.29566E-001
		1120.29*	15.10	6.22745E-001	2.46124E-001
		1764.49*	15.80	8.74964E-001	1.81479E-001
PB-214	0.581	74.82* @	6.21	2.48735E+001	5.47026E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.12091E-001	3.45414E-001
		351.92*	37.20	3.55014E-001	2.35931E-001
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	8.59102E-001	1.90954E-001
		969.11*	16.60	9.00380E-001	2.77690E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.995	1.434398E-001	6.436685E-002
K-40		0.995	1.697280E+001	1.591768E+000
Cs-137		0.996	1.351920E-001	5.189803E-002
TL-208		0.900	3.562004E-001	7.636759E-002
Bi-212		0.993	7.749240E-001	3.175594E-001
Pb-212	@	0.520	5.955846E-001	1.802810E-001
Bi-214		0.993	6.817592E-001	9.692767E-002
PB-214	@	0.581	3.731720E-001	1.948220E-001
Ac-228		0.632	8.723541E-001	1.573429E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.86	7.9304E-001	12.72
3	84.65	4.3514E-001	46.24
16	1332.77	2.5688E-002	81.79
17	1378.33	4.5173E-002	43.41
18	1447.23	1.1571E-002	97.03

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
	Co-60	1173.22	100.00	7.3277E-002	5.89E-002	4.6556E-002
		1332.49	100.00	5.8868E-002		-1.5366E-003
	Nb-94	702.63	100.00	7.6587E-002	6.95E-002	-2.7517E-003
		871.10	100.00	6.9550E-002		-2.0634E-002
	Ag-108m	79.20	7.10	4.6410E+000	9.29E-002	-4.9193E+000
		433.93	89.90	9.6660E-002		-4.0775E-003
		614.37	90.40	1.0295E-001		-2.8180E-003
		722.95	90.50	9.2917E-002		2.5424E-002
	Sb-125	176.33	6.89	1.7985E+000	2.95E-001	-5.4867E-002
		427.89	29.33	2.9529E-001		-1.1021E-002
		463.38	10.35	8.3021E-001		-3.6909E-002
		600.56	17.80	4.4063E-001		1.2143E-001
		606.64	5.02	1.9870E+000		4.7230E+000
		635.90	11.32	6.6781E-001		-2.0204E-001
	Cs-134	563.23	8.38	9.8306E-001	8.76E-002	2.5938E-002
		569.32	15.43	5.3162E-001		1.5784E-001
		604.70	97.60	1.0102E-001		2.8371E-003
		795.84	85.40	8.7581E-002		-5.8612E-002
		801.93	8.73	8.2496E-001		-1.1322E+000
+	Cs-137	661.65*	85.12	7.6986E-002	7.70E-002	1.3519E-001
	Eu-152	121.78	28.40	6.0703E-001	2.61E-001	1.7056E-001
		244.69	7.49	1.4752E+000		-6.4617E-001
		344.27	26.50	3.5206E-001		-3.6426E-001
		778.89	12.74	5.7783E-001		-3.5549E-001
		867.32	4.16	1.7055E+000		-2.2977E+000
		964.01	14.40	6.3986E-001		6.6086E-001
		1085.78	10.00	6.5008E-001		-1.2463E+000
		1112.02	13.30	5.1664E-001		-3.0430E-001
		1407.95	20.70	2.6083E-001		1.7054E-002
	Eu-154	123.07	40.50	4.1940E-001	1.80E-001	-1.1276E-001
		247.94	6.60	1.6037E+000		-7.9229E-001
		591.81	4.83	1.6573E+000		6.2252E-002
		723.30	19.70	4.2526E-001		5.5795E-002
		756.87	4.33	1.6836E+000		-2.3489E-001
		873.19	11.50	6.2583E-001		6.1345E-001
		996.32	10.30	6.3856E-001		-1.3456E-001
		1004.76	17.90	3.5945E-001		1.2893E-002
		1274.45	35.50	1.7960E-001		5.7197E-002
	Eu-155	86.54	30.90	9.1916E-001	9.19E-001	-1.6088E-001
		105.31	20.70	9.9806E-001		2.2710E-001
	Am-241	59.54	35.90	1.3126E+000	1.31E+000	-2.2967E-001
	Cm-243	228.19	10.56	1.0483E+000	7.51E-001	1.3966E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	7.5070E-001	7.51E-001	2.4030E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 9:16:56 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-101-F-
Sample Title: OOL-09-02-101-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 9:06:51 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-101-F-
Title: OOL-09-02-101-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	281-	306	291.08	72.67	1.50	4.80E+002	72.08	1.88E+003
m	2	281-	306	300.11	74.93	1.50	7.89E+002	80.73	2.05E+003
	3	332-	345	339.72	84.84	0.65	1.28E+002	125.36	1.43E+003
	4	943-	962	953.54	238.33	1.36	2.41E+002	84.50	4.62E+002
	5	1170-	1185	1178.51	294.59	1.50	8.73E+001	54.03	2.24E+002
	6	1347-	1360	1351.12	337.75	1.28	8.80E+001	43.08	1.40E+002
	7	1397-	1415	1406.36	351.56	0.93	1.34E+002	56.81	2.09E+002
	8	2032-	2052	2040.13	510.05	0.90	1.43E+002	49.27	1.34E+002
	9	2321-	2340	2330.55	582.67	1.03	1.67E+002	43.66	9.31E+001
	10	2424-	2445	2434.89	608.77	1.28	1.87E+002	41.75	7.12E+001
	11	3171-	3186	3177.01	794.35	0.90	3.48E+001	25.17	4.32E+001
	12	3633-	3652	3641.97	910.62	2.21	1.37E+002	35.22	5.33E+001
	13	3864-	3882	3873.46	968.50	1.72	1.05E+002	31.62	4.60E+001
	14	4469-	4486	4479.08	1119.95	0.77	7.38E+001	27.59	3.83E+001
	15	5826-	5856	5841.59	1460.67	2.13	1.16E+003	68.26	1.16E+001
	16	7051-	7064	7057.21	1764.65	0.60	3.31E+001	17.22	1.59E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.972	511.00*		100.00	2.00941E-001	7.44537E-002
K-40	0.999	1460.81*		10.67	2.00066E+001	2.00459E+000
TL-208	0.744	277.35		6.80		
		510.84*		21.60	9.30283E-001	3.52966E-001
		583.14*		84.20	2.91167E-001	8.51032E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	1.17146E+001	2.59020E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.05228E-001	2.32288E-001
Bi-214	0.994	609.31*		46.30	6.01353E-001	1.53494E-001
		1120.29*		15.10	8.48115E-001	3.29802E-001
		1764.49*		15.80	4.01956E-001	2.12723E-001
PB-214	0.578	74.82*	@	6.21	2.01846E+001	4.69736E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.40092E-001	3.46565E-001
		351.92*		37.20	4.51200E-001	2.05209E-001
Ac-228	0.991	338.32*		11.40	9.53725E-001	4.90254E-001
		911.07*		27.70	8.07903E-001	2.28050E-001
		969.11*		16.60	1.05440E+000	3.36186E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.972	1.380490E-001	7.666198E-002
K-40		0.999	2.000662E+001	2.004592E+000
TL-208		0.744	2.911670E-001	8.457251E-002
Pb-212	@	0.520	6.052285E-001	2.322878E-001
Bi-214		0.994	5.723613E-001	1.164548E-001
PB-214	@	0.578	4.742758E-001	1.765756E-001
Ac-228		0.991	8.943784E-001	1.761261E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.67	7.9994E-001	15.02
3	84.84	2.1344E-001	97.89
11	794.35	5.7927E-002	72.41

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0162E-001	7.70E-002	-1.1516E-001
	1332.49	100.00	7.6960E-002		-2.4029E-002
Nb-94	702.63	100.00	1.0157E-001	1.02E-001	-9.0137E-004
	871.10	100.00	1.0331E-001		2.1357E-002
Ag-108m	79.20	7.10	5.5176E+000	1.14E-001	-8.0572E+000
	433.93	89.90	1.2838E-001		1.5302E-002
	614.37	90.40	1.3140E-001		-1.5869E-002
	722.95	90.50	1.1378E-001		-3.4351E-002
Sb-125	176.33	6.89	2.3104E+000	3.77E-001	-5.2248E-001
	427.89	29.33	3.7680E-001		-1.7613E-001
	463.38	10.35	1.0676E+000		-3.3033E-001
	600.56	17.80	5.7663E-001		-2.4556E-002
	606.64	5.02	2.6769E+000		6.3014E+000
	635.90	11.32	8.9974E-001		-3.7201E-001
Cs-134	563.23	8.38	1.2597E+000	1.20E-001	2.1366E-001
	569.32	15.43	6.7326E-001		-5.6100E-002
	604.70	97.60	1.3904E-001		-1.3269E-002
	795.84	85.40	1.2006E-001		-4.3751E-002
	801.93	8.73	1.1070E+000		1.9271E-001
Cs-137	661.65	85.12	1.2995E-001	1.30E-001	-1.9072E-002
Eu-152	121.78	28.40	7.7987E-001	3.40E-001	3.6782E-001
	244.69	7.49	1.9992E+000		-1.0176E+000
	344.27	26.50	4.5107E-001		-5.1342E-003
	778.89	12.74	7.8587E-001		-6.3629E-001
	867.32	4.16	2.5357E+000		-1.2409E+000
	964.01	14.40	9.2949E-001		3.0126E-001
	1085.78	10.00	9.5621E-001		-2.0014E-003
	1112.02	13.30	7.4745E-001		1.2818E-001
	1407.95	20.70	3.4035E-001		-2.5778E-001
Eu-154	123.07	40.50	5.4297E-001	2.45E-001	4.0197E-001
	247.94	6.60	2.1571E+000		-3.2103E-001
	591.81	4.83	2.0796E+000		-1.9875E-001
	723.30	19.70	5.2275E-001		-3.6554E-001
	756.87	4.33	2.2922E+000		-1.0541E+000
	873.19	11.50	9.4027E-001		7.7329E-001
	996.32	10.30	8.8916E-001		-2.5451E-001
	1004.76	17.90	5.3777E-001		3.8704E-001
	1274.45	35.50	2.4522E-001		7.9962E-003
Eu-155	86.54	30.90	1.1235E+000	1.12E+000	1.7375E+000
	105.31	20.70	1.2205E+000		-7.3102E-001
Am-241	59.54	35.90	1.4087E+000	1.41E+000	6.5123E-001
Cm-243	228.19	10.56	1.3539E+000	9.82E-001	8.1151E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.8176E-001	9.82E-001	7.1674E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 10:56:34 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-102-F-
Sample Title: OOL-09-02-102-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 10:46:34 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-102-F-
Title: OOL-09-02-102-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	305	291.35	72.74	1.14	2.45E+002	62.50	1.78E+003
m	2	282-	305	299.98	74.90	1.14	5.40E+002	75.90	1.72E+003
	3	330-	344	339.13	84.69	0.66	1.20E+002	128.31	1.45E+003
	4	943-	960	953.73	238.38	1.55	2.95E+002	81.35	4.39E+002
	5	1173-	1186	1180.40	295.06	0.38	6.89E+001	48.64	1.98E+002
	6	1398-	1413	1405.80	351.42	1.68	1.49E+002	51.94	1.84E+002
	7	2030-	2052	2039.96	510.01	1.97	1.57E+002	53.57	1.52E+002
	8	2321-	2339	2329.37	582.38	1.64	1.79E+002	46.97	1.16E+002
	9	2425-	2446	2433.92	608.52	1.08	1.85E+002	45.41	9.40E+001
	10	2899-	2914	2905.36	726.41	1.62	4.73E+001	29.51	5.97E+001
	11	3630-	3650	3641.05	910.38	0.85	1.50E+002	39.55	7.09E+001
	12	3726-	3737	3731.81	933.08	0.37	2.94E+001	18.99	2.56E+001
	13	3864-	3882	3871.99	968.14	0.82	9.77E+001	33.70	5.83E+001
	14	5823-	5854	5839.16	1460.06	2.23	1.23E+003	71.31	1.98E+001
	15	7048-	7061	7054.87	1764.07	1.21	4.40E+001	15.59	7.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.969	511.00*	100.00	2.20289E-001	8.10311E-002
K-40	0.982	1460.81*	10.67	2.11947E+001	2.11341E+000
TL-208	0.736	277.35	6.80		
		510.84*	21.60	1.01986E+000	3.84278E-001
		583.14*	84.20	3.12168E-001	9.14838E-002
		860.37	12.46		
Bi-212	0.982	727.17*	11.80	6.25461E-001	3.97452E-001
Pb-212	0.520	74.81* @	10.70	8.01937E+000	1.93447E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.39983E-001	2.34784E-001
Bi-214	0.685	609.31*	46.30	5.95482E-001	1.63575E-001
		1120.29	15.10		
		1764.49*	15.80	5.33761E-001	1.96493E-001
PB-214	0.579	74.82* @	6.21	1.38176E+001	3.48081E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.26749E-001	3.09644E-001
		351.92*	37.20	4.99474E-001	1.93419E-001
Ac-228	0.617	338.32	11.40		
		911.07*	27.70	8.87391E-001	2.55173E-001
		969.11*	16.60	9.80681E-001	3.53560E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.969	1.528607E-001	8.337678E-002
K-40		0.982	2.119466E+001	2.113415E+000
TL-208		0.736	3.121683E-001	9.091641E-002
Bi-212		0.982	6.254607E-001	3.974521E-001
Pb-212	@	0.520	7.399832E-001	2.347835E-001
Bi-214		0.685	5.702172E-001	1.257153E-001
PB-214	@	0.579	4.790622E-001	1.640447E-001
Ac-228		0.617	9.193420E-001	2.069122E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.74	4.0881E-001	25.48
3	84.69	2.0004E-001	106.90
12	933.08	4.8985E-002	64.60

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0368E-001	7.79E-002	-8.2912E-003
	1332.49	100.00	7.7940E-002		-4.5942E-002
Nb-94	702.63	100.00	1.0077E-001	1.01E-001	5.8998E-003
	871.10	100.00	1.0302E-001		-3.9546E-002
Ag-108m	79.20	7.10	5.5227E+000	1.24E-001	-6.5636E+000
	433.93	89.90	1.2449E-001		4.8103E-002
	614.37	90.40	1.3643E-001		2.8066E-002
	722.95	90.50	1.3402E-001		8.6176E-002
Sb-125	176.33	6.89	2.3783E+000	3.81E-001	-1.2066E+000
	427.89	29.33	3.8103E-001		-2.1941E-002
	463.38	10.35	1.1293E+000		3.4513E-001
	600.56	17.80	6.0703E-001		-2.9609E-001
	606.64	5.02	2.7741E+000		2.0539E+000
	635.90	11.32	9.0197E-001		-9.1342E-001
Cs-134	563.23	8.38	1.3477E+000	1.18E-001	-1.3160E+000
	569.32	15.43	7.1378E-001		-2.4197E-001
	604.70	97.60	1.4470E-001		5.1922E-003
	795.84	85.40	1.1809E-001		-5.8863E-003
	801.93	8.73	1.0758E+000		-9.3600E-001
Cs-137	661.65	85.12	1.2538E-001	1.25E-001	5.5546E-002
Eu-152	121.78	28.40	7.8819E-001	3.56E-001	6.0998E-001
	244.69	7.49	2.0104E+000		-1.1230E+000
	344.27	26.50	4.5861E-001		-7.1562E-001
	778.89	12.74	8.4785E-001		-6.5857E-001
	867.32	4.16	2.4742E+000		-3.9032E+000
	964.01	14.40	9.4702E-001		-2.1766E-001
	1085.78	10.00	9.8741E-001		-3.7426E-001
	1112.02	13.30	7.8270E-001		-1.6472E+000
	1407.95	20.70	3.5604E-001		1.6000E-001
Eu-154	123.07	40.50	5.4404E-001	2.59E-001	7.7025E-002
	247.94	6.60	2.1480E+000		4.6141E-001
	591.81	4.83	2.2637E+000		9.7708E-001
	723.30	19.70	6.2256E-001		8.8818E-001
	756.87	4.33	2.3374E+000		-4.0383E-001
	873.19	11.50	8.7593E-001		-1.2084E+000
	996.32	10.30	9.5791E-001		3.7096E-001
	1004.76	17.90	5.5433E-001		2.4978E-001
	1274.45	35.50	2.5913E-001		-1.0240E-001
Eu-155	86.54	30.90	1.1068E+000	1.11E+000	2.2434E-001
	105.31	20.70	1.2359E+000		5.6115E-001
Am-241	59.54	35.90	1.3843E+000	1.38E+000	9.2814E-002
Cm-243	228.19	10.56	1.3717E+000	9.56E-001	8.5457E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.5626E-001	9.56E-001	6.7447E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 11:10:01 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-103-F-
Sample Title: OOL-09-02-103-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 10:59:05 PM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-103-F-
Title: OOL-09-02-103-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.43	72.76	1.19	3.54E+002	67.80	1.55E+003
m	2	285-	305	299.91	74.88	1.20	5.61E+002	77.27	1.91E+003
	3	333-	348	339.16	84.69	0.90	2.17E+002	141.88	1.66E+003
	4	947-	959	952.70	238.12	1.27	3.24E+002	65.89	3.02E+002
M	5	1170-	1203	1179.23	294.77	0.77	5.59E+001	24.87	1.39E+002
m	6	1170-	1203	1198.66	299.63	0.77	2.83E+001	20.97	1.38E+002
	7	1345-	1356	1350.78	337.67	0.46	4.68E+001	41.75	1.61E+002
	8	1398-	1414	1405.20	351.28	0.83	1.60E+002	52.48	1.78E+002
	9	2029-	2053	2041.37	510.36	1.79	1.83E+002	50.40	1.16E+002
	10	2319-	2339	2329.19	582.34	1.16	2.09E+002	49.87	1.21E+002
	11	2424-	2442	2433.83	608.50	0.71	1.46E+002	41.61	9.03E+001
	12	3430-	3444	3438.43	859.72	0.43	3.27E+001	23.66	3.93E+001
	13	3630-	3649	3640.18	910.17	1.60	1.80E+002	35.99	4.48E+001
	14	3849-	3880	3871.20	967.94	1.08	1.07E+002	50.93	1.10E+002
	15	4469-	4483	4475.49	1119.05	1.12	5.44E+001	25.49	3.96E+001
	16	5824-	5852	5838.46	1459.88	2.25	1.16E+003	68.99	1.80E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.987	511.00*		100.00	2.57781E-001	7.90271E-002
K-40	0.973	1460.81*		10.67	1.99979E+001	2.01136E+000
TL-208	0.887	277.35		6.80		
		510.84*		21.60	1.19343E+000	3.78625E-001
		583.14*		84.20	3.65080E-001	9.91578E-002
		860.37*		12.46	4.24038E-001	3.11351E-001
Pb-212	0.517	74.81*	@	10.70	8.33893E+000	1.99756E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.11842E-001	2.08606E-001
Bi-214	0.678	609.31*		46.30	4.69212E-001	1.45898E-001
		1120.29*		15.10	6.25469E-001	3.00568E-001
		1764.49		15.80		
PB-214	0.576	74.82*	@	6.21	1.43682E+001	3.59642E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.46155E-001	1.64633E-001
		351.92*		37.20	5.37580E-001	1.97835E-001
Ac-228	0.972	338.32*		11.40	5.06747E-001	4.59344E-001
		911.07*		27.70	1.06510E+000	2.45598E-001
		969.11*		16.60	1.07066E+000	5.23365E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.987	1.777645E-001	8.158583E-002
K-40		0.973	1.999793E+001	2.011363E+000
TL-208		0.887	3.704481E-001	9.385300E-002
Pb-212	@	0.517	8.118417E-001	2.086063E-001
Bi-214		0.678	4.990091E-001	1.312524E-001
PB-214	@	0.576	4.244788E-001	1.265466E-001
Ac-228		0.972	9.599339E-001	2.001242E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.76	5.8958E-001	19.17
3	84.69	3.6196E-001	65.33
m 6	299.63	4.7087E-002	74.21

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0734E-001	8.62E-002	-6.2759E-004
	1332.49	100.00	8.6234E-002		4.6776E-003
Nb-94	702.63	100.00	1.0754E-001	9.89E-002	-2.8881E-002
	871.10	100.00	9.8893E-002		5.9905E-002
Ag-108m	79.20	7.10	5.6968E+000	1.19E-001	-1.1707E+001
	433.93	89.90	1.1924E-001		-1.3927E-001
	614.37	90.40	1.2345E-001		-1.3184E-002
	722.95	90.50	1.3962E-001		2.5544E-001
Sb-125	176.33	6.89	2.3957E+000	3.73E-001	-5.5162E-001
	427.89	29.33	3.7314E-001		-2.4534E-001
	463.38	10.35	1.0766E+000		8.1352E-001
	600.56	17.80	6.1216E-001		-9.9607E-003
	606.64	5.02	2.6732E+000		3.0137E+000
	635.90	11.32	8.7707E-001		2.6324E-001
Cs-134	563.23	8.38	1.3199E+000	1.18E-001	-4.7607E-001
	569.32	15.43	7.1658E-001		5.1867E-001
	604.70	97.60	1.4199E-001		3.9625E-002
	795.84	85.40	1.1842E-001		-8.5979E-003
	801.93	8.73	1.0828E+000		-6.9452E-001
Cs-137	661.65	85.12	1.3023E-001	1.30E-001	2.3612E-002
Eu-152	121.78	28.40	7.8006E-001	3.53E-001	-5.4527E-001
	244.69	7.49	2.0204E+000		-2.5930E+000
	344.27	26.50	4.7536E-001		3.6962E-002
	778.89	12.74	8.0564E-001		-1.4096E-001
	867.32	4.16	2.3313E+000		-2.0443E+000
	964.01	14.40	9.0003E-001		-1.7730E-003
	1085.78	10.00	1.0340E+000		-5.4708E-001
	1112.02	13.30	7.3443E-001		-4.7018E-002
	1407.95	20.70	3.5348E-001		1.3051E-001
Eu-154	123.07	40.50	5.4537E-001	2.64E-001	1.0402E-001
	247.94	6.60	2.1601E+000		-2.8357E-001
	591.81	4.83	2.2073E+000		4.4296E-001
	723.30	19.70	6.4584E-001		1.2010E+000
	756.87	4.33	2.4437E+000		1.2045E+000
	873.19	11.50	8.4982E-001		-3.8417E-001
	996.32	10.30	9.2910E-001		4.0061E-001
	1004.76	17.90	5.3964E-001		-1.8644E-002
	1274.45	35.50	2.6359E-001		-1.5618E-001
Eu-155	86.54	30.90	1.1321E+000	1.13E+000	1.5441E+000
	105.31	20.70	1.2461E+000		-5.7730E-001
Am-241	59.54	35.90	1.4173E+000	1.42E+000	1.6515E-001
Cm-243	228.19	10.56	1.3979E+000	9.65E-001	1.0000E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.6510E-001	9.65E-001	-1.5703E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 10:31:44 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-104-F-
Sample Title: OOL-09-02-104-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 10:21:40 AM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-104-F-
Title: OOL-09-02-104-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	308	290.81	72.60	1.59	4.33E+002	76.33	1.97E+003
m	2	282-	308	300.25	74.97	1.59	8.94E+002	85.81	2.63E+003
	3	945-	962	954.33	238.53	1.23	2.69E+002	84.24	4.83E+002
	4	1345-	1358	1352.37	338.06	0.45	7.78E+001	46.16	1.73E+002
	5	1399-	1415	1406.52	351.61	1.83	1.51E+002	54.51	1.99E+002
	6	2322-	2341	2331.05	582.80	1.60	2.24E+002	47.29	1.02E+002
	7	2427-	2448	2435.88	609.01	2.22	1.96E+002	51.28	1.30E+002
	8	3172-	3186	3179.27	794.91	0.40	4.16E+001	26.05	4.64E+001
	9	3631-	3653	3642.46	910.74	0.94	1.43E+002	41.03	7.52E+001
	10	3866-	3884	3874.35	968.73	1.60	1.11E+002	32.75	4.98E+001
	11	4474-	4489	4480.68	1120.35	0.45	5.95E+001	26.19	3.95E+001
	12	5831-	5859	5843.83	1461.23	2.15	1.22E+003	71.92	2.73E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
K-40	0.994	1460.81*	10.67	2.11902E+001	2.11937E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.90205E-001	9.69193E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.32614E+001	2.89442E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.74630E-001	2.36401E-001
Bi-214	0.698	609.31*	46.30	6.31430E-001	1.82527E-001
		1120.29*	15.10	6.84660E-001	3.09838E-001
		1764.49	15.80		
Ac-228	0.996	338.32*	11.40	8.43712E-001	5.17548E-001
		911.07*	27.70	8.44444E-001	2.61314E-001
		969.11*	16.60	1.11681E+000	3.49038E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
K-40	0.994	2.119024E+001	2.119369E+000
TL-208	0.469	3.902052E-001	9.691926E-002
Pb-212 @	0.521	6.746301E-001	2.364008E-001
Bi-214	0.698	6.451435E-001	1.572665E-001
Ac-228	0.996	9.284321E-001	1.939421E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.60	7.2106E-001	17.64
5	351.61	2.5228E-001	36.01
8	794.91	6.9271E-002	62.69

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0502E-001	7.99E-002	3.4125E-002
	1332.49	100.00	7.9863E-002		-3.1272E-002
Nb-94	702.63	100.00	1.1198E-001	9.20E-002	1.3467E-001
	871.10	100.00	9.2022E-002		-3.9125E-002
Ag-108m	79.20	7.10	5.8367E+000	1.22E-001	-1.0766E+001
	433.93	89.90	1.2665E-001		-5.4232E-002
	614.37	90.40	1.4927E-001		3.2202E-002
	722.95	90.50	1.2202E-001		6.2653E-002
Sb-125	176.33	6.89	2.4948E+000	3.94E-001	1.9396E+000
	427.89	29.33	3.9402E-001		-8.0279E-002
	463.38	10.35	1.1413E+000		3.7839E-001
	600.56	17.80	6.1976E-001		-4.5968E-001
	606.64	5.02	2.9719E+000		-5.5439E-001
	635.90	11.32	9.2618E-001		7.0532E-002
Cs-134	563.23	8.38	1.2623E+000	1.26E-001	-1.1301E+000
	569.32	15.43	6.9092E-001		-5.5435E-001
	604.70	97.60	1.5065E-001		-3.9625E-002
	795.84	85.40	1.2611E-001		8.9445E-002
	801.93	8.73	1.1731E+000		8.9531E-002
Cs-137	661.65	85.12	1.4122E-001	1.41E-001	2.6587E-001
Eu-152	121.78	28.40	7.9679E-001	3.53E-001	-3.2948E-001
	244.69	7.49	2.0228E+000		-4.7053E-001
	344.27	26.50	4.7330E-001		-1.0481E-001
	778.89	12.74	8.1854E-001		-1.0898E+000
	867.32	4.16	2.2942E+000		-3.1776E+000
	964.01	14.40	9.0169E-001		5.1436E-001
	1085.78	10.00	9.9758E-001		3.7112E-001
	1112.02	13.30	7.5002E-001		-7.4032E-002
	1407.95	20.70	3.5348E-001		1.9227E-002
Eu-154	123.07	40.50	5.5382E-001	2.49E-001	7.3995E-002
	247.94	6.60	2.2121E+000		-6.8584E-001
	591.81	4.83	2.3005E+000		3.7055E-001
	723.30	19.70	5.6187E-001		4.4207E-001
	756.87	4.33	2.5276E+000		2.2347E-001
	873.19	11.50	8.0621E-001		-2.5399E-001
	996.32	10.30	9.9194E-001		1.5139E-001
	1004.76	17.90	5.3964E-001		2.6959E-001
	1274.45	35.50	2.4878E-001		-4.4396E-001
Eu-155	86.54	30.90	1.1759E+000	1.18E+000	2.3484E+000
	105.31	20.70	1.3014E+000		2.7948E-001
Am-241	59.54	35.90	1.4747E+000	1.47E+000	-3.6750E-001
Cm-243	228.19	10.56	1.3884E+000	1.01E+000	7.4513E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0066E+000	1.01E+000	2.4705E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 10:16:32 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-105-F-
Sample Title: OOL-09-02-105-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 10:06:29 AM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-105-F-
Title: OOL-09-02-105-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	309	290.81	72.60	1.59	4.58E+002	76.83	1.95E+003
m	2	282-	309	300.17	74.95	1.60	8.84E+002	86.40	2.77E+003
	3	331-	346	339.48	84.78	1.17	2.22E+002	143.21	1.70E+003
	4	945-	962	953.88	238.41	1.57	2.49E+002	78.61	4.17E+002
	5	1176-	1185	1180.80	295.16	0.41	5.77E+001	39.57	1.54E+002
	6	1395-	1416	1405.85	351.44	1.34	1.89E+002	62.09	2.17E+002
	7	2030-	2054	2042.32	510.60	1.16	1.92E+002	54.84	1.43E+002
	8	2320-	2341	2331.36	582.88	1.50	1.97E+002	47.15	1.02E+002
	9	2424-	2445	2434.91	608.77	2.12	1.87E+002	44.30	8.57E+001
	10	3434-	3447	3440.50	860.24	0.68	2.31E+001	23.38	4.29E+001
	11	3635-	3653	3643.09	910.90	0.72	1.34E+002	36.45	6.28E+001
	12	3866-	3883	3873.92	968.62	0.66	1.02E+002	32.24	5.19E+001
	13	3915-	3926	3920.16	980.18	1.01	1.49E+001	17.06	2.41E+001
	14	4470-	4483	4477.98	1119.67	0.30	3.37E+001	25.46	4.73E+001
	15	5828-	5857	5843.32	1461.10	2.34	1.23E+003	72.63	3.01E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.995	511.00*		100.00	2.69839E-001	8.53745E-002
K-40	0.997	1460.81*		10.67	2.12799E+001	2.13247E+000
TL-208	0.901	277.35		6.80		
		510.84*		21.60	1.24925E+000	4.08207E-001
		583.14*		84.20	3.44305E-001	9.37096E-002
		860.37*		12.46	3.00089E-001	3.05577E-001
Pb-212	0.520	74.81*	@	10.70	1.31157E+001	2.87284E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.25590E-001	2.20283E-001
Bi-214	0.692	609.31*		46.30	6.03170E-001	1.60820E-001
		1120.29*		15.10	3.87348E-001	2.95590E-001
		1764.49		15.80		
PB-214	0.580	74.82*	@	6.21	2.25987E+001	5.21475E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.57065E-001	2.52356E-001
		351.92*		37.20	6.34307E-001	2.33973E-001
Ac-228	0.631	338.32		11.40		
		911.07*		27.70	7.93422E-001	2.34071E-001
		969.11*		16.60	1.02519E+000	3.41037E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.995	1.962797E-001	8.751198E-002
K-40		0.997	2.127988E+001	2.132475E+000
TL-208		0.901	3.405502E-001	8.899782E-002
Pb-212	@	0.520	6.255897E-001	2.202833E-001
Bi-214		0.692	5.538764E-001	1.412658E-001
PB-214	@	0.580	5.061509E-001	1.715750E-001
Ac-228		0.631	8.676405E-001	1.929879E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.60	7.6325E-001	16.78
3	84.78	3.6947E-001	64.60
13	980.18	2.4765E-002	114.84

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0334E-001	8.49E-002	-1.3845E-002
	1332.49	100.00	8.4911E-002		4.6447E-002
Nb-94	702.63	100.00	1.0904E-001	9.95E-002	2.4806E-002
	871.10	100.00	9.9494E-002		-5.2195E-002
Ag-108m	79.20	7.10	5.8455E+000	1.15E-001	-2.8803E+000
	433.93	89.90	1.2210E-001		1.9293E-003
	614.37	90.40	1.3440E-001		-2.7292E-002
	722.95	90.50	1.1524E-001		-1.3955E-002
Sb-125	176.33	6.89	2.3998E+000	3.72E-001	5.5620E-002
	427.89	29.33	3.7191E-001		-2.5220E-001
	463.38	10.35	1.1173E+000		8.0672E-001
	600.56	17.80	5.5446E-001		-6.0893E-001
	606.64	5.02	2.7313E+000		4.4656E+000
	635.90	11.32	8.7707E-001		-3.3477E-001
Cs-134	563.23	8.38	1.2757E+000	1.24E-001	4.2675E-001
	569.32	15.43	7.0814E-001		1.6095E-001
	604.70	97.60	1.3773E-001		-7.1889E-002
	795.84	85.40	1.2360E-001		-6.4012E-002
	801.93	8.73	1.1070E+000		-2.1097E+000
Cs-137	661.65	85.12	1.2273E-001	1.23E-001	-3.1504E-003
Eu-152	121.78	28.40	7.9381E-001	3.48E-001	2.4083E-001
	244.69	7.49	1.9317E+000		-1.3611E+000
	344.27	26.50	4.5432E-001		-8.4290E-001
	778.89	12.74	7.9031E-001		-8.3945E-002
	867.32	4.16	2.4181E+000		1.0347E+000
	964.01	14.40	9.0169E-001		-4.3433E-001
	1085.78	10.00	9.5268E-001		4.3974E-002
	1112.02	13.30	7.4745E-001		4.2849E-002
	1407.95	20.70	3.4829E-001		2.3839E-001
Eu-154	123.07	40.50	5.4974E-001	2.72E-001	-1.1102E-001
	247.94	6.60	2.0990E+000		-7.1388E-002
	591.81	4.83	2.2263E+000		1.2557E+000
	723.30	19.70	5.2680E-001		-4.2368E-001
	756.87	4.33	2.5628E+000		2.5589E+000
	873.19	11.50	8.6818E-001		1.8290E-001
	996.32	10.30	9.0602E-001		-8.9874E-001
	1004.76	17.90	5.1678E-001		-2.5400E-001
	1274.45	35.50	2.7229E-001		8.7874E-002
Eu-155	86.54	30.90	1.1631E+000	1.16E+000	4.3510E-001
	105.31	20.70	1.2514E+000		2.1294E-001
Am-241	59.54	35.90	1.4739E+000	1.47E+000	-7.1951E-002
Cm-243	228.19	10.56	1.3195E+000	9.28E-001	-5.1809E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.2838E-001	9.28E-001	-4.0331E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 9:59:40 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-106-F-
Sample Title: OOL-09-02-106-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 9:49:37 AM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-106-F-
Title: OOL-09-02-106-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	309	291.66	72.82	1.41	4.03E+002	73.70	1.85E+003
m	2	285-	309	300.51	75.03	1.42	8.32E+002	83.92	2.54E+003
	3	944-	962	953.77	238.39	1.79	3.32E+002	86.83	4.82E+002
	4	1172-	1187	1180.44	295.07	1.52	9.14E+001	54.54	2.27E+002
	5	1401-	1415	1405.96	351.47	1.64	1.69E+002	51.20	1.74E+002
	6	2029-	2054	2041.98	510.51	2.23	2.54E+002	55.03	1.25E+002
	7	2321-	2341	2331.14	582.82	1.09	2.22E+002	49.24	1.13E+002
	8	2426-	2444	2435.23	608.85	1.45	1.82E+002	43.54	9.19E+001
	9	2900-	2913	2907.54	726.96	0.49	2.64E+001	29.46	7.16E+001
	10	3634-	3655	3643.43	910.98	1.42	1.76E+002	38.46	5.61E+001
	11	3866-	3883	3874.00	968.64	0.61	6.76E+001	34.54	7.44E+001
	12	4472-	4488	4479.26	1119.99	1.23	7.72E+001	25.75	2.88E+001
	13	4685-	4703	4692.52	1173.32	0.38	8.24E+001	29.17	4.06E+001
	14	5323-	5339	5330.35	1332.82	0.38	5.21E+001	24.25	3.19E+001
	15	5829-	5858	5843.76	1461.21	2.32	1.22E+003	70.34	1.48E+001
	16	7051-	7066	7059.42	1765.20	0.31	4.02E+001	15.63	7.81E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.993	511.00*		100.00	3.56627E-001	9.12602E-002
K-40	0.995	1460.81*		10.67	2.10776E+001	2.09597E+000
Co-60	0.998	1173.22*		100.00	1.44906E-001	5.25643E-002
		1332.49*		100.00	9.45167E-002	4.45814E-002
TL-208	0.749	277.35		6.80		
		510.84*		21.60	1.65105E+000	4.43495E-001
		583.14*		84.20	3.87815E-001	9.96783E-002
		860.37		12.46		
Bi-212	0.999	727.17*		11.80	3.49642E-001	3.92113E-001
Pb-212	0.520	74.81*	@	10.70	1.23271E+001	2.71748E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.31934E-001	2.53926E-001
Bi-214	0.992	609.31*		46.30	5.86370E-001	1.57725E-001
		1120.29*		15.10	8.88212E-001	3.10775E-001
		1764.49*		15.80	4.87574E-001	1.95846E-001
PB-214	0.580	74.82*	@	6.21	2.12400E+001	4.92962E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.66242E-001	3.50945E-001
		351.92*		37.20	5.67713E-001	1.96434E-001
Ac-228	0.631	338.32		11.40		
		911.07*		27.70	1.04014E+000	2.56993E-001
		969.11*		16.60	6.78635E-001	3.53998E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.993	2.728593E-001	9.372586E-002
K-40		0.995	2.107765E+001	2.095975E+000
Co-60		0.998	1.155986E-001	3.399966E-002
TL-208		0.749	3.878147E-001	9.887382E-002
Bi-212		0.999	3.496421E-001	3.921132E-001
Pb-212	@	0.520	8.319340E-001	2.539255E-001
Bi-214		0.992	5.935412E-001	1.142403E-001
PB-214	@	0.580	5.673625E-001	1.714096E-001
Ac-228		0.631	9.153724E-001	2.079682E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.82	6.7122E-001	18.30

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
+	Co-60	1173.22*	100.00	7.3037E-002	6.48E-002	1.4491E-001
		1332.49*	100.00	6.4829E-002		9.4517E-002
	Nb-94	702.63	100.00	1.0343E-001	1.02E-001	2.0949E-002
		871.10	100.00	1.0215E-001		-1.7682E-002
	Ag-108m	79.20	7.10	5.9300E+000	1.30E-001	-6.3299E+000
		433.93	89.90	1.2971E-001		-8.4928E-002
		614.37	90.40	1.4063E-001		2.2230E-002
		722.95	90.50	1.2998E-001		3.9967E-002
	Sb-125	176.33	6.89	2.4322E+000	4.15E-001	5.4285E-001
		427.89	29.33	4.1546E-001		1.2591E-001
		463.38	10.35	1.1497E+000		1.4578E+000
		600.56	17.80	6.2603E-001		4.7941E-002
		606.64	5.02	2.8301E+000		1.4007E+000
		635.90	11.32	9.4551E-001		-3.4796E-001
	Cs-134	563.23	8.38	1.2380E+000	1.23E-001	-5.3096E-001
		569.32	15.43	6.7920E-001		-4.8757E-001
		604.70	97.60	1.4927E-001		1.7695E-002
		795.84	85.40	1.2297E-001		4.7983E-002
		801.93	8.73	1.1036E+000		-1.4349E+000
	Cs-137	661.65	85.12	1.3463E-001	1.35E-001	1.0530E-001
	Eu-152	121.78	28.40	8.0530E-001	3.40E-001	2.3542E-001
		244.69	7.49	2.0352E+000		-1.1074E+000
		344.27	26.50	4.5432E-001		-7.0632E-001
		778.89	12.74	7.9252E-001		-1.6619E+000
		867.32	4.16	2.5222E+000		-1.7211E+000
		964.01	14.40	9.2949E-001		3.3558E-001
		1085.78	10.00	9.5621E-001		-4.0431E-002
		1112.02	13.30	7.3179E-001		-4.1170E-001
		1407.95	20.70	3.4035E-001		-3.2823E-002
	Eu-154	123.07	40.50	5.5747E-001	2.71E-001	1.2218E-001
		247.94	6.60	2.1631E+000		-9.6224E-001
		591.81	4.83	2.3277E+000		-2.8244E-001
		723.30	19.70	6.0186E-001		4.2412E-001
		756.87	4.33	2.4437E+000		1.0650E+000
		873.19	11.50	9.0870E-001		-4.8702E-001
		996.32	10.30	8.8231E-001		-6.5449E-001
		1004.76	17.90	5.4520E-001		4.9427E-001
		1274.45	35.50	2.7122E-001		-3.7866E-001
	Eu-155	86.54	30.90	1.1821E+000	1.18E+000	2.2935E+000
		105.31	20.70	1.3001E+000		7.8475E-002
	Am-241	59.54	35.90	1.4832E+000	1.48E+000	-1.1780E-001
	Cm-243	228.19	10.56	1.3988E+000	1.01E+000	5.1937E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0066E+000	1.01E+000	6.3853E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/17/2006 1:56:50 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-107-F-G
Sample ID: OOL-09-02-107
Sample Title: OOL-09-02-107-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 8:49:16 AM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-107-F-G
Log Number: OOL-09-02-107
Title: OOL-09-02-107-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	295-	309	300.91	75.13	1.11	4.60E+002	75.14	2.09E+003
F	2	330-	345	339.53	84.79	1.13	2.36E+002	62.43	1.67E+003
F	3	827-	842	836.71	209.12	1.28	7.82E+001	31.82	3.64E+002
F	4	949-	963	955.09	238.72	1.31	2.66E+002	40.46	3.01E+002
F	5	1402-	1418	1408.65	352.14	1.40	1.20E+002	28.61	1.81E+002
F	6	2326-	2344	2333.70	583.46	1.56	1.73E+002	77.94	8.60E+001
F	7	2425-	2449	2438.90	609.77	1.58	2.08E+002	51.43	8.09E+001
F	8	2905-	2921	2911.48	727.95	1.64	4.92E+001	18.20	5.14E+001
F	9	3638-	3657	3648.00	912.12	1.73	1.21E+002	56.23	5.70E+001
F	10	3872-	3888	3878.87	969.86	1.76	7.37E+001	20.38	4.56E+001
F	11	4477-	4495	4485.95	1121.67	1.83	5.36E+001	18.35	4.87E+001
F	12	5835-	5863	5849.99	1462.77	1.97	1.21E+003	101.41	2.90E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-107-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
K-40	0.886	1460.81*	10.67	2.18796E+001	2.27217E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.17046E-001	1.45978E-001
		860.37	12.46		
Bi-212	0.981	727.17*	11.80	6.85216E-001	2.59674E-001
Pb-212	0.520	74.81* @	10.70	6.75581E+000	1.53559E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.79291E-001	1.45348E-001
Bi-214	0.684	609.31*	46.30	7.01840E-001	1.85006E-001
		1120.29*	15.10	6.49144E-001	2.28631E-001
		1764.49	15.80		
Ac-228	0.607	338.32	11.40		
		911.07*	27.70	7.62761E-001	3.56977E-001
		969.11*	16.60	7.85577E-001	2.21728E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-107-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
K-40	0.886	2.187956E+001	2.272172E+000
TL-208	0.469	3.170462E-001	1.459783E-001
Bi-212	0.981	6.852161E-001	2.596743E-001
Pb-212 @	0.520	6.792910E-001	1.453481E-001
Bi-214	0.684	6.809885E-001	1.438184E-001
Ac-228	0.607	7.792250E-001	1.883518E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	2	84.79	3.9317E-001	26.47
F	3	209.12	1.3035E-001	40.68
F	5	352.14	1.9951E-001	23.90

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-107-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.2555E-001	1.02E-001	7.1937E-002
	1332.49	100.00	1.0180E-001		1.3270E-001
Nb-94	702.63	100.00	1.1152E-001	1.10E-001	-9.0784E-002
	871.10	100.00	1.0952E-001		-3.6563E-002
Ag-108m	79.20	7.10	5.8583E+000	1.22E-001	-2.2300E+000
	433.93	89.90	1.2248E-001		-1.3025E-001
	614.37	90.40	1.5666E-001		-4.3492E-002
	722.95	90.50	1.3340E-001		-2.6808E-002
Sb-125	176.33	6.89	2.4053E+000	3.95E-001	2.8669E-002
	427.89	29.33	3.9450E-001		-4.7244E-001
	463.38	10.35	1.1305E+000		1.1313E+000
	600.56	17.80	5.9814E-001		2.1915E-001
	606.64	5.02	2.8671E+000		-5.7370E-001
	635.90	11.32	9.7518E-001		5.5037E-001
Cs-134	563.23	8.38	1.3402E+000	1.24E-001	-2.4772E-001
	569.32	15.43	7.1351E-001		-1.2670E-001
	604.70	97.60	1.4021E-001		-1.7572E-002
	795.84	85.40	1.2426E-001		1.9860E-002
	801.93	8.73	1.2420E+000		-4.0189E-001
Cs-137	661.65	85.12	1.4170E-001	1.42E-001	1.6848E-002
Eu-152	121.78	28.40	7.9538E-001	4.04E-001	-3.4136E-001
	244.69	7.49	1.9283E+000		-1.1561E+000
	344.27	26.50	4.7486E-001		-6.3139E-001
	778.89	12.74	8.4685E-001		-2.0944E-001
	867.32	4.16	2.7450E+000		-1.2886E+000
	964.01	14.40	8.8919E-001		1.4683E-001
	1085.78	10.00	1.0694E+000		3.6118E-001
	1112.02	13.30	8.2399E-001		4.3395E-001
	1407.95	20.70	4.0351E-001		1.2895E-001
Eu-154	123.07	40.50	5.5764E-001	2.85E-001	1.4746E-001
	247.94	6.60	2.0553E+000		-1.4161E+000
	591.81	4.83	2.2719E+000		9.4274E-001
	723.30	19.70	6.1673E-001		-2.0021E-001
	756.87	4.33	2.3268E+000		-2.1317E+000
	873.19	11.50	9.4216E-001		5.0259E-001
	996.32	10.30	9.5995E-001		-6.1165E-001
	1004.76	17.90	5.2835E-001		2.6567E-002
	1274.45	35.50	2.8521E-001		-8.7888E-002
Eu-155	86.54	30.90	1.1953E+000	1.20E+000	2.6719E-001
	105.31	20.70	1.3064E+000		3.9735E-001
Am-241	59.54	35.90	1.5280E+000	1.53E+000	-1.2466E+000
Cm-243	228.19	10.56	1.3441E+000	1.01E+000	1.7313E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0078E+000	1.01E+000	-3.1742E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 8:27:10 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-108-F-
Sample Title: OOL-09-02-108-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 8:17:05 AM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-108-F-
Title: OOL-09-02-108-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	305	291.29	72.72	1.24	3.41E+002	69.04	1.50E+003
m	2	286-	305	300.37	75.00	1.25	6.48E+002	79.32	1.92E+003
	3	944-	962	955.28	238.77	1.18	3.32E+002	80.97	4.06E+002
	4	1348-	1360	1352.81	338.17	1.33	8.57E+001	43.13	1.49E+002
	5	1399-	1418	1408.38	352.07	1.48	1.56E+002	56.88	1.94E+002
	6	2324-	2343	2333.46	583.40	2.05	1.52E+002	46.28	1.15E+002
	7	2430-	2449	2438.04	609.55	1.51	1.58E+002	42.73	8.91E+001
	8	2804-	2815	2809.78	702.51	0.55	1.92E+001	21.42	3.98E+001
	9	3636-	3658	3646.90	911.85	1.38	1.66E+002	39.08	5.98E+001
	10	3868-	3887	3877.84	969.60	0.58	9.08E+001	36.00	7.02E+001
	11	4477-	4494	4486.16	1121.72	1.11	6.16E+001	24.71	2.94E+001
	12	5834-	5862	5848.37	1462.36	2.38	1.20E+003	69.41	1.10E+001
	13	6351-	6364	6357.71	1589.73	1.16	2.65E+001	11.78	3.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
K-40	0.926	1460.81*	10.67	2.08184E+001	2.06971E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.65356E-001	8.78685E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	9.61628E+000	2.22180E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.32316E-001	2.41551E-001
Bi-214	0.686	609.31*	46.30	5.08705E-001	1.51215E-001
		1120.29*	15.10	7.09012E-001	2.94084E-001
		1764.49	15.80		
Ac-228	0.988	338.32*	11.40	9.29358E-001	4.89819E-001
		911.07*	27.70	9.82967E-001	2.57271E-001
		969.11*	16.60	9.11881E-001	3.73949E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
K-40		0.926	2.081844E+001	2.069714E+000
TL-208		0.470	2.653558E-001	8.786853E-002
Pb-212	@	0.521	8.323157E-001	2.415514E-001
Bi-214		0.686	5.505901E-001	1.344789E-001
Ac-228		0.988	9.552766E-001	1.945234E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.72	5.6848E-001	20.24
5	352.07	2.6019E-001	36.44
8	702.51	3.2034E-002	111.46
13	1589.73	4.4167E-002	44.47

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0502E-001	7.60E-002	-5.0186E-002
	1332.49	100.00	7.5966E-002		1.2350E-002
Nb-94	702.63	100.00	1.0447E-001	9.07E-002	-2.0933E-002
	871.10	100.00	9.0714E-002		-8.1477E-002
Ag-108m	79.20	7.10	5.8455E+000	1.20E-001	-1.7058E+001
	433.93	89.90	1.2290E-001		-7.0429E-003
	614.37	90.40	1.4866E-001		6.1497E-002
	722.95	90.50	1.1981E-001		2.4440E-002
Sb-125	176.33	6.89	2.3420E+000	3.68E-001	-6.8584E-001
	427.89	29.33	3.6757E-001		3.5285E-002
	463.38	10.35	1.1225E+000		1.3287E+000
	600.56	17.80	5.9533E-001		1.7377E-001
	606.64	5.02	2.7528E+000		-4.4493E-001
	635.90	11.32	9.1306E-001		-1.5113E-001
Cs-134	563.23	8.38	1.2570E+000	1.12E-001	-3.9090E-001
	569.32	15.43	7.0672E-001		1.4616E-001
	604.70	97.60	1.3545E-001		-5.9401E-002
	795.84	85.40	1.1229E-001		-4.4789E-002
	801.93	8.73	1.0932E+000		-1.4627E+000
Cs-137	661.65	85.12	1.1787E-001	1.18E-001	-6.4880E-002
Eu-152	121.78	28.40	7.9344E-001	3.27E-001	1.6440E-001
	244.69	7.49	1.9068E+000		-1.4855E+000
	344.27	26.50	4.3897E-001		-1.0200E-001
	778.89	12.74	7.8809E-001		-5.2550E-001
	867.32	4.16	2.4811E+000		-9.4962E-001
	964.01	14.40	8.5035E-001		-8.9852E-002
	1085.78	10.00	9.6673E-001		-4.2329E-001
	1112.02	13.30	7.3179E-001		4.2236E-001
	1407.95	20.70	3.2664E-001		-3.9445E-001
Eu-154	123.07	40.50	5.4921E-001	2.38E-001	-3.7243E-001
	247.94	6.60	1.9792E+000		-3.0692E+000
	591.81	4.83	2.2215E+000		1.0599E+000
	723.30	19.70	5.5555E-001		2.5449E-001
	756.87	4.33	2.3502E+000		2.1903E-001
	873.19	11.50	8.0059E-001		-9.2799E-001
	996.32	10.30	9.7663E-001		5.7929E-001
	1004.76	17.90	5.0494E-001		-1.4285E-001
	1274.45	35.50	2.3795E-001		-6.3620E-002
Eu-155	86.54	30.90	1.1586E+000	1.16E+000	1.6178E+000
	105.31	20.70	1.2707E+000		-7.1935E-001
Am-241	59.54	35.90	1.5232E+000	1.52E+000	9.2350E-001
Cm-243	228.19	10.56	1.3655E+000	9.48E-001	-5.6771E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.4815E-001	9.48E-001	-8.6855E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 2:08:55 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-02-109-F-
Sample Title: OOL-09-02-109-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 1:58:52 PM
Live Time: 600.0 seconds
Real Time: 600.8 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: ORG7829
Log Number: OOL-09-02-109-F-
Title: OOL-09-02-109-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	305	300.91	75.23	1.07	2.60E+002	83.34	6.85E+002
2	946-	961	954.67	238.68	1.09	2.00E+002	66.20	3.13E+002
3	1335-	1358	1353.03	338.28	0.34	6.85E+001	58.06	2.01E+002
4	1398-	1418	1407.46	351.89	0.66	1.37E+002	52.06	1.57E+002
5	1750-	1759	1754.34	438.61	0.42	2.18E+001	22.96	5.12E+001
6	2324-	2340	2333.03	583.30	0.81	1.54E+002	39.23	7.87E+001
7	2428-	2445	2436.80	609.24	1.15	1.40E+002	36.40	6.30E+001
8	3635-	3653	3644.22	911.12	1.50	1.11E+002	31.66	4.35E+001
9	3868-	3887	3874.88	968.79	1.40	6.05E+001	30.05	4.95E+001
10	4475-	4488	4481.65	1120.49	0.36	4.11E+001	21.56	2.89E+001
11	5829-	5856	5844.56	1461.25	1.61	8.16E+002	59.87	2.53E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.994	1460.81*	10.67	1.85401E+001	2.02609E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.44448E-001	9.83822E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.00559E+001	3.77313E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.53616E-001	2.39179E-001
Bi-214	0.705	609.31*	46.30	5.76868E-001	1.65951E-001
		1120.29*	15.10	6.06282E-001	3.24583E-001
		1764.49	15.80		
Ac-228	0.999	338.32*	11.40	9.51449E-001	8.20064E-001
		911.07*	27.70	8.41087E-001	2.59712E-001
		969.11*	16.60	7.80901E-001	3.96495E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.994	1.854005E+001	2.026086E+000
TL-208	0.471	3.444484E-001	9.838223E-002
Pb-212 @	0.593	6.536156E-001	2.391788E-001
Bi-214	0.705	5.829634E-001	1.477588E-001
Ac-228	0.999	8.314400E-001	2.100095E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
4	351.89	2.2876E-001	37.93
5	438.61	3.6410E-002	105.10

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2434E-001	9.95E-002	1.0581E-001
	1332.49	100.00	9.9464E-002		3.9885E-002
Nb-94	702.63	100.00	1.1089E-001	1.11E-001	4.4121E-002
	871.10	100.00	1.1329E-001		-4.9343E-002
Ag-108m	79.20	7.10	1.0257E+001	1.33E-001	-1.8246E+001
	433.93	89.90	1.4356E-001		1.2282E-002
	614.37	90.40	1.7109E-001		-8.0896E-002
	722.95	90.50	1.3326E-001		-2.8053E-002
Sb-125	176.33	6.89	2.7585E+000	4.35E-001	1.7400E+000
	427.89	29.33	4.3536E-001		-6.7349E-002
	463.38	10.35	1.3239E+000		-2.0086E-001
	600.56	17.80	6.8906E-001		3.6814E-001
	606.64	5.02	3.1609E+000		6.5211E+000
	635.90	11.32	1.0528E+000		-2.5289E-001
Cs-134	563.23	8.38	1.4202E+000	1.35E-001	-1.0053E+000
	569.32	15.43	8.0133E-001		1.6538E-002
	604.70	97.60	1.5761E-001		-4.0616E-002
	795.84	85.40	1.3495E-001		-6.2254E-002
	801.93	8.73	1.2442E+000		-3.3011E-001
Cs-137	661.65	85.12	1.3541E-001	1.35E-001	2.2216E-002
Eu-152	121.78	28.40	9.6680E-001	4.42E-001	-3.3593E-001
	244.69	7.49	2.2440E+000		-8.7740E-001
	344.27	26.50	5.1014E-001		-1.5622E-001
	778.89	12.74	9.1940E-001		2.4835E-001
	867.32	4.16	2.7728E+000		-3.3894E+000
	964.01	14.40	9.7061E-001		-8.3816E-002
	1085.78	10.00	1.0927E+000		1.4031E-001
	1112.02	13.30	7.7894E-001		-8.5667E-001
	1407.95	20.70	4.4181E-001		1.4599E-001
Eu-154	123.07	40.50	6.7461E-001	3.19E-001	2.0461E-002
	247.94	6.60	2.4358E+000		-9.2334E-001
	591.81	4.83	2.5267E+000		-1.8600E+000
	723.30	19.70	6.1797E-001		-2.0631E-002
	756.87	4.33	2.9003E+000		6.9701E-001
	873.19	11.50	1.0008E+000		6.0617E-001
	996.32	10.30	1.0562E+000		-6.7979E-002
	1004.76	17.90	6.1456E-001		-3.4155E-001
	1274.45	35.50	3.1888E-001		1.0666E-001
Eu-155	86.54	30.90	1.7794E+000	1.75E+000	2.8753E+000
	105.31	20.70	1.7469E+000		1.8899E-001
Am-241	59.54	35.90	4.2397E+000	4.24E+000	-1.8756E+000
Cm-243	228.19	10.56	1.5873E+000	1.06E+000	-4.6622E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0550E+000	1.06E+000	-7.9163E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 8:46:49 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-02-110-F-
Sample Title: OOL-09-02-110-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 8:36:47 AM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: ORG7829
Log Number: OOL-09-02-110-F-
Title: OOL-09-02-110-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	307	300.78	75.20	0.74	1.47E+002	101.41	1.00E+003
2	945-	961	954.83	238.72	1.41	2.47E+002	66.68	2.91E+002
3	1400-	1416	1407.76	351.96	0.92	1.42E+002	45.91	1.30E+002
4	2036-	2053	2044.06	511.05	1.58	8.78E+001	40.66	1.05E+002
5	2325-	2341	2333.89	583.51	1.65	1.05E+002	37.95	8.62E+001
6	2430-	2447	2437.88	609.51	1.33	1.47E+002	35.36	5.51E+001
7	3639-	3655	3646.16	911.60	1.20	1.14E+002	28.81	3.22E+001
8	3870-	3886	3877.97	969.56	1.27	6.45E+001	25.51	3.35E+001
9	4478-	4490	4483.81	1121.03	0.84	3.89E+001	22.03	3.31E+001
10	5836-	5860	5847.08	1461.88	1.87	8.15E+002	58.42	1.81E+001
11	7059-	7072	7065.59	1766.53	0.38	3.25E+001	12.74	3.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	1.000	511.00*	100.00	1.57760E-001	7.61093E-002
K-40	0.963	1460.81*	10.67	1.85243E+001	2.00318E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	7.30368E-001	3.57371E-001
		583.14*	84.20	2.34052E-001	9.00329E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	5.66786E+000	4.07502E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.07859E-001	2.51856E-001
Bi-214	0.968	609.31*	46.30	6.05522E-001	1.63689E-001
		1120.29*	15.10	5.73430E-001	3.30742E-001
		1764.49*	15.80	5.28670E-001	2.13809E-001
Ac-228	0.626	338.32	11.40		
		911.07*	27.70	8.66690E-001	2.40914E-001
		969.11*	16.60	8.32697E-001	3.40739E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN		1.000	1.072044E-001	7.853725E-002
K-40		0.963	1.852431E+001	2.003184E+000
TL-208		0.749	2.340518E-001	8.970924E-002
Pb-212	@	0.593	8.078590E-001	2.518561E-001
Bi-214		0.968	5.766287E-001	1.209672E-001
Ac-228		0.626	8.553608E-001	1.967121E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	351.96	2.3675E-001	32.32

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1862E-001	9.06E-002	-2.3502E-002
	1332.49	100.00	9.0643E-002		-4.8883E-002
Nb-94	702.63	100.00	1.1909E-001	1.04E-001	9.0879E-003
	871.10	100.00	1.0367E-001		-5.4557E-002
Ag-108m	79.20	7.10	1.0659E+001	1.36E-001	-4.8436E+000
	433.93	89.90	1.4632E-001		-8.6474E-003
	614.37	90.40	1.7109E-001		4.3367E-002
	722.95	90.50	1.3573E-001		-2.2554E-002
Sb-125	176.33	6.89	2.8166E+000	4.55E-001	9.2139E-001
	427.89	29.33	4.5463E-001		-1.2047E-001
	463.38	10.35	1.2064E+000		4.7667E-001
	600.56	17.80	6.9278E-001		-7.2602E-002
	606.64	5.02	3.2661E+000		6.7432E+000
	635.90	11.32	1.0591E+000		2.8693E-001
Cs-134	563.23	8.38	1.2974E+000	1.32E-001	-2.1686E+000
	569.32	15.43	7.9099E-001		6.5581E-002
	604.70	97.60	1.6370E-001		3.4801E-002
	795.84	85.40	1.3202E-001		-5.4351E-002
	801.93	8.73	1.2985E+000		-8.2993E-001
Cs-137	661.65	85.12	1.3585E-001	1.36E-001	-2.6053E-004
Eu-152	121.78	28.40	9.8510E-001	4.12E-001	-4.1743E-001
	244.69	7.49	2.2815E+000		-2.1134E+000
	344.27	26.50	5.3702E-001		-6.2576E-001
	778.89	12.74	8.9705E-001		-4.9763E-002
	867.32	4.16	2.7625E+000		8.7812E-001
	964.01	14.40	9.6803E-001		3.1796E-001
	1085.78	10.00	1.0349E+000		2.8767E-001
	1112.02	13.30	8.4217E-001		5.3609E-002
	1407.95	20.70	4.1245E-001		1.1005E-002
Eu-154	123.07	40.50	6.8690E-001	2.70E-001	7.1614E-002
	247.94	6.60	2.5740E+000		-4.2908E-002
	591.81	4.83	2.3858E+000		1.9224E-001
	723.30	19.70	6.2922E-001		3.1365E-004
	756.87	4.33	2.6879E+000		-1.2313E+000
	873.19	11.50	8.8511E-001		-9.9909E-001
	996.32	10.30	1.0703E+000		3.9305E-001
	1004.76	17.90	6.5655E-001		9.9737E-002
	1274.45	35.50	2.7041E-001		-4.2133E-001
Eu-155	86.54	30.90	1.8254E+000	1.78E+000	3.2497E+000
	105.31	20.70	1.7776E+000		1.7574E+000
Am-241	59.54	35.90	4.2414E+000	4.24E+000	-8.3280E-001
Cm-243	228.19	10.56	1.6041E+000	1.11E+000	1.6947E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1065E+000	1.11E+000	2.4230E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 12:14:02 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-111
Sample Title: OOL-09-02-111-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 12:03:58 AM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-111
Title: OOL-09-02-111-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	313	291.57	72.72	1.06	4.10E+002	67.80	1.45E+003
m	2	285-	313	299.91	74.81	1.06	7.95E+002	78.67	1.79E+003
m	3	285-	313	308.37	76.92	1.07	1.97E+002	62.37	1.56E+003
	4	331-	355	339.60	84.73	1.33	3.76E+002	205.77	2.57E+003
	5	947-	959	953.13	238.16	1.18	2.71E+002	63.12	2.89E+002
	6	1348-	1357	1352.15	337.95	0.67	7.04E+001	34.52	1.06E+002
	7	1401-	1416	1406.00	351.41	1.34	1.43E+002	51.41	1.78E+002
	8	2321-	2339	2329.67	582.40	1.46	1.86E+002	41.59	7.82E+001
	9	2424-	2440	2434.14	608.53	1.37	1.95E+002	40.25	7.23E+001
	10	3632-	3650	3639.97	910.07	1.64	1.59E+002	35.46	4.97E+001
	11	3863-	3880	3871.22	967.90	1.56	1.08E+002	32.36	5.00E+001
	12	4468-	4486	4477.91	1119.62	1.60	6.07E+001	29.54	4.83E+001
	13	5825-	5851	5837.97	1459.74	1.88	1.12E+003	69.66	3.29E+001
	14	6340-	6353	6346.80	1586.99	0.57	1.80E+001	11.98	7.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.961	1460.81*	10.67	1.88003E+001	1.91868E+000
TL-208	0.458	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.14304E-001	8.14065E-002
		860.37	12.46		
Pb-212	0.839	74.81* @	10.70	1.13938E+001	2.50188E+000
		77.11* @	18.00	1.61807E+000	6.01854E-001
		87.30 @	8.00		
		238.63*	44.60	6.57880E-001	1.84829E-001
Bi-214	0.684	609.31*	46.30	6.07906E-001	1.46275E-001
		1120.29*	15.10	6.77033E-001	3.37044E-001
		1764.49	15.80		
PB-214	0.386	74.82* @	6.21	1.96318E+001	4.54026E+000
		77.11* @	10.50	2.77383E+000	1.05233E+000
		87.30 @	4.67		
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	4.65134E-001	1.84549E-001
Ac-228	0.967	338.32*	11.40	7.39759E-001	3.80708E-001
		911.07*	27.70	9.11545E-001	2.28480E-001
		969.11*	16.60	1.04969E+000	3.33265E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.961	1.880034E+001	1.918681E+000
TL-208		0.458	3.143039E-001	8.140647E-002
Pb-212	@	0.839	6.578804E-001	1.848286E-001
Bi-214		0.684	6.188629E-001	1.341832E-001
PB-214	@	0.386	4.651340E-001	1.826563E-001
Ac-228		0.967	9.132150E-001	1.688882E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.72	6.8343E-001	16.53
4	84.73	6.2639E-001	54.75
14	1586.99	3.0000E-002	66.54

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0183E-001	6.86E-002	3.4404E-002
	1332.49	100.00	6.8643E-002		4.6653E-002
Nb-94	702.63	100.00	9.2840E-002	9.03E-002	5.2628E-003
	871.10	100.00	9.0325E-002		4.5038E-002
Ag-108m	79.20	7.10	5.0564E+000	1.07E-001	-3.3164E-001
	433.93	89.90	1.1500E-001		-7.1973E-002
	614.37	90.40	1.0693E-001		-2.3855E-001
	722.95	90.50	1.1556E-001		1.4532E-001
Sb-125	176.33	6.89	2.0981E+000	3.61E-001	-2.8005E-001
	427.89	29.33	3.6113E-001		-1.0586E-001
	463.38	10.35	1.0594E+000		4.6726E-001
	600.56	17.80	5.5645E-001		-1.0311E-001
	606.64	5.02	2.7000E+000		6.5365E+000
	635.90	11.32	8.0221E-001		5.7321E-001
Cs-134	563.23	8.38	1.1708E+000	1.10E-001	-1.5019E+000
	569.32	15.43	6.4695E-001		-2.0615E-002
	604.70	97.60	1.3908E-001		1.1573E-002
	795.84	85.40	1.1010E-001		8.6550E-002
	801.93	8.73	9.6766E-001		2.1597E-001
Cs-137	661.65	85.12	1.1872E-001	1.19E-001	3.9944E-002
Eu-152	121.78	28.40	7.1780E-001	3.33E-001	1.4211E-001
	244.69	7.49	1.7150E+000		-4.7940E-001
	344.27	26.50	4.0776E-001		-2.2678E-001
	778.89	12.74	7.5909E-001		-9.5584E-001
	867.32	4.16	2.1768E+000		-8.7895E-001
	964.01	14.40	8.6665E-001		8.8823E-002
	1085.78	10.00	8.9180E-001		3.8293E-001
	1112.02	13.30	7.2196E-001		-4.4889E-001
	1407.95	20.70	3.3260E-001		-4.9412E-001
Eu-154	123.07	40.50	4.9623E-001	2.74E-001	2.1280E-002
	247.94	6.60	1.8457E+000		2.3596E-001
	591.81	4.83	1.9463E+000		-4.7663E-001
	723.30	19.70	5.4084E-001		1.0018E+000
	756.87	4.33	2.1889E+000		-3.6562E-001
	873.19	11.50	7.6394E-001		-4.5332E-002
	996.32	10.30	8.1007E-001		2.7459E-001
	1004.76	17.90	4.7929E-001		3.0910E-001
	1274.45	35.50	2.7423E-001		2.0067E-001
Eu-155	86.54	30.90	1.0361E+000	1.04E+000	4.4384E-002
	105.31	20.70	1.2264E+000		4.1527E-001
Am-241	59.54	35.90	1.3890E+000	1.39E+000	3.8752E-001
Cm-243	228.19	10.56	1.2709E+000	8.89E-001	-1.9074E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.8893E-001	8.89E-001	3.4785E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 11:03:17 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-112-F-
Sample Title: OOL-09-02-112-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 11:02:43 PM
Live Time: 32.8 seconds
Real Time: 32.9 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-112-F-
Title: OOL-09-02-112-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5830-	5848	5840.59	1460.39	0.90	7.05E+001	18.10	4.47E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.994	1460.81*	10.67	2.16723E+001	5.83144E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.994	2.167231E+001	5.831438E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	4.0975E-001	2.37E-001	-1.1564E-001
	1332.49	100.00	2.3701E-001		-1.2078E-001
Nb-94	702.63	100.00	5.1855E-001	3.77E-001	-9.1253E-002
	871.10	100.00	3.7689E-001		1.4374E-001
Ag-108m	79.20	7.10	2.2461E+001	4.01E-001	-2.1181E+000
	433.93	89.90	6.7152E-001		3.7526E-001
	614.37	90.40	6.4317E-001		-5.8937E-001
	722.95	90.50	4.0133E-001		-1.9133E-001
Sb-125	176.33	6.89	1.0005E+001	1.89E+000	-8.5725E+000
	427.89	29.33	1.8892E+000		-7.0904E-001
	463.38	10.35	4.4003E+000		1.6315E+000
	600.56	17.80	3.0696E+000		1.4489E+000
	606.64	5.02	1.3436E+001		7.7499E+000
	635.90	11.32	4.6237E+000		6.5266E-001
Cs-134	563.23	8.38	5.9999E+000	5.25E-001	1.9071E+000
	569.32	15.43	2.5206E+000		3.1174E-001
	604.70	97.60	6.7734E-001		2.4542E-001
	795.84	85.40	5.2461E-001		1.0230E-001
	801.93	8.73	5.6429E+000		-4.0493E-001
Cs-137	661.65	85.12	6.2303E-001	6.23E-001	-1.5313E-001
Eu-152	121.78	28.40	3.3994E+000	1.46E+000	-4.0657E-001
	244.69	7.49	8.0758E+000		-2.4309E+000
	344.27	26.50	2.1616E+000		9.9633E-001
	778.89	12.74	3.5016E+000		-3.7243E-001
	867.32	4.16	7.4329E+000		-1.2659E+000
	964.01	14.40	3.9943E+000		1.2499E+000
	1085.78	10.00	3.6708E+000		-8.9772E-001
	1112.02	13.30	4.5076E+000		-2.6697E-001
	1407.95	20.70	1.4604E+000		3.1453E-001
Eu-154	123.07	40.50	2.3484E+000	1.18E+000	-2.4601E-001
	247.94	6.60	9.3182E+000		5.9337E+000
	591.81	4.83	1.0224E+001		-3.6437E+000
	723.30	19.70	1.9835E+000		-1.7581E-001
	756.87	4.33	1.0244E+001		-1.6142E+000
	873.19	11.50	3.2789E+000		-2.7512E-001
	996.32	10.30	5.4475E+000		1.7062E+000
	1004.76	17.90	3.0277E+000		9.2951E-001
	1274.45	35.50	1.1770E+000		4.4890E-001
Eu-155	86.54	30.90	4.7035E+000	4.70E+000	3.9429E+000
	105.31	20.70	5.3771E+000		6.7110E-001
Am-241	59.54	35.90	5.9306E+000	5.93E+000	-6.3707E+000
Cm-243	228.19	10.56	5.0752E+000	4.71E+000	-5.5718E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	4.7059E+000	4.71E+000	1.8890E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 9:03:14 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-113-F-
Sample Title: OOL-09-02-113-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 8:53:00 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-113-F-
Title: OOL-09-02-113-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	290-	308	299.86	74.87	1.18	1.00E+003	169.46	1.91E+003
2	330-	347	339.02	84.66	1.20	1.50E+002	146.87	1.68E+003
3	740-	749	744.14	185.97	0.71	5.74E+001	51.00	2.74E+002
4	944-	960	953.85	238.41	1.20	1.96E+002	78.17	4.42E+002
5	1343-	1359	1352.21	338.02	0.53	8.56E+001	50.76	1.83E+002
6	1397-	1413	1405.96	351.46	1.74	1.39E+002	51.73	1.78E+002
7	2030-	2050	2040.33	510.10	1.32	1.45E+002	49.22	1.34E+002
8	2322-	2338	2330.72	582.72	1.48	1.46E+002	42.25	1.02E+002
9	2426-	2443	2435.07	608.81	1.32	1.52E+002	38.84	7.41E+001
10	3632-	3651	3641.95	910.61	0.85	1.50E+002	36.28	5.50E+001
11	5827-	5855	5841.58	1460.66	2.20	1.14E+003	70.32	3.26E+001
12	7049-	7065	7057.40	1764.70	0.72	5.76E+001	17.28	6.41E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.975	511.00*	100.00	2.04243E-001	7.45480E-002
K-40	0.999	1460.81*	10.67	1.96603E+001	2.00345E+000
TL-208	0.745	277.35	6.80		
		510.84*	21.60	9.45572E-001	3.53663E-001
		583.14*	84.20	2.55099E-001	8.08741E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.49302E+001	3.86136E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.92166E-001	2.10775E-001
Bi-214	0.693	609.31*	46.30	4.89124E-001	1.38818E-001
		1120.29	15.10		
		1764.49*	15.80	6.98715E-001	2.21014E-001
Ac-228	0.536	338.32*	11.40	9.27548E-001	5.69189E-001
		911.07*	27.70	8.86812E-001	2.37532E-001
		969.11	16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN	0.975	1.491421E-001	7.654630E-002
K-40	0.999	1.966030E+001	2.003455E+000
TL-208	0.745	2.550989E-001	8.044571E-002
Pb-212 @	0.520	4.921656E-001	2.107752E-001
Bi-214	0.693	5.484169E-001	1.175534E-001
Ac-228	0.536	8.928541E-001	2.192100E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.66	2.4944E-001	98.13
3	185.97	9.5616E-002	88.90
6	351.46	2.3135E-001	37.27

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0602E-001	8.49E-002	-6.1783E-003
	1332.49	100.00	8.4911E-002		-1.7250E-002
Nb-94	702.63	100.00	1.0395E-001	9.65E-002	3.8356E-002
	871.10	100.00	9.6454E-002		-1.7462E-002
Ag-108m	79.20	7.10	5.2713E+000	1.22E-001	-4.6037E+000
	433.93	89.90	1.2190E-001		2.1190E-002
	614.37	90.40	1.3187E-001		-9.1126E-002
	722.95	90.50	1.3075E-001		1.1598E-001
Sb-125	176.33	6.89	2.3168E+000	3.89E-001	1.1599E-001
	427.89	29.33	3.8934E-001		4.7534E-001
	463.38	10.35	1.0748E+000		5.1762E-001
	600.56	17.80	5.9664E-001		3.3892E-002
	606.64	5.02	2.6696E+000		4.7209E+000
	635.90	11.32	9.1526E-001		-4.1221E-001
Cs-134	563.23	8.38	1.3224E+000	1.24E-001	-3.6448E-001
	569.32	15.43	6.8801E-001		6.0028E-001
	604.70	97.60	1.3545E-001		-3.4699E-002
	795.84	85.40	1.2424E-001		4.1173E-002
	801.93	8.73	1.0863E+000		-4.0255E-001
Cs-137	661.65	85.12	1.3757E-001	1.38E-001	1.1727E-001
Eu-152	121.78	28.40	7.5120E-001	3.35E-001	2.4754E-001
	244.69	7.49	1.9459E+000		-1.5618E+000
	344.27	26.50	4.3729E-001		-9.3392E-002
	778.89	12.74	8.3124E-001		-4.7418E-001
	867.32	4.16	2.2411E+000		-5.5832E+000
	964.01	14.40	8.8323E-001		1.1983E+000
	1085.78	10.00	9.5268E-001		2.6354E-001
	1112.02	13.30	7.6023E-001		-9.6429E-001
	1407.95	20.70	3.3494E-001		1.5108E-001
Eu-154	123.07	40.50	5.2211E-001	2.32E-001	3.4734E-001
	247.94	6.60	1.9907E+000		-2.4226E+000
	591.81	4.83	2.2310E+000		-1.2786E+000
	723.30	19.70	6.0069E-001		2.5031E-001
	756.87	4.33	2.4129E+000		1.8825E+000
	873.19	11.50	8.4717E-001		3.5731E-001
	996.32	10.30	9.2584E-001		3.4368E-001
	1004.76	17.90	5.3024E-001		5.1887E-001
	1274.45	35.50	2.3170E-001		1.7685E-002
Eu-155	86.54	30.90	1.0922E+000	1.09E+000	3.1519E-001
	105.31	20.70	1.2120E+000		7.3838E-001
Am-241	59.54	35.90	1.3674E+000	1.37E+000	5.7531E-001
Cm-243	228.19	10.56	1.2898E+000	9.42E-001	1.0998E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.4161E-001	9.42E-001	2.2882E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 10:43:46 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-114-F-
Sample Title: OOL-09-02-114-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 10:34:01 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-114-F-
Title: OOL-09-02-114-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	306	291.57	72.79	1.25	3.91E+002	67.21	1.73E+003
m	2	283-	306	300.32	74.98	1.25	6.73E+002	77.36	1.81E+003
	3	330-	346	339.66	84.82	1.02	1.69E+002	142.33	1.62E+003
	4	946-	962	952.67	238.11	1.15	2.40E+002	79.96	4.46E+002
	5	1174-	1186	1179.06	294.73	0.31	6.85E+001	43.55	1.60E+002
	6	1307-	1317	1311.88	327.94	0.61	2.76E+001	34.37	1.17E+002
	7	1399-	1414	1406.65	351.64	1.12	1.45E+002	48.33	1.53E+002
	8	2033-	2051	2039.33	509.85	0.46	1.32E+002	45.93	1.23E+002
	9	2321-	2341	2330.05	582.55	0.60	2.19E+002	50.94	1.25E+002
	10	2424-	2444	2433.38	608.39	1.23	1.40E+002	47.00	1.20E+002
	11	2898-	2912	2905.72	726.51	1.38	5.36E+001	27.67	5.04E+001
	12	3631-	3650	3640.94	910.36	1.62	1.61E+002	35.93	4.99E+001
	13	3863-	3882	3872.27	968.21	0.84	9.03E+001	34.31	6.17E+001
	14	5826-	5854	5839.92	1460.25	2.11	1.17E+003	69.27	1.74E+001
	15	6342-	6355	6348.48	1587.42	0.64	1.77E+001	14.09	1.23E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.959	511.00*		100.00	1.85563E-001	6.93119E-002
K-40	0.990	1460.81*		10.67	2.02506E+001	2.03082E+000
TL-208	0.739	277.35		6.80		
		510.84*		21.60	8.59086E-001	3.28468E-001
		583.14*		84.20	3.81343E-001	1.01828E-001
		860.37		12.46		
Bi-212	0.986	727.17*		11.80	7.09195E-001	3.75653E-001
Pb-212	0.516	74.81*	@	10.70	9.98965E+000	2.26954E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.01682E-001	2.21651E-001
Bi-214	0.382	609.31*		46.30	4.51107E-001	1.61201E-001
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.580	74.82*	@	6.21	1.72124E+001	4.10525E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	4.24069E-001	2.78892E-001
		351.92*		37.20	4.86303E-001	1.81579E-001
Ac-228	0.618	338.32		11.40		
		911.07*		27.70	9.52274E-001	2.39075E-001
		969.11*		16.60	9.06837E-001	3.57353E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.959	1.031924E-001	7.266846E-002
K-40		0.990	2.025061E+001	2.030816E+000
TL-208		0.739	3.813433E-001	1.010672E-001
Bi-212		0.986	7.091949E-001	3.756531E-001
Pb-212	@	0.516	6.016818E-001	2.216512E-001
Bi-214		0.382	4.511072E-001	1.612014E-001
PB-214	@	0.580	4.677759E-001	1.521692E-001
Ac-228		0.618	9.382255E-001	1.987065E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	6.5246E-001	17.17
3	84.82	2.8117E-001	84.37
6	327.94	4.5920E-002	124.76
15	1587.42	2.9542E-002	79.47

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0799E-001	7.24E-002	2.4566E-002
	1332.49	100.00	7.2372E-002		-1.0618E-001
Nb-94	702.63	100.00	1.0184E-001	9.65E-002	-6.9896E-002
	871.10	100.00	9.6454E-002		-2.8497E-002
Ag-108m	79.20	7.10	5.5287E+000	1.26E-001	-4.5079E+000
	433.93	89.90	1.2606E-001		6.7816E-002
	614.37	90.40	1.3302E-001		8.0251E-002
	722.95	90.50	1.2553E-001		7.3941E-002
Sb-125	176.33	6.89	2.3670E+000	3.74E-001	1.7882E+000
	427.89	29.33	3.7436E-001		1.7736E-002
	463.38	10.35	1.0945E+000		1.5794E-001
	600.56	17.80	5.9005E-001		1.1614E-001
	606.64	5.02	2.7882E+000		5.6370E+000
	635.90	11.32	8.5848E-001		-7.7909E-001
Cs-134	563.23	8.38	1.2809E+000	1.22E-001	-5.2009E-001
	569.32	15.43	6.9527E-001		-3.4500E-002
	604.70	97.60	1.4235E-001		2.4745E-002
	795.84	85.40	1.2201E-001		1.1152E-001
	801.93	8.73	1.1339E+000		-3.9623E-002
Cs-137	661.65	85.12	1.2683E-001	1.27E-001	8.2819E-002
Eu-152	121.78	28.40	7.6586E-001	3.09E-001	7.8469E-001
	244.69	7.49	1.8724E+000		-1.7191E-001
	344.27	26.50	4.3109E-001		-1.1945E+000
	778.89	12.74	7.9031E-001		-4.6325E-001
	867.32	4.16	2.2867E+000		-8.1988E-001
	964.01	14.40	9.0169E-001		-1.4485E-001
	1085.78	10.00	9.2390E-001		1.8719E-002
	1112.02	13.30	7.5515E-001		-1.7704E+000
	1407.95	20.70	3.0933E-001		-2.4714E-002
Eu-154	123.07	40.50	5.2281E-001	2.50E-001	-2.9168E-001
	247.94	6.60	1.9874E+000		-2.1075E+000
	591.81	4.83	2.1785E+000		2.6762E-001
	723.30	19.70	5.7429E-001		3.2719E-001
	756.87	4.33	2.1713E+000		1.8322E+000
	873.19	11.50	8.3375E-001		-5.3283E-001
	996.32	10.30	8.6846E-001		-2.5460E-001
	1004.76	17.90	4.9688E-001		-2.2659E-001
	1274.45	35.50	2.4995E-001		7.8134E-002
Eu-155	86.54	30.90	1.1115E+000	1.11E+000	5.9073E-001
	105.31	20.70	1.2375E+000		1.4049E-001
Am-241	59.54	35.90	1.4409E+000	1.44E+000	4.1284E-001
Cm-243	228.19	10.56	1.3414E+000	9.51E-001	2.6786E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.5140E-001	9.51E-001	3.4443E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 10:29:44 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-115-F-
Sample Title: OOL-09-02-115-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 10:20:08 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-115-F-
Title: OOL-09-02-115-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	291.56	72.79	1.20	3.69E+002	67.78	1.64E+003
m	2	284-	305	299.74	74.84	1.21	6.80E+002	78.43	1.80E+003
	3	333-	346	338.74	84.59	1.18	2.64E+002	124.42	1.36E+003
	4	737-	746	741.89	185.41	0.80	5.23E+001	50.72	2.74E+002
	5	943-	962	953.58	238.34	1.40	3.33E+002	83.84	4.20E+002
	6	1169-	1185	1180.30	295.04	0.31	6.18E+001	54.53	2.26E+002
	7	1395-	1414	1406.72	351.65	1.16	1.74E+002	56.57	1.87E+002
	8	2031-	2053	2041.46	510.38	0.92	1.72E+002	50.54	1.27E+002
	9	2321-	2341	2329.84	582.50	0.99	1.91E+002	44.89	9.17E+001
	10	2424-	2443	2434.41	608.65	1.21	1.89E+002	42.02	7.75E+001
	11	3435-	3446	3440.03	860.12	0.56	2.73E+001	20.15	3.07E+001
	12	3634-	3653	3641.41	910.48	1.86	1.94E+002	34.73	3.41E+001
	13	3863-	3881	3871.86	968.10	1.09	1.01E+002	34.84	6.36E+001
	14	5824-	5852	5839.93	1460.25	2.17	1.13E+003	67.55	1.32E+001
	15	7046-	7065	7055.67	1764.27	0.44	6.67E+001	18.81	7.32E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.988	511.00*		100.00	2.41400E-001	7.82574E-002
K-40	0.990	1460.81*		10.67	1.95627E+001	1.96828E+000
TL-208	0.893	277.35		6.80		
		510.84*		21.60	1.11759E+000	3.73622E-001
		583.14*		84.20	3.33849E-001	8.95936E-002
		860.37*		12.46	3.54448E-001	2.64973E-001
Pb-212	0.520	74.81*	@	10.70	1.01106E+001	2.29960E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.36475E-001	2.47884E-001
Bi-214	0.690	609.31*		46.30	6.06933E-001	1.54591E-001
		1120.29		15.10		
		1764.49*		15.80	8.08897E-001	2.42041E-001
PB-214	0.582	74.82*	@	6.21	1.74208E+001	4.15920E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.82528E-001	3.43745E-001
		351.92*		37.20	5.83647E-001	2.13623E-001
Ac-228	0.618	338.32		11.40		
		911.07*		27.70	1.14621E+000	2.44094E-001
		969.11*		16.60	1.01824E+000	3.65689E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.988	1.688370E-001	8.034790E-002
K-40		0.990	1.956266E+001	1.968284E+000
TL-208		0.893	3.359381E-001	8.430055E-002
Pb-212	@	0.520	8.364749E-001	2.478842E-001
Bi-214		0.690	6.654506E-001	1.302847E-001
PB-214	@	0.582	5.276134E-001	1.814404E-001
Ac-228		0.618	1.106765E+000	2.030210E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	6.1558E-001	18.35
3	84.59	4.4020E-001	47.11
4	185.41	8.7165E-002	96.98

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0668E-001	7.84E-002	-5.4825E-002
	1332.49	100.00	7.8425E-002		2.1339E-002
Nb-94	702.63	100.00	1.0447E-001	9.55E-002	6.6916E-003
	871.10	100.00	9.5523E-002		4.0741E-002
Ag-108m	79.20	7.10	5.5074E+000	1.20E-001	-1.1279E+001
	433.93	89.90	1.2449E-001		1.1763E-001
	614.37	90.40	1.3325E-001		-1.0255E-001
	722.95	90.50	1.1953E-001		-1.0431E-002
Sb-125	176.33	6.89	2.3221E+000	3.76E-001	-1.8297E+000
	427.89	29.33	3.7619E-001		-1.3119E-001
	463.38	10.35	1.0820E+000		1.3418E-001
	600.56	17.80	5.7527E-001		-5.1276E-002
	606.64	5.02	2.7528E+000		3.9865E+000
	635.90	11.32	8.6083E-001		-2.7821E-002
Cs-134	563.23	8.38	1.2836E+000	1.13E-001	-3.6890E-003
	569.32	15.43	6.4737E-001		-1.2488E-001
	604.70	97.60	1.4144E-001		-5.9576E-003
	795.84	85.40	1.1264E-001		-2.6052E-002
	801.93	8.73	1.0509E+000		-5.0424E-001
Cs-137	661.65	85.12	1.3624E-001	1.36E-001	1.3778E-001
Eu-152	121.78	28.40	7.5769E-001	3.09E-001	-3.0389E-001
	244.69	7.49	1.9239E+000		-5.8703E-001
	344.27	26.50	4.7226E-001		-4.8172E-001
	778.89	12.74	7.8140E-001		-1.3725E-001
	867.32	4.16	2.2411E+000		-1.0017E+000
	964.01	14.40	9.2465E-001		8.4074E-002
	1085.78	10.00	9.0169E-001		-1.0536E+000
	1112.02	13.30	7.6780E-001		-5.0543E-001
	1407.95	20.70	3.0933E-001		-2.9496E-001
Eu-154	123.07	40.50	5.3080E-001	2.77E-001	-3.9895E-001
	247.94	6.60	2.0803E+000		-1.0884E+000
	591.81	4.83	2.2591E+000		1.4881E+000
	723.30	19.70	5.5044E-001		-1.3021E-001
	756.87	4.33	2.3374E+000		-4.7050E-001
	873.19	11.50	8.2285E-001		-7.2397E-001
	996.32	10.30	8.9594E-001		4.9324E-001
	1004.76	17.90	5.2643E-001		4.3859E-002
	1274.45	35.50	2.7653E-001		7.5795E-002
Eu-155	86.54	30.90	1.1178E+000	1.12E+000	1.9624E+000
	105.31	20.70	1.2303E+000		3.9362E-001
Am-241	59.54	35.90	1.4401E+000	1.44E+000	2.6439E-001
Cm-243	228.19	10.56	1.3250E+000	9.38E-001	1.6545E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.3832E-001	9.38E-001	-1.0913E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 10:45:50 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-116-F-
Sample Title: OOL-09-02-116-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 10:35:47 AM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-116-F-
Title: OOL-09-02-116-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	309	291.95	72.89	1.58	3.93E+002	78.49	2.08E+003
m	2	282-	309	300.53	75.03	1.59	7.56E+002	85.30	2.65E+003
	3	945-	961	954.02	238.45	1.22	2.76E+002	78.46	4.24E+002
	4	1173-	1184	1178.85	294.67	1.12	6.51E+001	44.10	1.76E+002
	5	1397-	1414	1406.81	351.68	1.22	1.82E+002	53.78	1.76E+002
	6	2030-	2050	2042.36	510.61	0.93	1.22E+002	50.12	1.47E+002
	7	2321-	2341	2331.99	583.04	1.63	1.65E+002	49.32	1.29E+002
	8	2426-	2444	2435.80	608.99	1.72	1.36E+002	42.65	9.98E+001
	9	2900-	2916	2906.57	726.72	0.81	7.46E+001	28.66	4.44E+001
	10	3632-	3654	3643.41	910.98	1.77	1.58E+002	40.93	7.17E+001
	11	3866-	3883	3875.69	969.06	1.36	7.00E+001	32.15	6.10E+001
	12	5404-	5417	5410.29	1352.81	0.45	9.98E+000	12.78	1.10E+001
	13	5830-	5859	5843.79	1461.22	2.17	1.22E+003	69.86	1.03E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.995	511.00*		100.00	1.72131E-001	7.42569E-002
K-40	0.995	1460.81*		10.67	2.11900E+001	2.09866E+000
TL-208	0.751	277.35		6.80		
		510.84*		21.60	7.96904E-001	3.49888E-001
		583.14*		84.20	2.88364E-001	9.39146E-002
		860.37		12.46		
Bi-212	0.993	727.17*		11.80	9.86879E-001	3.96715E-001
Pb-212	0.520	74.81*	@	10.70	1.11970E+001	2.53266E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.91366E-001	2.24746E-001
Bi-214	0.396	609.31*		46.30	4.38556E-001	1.47597E-001
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.580	74.82*	@	6.21	1.92927E+001	4.58306E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	4.02920E-001	2.81302E-001
		351.92*		37.20	6.13112E-001	2.07732E-001
Ac-228	0.633	338.32		11.40		
		911.07*		27.70	9.36091E-001	2.64879E-001
		969.11*		16.60	7.03289E-001	3.31139E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.995	1.098447E-001	7.695107E-002
K-40		0.995	2.118996E+001	2.098657E+000
TL-208		0.751	2.883636E-001	9.344321E-002
Bi-212		0.993	9.868786E-001	3.967154E-001
Pb-212	@	0.520	6.913664E-001	2.247456E-001
Bi-214		0.396	4.385556E-001	1.475968E-001
PB-214	@	0.580	5.389373E-001	1.671064E-001
Ac-228		0.633	8.452552E-001	2.068453E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.89	6.5565E-001	19.95
12	1352.81	1.6627E-002	128.06

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0469E-001	8.08E-002	-2.7263E-002
	1332.49	100.00	8.0805E-002		4.4268E-002
Nb-94	702.63	100.00	1.0754E-001	1.02E-001	-3.2784E-002
	871.10	100.00	1.0186E-001		-2.8497E-002
Ag-108m	79.20	7.10	5.6770E+000	1.24E-001	-6.7223E+000
	433.93	89.90	1.2410E-001		-4.4800E-002
	614.37	90.40	1.4257E-001		-4.3466E-002
	722.95	90.50	1.3201E-001		1.5125E-002
Sb-125	176.33	6.89	2.3783E+000	3.90E-001	4.2659E-001
	427.89	29.33	3.8993E-001		1.8596E-001
	463.38	10.35	1.1631E+000		7.3882E-001
	600.56	17.80	6.2603E-001		2.2455E-001
	606.64	5.02	2.7061E+000		1.5118E+000
	635.90	11.32	8.6550E-001		2.7786E-001
Cs-134	563.23	8.38	1.2836E+000	1.22E-001	1.0502E+000
	569.32	15.43	6.8801E-001		1.8900E-002
	604.70	97.60	1.4126E-001		2.9976E-002
	795.84	85.40	1.2169E-001		-4.0828E-002
	801.93	8.73	1.1036E+000		-1.3446E+000
Cs-137	661.65	85.12	1.2596E-001	1.26E-001	-3.6625E-002
Eu-152	121.78	28.40	7.6953E-001	3.38E-001	4.5474E-002
	244.69	7.49	1.9472E+000		-1.8125E+000
	344.27	26.50	4.6863E-001		-8.1841E-001
	778.89	12.74	7.9031E-001		-1.6242E-001
	867.32	4.16	2.4880E+000		-2.0761E+000
	964.01	14.40	8.4858E-001		3.7889E-001
	1085.78	10.00	8.9416E-001		-5.9470E-001
	1112.02	13.30	7.5259E-001		-2.0859E+000
	1407.95	20.70	3.3765E-001		-1.1730E-001
Eu-154	123.07	40.50	5.3162E-001	2.53E-001	6.5946E-002
	247.94	6.60	2.1005E+000		4.2522E-001
	591.81	4.83	2.2683E+000		-7.6444E-003
	723.30	19.70	6.1230E-001		7.8713E-002
	756.87	4.33	2.3181E+000		-2.1065E-001
	873.19	11.50	8.8105E-001		-1.0577E-002
	996.32	10.30	9.0936E-001		2.4094E-001
	1004.76	17.90	5.6863E-001		4.1738E-001
	1274.45	35.50	2.5343E-001		7.2867E-002
Eu-155	86.54	30.90	1.1225E+000	1.12E+000	6.8797E-001
	105.31	20.70	1.2623E+000		2.6757E-001
Am-241	59.54	35.90	1.4393E+000	1.44E+000	9.2214E-001
Cm-243	228.19	10.56	1.3962E+000	9.54E-001	1.4023E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.5383E-001	9.54E-001	-3.3179E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 11:38:24 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-117-F-
Sample Title: OOL-09-02-117-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 11:28:21 AM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-117-F-
Title: OOL-09-02-117-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	309	291.55	72.79	1.37	3.97E+002	71.56	1.69E+003
m	2	285-	309	300.67	75.07	1.37	7.14E+002	81.22	2.45E+003
	3	330-	345	339.16	84.70	0.99	1.30E+002	142.90	1.71E+003
	4	944-	960	954.47	238.56	1.36	2.95E+002	76.75	3.93E+002
	5	1395-	1416	1407.01	351.73	1.92	1.42E+002	62.24	2.31E+002
	6	2032-	2054	2042.32	510.60	1.24	1.62E+002	51.98	1.40E+002
	7	2318-	2341	2330.88	582.76	1.45	2.29E+002	52.12	1.19E+002
	8	2425-	2447	2436.07	609.06	1.66	1.80E+002	47.68	1.06E+002
	9	3634-	3655	3643.25	910.94	0.67	2.15E+002	39.41	5.08E+001
	10	3865-	3886	3874.84	968.85	1.94	1.05E+002	36.51	6.46E+001
	11	4473-	4489	4481.21	1120.48	0.83	5.15E+001	25.47	3.75E+001
	12	5828-	5859	5843.90	1461.24	2.14	1.30E+003	73.41	2.00E+001
	13	7055-	7069	7061.64	1765.76	0.36	2.89E+001	18.22	1.91E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.995	511.00*		100.00	2.28235E-001	7.93956E-002
K-40	0.994	1460.81*		10.67	2.25450E+001	2.22377E+000
TL-208	0.748	277.35		6.80		
		510.84*		21.60	1.05664E+000	3.77565E-001
		583.14*		84.20	3.99004E-001	1.04746E-001
		860.37		12.46		
Pb-212	0.521	74.81*	@	10.70	1.05705E+001	2.39573E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.40618E-001	2.24907E-001
Bi-214	0.988	609.31*		46.30	5.78779E-001	1.69272E-001
		1120.29*		15.10	5.91903E-001	2.99620E-001
		1764.49*		15.80	3.51169E-001	2.23792E-001
Ac-228	0.633	338.32		11.40		
		911.07*		27.70	1.27225E+000	2.75207E-001
		969.11*		16.60	1.05852E+000	3.83016E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN	0.995	1.420501E-001	8.250859E-002
K-40	0.994	2.254500E+001	2.223766E+000
TL-208	0.748	3.990044E-001	1.039358E-001
Pb-212 @	0.521	7.406177E-001	2.249067E-001
Bi-214	0.988	5.121422E-001	1.230853E-001
Ac-228	0.633	1.199479E+000	2.234959E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	6.6090E-001	18.05
3	84.70	2.1700E-001	109.75
5	351.73	2.3666E-001	43.83

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0266E-001	8.13E-002	5.8063E-002
	1332.49	100.00	8.1272E-002		1.8059E-002
Nb-94	702.63	100.00	1.0395E-001	9.95E-002	-5.6978E-002
	871.10	100.00	9.9494E-002		-2.4048E-002
Ag-108m	79.20	7.10	5.8214E+000	1.25E-001	-2.2571E+000
	433.93	89.90	1.2606E-001		-9.5811E-002
	614.37	90.40	1.4554E-001		3.4059E-002
	722.95	90.50	1.2500E-001		1.1476E-001
Sb-125	176.33	6.89	2.3545E+000	3.91E-001	-1.4247E+000
	427.89	29.33	3.9052E-001		2.1757E-002
	463.38	10.35	1.0784E+000		-5.7979E-002
	600.56	17.80	6.0315E-001		3.8961E-002
	606.64	5.02	2.8336E+000		5.1544E+000
	635.90	11.32	9.1526E-001		-2.5939E-001
Cs-134	563.23	8.38	1.3070E+000	1.24E-001	5.1553E-002
	569.32	15.43	6.9382E-001		-3.1859E-001
	604.70	97.60	1.4308E-001		1.1888E-002
	795.84	85.40	1.2424E-001		-1.3950E-001
	801.93	8.73	1.3065E+000		4.9774E-001
Cs-137	661.65	85.12	1.2450E-001	1.25E-001	-4.1121E-002
Eu-152	121.78	28.40	8.0769E-001	3.43E-001	8.6675E-001
	244.69	7.49	2.0017E+000		-2.3149E+000
	344.27	26.50	4.7019E-001		-3.5667E-001
	778.89	12.74	8.4785E-001		-4.3216E-001
	867.32	4.16	2.3823E+000		-4.4515E-001
	964.01	14.40	9.5645E-001		5.9570E-001
	1085.78	10.00	1.0628E+000		2.0677E-001
	1112.02	13.30	7.4745E-001		-5.1610E-001
	1407.95	20.70	3.4302E-001		-3.4748E-002
Eu-154	123.07	40.50	5.5903E-001	2.69E-001	1.5117E-001
	247.94	6.60	2.1435E+000		1.3056E-001
	591.81	4.83	2.2310E+000		-4.5363E-002
	723.30	19.70	5.7306E-001		3.8773E-001
	756.87	4.33	2.3117E+000		-1.9098E-001
	873.19	11.50	8.6298E-001		-2.7854E-001
	996.32	10.30	9.0268E-001		-3.0463E-001
	1004.76	17.90	5.4887E-001		-2.3063E-001
	1274.45	35.50	2.6906E-001		-2.3445E-003
Eu-155	86.54	30.90	1.1589E+000	1.16E+000	1.8219E-001
	105.31	20.70	1.2746E+000		3.0130E-001
Am-241	59.54	35.90	1.4572E+000	1.46E+000	3.5516E-001
Cm-243	228.19	10.56	1.3539E+000	9.37E-001	-1.5417E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.3667E-001	9.37E-001	1.2906E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 11:53:52 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-118-F-
Sample Title: OOL-09-02-118-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 11:43:49 AM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-118-F-
Title: OOL-09-02-118-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	309	300.93	75.14	1.06	5.21E+002	147.49	1.84E+003
2	332-	348	340.10	84.93	0.97	2.62E+002	150.14	1.79E+003
3	943-	961	954.16	238.49	1.25	2.66E+002	83.11	4.54E+002
4	1398-	1417	1407.62	351.88	1.38	1.20E+002	57.55	2.11E+002
5	2032-	2053	2042.98	510.76	1.37	1.51E+002	48.21	1.21E+002
6	2322-	2340	2332.20	583.09	1.70	1.51E+002	45.71	1.16E+002
7	2427-	2446	2436.14	609.08	1.16	1.27E+002	45.46	1.17E+002
8	3634-	3654	3644.55	911.26	1.73	1.55E+002	36.34	5.22E+001
9	3865-	3885	3874.92	968.87	0.91	8.41E+001	35.44	6.59E+001
10	5830-	5860	5844.75	1461.46	2.17	1.32E+003	73.26	1.55E+001
11	7054-	7067	7060.13	1765.38	0.36	3.43E+001	16.64	1.37E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.998	511.00*		100.00	2.12419E-001	7.36803E-002
K-40	0.987	1460.81*		10.67	2.28656E+001	2.24368E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	9.83419E-001	3.50439E-001
		583.14*		84.20	2.62789E-001	8.68153E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	7.70410E+000	2.65337E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.68596E-001	2.33424E-001
Bi-214	0.692	609.31*		46.30	4.07781E-001	1.54766E-001
		1120.29		15.10		
		1764.49*		15.80	4.15799E-001	2.06065E-001
Ac-228	0.632	338.32		11.40		
		911.07*		27.70	9.15494E-001	2.39313E-001
		969.11*		16.60	8.44625E-001	3.66715E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN	0.998	1.556563E-001	7.600658E-002
K-40	0.987	2.286560E+001	2.243683E+000
TL-208	0.752	2.627885E-001	8.639182E-002
Pb-212 @	0.520	6.685960E-001	2.334245E-001
Bi-214	0.692	4.106728E-001	1.237502E-001
Ac-228	0.632	8.943269E-001	2.004134E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.93	4.3726E-001	57.23
4	351.88	2.0034E-001	47.88

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0831E-001	8.92E-002	-2.2106E-002
	1332.49	100.00	8.9239E-002		5.1159E-002
Nb-94	702.63	100.00	1.0290E-001	9.74E-002	-9.9155E-003
	871.10	100.00	9.7376E-002		-1.8104E-002
Ag-108m	79.20	7.10	5.7663E+000	1.19E-001	-5.9470E+000
	433.93	89.90	1.2703E-001		3.2904E-002
	614.37	90.40	1.4107E-001		-2.1592E-002
	722.95	90.50	1.1925E-001		1.3993E-001
Sb-125	176.33	6.89	2.4049E+000	3.82E-001	-3.7950E-001
	427.89	29.33	3.8223E-001		-3.0498E-001
	463.38	10.35	1.1155E+000		5.1542E-001
	600.56	17.80	6.1850E-001		-1.8362E-001
	606.64	5.02	2.7882E+000		4.7847E+000
	635.90	11.32	8.7477E-001		2.4716E-001
Cs-134	563.23	8.38	1.3096E+000	1.24E-001	5.8354E-001
	569.32	15.43	7.3180E-001		5.2447E-001
	604.70	97.60	1.3997E-001		4.8126E-002
	795.84	85.40	1.2424E-001		-4.9825E-002
	801.93	8.73	1.1795E+000		-1.3055E+000
Cs-137	661.65	85.12	1.2883E-001	1.29E-001	3.4887E-002
Eu-152	121.78	28.40	7.8950E-001	3.29E-001	-6.5961E-002
	244.69	7.49	1.9917E+000		-2.8885E+000
	344.27	26.50	4.7381E-001		-3.6480E-001
	778.89	12.74	8.2280E-001		-1.2436E-001
	867.32	4.16	2.5357E+000		-3.6203E-001
	964.01	14.40	9.0169E-001		-5.3614E-002
	1085.78	10.00	1.0176E+000		1.2895E-001
	1112.02	13.30	7.3443E-001		-1.6300E+000
	1407.95	20.70	3.2943E-001		1.7340E-001
Eu-154	123.07	40.50	5.4577E-001	2.59E-001	8.6387E-002
	247.94	6.60	2.2048E+000		2.4792E+000
	591.81	4.83	2.4075E+000		-5.9918E-001
	723.30	19.70	5.4398E-001		3.4598E-001
	756.87	4.33	2.3310E+000		-1.7793E+000
	873.19	11.50	8.2832E-001		-1.1854E-001
	996.32	10.30	1.0422E+000		5.0551E-001
	1004.76	17.90	5.7215E-001		2.3437E-001
	1274.45	35.50	2.5913E-001		-5.0530E-003
Eu-155	86.54	30.90	1.1681E+000	1.17E+000	1.8345E+000
	105.31	20.70	1.2795E+000		6.1201E-001
Am-241	59.54	35.90	1.4234E+000	1.42E+000	-8.6767E-001
Cm-243	228.19	10.56	1.3979E+000	9.82E-001	-8.3788E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.8176E-001	9.82E-001	4.9947E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 2:06:52 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-119-F-
Sample Title: OOL-09-02-119-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 1:56:48 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-119-F-
Title: OOL-09-02-119-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	309	300.18	74.95	1.77	8.46E+002	182.49	2.31E+003
2	944-	962	954.75	238.63	1.63	3.07E+002	82.09	4.28E+002
3	1178-	1193	1182.50	295.59	0.84	5.88E+001	51.40	2.05E+002
4	1395-	1417	1406.70	351.65	0.90	2.14E+002	60.34	1.89E+002
5	2030-	2053	2041.10	510.29	0.37	1.82E+002	52.63	1.35E+002
6	2320-	2344	2331.78	582.98	1.24	2.07E+002	44.78	7.66E+001
7	2426-	2446	2436.83	609.25	1.18	1.58E+002	41.29	7.88E+001
8	3634-	3656	3644.58	911.27	1.31	1.35E+002	40.77	7.56E+001
9	3868-	3887	3876.39	969.24	1.02	8.22E+001	35.50	6.98E+001
10	5830-	5861	5845.95	1461.76	2.28	1.22E+003	74.39	4.39E+001
11	7055-	7071	7061.97	1765.84	1.03	5.07E+001	18.13	1.13E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.984	511.00*		100.00	2.56309E-001	8.17713E-002
K-40	0.972	1460.81*		10.67	2.11293E+001	2.14081E+000
TL-208	0.750	277.35		6.80		
		510.84*		21.60	1.18662E+000	3.90777E-001
		583.14*		84.20	3.61980E-001	9.12612E-002
		860.37		12.46		
Pb-212	0.521	74.81*	@	10.70	1.25537E+001	3.65962E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.70286E-001	2.38828E-001
Bi-214	0.687	609.31*		46.30	5.09661E-001	1.47048E-001
		1120.29		15.10		
		1764.49*		15.80	6.14789E-001	2.28404E-001
PB-214	0.581	74.82*	@	6.21	2.16304E+001	6.49818E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.64280E-001	3.24327E-001
		351.92*		37.20	7.17340E-001	2.35515E-001
Ac-228	0.633	338.32		11.40		
		911.07*		27.70	8.00655E-001	2.58093E-001
		969.11*		16.60	8.25344E-001	3.66799E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.984	1.781213E-001	8.407513E-002
K-40		0.972	2.112926E+001	2.140813E+000
TL-208		0.750	3.619800E-001	9.049559E-002
Pb-212	@	0.521	7.702860E-001	2.388279E-001
Bi-214		0.687	5.404671E-001	1.236403E-001
PB-214	@	0.581	5.954431E-001	1.905700E-001
Ac-228		0.633	8.088309E-001	2.110767E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.1459E-001	8.13E-002	6.3065E-002
	1332.49	100.00	8.1272E-002		8.5765E-003
Nb-94	702.63	100.00	1.1077E-001	9.68E-002	9.6160E-002
	871.10	100.00	9.6763E-002		1.1250E-002
Ag-108m	79.20	7.10	5.8020E+000	1.24E-001	-6.5741E+000
	433.93	89.90	1.2370E-001		-1.3766E-001
	614.37	90.40	1.4150E-001		3.9937E-003
	722.95	90.50	1.2712E-001		4.0513E-002
Sb-125	176.33	6.89	2.3347E+000	3.82E-001	9.9258E-002
	427.89	29.33	3.8163E-001		9.5571E-002
	463.38	10.35	1.0856E+000		1.4413E+000
	600.56	17.80	5.7117E-001		-1.7314E-001
	606.64	5.02	2.6138E+000		4.4665E+000
	635.90	11.32	8.9300E-001		2.4092E-001
Cs-134	563.23	8.38	1.2730E+000	1.23E-001	-1.0039E-001
	569.32	15.43	6.7027E-001		-4.8348E-004
	604.70	97.60	1.3333E-001		-3.7403E-003
	795.84	85.40	1.2265E-001		5.9164E-002
	801.93	8.73	1.1763E+000		-1.4176E+000
Cs-137	661.65	85.12	1.2883E-001	1.29E-001	3.4654E-002
Eu-152	121.78	28.40	7.7777E-001	3.40E-001	5.9674E-002
	244.69	7.49	1.9714E+000		-1.8044E+000
	344.27	26.50	4.3392E-001		-8.3399E-001
	778.89	12.74	7.7466E-001		-1.3636E+000
	867.32	4.16	2.4533E+000		1.0460E+000
	964.01	14.40	9.0003E-001		3.1228E-001
	1085.78	10.00	9.6673E-001		4.7858E-001
	1112.02	13.30	7.6023E-001		-8.1832E-001
	1407.95	20.70	3.4035E-001		-2.9128E-001
Eu-154	123.07	40.50	5.3692E-001	2.59E-001	-7.6233E-002
	247.94	6.60	2.1036E+000		-1.9236E+000
	591.81	4.83	2.1395E+000		5.4275E-001
	723.30	19.70	5.8404E-001		1.9882E-001
	756.87	4.33	2.1713E+000		-1.5833E+000
	873.19	11.50	8.4450E-001		2.4961E-001
	996.32	10.30	8.9932E-001		1.9979E-001
	1004.76	17.90	5.1678E-001		1.0565E-001
	1274.45	35.50	2.5913E-001		2.0338E-001
Eu-155	86.54	30.90	1.1559E+000	1.16E+000	1.6224E+000
	105.31	20.70	1.2730E+000		6.6463E-001
Am-241	59.54	35.90	1.4575E+000	1.46E+000	1.6883E-002
Cm-243	228.19	10.56	1.3368E+000	9.19E-001	-7.5302E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.1918E-001	9.19E-001	-1.0608E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 2:23:46 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-120-F-
Sample Title: OOL-09-02-120-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 2:13:42 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-120-F-
Title: OOL-09-02-120-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	282-	309	300.42	75.01	1.89	1.33E+003	236.69	2.94E+003
2	334-	344	339.92	84.88	0.38	1.49E+002	109.70	1.25E+003
3	947-	962	954.99	238.69	0.99	2.67E+002	73.71	3.81E+002
4	1398-	1416	1407.60	351.88	0.67	1.14E+002	58.94	2.34E+002
5	2032-	2054	2044.20	511.07	0.85	1.68E+002	52.66	1.42E+002
6	2320-	2345	2332.76	583.23	1.82	2.42E+002	52.23	1.10E+002
7	2425-	2447	2438.48	609.66	1.44	1.81E+002	45.87	9.44E+001
8	2904-	2915	2909.48	727.44	0.69	4.69E+001	24.25	4.21E+001
9	3635-	3655	3645.64	911.53	0.48	1.82E+002	38.29	5.50E+001
10	3869-	3887	3876.61	969.29	1.66	1.11E+002	34.08	5.63E+001
11	5832-	5860	5847.14	1462.06	2.16	1.23E+003	71.03	1.81E+001
12	7056-	7074	7063.82	1766.30	0.30	4.74E+001	18.21	1.16E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	1.000	511.00*	100.00	2.36805E-001	8.07447E-002
K-40	0.952	1460.81*	10.67	2.12832E+001	2.11655E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.09632E+000	3.84390E-001
		583.14*	84.20	4.22091E-001	1.06447E-001
		860.37	12.46		
Bi-212	0.998	727.17*	11.80	6.20404E-001	3.29270E-001
Pb-212	0.521	74.81* @	10.70	1.97039E+001	5.21842E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.70160E-001	2.12783E-001
Bi-214	0.675	609.31*	46.30	5.81810E-001	1.64196E-001
		1120.29	15.10		
		1764.49*	15.80	5.75748E-001	2.28339E-001
Ac-228	0.630	338.32	11.40		
		911.07*	27.70	1.07649E+000	2.58062E-001
		969.11*	16.60	1.11175E+000	3.61432E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN	1.000	1.456339E-001	8.390191E-002
K-40	0.952	2.128319E+001	2.116552E+000
TL-208	0.751	4.220906E-001	1.055544E-001
Bi-212	0.998	6.204042E-001	3.292703E-001
Pb-212 @	0.521	6.701595E-001	2.127834E-001
Bi-214	0.675	5.797436E-001	1.333080E-001
Ac-228	0.630	1.088394E+000	2.100224E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.88	2.4892E-001	73.45
4	351.88	1.9018E-001	51.65

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0896E-001	7.89E-002	1.1603E-001
	1332.49	100.00	7.8908E-002		-8.0800E-003
Nb-94	702.63	100.00	1.0576E-001	9.92E-002	6.1436E-002
	871.10	100.00	9.9194E-002		-5.5347E-002
Ag-108m	79.20	7.10	5.7988E+000	1.20E-001	-5.8082E+000
	433.93	89.90	1.2027E-001		-9.4889E-002
	614.37	90.40	1.4927E-001		-6.9470E-003
	722.95	90.50	1.2419E-001		-9.1224E-002
Sb-125	176.33	6.89	2.3431E+000	3.97E-001	-1.1596E+000
	427.89	29.33	3.9691E-001		8.0581E-002
	463.38	10.35	1.1155E+000		1.3832E+000
	600.56	17.80	6.0574E-001		-2.8916E-001
	606.64	5.02	2.7706E+000		6.7361E+000
	635.90	11.32	8.7477E-001		5.3571E-001
Cs-134	563.23	8.38	1.2757E+000	1.19E-001	-2.6874E-001
	569.32	15.43	6.8655E-001		-6.5099E-001
	604.70	97.60	1.3602E-001		-3.3259E-002
	795.84	85.40	1.1875E-001		3.6009E-002
	801.93	8.73	1.1439E+000		-7.4486E-001
Cs-137	661.65	85.12	1.2214E-001	1.22E-001	4.5890E-002
Eu-152	121.78	28.40	7.9530E-001	3.59E-001	5.3748E-002
	244.69	7.49	1.9523E+000		-1.7475E+000
	344.27	26.50	4.5539E-001		-6.8670E-001
	778.89	12.74	8.5807E-001		-3.0401E-001
	867.32	4.16	2.5289E+000		-2.2516E+000
	964.01	14.40	8.9167E-001		-1.9054E-001
	1085.78	10.00	9.9758E-001		-1.0328E-001
	1112.02	13.30	7.4227E-001		2.9552E-001
	1407.95	20.70	3.5859E-001		7.9676E-002
Eu-154	123.07	40.50	5.5093E-001	2.60E-001	-4.7489E-002
	247.94	6.60	2.0583E+000		-1.3765E+000
	591.81	4.83	2.2025E+000		-6.6885E-001
	723.30	19.70	5.6687E-001		-5.6002E-001
	756.87	4.33	2.2856E+000		4.6620E-001
	873.19	11.50	8.4450E-001		-1.0164E+000
	996.32	10.30	1.0365E+000		-7.3487E-001
	1004.76	17.90	6.1918E-001		5.1741E-002
	1274.45	35.50	2.6025E-001		-8.1307E-003
Eu-155	86.54	30.90	1.1717E+000	1.17E+000	1.3010E+000
	105.31	20.70	1.2691E+000		-1.8738E-001
Am-241	59.54	35.90	1.4536E+000	1.45E+000	6.2908E-001
Cm-243	228.19	10.56	1.3761E+000	9.58E-001	1.0808E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.5787E-001	9.58E-001	3.4513E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 10:21:29 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-02-121-F-
Sample Title: OOL-09-02-121-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 10:11:28 AM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: ORG7829
Log Number: OOL-09-02-121-F-
Title: OOL-09-02-121-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	293.18	73.30	0.95	1.34E+002	46.09	8.37E+002
m	2	284-	306	300.65	75.16	0.95	2.66E+002	55.15	9.98E+002
	3	325-	345	340.22	85.06	0.90	1.65E+002	141.02	1.38E+003
	4	947-	973	954.50	238.64	1.36	2.62E+002	96.34	4.79E+002
	5	1347-	1359	1352.45	338.13	0.44	6.13E+001	38.89	1.25E+002
	6	1401-	1415	1407.52	351.90	0.94	8.88E+001	43.69	1.41E+002
	7	2034-	2055	2043.10	510.81	1.32	1.50E+002	46.01	1.07E+002
	8	2323-	2341	2332.54	583.17	1.02	1.60E+002	41.13	8.31E+001
	9	2429-	2447	2437.76	609.48	1.52	9.40E+001	41.22	1.03E+002
	10	2901-	2915	2908.65	727.21	0.80	3.79E+001	25.52	4.41E+001
	11	3637-	3655	3644.71	911.24	1.69	1.35E+002	32.42	4.12E+001
M	12	3854-	3886	3859.29	964.89	1.50	2.13E+001	13.22	2.91E+001
m	13	3854-	3886	3875.67	968.99	1.50	8.41E+001	21.69	4.96E+001
	14	5832-	5857	5844.49	1461.23	1.88	8.37E+002	57.56	6.23E+000
	15	7053-	7066	7059.29	1764.95	0.30	2.83E+001	13.28	5.69E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.999	511.00*	100.00	2.69484E-001	9.03524E-002
K-40	0.994	1460.81*	10.67	1.90192E+001	2.02060E+000
TL-208	0.753	277.35	6.80		
		510.84*	21.60	1.24761E+000	4.30528E-001
		583.14*	84.20	3.56962E-001	1.02907E-001
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	6.43930E-001	4.40021E-001
Pb-212	0.594	74.81* @	10.70	1.03010E+001	2.93873E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.56564E-001	3.41937E-001
Bi-214	0.695	609.31*	46.30	3.87393E-001	1.76421E-001
		1120.29	15.10		
		1764.49*	15.80	4.60367E-001	2.20737E-001
Ac-228	0.999	338.32*	11.40	8.50976E-001	5.56305E-001
		911.07*	27.70	1.02610E+000	2.73560E-001
		969.11*	16.60	1.08531E+000	3.02268E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN	0.999	1.923799E-001	9.301243E-002
K-40	0.994	1.901917E+001	2.020601E+000
TL-208	0.753	3.569617E-001	1.022473E-001
Bi-212	1.000	6.439305E-001	4.400212E-001
Pb-212 @	0.594	8.565636E-001	3.419365E-001
Bi-214	0.695	4.158377E-001	1.378129E-001
Ac-228	0.999	1.029080E+000	1.905577E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.30	2.2370E-001	34.34
3	85.06	2.7502E-001	85.46
6	351.90	1.4806E-001	49.18
M 12	964.89	3.5533E-002	62.00

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2008E-001	1.03E-001	6.9701E-002
	1332.49	100.00	1.0264E-001		9.9600E-002
Nb-94	702.63	100.00	1.1565E-001	1.10E-001	-4.0788E-002
	871.10	100.00	1.1019E-001		-7.3982E-002
Ag-108m	79.20	7.10	1.0754E+001	1.43E-001	-2.6506E+000
	433.93	89.90	1.4328E-001		-1.5784E-001
	614.37	90.40	1.6991E-001		6.5472E-002
	722.95	90.50	1.4894E-001		1.2771E-001
Sb-125	176.33	6.89	2.9710E+000	4.43E-001	-4.5040E-001
	427.89	29.33	4.4300E-001		-8.4756E-003
	463.38	10.35	1.3405E+000		7.5132E-001
	600.56	17.80	7.1825E-001		-4.7979E-001
	606.64	5.02	3.2513E+000		6.5895E+000
	635.90	11.32	1.0559E+000		-7.0973E-001
Cs-134	563.23	8.38	1.5578E+000	1.38E-001	1.7570E-001
	569.32	15.43	8.4723E-001		4.3032E-001
	604.70	97.60	1.6266E-001		2.2073E-002
	795.84	85.40	1.3781E-001		-5.1415E-003
	801.93	8.73	1.2492E+000		-8.1527E-001
Cs-137	661.65	85.12	1.3496E-001	1.35E-001	-1.7511E-001
Eu-152	121.78	28.40	1.0305E+000	4.20E-001	4.3351E-001
	244.69	7.49	2.3037E+000		9.1391E-001
	344.27	26.50	5.6826E-001		-2.6146E-001
	778.89	12.74	9.0989E-001		-7.3477E-001
	867.32	4.16	2.7521E+000		-2.0171E+000
	964.01	14.40	1.0729E+000		-2.9196E-003
	1085.78	10.00	1.1080E+000		1.5681E-001
	1112.02	13.30	9.5555E-001		1.4375E+000
	1407.95	20.70	4.2000E-001		3.6862E-001
Eu-154	123.07	40.50	7.0954E-001	3.08E-001	-9.7714E-002
	247.94	6.60	2.5353E+000		1.1343E+000
	591.81	4.83	2.6727E+000		1.0544E-001
	723.30	19.70	6.7571E-001		3.5424E-001
	756.87	4.33	2.8138E+000		1.3666E+000
	873.19	11.50	9.5472E-001		-1.8284E-001
	996.32	10.30	1.1472E+000		2.1487E-001
	1004.76	17.90	6.1456E-001		1.4476E-001
	1274.45	35.50	3.0792E-001		1.8683E-001
Eu-155	86.54	30.90	1.8388E+000	1.82E+000	2.1093E-001
	105.31	20.70	1.8224E+000		-8.0757E-001
Am-241	59.54	35.90	4.2692E+000	4.27E+000	1.6705E+000
Cm-243	228.19	10.56	1.6572E+000	1.14E+000	1.1329E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1421E+000	1.14E+000	-3.3222E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 9:55:45 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-02-122-F-
Sample Title: OOL-09-02-122-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 9:45:40 AM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: ORG7829
Log Number: OOL-09-02-122-F-
Title: OOL-09-02-122-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	305	292.00	73.00	1.14	2.45E+002	49.44	8.82E+002
m	2	283-	305	301.08	75.27	1.15	3.85E+002	56.97	9.06E+002
	3	333-	345	340.23	85.06	0.81	9.25E+001	95.60	8.68E+002
	4	950-	961	955.81	238.97	1.04	1.52E+002	58.09	2.90E+002
	5	1401-	1420	1408.94	352.26	0.99	1.02E+002	52.68	1.76E+002
	6	2037-	2054	2044.75	511.22	0.62	9.86E+001	41.20	1.05E+002
	7	2327-	2343	2334.84	583.75	1.50	1.47E+002	36.97	6.63E+001
	8	2431-	2448	2440.14	610.08	0.82	1.12E+002	38.30	8.31E+001
	9	2902-	2919	2911.99	728.05	0.72	5.56E+001	27.82	4.34E+001
	10	3639-	3656	3648.86	912.28	2.04	8.98E+001	32.35	5.62E+001
	11	3874-	3888	3880.09	970.09	1.36	5.97E+001	23.98	3.13E+001
	12	5837-	5863	5850.46	1462.72	1.76	8.34E+002	60.00	2.35E+001
	13	7061-	7074	7067.65	1767.04	1.30	3.66E+001	14.09	5.35E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.998	511.00*	100.00	1.77147E-001	7.78227E-002
K-40	0.886	1460.81*	10.67	1.89735E+001	2.05442E+000
TL-208	0.744	277.35	6.80		
		510.84*	21.60	8.20125E-001	3.66463E-001
		583.14*	84.20	3.27503E-001	9.29069E-002
		860.37	12.46		
Bi-212	0.975	727.17*	11.80	9.43865E-001	4.85499E-001
Pb-212	0.591	74.81* @	10.70	1.48173E+001	3.64050E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.96790E-001	2.05053E-001
Bi-214	0.391	609.31*	46.30	4.61457E-001	1.67798E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.600	338.32	11.40		
		911.07*	27.70	6.83611E-001	2.58554E-001
		969.11*	16.60	7.70889E-001	3.20062E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN	0.998	1.064065E-001	8.033546E-002
K-40	0.886	1.897347E+001	2.054417E+000
TL-208	0.744	3.275029E-001	9.229182E-002
Bi-212	0.975	9.438650E-001	4.854990E-001
Pb-212 @	0.591	4.967901E-001	2.050525E-001
Bi-214	0.391	4.614566E-001	1.677980E-001
Ac-228	0.600	7.180761E-001	2.011269E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.00	4.0873E-001	20.16
3	85.06	1.5412E-001	103.38
5	352.26	1.7043E-001	51.52
13	1767.04	6.1081E-002	38.44

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1564E-001	9.06E-002	2.1894E-002
	1332.49	100.00	9.0643E-002		1.1279E-002
Nb-94	702.63	100.00	1.1719E-001	1.10E-001	5.5285E-002
	871.10	100.00	1.0973E-001		2.8544E-002
Ag-108m	79.20	7.10	1.0773E+001	1.44E-001	-2.1925E+001
	433.93	89.90	1.4384E-001		2.8688E-002
	614.37	90.40	1.7798E-001		-1.5807E-002
	722.95	90.50	1.4594E-001		-4.8504E-002
Sb-125	176.33	6.89	2.8764E+000	4.41E-001	1.6358E+000
	427.89	29.33	4.4132E-001		-2.9013E-001
	463.38	10.35	1.2064E+000		6.8259E-001
	600.56	17.80	6.5064E-001		-3.2922E-001
	606.64	5.02	3.0729E+000		-7.5896E-001
	635.90	11.32	1.0776E+000		-1.0688E+000
Cs-134	563.23	8.38	1.4084E+000	1.32E-001	-9.0014E-001
	569.32	15.43	7.8261E-001		4.9612E-001
	604.70	97.60	1.4135E-001		-9.7442E-003
	795.84	85.40	1.3152E-001		4.9044E-002
	801.93	8.73	1.2839E+000		-3.7537E-001
Cs-137	661.65	85.12	1.3979E-001	1.40E-001	-1.8938E-002
Eu-152	121.78	28.40	1.0289E+000	4.63E-001	6.2276E-001
	244.69	7.49	2.2833E+000		-2.5520E+000
	344.27	26.50	5.3252E-001		-1.0455E+000
	778.89	12.74	8.9056E-001		-4.1353E-001
	867.32	4.16	2.9905E+000		-9.5857E-002
	964.01	14.40	9.7061E-001		4.3458E-001
	1085.78	10.00	1.1029E+000		-1.2214E-001
	1112.02	13.30	8.3070E-001		0.0000E+000
	1407.95	20.70	4.6252E-001		1.6724E-001
Eu-154	123.07	40.50	7.0287E-001	2.92E-001	-3.5815E-001
	247.94	6.60	2.4716E+000		-3.1561E+000
	591.81	4.83	2.4573E+000		-2.6424E+000
	723.30	19.70	6.7743E-001		-5.0039E-002
	756.87	4.33	2.8487E+000		-2.6827E+000
	873.19	11.50	9.2266E-001		-2.9519E-001
	996.32	10.30	1.0609E+000		8.8567E-001
	1004.76	17.90	6.2800E-001		2.7503E-001
	1274.45	35.50	2.9151E-001		-1.3927E-001
Eu-155	86.54	30.90	1.8128E+000	1.79E+000	1.3104E+000
	105.31	20.70	1.7900E+000		1.0095E+000
Am-241	59.54	35.90	4.2379E+000	4.24E+000	6.4008E-001
Cm-243	228.19	10.56	1.5977E+000	1.15E+000	-1.9031E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1534E+000	1.15E+000	6.0921E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 8:02:01 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-02-123-F-
Sample Title: OOL-09-02-123-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 7:51:59 AM
Live Time: 600.0 seconds
Real Time: 600.8 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: ORG7829
Log Number: OOL-09-02-123-F-
Title: OOL-09-02-123-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	308	291.93	72.98	0.92	1.45E+002	44.46	5.71E+002
m	2	288-	308	300.79	75.20	0.93	2.54E+002	52.16	8.17E+002
	3	946-	961	955.55	238.90	0.75	2.27E+002	66.34	3.06E+002
	4	1174-	1188	1181.04	295.28	0.57	6.29E+001	48.43	1.90E+002
	5	1349-	1359	1354.29	338.59	0.34	3.36E+001	36.52	1.31E+002
	6	1399-	1417	1408.22	352.08	1.41	1.28E+002	48.06	1.40E+002
	7	2322-	2346	2333.87	583.51	1.11	1.86E+002	45.27	8.43E+001
	8	2431-	2447	2438.29	609.61	0.96	1.27E+002	37.09	7.39E+001
	9	3637-	3655	3647.25	911.88	1.66	1.16E+002	31.07	4.00E+001
	10	3872-	3886	3878.35	969.66	0.58	4.30E+001	23.62	3.50E+001
	11	4475-	4492	4484.04	1121.09	0.59	5.58E+001	27.99	4.52E+001
	12	5835-	5861	5848.07	1462.12	2.15	8.86E+002	62.06	2.68E+001
	13	7060-	7073	7066.40	1766.73	0.74	3.10E+001	13.93	7.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.944	1460.81*	10.67	2.01475E+001	2.15673E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.14507E-001	1.14567E-001
		860.37	12.46		
Pb-212	0.592	74.81* @	10.70	9.83567E+000	2.78974E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.41010E-001	2.45785E-001
Bi-214	0.961	609.31*	46.30	5.23898E-001	1.65898E-001
		1120.29*	15.10	8.23929E-001	4.22124E-001
		1764.49*	15.80	5.04287E-001	2.32148E-001
PB-214	0.627	74.82* @	6.21	1.69471E+001	4.96173E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.01694E-001	3.95643E-001
		351.92*	37.20	5.50087E-001	2.26072E-001
Ac-228	0.986	338.32*	11.40	4.66222E-001	5.12521E-001
		911.07*	27.70	8.82975E-001	2.57415E-001
		969.11*	16.60	5.55443E-001	3.10524E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40		0.944	2.014746E+001	2.156727E+000
TL-208		0.469	4.145067E-001	1.145672E-001
Pb-212	@	0.592	7.410101E-001	2.457850E-001
Bi-214		0.961	5.457136E-001	1.285630E-001
PB-214	@	0.627	5.381760E-001	1.962872E-001
Ac-228		0.986	7.127176E-001	1.848396E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.98	2.4178E-001	30.65

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1862E-001	1.02E-001	5.0175E-002
	1332.49	100.00	1.0202E-001		3.2466E-002
Nb-94	702.63	100.00	1.1833E-001	1.13E-001	6.1229E-002
	871.10	100.00	1.1286E-001		-7.7709E-002
Ag-108m	79.20	7.10	1.0435E+001	1.41E-001	1.8015E+000
	433.93	89.90	1.4769E-001		-1.6203E-001
	614.37	90.40	1.7657E-001		-4.2329E-003
	722.95	90.50	1.4093E-001		6.8558E-002
Sb-125	176.33	6.89	2.8256E+000	4.65E-001	-1.9709E-001
	427.89	29.33	4.6515E-001		1.6630E-001
	463.38	10.35	1.2876E+000		9.0234E-001
	600.56	17.80	7.3589E-001		5.0927E-001
	606.64	5.02	3.2364E+000		4.9330E+000
	635.90	11.32	1.0746E+000		2.9765E-001
Cs-134	563.23	8.38	1.5543E+000	1.47E-001	1.4247E+000
	569.32	15.43	8.4334E-001		1.8911E-001
	604.70	97.60	1.6551E-001		-1.4946E-002
	795.84	85.40	1.4695E-001		9.0009E-003
	801.93	8.73	1.3411E+000		-3.6364E-001
Cs-137	661.65	85.12	1.4486E-001	1.45E-001	1.0180E-001
Eu-152	121.78	28.40	1.0207E+000	4.20E-001	7.2812E-002
	244.69	7.49	2.2647E+000		-1.5190E+000
	344.27	26.50	5.2491E-001		-4.4325E-001
	778.89	12.74	9.5037E-001		2.1440E-001
	867.32	4.16	2.9035E+000		-5.6478E-001
	964.01	14.40	9.3657E-001		-4.1026E-001
	1085.78	10.00	1.0563E+000		-7.2583E-001
	1112.02	13.30	8.1121E-001		-2.9670E-001
	1407.95	20.70	4.2000E-001		-1.0503E-001
Eu-154	123.07	40.50	7.1381E-001	3.00E-001	6.5134E-001
	247.94	6.60	2.5288E+000		-1.1833E+000
	591.81	4.83	2.6140E+000		-8.8656E-001
	723.30	19.70	6.5110E-001		2.6763E-001
	756.87	4.33	2.7785E+000		3.1834E-001
	873.19	11.50	9.8569E-001		1.1436E-001
	996.32	10.30	1.1472E+000		8.7674E-001
	1004.76	17.90	5.9520E-001		-1.0787E+000
	1274.45	35.50	2.9983E-001		1.4720E-001
Eu-155	86.54	30.90	1.7865E+000	1.76E+000	1.4254E+000
	105.31	20.70	1.7550E+000		-1.0753E+000
Am-241	59.54	35.90	4.1676E+000	4.17E+000	-8.2200E-001
Cm-243	228.19	10.56	1.6422E+000	1.16E+000	1.8763E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1567E+000	1.16E+000	-6.9290E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 7:25:15 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-124-F-
Sample Title: OOL-09-02-124-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 7:15:13 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-124-F-
Title: OOL-09-02-124-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	309	291.99	72.90	1.51	4.60E+002	74.24	1.64E+003
m	2	284-	309	300.27	74.97	1.52	7.94E+002	81.01	2.22E+003
	3	335-	345	338.33	84.49	0.63	1.40E+002	102.25	1.08E+003
	4	946-	963	953.73	238.38	0.87	3.26E+002	79.90	4.05E+002
	5	1175-	1189	1179.79	294.91	1.13	8.25E+001	52.30	2.15E+002
	6	1347-	1360	1351.87	337.94	1.01	8.07E+001	44.47	1.55E+002
	7	1397-	1416	1406.10	351.50	0.37	1.22E+002	58.24	2.17E+002
	8	2030-	2053	2041.15	510.30	1.27	1.38E+002	57.81	1.83E+002
	9	2322-	2343	2330.81	582.74	1.85	1.97E+002	46.90	9.90E+001
	10	2425-	2447	2434.83	608.75	1.12	1.72E+002	49.45	1.20E+002
	11	2900-	2913	2906.52	726.70	0.89	3.39E+001	26.98	5.51E+001
	12	3634-	3656	3642.98	910.87	0.70	1.83E+002	36.14	4.11E+001
	13	3867-	3886	3873.79	968.59	1.07	1.28E+002	33.14	4.54E+001
	14	4470-	4486	4478.27	1119.75	0.77	5.26E+001	27.64	4.64E+001
	15	5828-	5858	5842.93	1461.00	2.16	1.14E+003	69.86	2.70E+001
	16	7052-	7069	7060.33	1765.43	0.58	6.60E+001	19.17	9.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.985	511.00*		100.00	1.94205E-001	8.54617E-002
K-40	0.999	1460.81*		10.67	1.97064E+001	2.00160E+000
TL-208	0.747	277.35		6.80		
		510.84*		21.60	8.99096E-001	4.02412E-001
		583.14*		84.20	3.43786E-001	9.32838E-002
		860.37		12.46		
Bi-212	0.993	727.17*		11.80	4.49077E-001	3.60993E-001
Pb-212	0.520	74.81*	@	10.70	1.17805E+001	2.60310E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.19210E-001	2.38092E-001
Bi-214	0.987	609.31*		46.30	5.55107E-001	1.73293E-001
		1120.29*		15.10	6.04409E-001	3.24239E-001
		1764.49*		15.80	8.00765E-001	2.45956E-001
PB-214	0.580	74.82*	@	6.21	2.02982E+001	4.72105E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.10990E-001	3.35078E-001
		351.92*		37.20	4.08378E-001	2.07197E-001
Ac-228	0.996	338.32*		11.40	8.74922E-001	5.01132E-001
		911.07*		27.70	1.08144E+000	2.47310E-001
		969.11*		16.60	1.28104E+000	3.58820E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.985	1.199468E-001	8.777155E-002
K-40		0.999	1.970640E+001	2.001597E+000
TL-208		0.747	3.437863E-001	9.260851E-002
Bi-212		0.993	4.490774E-001	3.609934E-001
Pb-212	@	0.520	8.192100E-001	2.380923E-001
Bi-214		0.987	6.314405E-001	1.298131E-001
PB-214	@	0.580	4.367603E-001	1.762269E-001
Ac-228		0.996	1.107348E+000	1.886498E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.90	7.6672E-001	16.14
3	84.49	2.3278E-001	73.21

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0992E-001	7.65E-002	9.5732E-002
	1332.49	100.00	7.6465E-002		1.5350E-002
Nb-94	702.63	100.00	1.0290E-001	9.92E-002	-4.7000E-002
	871.10	100.00	9.9194E-002		-6.4781E-002
Ag-108m	79.20	7.10	5.5134E+000	1.26E-001	-4.1623E+000
	433.93	89.90	1.2990E-001		-5.3947E-002
	614.37	90.40	1.3844E-001		2.1280E-002
	722.95	90.50	1.2606E-001		2.5396E-002
Sb-125	176.33	6.89	2.3876E+000	4.00E-001	5.9106E-001
	427.89	29.33	4.0034E-001		1.1176E-002
	463.38	10.35	1.1447E+000		5.2461E-001
	600.56	17.80	6.0186E-001		-1.1268E-001
	606.64	5.02	2.8405E+000		3.7008E+000
	635.90	11.32	9.1306E-001		3.4515E-001
Cs-134	563.23	8.38	1.3700E+000	1.29E-001	5.8112E-001
	569.32	15.43	7.1378E-001		-5.1603E-001
	604.70	97.60	1.4470E-001		-4.8931E-003
	795.84	85.40	1.2857E-001		6.6326E-002
	801.93	8.73	1.1172E+000		-1.6148E+000
Cs-137	661.65	85.12	1.2421E-001	1.24E-001	1.6481E-002
Eu-152	121.78	28.40	7.6081E-001	4.08E-001	-2.7226E-001
	244.69	7.49	1.9866E+000		-1.0081E+000
	344.27	26.50	4.6601E-001		6.1222E-002
	778.89	12.74	8.0996E-001		-9.8443E-001
	867.32	4.16	2.3967E+000		-2.2805E+000
	964.01	14.40	9.5332E-001		4.0061E-002
	1085.78	10.00	1.0076E+000		6.5410E-001
	1112.02	13.30	7.7280E-001		6.4787E-001
	1407.95	20.70	4.0815E-001		3.8912E-001
Eu-154	123.07	40.50	5.3011E-001	2.67E-001	6.2208E-002
	247.94	6.60	2.0850E+000		-1.6699E-001
	591.81	4.83	2.2121E+000		1.5246E+000
	723.30	19.70	5.8283E-001		5.5096E-001
	756.87	4.33	2.4860E+000		1.2550E+000
	873.19	11.50	9.0374E-001		9.1813E-001
	996.32	10.30	8.9594E-001		-1.2488E-001
	1004.76	17.90	5.1872E-001		1.1524E-001
	1274.45	35.50	2.6689E-001		-4.2265E-001
Eu-155	86.54	30.90	1.1054E+000	1.11E+000	1.5912E+000
	105.31	20.70	1.2161E+000		2.0690E-001
Am-241	59.54	35.90	1.3564E+000	1.36E+000	-3.0776E-001
Cm-243	228.19	10.56	1.3770E+000	9.67E-001	-3.0602E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.6750E-001	9.67E-001	-4.3150E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 8:47:45 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-125-F-
Sample Title: OOL-09-02-125-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 8:37:17 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-125-F-
Title: OOL-09-02-125-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	308	291.89	72.87	1.39	3.52E+002	68.85	1.69E+003
m	2	283-	308	299.96	74.89	1.39	6.82E+002	77.12	2.08E+003
	3	329-	343	338.34	84.49	0.94	1.77E+002	125.98	1.37E+003
	4	946-	964	953.58	238.34	0.96	3.10E+002	80.08	4.01E+002
	5	1397-	1412	1405.84	351.44	1.16	1.50E+002	52.91	1.92E+002
	6	2321-	2341	2329.75	582.47	1.59	1.90E+002	46.95	1.06E+002
	7	2424-	2446	2434.27	608.61	1.95	2.08E+002	46.10	8.90E+001
	8	3633-	3652	3641.36	910.46	1.71	1.66E+002	37.28	5.62E+001
	9	3867-	3881	3873.77	968.58	1.38	7.15E+001	25.83	3.55E+001
	10	5826-	5857	5841.75	1460.71	2.10	1.19E+003	72.28	3.52E+001
	11	7050-	7066	7057.78	1764.79	1.75	5.05E+001	16.52	6.46E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	2.05333E+001	2.08026E+000
TL-208	0.462	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.31388E-001	9.26011E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.01360E+001	2.29344E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.76744E-001	2.34944E-001
Bi-214	0.689	609.31*	46.30	6.69754E-001	1.69811E-001
		1120.29	15.10		
		1764.49*	15.80	6.13194E-001	2.09538E-001
Ac-228	0.625	338.32	11.40		
		911.07*	27.70	9.80048E-001	2.47620E-001
		969.11*	16.60	7.17597E-001	2.69995E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
K-40	1.000	2.053326E+001	2.080261E+000
TL-208	0.462	3.313879E-001	9.260113E-002
Pb-212 @	0.520	7.767440E-001	2.349435E-001
Bi-214	0.689	6.473334E-001	1.319277E-001
Ac-228	0.625	8.601466E-001	1.824921E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.87	5.8695E-001	19.55
3	84.49	2.9462E-001	71.27
5	351.44	2.4935E-001	35.36

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0602E-001	7.65E-002	5.1174E-003
	1332.49	100.00	7.6465E-002		4.1727E-002
Nb-94	702.63	100.00	1.0290E-001	9.46E-002	-5.9224E-002
	871.10	100.00	9.4581E-002		-5.0622E-002
Ag-108m	79.20	7.10	5.2900E+000	1.26E-001	-1.0717E+000
	433.93	89.90	1.2933E-001		9.4911E-002
	614.37	90.40	1.3844E-001		1.6888E-002
	722.95	90.50	1.2606E-001		-3.2281E-003
Sb-125	176.33	6.89	2.3690E+000	3.82E-001	1.9877E+000
	427.89	29.33	3.8223E-001		-8.4249E-002
	463.38	10.35	1.0437E+000		-6.0168E-001
	600.56	17.80	5.6980E-001		-1.5803E-001
	606.64	5.02	2.8127E+000		5.0912E+000
	635.90	11.32	8.8165E-001		2.4707E-001
Cs-134	563.23	8.38	1.3199E+000	1.26E-001	4.2186E-001
	569.32	15.43	7.1798E-001		4.5230E-001
	604.70	97.60	1.4308E-001		1.0993E-002
	795.84	85.40	1.2642E-001		-1.5502E-002
	801.93	8.73	1.1985E+000		-8.5106E-001
Cs-137	661.65	85.12	1.2769E-001	1.28E-001	4.0279E-002
Eu-152	121.78	28.40	7.5396E-001	3.59E-001	4.9062E-001
	244.69	7.49	1.8764E+000		-2.0505E+000
	344.27	26.50	4.5914E-001		-4.8598E-001
	778.89	12.74	8.6212E-001		1.1026E-001
	867.32	4.16	2.2867E+000		-1.6396E+000
	964.01	14.40	8.2525E-001		1.0645E-001
	1085.78	10.00	9.8399E-001		-8.3625E-001
	1112.02	13.30	7.7529E-001		-1.2585E+000
	1407.95	20.70	3.5859E-001		1.2542E-002
Eu-154	123.07	40.50	5.2169E-001	2.50E-001	-2.6347E-001
	247.94	6.60	2.0599E+000		-7.1305E-001
	591.81	4.83	2.1930E+000		5.3511E-001
	723.30	19.70	5.8040E-001		2.9017E-003
	756.87	4.33	2.2856E+000		-2.6476E-001
	873.19	11.50	8.1458E-001		-1.8334E-001
	996.32	10.30	9.4202E-001		-3.3201E-003
	1004.76	17.90	5.2066E-001		-1.6270E-001
	1274.45	35.50	2.4995E-001		2.4002E-002
Eu-155	86.54	30.90	1.0885E+000	1.09E+000	-4.9474E-001
	105.31	20.70	1.1846E+000		-7.0186E-001
Am-241	59.54	35.90	1.3485E+000	1.35E+000	-3.8624E-002
Cm-243	228.19	10.56	1.3513E+000	9.69E-001	5.3270E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.6909E-001	9.69E-001	2.5180E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 9:33:10 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-126-F-
Sample Title: OOL-09-02-126-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 9:23:05 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-126-F-
Title: OOL-09-02-126-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	308	300.05	74.92	1.60	7.64E+002	162.81	1.88E+003
2	330-	344	339.13	84.69	0.79	2.68E+002	124.46	1.31E+003
3	945-	962	954.45	238.56	1.52	2.91E+002	79.49	4.16E+002
4	1174-	1190	1179.40	294.81	0.80	1.01E+002	56.42	2.23E+002
5	1342-	1363	1352.43	338.08	1.03	1.31E+002	62.39	2.35E+002
6	1395-	1413	1407.07	351.74	0.89	2.10E+002	54.44	1.66E+002
7	2029-	2051	2041.44	510.38	1.90	1.68E+002	48.16	1.13E+002
8	2322-	2343	2331.24	582.85	2.03	2.18E+002	47.29	9.74E+001
9	2422-	2444	2435.33	608.88	1.52	2.26E+002	46.91	9.00E+001
10	3632-	3653	3643.58	911.02	0.58	1.91E+002	41.05	6.60E+001
11	3863-	3882	3874.07	968.66	0.56	9.04E+001	35.91	6.96E+001
12	4469-	4487	4478.26	1119.74	0.67	7.20E+001	27.04	3.50E+001
13	5828-	5857	5842.43	1460.88	2.20	1.14E+003	68.11	1.46E+001
14	7052-	7068	7058.71	1765.03	0.42	4.82E+001	16.25	6.84E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.988	511.00*		100.00	2.36712E-001	7.49578E-002
K-40	1.000	1460.81*		10.67	1.97129E+001	1.98390E+000
TL-208	0.749	277.35		6.80		
		510.84*		21.60	1.09589E+000	3.58382E-001
		583.14*		84.20	3.79717E-001	9.62128E-002
		860.37		12.46		
Pb-212	0.521	74.81*	@	10.70	1.13476E+001	3.28547E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.29272E-001	2.29936E-001
Bi-214	0.993	609.31*		46.30	7.27740E-001	1.75638E-001
		1120.29*		15.10	8.28216E-001	3.23209E-001
		1764.49*		15.80	5.84333E-001	2.05634E-001
PB-214	0.581	74.82*	@	6.21	1.95522E+001	5.83617E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	6.25634E-001	3.64823E-001
		351.92*		37.20	7.05959E-001	2.17681E-001
Ac-228	0.998	338.32*		11.40	1.41925E+000	7.12039E-001
		911.07*		27.70	1.12935E+000	2.75306E-001
		969.11*		16.60	9.08073E-001	3.72894E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.988	1.546932E-001	7.773940E-002
K-40		1.000	1.971295E+001	1.983897E+000
TL-208		0.749	3.797169E-001	9.541371E-002
Pb-212	@	0.521	7.292723E-001	2.299357E-001
Bi-214		0.993	6.907249E-001	1.234306E-001
PB-214	@	0.581	6.848699E-001	1.869333E-001
Ac-228		0.998	1.083749E+000	2.114876E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.69	4.4591E-001	46.52

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0831E-001	8.27E-002	3.6152E-003
	1332.49	100.00	8.2657E-002		-1.2715E-002
Nb-94	702.63	100.00	1.0264E-001	9.58E-002	-4.3378E-002
	871.10	100.00	9.5834E-002		-1.0868E-002
Ag-108m	79.20	7.10	5.2445E+000	1.23E-001	-4.4878E+000
	433.93	89.90	1.2310E-001		-7.8448E-002
	614.37	90.40	1.4512E-001		-5.3946E-002
	722.95	90.50	1.3100E-001		1.6819E-001
Sb-125	176.33	6.89	2.3368E+000	3.78E-001	2.4811E-002
	427.89	29.33	3.7801E-001		-1.9640E-001
	463.38	10.35	1.0856E+000		6.3330E-001
	600.56	17.80	5.8338E-001		-1.4812E-001
	606.64	5.02	2.8405E+000		4.6532E+000
	635.90	11.32	9.1526E-001		3.5288E-001
Cs-134	563.23	8.38	1.3070E+000	1.28E-001	-2.4931E-001
	569.32	15.43	7.1237E-001		1.8396E-001
	604.70	97.60	1.4452E-001		-7.6201E-002
	795.84	85.40	1.2796E-001		8.6552E-002
	801.93	8.73	1.0932E+000		-1.6997E+000
Cs-137	661.65	85.12	1.2596E-001	1.26E-001	8.0110E-002
Eu-152	121.78	28.40	7.4286E-001	4.04E-001	-2.1018E-001
	244.69	7.49	1.9587E+000		3.6997E-001
	344.27	26.50	4.6549E-001		2.9850E-002
	778.89	12.74	7.8140E-001		-1.3061E+000
	867.32	4.16	2.3895E+000		-1.7413E+000
	964.01	14.40	9.4227E-001		3.5058E-001
	1085.78	10.00	9.8741E-001		3.2275E-001
	1112.02	13.30	8.0212E-001		6.3568E-001
	1407.95	20.70	4.0371E-001		4.3223E-001
Eu-154	123.07	40.50	5.1680E-001	2.57E-001	-2.9408E-003
	247.94	6.60	2.1282E+000		4.1238E-001
	591.81	4.83	2.1882E+000		-8.6106E-001
	723.30	19.70	5.9598E-001		4.7900E-001
	756.87	4.33	2.2856E+000		-7.3221E-001
	873.19	11.50	8.5511E-001		-3.4528E-001
	996.32	10.30	8.9932E-001		1.1476E+000
	1004.76	17.90	5.1286E-001		3.4272E-002
	1274.45	35.50	2.5687E-001		-2.3337E-001
Eu-155	86.54	30.90	1.0899E+000	1.09E+000	-2.6721E-001
	105.31	20.70	1.1812E+000		2.4950E-001
Am-241	59.54	35.90	1.3294E+000	1.33E+000	-9.3105E-001
Cm-243	228.19	10.56	1.3779E+000	9.97E-001	2.6177E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.9658E-001	9.97E-001	7.0022E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 9:46:00 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-127-F-
Sample Title: OOL-09-02-127-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 9:35:56 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-127-F-
Title: OOL-09-02-127-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	309	291.58	72.80	1.39	3.53E+002	69.83	1.39E+003
m	2	286-	309	300.15	74.94	1.40	8.02E+002	80.20	2.19E+003
	3	332-	343	339.04	84.67	1.45	2.02E+002	107.87	1.12E+003
	4	947-	962	953.66	238.36	1.23	2.70E+002	75.75	4.04E+002
	5	1173-	1187	1179.12	294.74	0.44	8.30E+001	49.79	1.93E+002
	6	1397-	1413	1405.56	351.37	1.32	1.21E+002	54.43	2.06E+002
	7	2321-	2340	2330.64	582.70	1.62	1.91E+002	46.34	1.05E+002
	8	2427-	2446	2435.32	608.87	1.40	1.83E+002	42.67	8.21E+001
	9	3633-	3652	3642.02	910.63	1.07	1.76E+002	38.40	5.84E+001
M	10	3848-	3882	3855.79	964.08	1.94	6.05E+001	18.89	4.76E+001
m	11	3848-	3882	3873.28	968.46	1.94	1.06E+002	23.16	6.41E+001
	12	4471-	4489	4479.47	1120.05	1.05	7.62E+001	23.68	2.08E+001
	13	5829-	5856	5842.18	1460.81	2.21	1.31E+003	72.82	1.67E+001
	14	7049-	7063	7056.20	1764.40	1.13	3.46E+001	19.23	2.04E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	2.26175E+001	2.22268E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.33260E-001	9.17790E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.19076E+001	2.62009E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.77008E-001	2.17696E-001
Bi-214	0.996	609.31*	46.30	5.88849E-001	1.55384E-001
		1120.29*	15.10	8.76501E-001	2.87817E-001
		1764.49*	15.80	4.19911E-001	2.36984E-001
PB-214	0.577	74.82* @	6.21	2.05172E+001	4.75384E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.14095E-001	3.20181E-001
		351.92*	37.20	4.04745E-001	1.94934E-001
Ac-228	0.626	338.32	11.40		
		911.07*	27.70	1.03815E+000	2.56573E-001
		969.11*	16.60	1.06498E+000	2.57910E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
K-40		1.000	2.261749E+001	2.222684E+000
TL-208		0.467	3.332602E-001	9.177904E-002
Pb-212	@	0.520	6.770077E-001	2.176958E-001
Bi-214		0.996	5.953625E-001	1.184320E-001
PB-214	@	0.577	4.343161E-001	1.665030E-001
Ac-228		0.626	1.051498E+000	1.818955E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.80	5.8866E-001	19.77
3	84.67	3.3714E-001	53.33
M 10	964.08	1.0077E-001	31.25

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0799E-001	7.84E-002	1.3130E-002
	1332.49	100.00	7.8425E-002		-4.7818E-003
Nb-94	702.63	100.00	9.9134E-002	9.65E-002	-7.7581E-002
	871.10	100.00	9.6454E-002		2.3943E-002
Ag-108m	79.20	7.10	5.5176E+000	1.19E-001	-7.0428E+000
	433.93	89.90	1.1862E-001		-4.1288E-002
	614.37	90.40	1.3888E-001		4.5200E-002
	722.95	90.50	1.2311E-001		1.0953E-001
Sb-125	176.33	6.89	2.3988E+000	3.92E-001	1.2860E+000
	427.89	29.33	3.9169E-001		1.3390E-001
	463.38	10.35	1.1747E+000		1.5279E+000
	600.56	17.80	6.2603E-001		1.4131E-001
	606.64	5.02	2.8266E+000		5.3072E+000
	635.90	11.32	9.1745E-001		-1.8455E-001
Cs-134	563.23	8.38	1.2543E+000	1.29E-001	-1.3827E+000
	569.32	15.43	7.2492E-001		7.4558E-001
	604.70	97.60	1.4559E-001		-5.7759E-003
	795.84	85.40	1.2918E-001		-3.7507E-002
	801.93	8.73	1.1472E+000		-2.3907E-001
Cs-137	661.65	85.12	1.2596E-001	1.26E-001	1.2242E-001
Eu-152	121.78	28.40	7.7873E-001	3.46E-001	1.8796E-001
	244.69	7.49	1.9992E+000		-3.6402E-001
	344.27	26.50	4.5270E-001		-6.6645E-001
	778.89	12.74	8.0780E-001		-8.8792E-001
	867.32	4.16	2.3751E+000		-2.0209E+000
	964.01	14.40	9.7041E-001		-3.6381E-001
	1085.78	10.00	9.5973E-001		2.1947E-001
	1112.02	13.30	7.9004E-001		5.4077E-001
	1407.95	20.70	3.4566E-001		2.2687E-001
Eu-154	123.07	40.50	5.3813E-001	2.52E-001	-1.7922E-001
	247.94	6.60	2.1721E+000		7.3424E-001
	591.81	4.83	2.2497E+000		-6.2750E-001
	723.30	19.70	5.6687E-001		5.1317E-001
	756.87	4.33	2.2659E+000		-2.5269E-001
	873.19	11.50	8.4450E-001		-2.1654E-001
	996.32	10.30	9.2910E-001		-1.9092E-001
	1004.76	17.90	4.9688E-001		-3.4807E-001
	1274.45	35.50	2.5228E-001		-1.3188E-001
Eu-155	86.54	30.90	1.1103E+000	1.11E+000	1.3560E+000
	105.31	20.70	1.2074E+000		-2.9904E-001
Am-241	59.54	35.90	1.3895E+000	1.39E+000	-2.1916E-002
Cm-243	228.19	10.56	1.4186E+000	1.01E+000	-1.6602E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0097E+000	1.01E+000	1.1580E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 11:02:48 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-128-F-
Sample Title: OOL-09-02-128-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 10:52:45 AM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-128-F-
Title: OOL-09-02-128-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	307	300.43	75.01	0.95	7.73E+002	166.61	2.06E+003
2	948-	962	953.97	238.44	1.59	3.14E+002	70.52	3.36E+002
3	1172-	1183	1178.76	294.65	0.77	4.41E+001	43.50	1.76E+002
4	1400-	1414	1405.94	351.46	1.17	1.40E+002	49.04	1.68E+002
5	2319-	2343	2330.88	582.76	1.26	2.71E+002	46.16	6.87E+001
6	2426-	2445	2436.46	609.16	1.36	1.36E+002	45.63	1.15E+002
7	3632-	3653	3643.69	911.05	1.00	1.58E+002	39.48	6.60E+001
8	3866-	3884	3874.33	968.72	1.06	7.75E+001	34.71	6.95E+001
9	5830-	5857	5843.40	1461.12	2.37	1.13E+003	69.88	3.10E+001
10	7052-	7066	7059.41	1765.20	0.83	4.66E+001	16.92	9.44E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
K-40	0.997	1460.81*	10.67	1.96030E+001	1.99518E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.73494E-001	1.01440E-001
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.14609E+001	3.33902E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.86673E-001	2.15696E-001
Bi-214	0.695	609.31*	46.30	4.36518E-001	1.56487E-001
		1120.29	15.10		
		1764.49*	15.80	5.64865E-001	2.12859E-001
PB-214	0.578	74.82* @	6.21	1.97474E+001	5.92912E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	2.72908E-001	2.73139E-001
		351.92*	37.20	4.70904E-001	1.82581E-001
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	9.34103E-001	2.57004E-001
		969.11*	16.60	7.78520E-001	3.57863E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
K-40		0.997	1.960303E+001	1.995175E+000
TL-208		0.468	4.734937E-001	1.014401E-001
Pb-212	@	0.520	7.866726E-001	2.156959E-001
Bi-214		0.695	4.815481E-001	1.260812E-001
PB-214	@	0.578	4.097560E-001	1.517911E-001
Ac-228		0.632	8.811637E-001	2.087494E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	9.9526E-002	8.22E-002	4.2070E-002
	1332.49	100.00	8.2198E-002		6.3359E-002
Nb-94	702.63	100.00	1.0343E-001	9.49E-002	-6.5192E-003
	871.10	100.00	9.4896E-002		-8.9984E-002
Ag-108m	79.20	7.10	5.6213E+000	1.17E-001	-9.4040E+000
	433.93	89.90	1.1716E-001		-7.3709E-002
	614.37	90.40	1.4322E-001		2.4629E-003
	722.95	90.50	1.2284E-001		2.4407E-002
Sb-125	176.33	6.89	2.3493E+000	3.74E-001	-1.3471E+000
	427.89	29.33	3.7375E-001		-8.3241E-002
	463.38	10.35	1.1121E+000		1.8438E+000
	600.56	17.80	5.9401E-001		-5.0062E-001
	606.64	5.02	2.7385E+000		4.2041E+000
	635.90	11.32	9.5186E-001		4.9433E-001
Cs-134	563.23	8.38	1.3275E+000	1.25E-001	7.4867E-001
	569.32	15.43	7.0387E-001		7.2373E-002
	604.70	97.60	1.3885E-001		-2.8479E-002
	795.84	85.40	1.2455E-001		4.4651E-002
	801.93	8.73	1.2203E+000		-6.1080E-001
Cs-137	661.65	85.12	1.2093E-001	1.21E-001	1.7946E-002
Eu-152	121.78	28.40	7.8969E-001	3.29E-001	2.6939E-001
	244.69	7.49	1.9433E+000		-6.7037E-001
	344.27	26.50	4.6601E-001		-5.2749E-001
	778.89	12.74	7.4703E-001		-1.4150E+000
	867.32	4.16	2.4393E+000		-5.0655E-001
	964.01	14.40	8.7982E-001		-1.1179E-001
	1085.78	10.00	9.7712E-001		5.1575E-002
	1112.02	13.30	7.8024E-001		-1.2358E+000
	1407.95	20.70	3.2943E-001		1.0845E-001
Eu-154	123.07	40.50	5.5251E-001	2.46E-001	6.5507E-001
	247.94	6.60	2.0772E+000		1.8253E-001
	591.81	4.83	2.1882E+000		3.6400E-001
	723.30	19.70	5.6562E-001		3.5801E-001
	756.87	4.33	2.3246E+000		2.8740E+000
	873.19	11.50	8.3375E-001		-1.7485E-001
	996.32	10.30	9.3881E-001		-2.7463E-001
	1004.76	17.90	5.3402E-001		-7.4475E-002
	1274.45	35.50	2.4641E-001		-2.3677E-001
Eu-155	86.54	30.90	1.1355E+000	1.14E+000	2.5764E+000
	105.31	20.70	1.2565E+000		4.5504E-001
Am-241	59.54	35.90	1.3997E+000	1.40E+000	-1.2437E+000
Cm-243	228.19	10.56	1.3814E+000	9.51E-001	3.7175E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.5059E-001	9.51E-001	-3.5864E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 11:22:23 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-129-F-
Sample Title: OOL-09-02-129-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 11:12:20 AM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-129-F-
Title: OOL-09-02-129-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	295-	309	300.53	75.04	1.20	4.17E+002	156.38	2.05E+003
	2	332-	346	339.26	84.72	0.70	1.34E+002	135.03	1.60E+003
	3	946-	961	954.06	238.46	1.21	2.55E+002	80.17	4.72E+002
	4	1346-	1360	1352.49	338.10	0.33	7.31E+001	48.84	1.90E+002
	5	1400-	1414	1406.55	351.61	1.04	1.37E+002	48.97	1.69E+002
	6	2318-	2341	2331.37	582.88	1.50	2.04E+002	50.81	1.17E+002
	7	2428-	2447	2436.17	609.09	0.95	1.43E+002	47.29	1.25E+002
	8	3633-	3654	3643.77	911.07	1.41	1.97E+002	41.47	6.64E+001
M	9	3851-	3882	3857.91	964.62	1.67	4.83E+001	17.89	4.43E+001
m	10	3851-	3882	3874.06	968.65	1.67	1.07E+002	23.69	5.92E+001
	11	4471-	4487	4480.04	1120.19	0.72	7.41E+001	26.80	3.59E+001
	12	5828-	5858	5843.75	1461.21	2.22	1.30E+003	73.78	2.32E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
K-40	0.995	1460.81*	10.67	2.25581E+001	2.22826E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.56260E-001	1.00071E-001
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	6.18428E+000	2.61543E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.39427E-001	2.24772E-001
Bi-214	0.699	609.31*	46.30	4.60049E-001	1.62491E-001
		1120.29*	15.10	8.52349E-001	3.21257E-001
		1764.49	15.80		
Ac-228	0.998	338.32*	11.40	7.92190E-001	5.43793E-001
		911.07*	27.70	1.16262E+000	2.79296E-001
		969.11*	16.60	1.07502E+000	2.63173E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
K-40	0.995	2.255808E+001	2.228257E+000
TL-208	0.470	3.562600E-001	1.000709E-001
Pb-212 @	0.520	6.394266E-001	2.247720E-001
Bi-214	0.699	5.399663E-001	1.449988E-001
Ac-228	0.998	1.080457E+000	1.806587E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.72	2.2274E-001	101.04
5	351.61	2.2875E-001	35.68
M 9	964.62	8.0493E-002	37.05

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0831E-001	8.49E-002	7.5135E-003
	1332.49	100.00	8.4911E-002		2.2138E-002
Nb-94	702.63	100.00	1.0653E-001	9.71E-002	-2.6372E-002
	871.10	100.00	9.7070E-002		4.9070E-002
Ag-108m	79.20	7.10	5.7231E+000	1.27E-001	-5.5771E+000
	433.93	89.90	1.3047E-001		8.7154E-002
	614.37	90.40	1.4721E-001		1.3623E-002
	722.95	90.50	1.2686E-001		9.7614E-002
Sb-125	176.33	6.89	2.3701E+000	4.04E-001	-5.6746E-001
	427.89	29.33	4.0432E-001		-7.0203E-002
	463.38	10.35	1.1862E+000		6.0585E-001
	600.56	17.80	6.3592E-001		-1.2458E-001
	606.64	5.02	2.9019E+000		6.0584E+000
	635.90	11.32	9.7889E-001		2.2358E-001
Cs-134	563.23	8.38	1.2809E+000	1.30E-001	-7.1833E-001
	569.32	15.43	7.1237E-001		5.5038E-001
	604.70	97.60	1.4700E-001		2.7910E-002
	795.84	85.40	1.2978E-001		7.4600E-002
	801.93	8.73	1.1891E+000		-7.2451E-001
Cs-137	661.65	85.12	1.3463E-001	1.35E-001	3.0859E-002
Eu-152	121.78	28.40	7.7357E-001	3.61E-001	-2.7350E-001
	244.69	7.49	2.0104E+000		-2.1504E+000
	344.27	26.50	4.6967E-001		-2.5138E-001
	778.89	12.74	8.2280E-001		-8.0530E-001
	867.32	4.16	2.3387E+000		-4.2324E+000
	964.01	14.40	9.7960E-001		-1.5767E-001
	1085.78	10.00	9.7367E-001		-6.7985E-002
	1112.02	13.30	7.9247E-001		-4.9148E-001
	1407.95	20.70	3.6111E-001		8.8529E-002
Eu-154	123.07	40.50	5.3935E-001	2.43E-001	5.3855E-001
	247.94	6.60	2.1282E+000		-3.0389E+000
	591.81	4.83	2.2776E+000		1.7406E+000
	723.30	19.70	5.8162E-001		3.8057E-001
	756.87	4.33	2.4437E+000		-2.8118E+000
	873.19	11.50	8.6298E-001		-4.5594E-001
	996.32	10.30	9.2584E-001		-8.6411E-002
	1004.76	17.90	5.6153E-001		3.1091E-002
	1274.45	35.50	2.4282E-001		4.9466E-002
Eu-155	86.54	30.90	1.1423E+000	1.14E+000	1.3350E+000
	105.31	20.70	1.2761E+000		2.6316E-001
Am-241	59.54	35.90	1.4191E+000	1.42E+000	-7.4692E-001
Cm-243	228.19	10.56	1.3884E+000	9.97E-001	-1.3631E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.9735E-001	9.97E-001	7.4393E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 3:26:20 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-130-F-
Sample Title: OOL-09-02-130-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 3:16:17 PM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-130-F-
Title: OOL-09-02-130-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	308	299.97	74.89	1.46	9.99E+002	175.55	2.16E+003
2	739-	751	743.84	185.89	0.27	5.68E+001	65.97	4.08E+002
3	946-	962	954.16	238.49	0.92	2.75E+002	81.01	4.56E+002
4	1346-	1359	1352.36	338.06	0.46	5.52E+001	46.71	1.86E+002
5	1400-	1417	1406.63	351.63	1.19	2.05E+002	52.09	1.54E+002
6	2031-	2051	2042.72	510.70	0.91	1.39E+002	49.27	1.36E+002
7	2320-	2344	2331.72	582.97	2.27	2.70E+002	50.33	9.40E+001
8	2427-	2446	2436.04	609.05	1.28	1.28E+002	47.47	1.30E+002
9	2902-	2916	2907.93	727.06	1.15	3.94E+001	28.47	5.96E+001
10	3634-	3654	3644.92	911.35	0.94	1.74E+002	41.52	7.58E+001
11	3867-	3882	3874.50	968.76	1.55	5.96E+001	32.02	6.84E+001
12	4948-	4961	4954.56	1238.85	0.38	4.17E+001	23.34	3.63E+001
13	5833-	5860	5845.55	1461.66	2.13	1.30E+003	75.64	4.13E+001
14	7056-	7070	7063.23	1766.16	1.29	4.35E+001	16.25	8.51E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.997	511.00*	100.00	1.95701E-001	7.42168E-002
K-40	0.978	1460.81*	10.67	2.25763E+001	2.24814E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	9.06021E-001	3.51473E-001
		583.14*	84.20	4.71182E-001	1.07150E-001
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	5.21603E-001	3.81910E-001
Pb-212	0.521	74.81* @	10.70	1.48513E+001	3.90863E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.89521E-001	2.30243E-001
Bi-214	0.679	609.31*	46.30	4.10683E-001	1.61012E-001
		1120.29	15.10		
		1764.49*	15.80	5.27703E-001	2.04120E-001
Ac-228	0.997	338.32*	11.40	5.97921E-001	5.14938E-001
		911.07*	27.70	1.03008E+000	2.72616E-001
		969.11*	16.60	5.98742E-001	3.27561E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN	0.997	9.392522E-002	7.767108E-002
K-40	0.978	2.257634E+001	2.248141E+000
TL-208	0.751	4.711822E-001	1.060437E-001
Bi-212	1.000	5.216034E-001	3.819100E-001
Pb-212 @	0.521	6.895211E-001	2.302429E-001
Bi-214	0.679	4.555676E-001	1.264161E-001
Ac-228	0.997	8.172522E-001	1.940863E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	185.89	9.4583E-002	116.25
5	351.63	3.4167E-001	25.41
12	1238.85	6.9423E-002	56.02

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.1520E-001	7.79E-002	9.2453E-002
	1332.49	100.00	7.7940E-002		-2.3950E-002
Nb-94	702.63	100.00	1.1003E-001	9.30E-002	8.8199E-002
	871.10	100.00	9.2991E-002		-2.1382E-002
Ag-108m	79.20	7.10	5.7272E+000	1.27E-001	-1.0696E+001
	433.93	89.90	1.2819E-001		-3.6455E-002
	614.37	90.40	1.4407E-001		-1.0282E-001
	722.95	90.50	1.2686E-001		-3.4812E-002
Sb-125	176.33	6.89	2.4443E+000	3.86E-001	-4.5811E-001
	427.89	29.33	3.8580E-001		2.5954E-001
	463.38	10.35	1.1293E+000		5.5135E-001
	600.56	17.80	6.2228E-001		2.5516E-001
	606.64	5.02	2.8232E+000		4.4675E+000
	635.90	11.32	9.2401E-001		-6.5567E-001
Cs-134	563.23	8.38	1.3070E+000	1.23E-001	8.0296E-001
	569.32	15.43	6.6876E-001		-1.5974E-001
	604.70	97.60	1.4181E-001		-7.9088E-003
	795.84	85.40	1.2297E-001		3.8100E-002
	801.93	8.73	1.1891E+000		-1.7654E+000
Cs-137	661.65	85.12	1.3967E-001	1.40E-001	9.5813E-002
Eu-152	121.78	28.40	7.9044E-001	3.48E-001	-5.4055E-001
	244.69	7.49	2.0364E+000		-2.9272E-001
	344.27	26.50	4.7433E-001		-9.2444E-002
	778.89	12.74	8.2913E-001		-8.4877E-001
	867.32	4.16	2.3751E+000		-1.8914E+000
	964.01	14.40	8.9836E-001		2.7334E-001
	1085.78	10.00	9.7020E-001		-3.5106E-001
	1112.02	13.30	7.7529E-001		-9.4544E-001
	1407.95	20.70	3.4829E-001		1.0820E-001
Eu-154	123.07	40.50	5.5145E-001	2.68E-001	-9.4712E-002
	247.94	6.60	2.1282E+000		-2.9908E+000
	591.81	4.83	2.1346E+000		-1.2457E+000
	723.30	19.70	5.8765E-001		5.6393E-002
	756.87	4.33	2.4314E+000		-8.5447E-001
	873.19	11.50	8.1180E-001		-3.8099E-001
	996.32	10.30	9.5791E-001		3.8651E-001
	1004.76	17.90	5.2066E-001		-1.7944E-001
	1274.45	35.50	2.6798E-001		3.5371E-002
Eu-155	86.54	30.90	1.1656E+000	1.17E+000	1.8221E+000
	105.31	20.70	1.2793E+000		8.0268E-001
Am-241	59.54	35.90	1.4265E+000	1.43E+000	5.4121E-001
Cm-243	228.19	10.56	1.4237E+000	1.00E+000	1.4995E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0012E+000	1.00E+000	-3.5326E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 3:02:00 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-131-F-
Sample Title: OOL-09-02-131-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 2:51:57 PM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-131-F-
Title: OOL-09-02-131-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	309	291.71	72.83	1.43	3.47E+002	73.93	1.71E+003
m	2	286-	309	300.33	74.99	1.44	7.29E+002	82.65	2.53E+003
	3	331-	346	339.35	84.74	1.22	2.30E+002	143.88	1.71E+003
	4	946-	961	955.06	238.71	0.85	2.75E+002	76.34	4.14E+002
	5	1401-	1418	1407.33	351.81	0.80	1.17E+002	52.94	1.86E+002
	6	1844-	1854	1849.14	462.29	0.66	3.95E+001	28.25	6.75E+001
	7	2320-	2345	2332.61	583.19	1.59	2.29E+002	50.20	9.87E+001
	8	2428-	2448	2436.43	609.15	1.08	1.84E+002	42.05	7.64E+001
	9	2902-	2917	2908.88	727.29	0.62	4.56E+001	29.97	6.24E+001
	10	3631-	3655	3644.59	911.27	1.22	1.64E+002	38.78	5.54E+001
	11	3866-	3884	3875.70	969.06	1.88	9.33E+001	35.38	6.87E+001
	12	4476-	4490	4482.72	1120.86	1.02	4.84E+001	25.73	4.26E+001
	13	5831-	5861	5846.20	1461.82	2.21	1.22E+003	71.08	1.93E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
K-40	0.968	1460.81*	10.67	2.11406E+001	2.10769E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.00221E-001	1.01942E-001
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	6.03702E-001	4.03076E-001
Pb-212	0.521	74.81* @	10.70	1.08069E+001	2.44739E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.90573E-001	2.20093E-001
Bi-214	0.697	609.31*	46.30	5.91172E-001	1.53766E-001
		1120.29*	15.10	5.56292E-001	3.01770E-001
		1764.49	15.80		
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	9.67269E-001	2.54900E-001
		969.11*	16.60	9.36667E-001	3.68539E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
K-40		0.968	2.114057E+001	2.107691E+000
TL-208		0.471	4.002210E-001	1.019420E-001
Bi-212		1.000	6.037022E-001	4.030761E-001
Pb-212	@	0.521	6.905727E-001	2.200930E-001
Bi-214		0.697	5.839825E-001	1.370052E-001
Ac-228		0.633	9.573668E-001	2.096413E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.83	5.7914E-001	21.28
	3	84.74	3.8305E-001	62.60
	5	351.81	1.9558E-001	45.11
	6	462.29	6.5763E-002	71.59

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.1150E-001	7.44E-002	4.5273E-002
	1332.49	100.00	7.4448E-002		-1.7799E-002
Nb-94	702.63	100.00	1.0576E-001	1.04E-001	-2.0136E-002
	871.10	100.00	1.0445E-001		-6.3606E-002
Ag-108m	79.20	7.10	5.8656E+000	1.26E-001	-5.3934E+000
	433.93	89.90	1.2606E-001		3.1470E-002
	614.37	90.40	1.4533E-001		4.4246E-002
	722.95	90.50	1.2817E-001		-1.1982E-002
Sb-125	176.33	6.89	2.3566E+000	3.73E-001	-1.2950E+000
	427.89	29.33	3.7252E-001		6.9604E-002
	463.38	10.35	1.1259E+000		1.1351E+000
	600.56	17.80	5.8605E-001		3.6343E-002
	606.64	5.02	2.7278E+000		-4.1774E-001
	635.90	11.32	9.2183E-001		3.1642E-001
Cs-134	563.23	8.38	1.3326E+000	1.21E-001	-9.3519E-001
	569.32	15.43	7.4132E-001		-4.9781E-002
	604.70	97.60	1.3697E-001		-9.3261E-002
	795.84	85.40	1.2136E-001		1.0853E-001
	801.93	8.73	1.1239E+000		-1.4495E+000
Cs-137	661.65	85.12	1.2854E-001	1.29E-001	3.8057E-002
Eu-152	121.78	28.40	8.1025E-001	3.29E-001	7.4111E-002
	244.69	7.49	2.0572E+000		-1.7160E+000
	344.27	26.50	4.5593E-001		-6.9695E-001
	778.89	12.74	8.2703E-001		4.3282E-001
	867.32	4.16	2.5357E+000		-4.2827E+000
	964.01	14.40	9.1815E-001		3.3352E-001
	1085.78	10.00	9.4200E-001		4.5384E-001
	1112.02	13.30	7.6780E-001		-1.1816E-001
	1407.95	20.70	3.2943E-001		1.0390E-001
Eu-154	123.07	40.50	5.6420E-001	2.44E-001	-1.9447E-001
	247.94	6.60	2.1541E+000		-2.7139E-001
	591.81	4.83	2.1197E+000		-2.2785E+000
	723.30	19.70	5.8765E-001		-4.6194E-002
	756.87	4.33	2.4437E+000		1.0937E+000
	873.19	11.50	8.8105E-001		-7.1775E-001
	996.32	10.30	8.9256E-001		1.0895E-001
	1004.76	17.90	5.2834E-001		7.8074E-002
	1274.45	35.50	2.4403E-001		-1.4022E-001
Eu-155	86.54	30.90	1.1706E+000	1.17E+000	8.2587E-002
	105.31	20.70	1.2868E+000		5.3008E-001
Am-241	59.54	35.90	1.4990E+000	1.50E+000	1.5777E+000
Cm-243	228.19	10.56	1.4228E+000	1.02E+000	5.4199E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0173E+000	1.02E+000	4.7259E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 2:42:13 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-132-F-
Sample Title: OOL-09-02-132-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 2:32:10 PM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-132-F-
Title: OOL-09-02-132-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	309	300.39	75.00	1.33	4.99E+002	168.14	2.27E+003
2	946-	961	954.74	238.63	1.49	3.23E+002	76.35	3.98E+002
3	1054-	1064	1059.08	264.72	0.49	3.73E+001	40.08	1.60E+002
4	1399-	1416	1406.82	351.68	1.04	2.07E+002	55.89	1.86E+002
5	2030-	2050	2043.07	510.78	1.02	1.68E+002	49.70	1.31E+002
6	2322-	2344	2332.33	583.12	1.27	2.03E+002	48.12	1.03E+002
7	2426-	2448	2437.40	609.39	1.38	1.82E+002	45.59	9.23E+001
8	2901-	2919	2907.49	726.95	0.39	5.39E+001	31.61	6.11E+001
9	3634-	3657	3645.16	911.41	1.19	1.89E+002	42.25	6.89E+001
10	3869-	3887	3876.40	969.24	1.62	8.78E+001	32.76	5.63E+001
11	4478-	4489	4483.67	1121.10	0.42	2.27E+001	21.97	4.03E+001
12	5831-	5862	5846.67	1461.94	2.20	1.23E+003	72.38	2.75E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.999	511.00*	100.00	2.36849E-001	7.69306E-002
K-40	0.961	1460.81*	10.67	2.12400E+001	2.12734E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	1.09652E+000	3.67245E-001
		583.14*	84.20	3.53948E-001	9.58045E-002
		860.37	12.46		
Bi-212	0.998	727.17*	11.80	7.13992E-001	4.26862E-001
Pb-212	0.521	74.81* @	10.70	7.40621E+000	2.88521E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.11827E-001	2.30059E-001
Bi-214	0.695	609.31*	46.30	5.85268E-001	1.63562E-001
		1120.29*	15.10	2.60557E-001	2.54220E-001
		1764.49	15.80		
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	1.11842E+000	2.81000E-001
		969.11*	16.60	8.81116E-001	3.41680E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN	0.999	1.603965E-001	7.962621E-002
K-40	0.961	2.123999E+001	2.127344E+000
TL-208	0.752	3.539482E-001	9.510756E-002
Bi-212	0.998	7.139918E-001	4.268624E-001
Pb-212 @	0.521	8.118266E-001	2.300588E-001
Bi-214	0.695	4.902047E-001	1.375516E-001
Ac-228	0.631	1.022678E+000	2.170320E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	264.72	6.2147E-002	107.50
4	351.68	3.4448E-001	27.04

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0368E-001	8.40E-002	1.4956E-002
	1332.49	100.00	8.4017E-002		-1.9506E-002
Nb-94	702.63	100.00	1.0421E-001	9.65E-002	-7.2726E-002
	871.10	100.00	9.6454E-002		6.6420E-002
Ag-108m	79.20	7.10	5.8775E+000	1.25E-001	-6.6508E+000
	433.93	89.90	1.2548E-001		7.1907E-002
	614.37	90.40	1.4512E-001		5.7651E-003
	722.95	90.50	1.2895E-001		1.1712E-001
Sb-125	176.33	6.89	2.4513E+000	3.80E-001	5.8623E-001
	427.89	29.33	3.7983E-001		-5.1801E-001
	463.38	10.35	1.1173E+000		6.5133E-002
	600.56	17.80	6.1343E-001		-2.1219E-001
	606.64	5.02	2.7847E+000		-1.6314E-001
	635.90	11.32	9.8094E-001		6.9144E-002
Cs-134	563.23	8.38	1.3452E+000	1.27E-001	1.8458E-001
	569.32	15.43	7.3317E-001		2.0588E-001
	604.70	97.60	1.3941E-001		-2.1099E-002
	795.84	85.40	1.2704E-001		1.4491E-001
	801.93	8.73	1.1472E+000		-1.5955E+000
Cs-137	661.65	85.12	1.2797E-001	1.28E-001	1.0885E-002
Eu-152	121.78	28.40	8.0916E-001	3.51E-001	3.6294E-001
	244.69	7.49	2.0079E+000		-3.0735E+000
	344.27	26.50	4.9153E-001		-6.3690E-001
	778.89	12.74	8.2703E-001		-1.0918E-001
	867.32	4.16	2.4181E+000		-3.3474E+000
	964.01	14.40	8.7470E-001		-3.6085E-002
	1085.78	10.00	1.0043E+000		1.0150E-001
	1112.02	13.30	7.2915E-001		-6.5593E-001
	1407.95	20.70	3.5089E-001		1.2246E-001
Eu-154	123.07	40.50	5.6162E-001	2.59E-001	2.2473E-001
	247.94	6.60	2.1706E+000		-3.6680E-002
	591.81	4.83	2.3096E+000		-1.2633E+000
	723.30	19.70	5.9598E-001		5.3351E-001
	756.87	4.33	2.4437E+000		1.8571E+000
	873.19	11.50	8.3645E-001		-4.6002E-002
	996.32	10.30	9.0936E-001		7.7581E-001
	1004.76	17.90	5.0494E-001		3.3514E-002
	1274.45	35.50	2.5913E-001		3.9103E-002
Eu-155	86.54	30.90	1.1747E+000	1.17E+000	1.7462E+000
	105.31	20.70	1.3272E+000		1.5413E+000
Am-241	59.54	35.90	1.4848E+000	1.48E+000	-1.0198E-001
Cm-243	228.19	10.56	1.4228E+000	1.00E+000	-6.6138E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0012E+000	1.00E+000	-1.4000E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 10:37:41 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-02-133-F-
Sample Title: OOL-09-02-133-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 10:27:40 AM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: ORG7829
Log Number: OOL-09-02-133-F-
Title: OOL-09-02-133-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.77	72.94	1.07	1.59E+002	46.31	9.05E+002
m	2	282-	306	300.49	75.12	1.08	3.25E+002	54.75	8.99E+002
	3	946-	960	954.99	238.76	0.98	1.79E+002	64.05	3.09E+002
	4	1348-	1358	1353.16	338.31	0.34	4.11E+001	35.00	1.15E+002
	5	1399-	1416	1407.54	351.91	1.39	1.39E+002	44.75	1.17E+002
	6	1846-	1857	1851.50	462.90	0.42	3.67E+001	26.36	5.73E+001
	7	2032-	2054	2042.83	510.74	1.73	1.13E+002	47.25	1.21E+002
	8	2322-	2342	2332.54	583.17	0.79	1.66E+002	42.05	8.13E+001
	9	2427-	2443	2436.77	609.23	0.48	8.47E+001	36.57	8.43E+001
	10	3435-	3448	3442.02	860.56	0.64	3.26E+001	21.94	3.34E+001
	11	3635-	3654	3644.56	911.20	1.04	1.34E+002	34.41	4.97E+001
	12	3868-	3882	3875.73	969.00	0.65	7.30E+001	25.23	3.20E+001
	13	4475-	4488	4482.04	1120.59	0.35	3.27E+001	21.85	3.33E+001
	14	5830-	5857	5844.26	1461.17	1.53	9.45E+002	63.65	2.45E+001
	15	7054-	7067	7060.71	1765.31	0.37	2.66E+001	15.34	1.24E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.998	511.00*	100.00	2.03406E-001	8.92325E-002
K-40	0.996	1460.81*	10.67	2.14685E+001	2.26140E+000
TL-208	0.903	277.35	6.80		
		510.84*	21.60	9.41695E-001	4.20211E-001
		583.14*	84.20	3.69964E-001	1.05500E-001
		860.37*	12.46	5.44000E-001	3.72394E-001
Pb-212	0.593	74.81* @	10.70	1.26122E+001	3.25903E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.83771E-001	2.28243E-001
Bi-214	0.995	609.31*	46.30	3.49136E-001	1.56688E-001
		1120.29*	15.10	4.82882E-001	3.26455E-001
		1764.49*	15.80	4.32438E-001	2.53256E-001
Ac-228	1.000	338.32*	11.40	5.70590E-001	4.94220E-001
		911.07*	27.70	1.02208E+000	2.87081E-001
		969.11*	16.60	9.42327E-001	3.40347E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN	0.998	1.207288E-001	9.185448E-002
K-40	0.996	2.146846E+001	2.261396E+000
TL-208	0.903	3.827656E-001	1.008802E-001
Pb-212 @	0.593	5.837711E-001	2.282427E-001
Bi-214	0.995	3.880027E-001	1.233668E-001
Ac-228	1.000	9.200309E-001	2.005598E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.94	2.6570E-001	29.05
5	351.91	2.3127E-001	32.25
6	462.90	6.1241E-002	71.74

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.3025E-001	8.92E-002	1.3830E-001
	1332.49	100.00	8.9202E-002		-4.6473E-002
Nb-94	702.63	100.00	1.1526E-001	1.13E-001	1.1933E-002
	871.10	100.00	1.1286E-001		5.1290E-002
Ag-108m	79.20	7.10	1.0168E+001	1.45E-001	-1.1673E+001
	433.93	89.90	1.4467E-001		7.0602E-002
	614.37	90.40	1.6205E-001		-7.8276E-002
	722.95	90.50	1.5474E-001		1.0440E-001
Sb-125	176.33	6.89	2.8586E+000	4.48E-001	2.0262E+000
	427.89	29.33	4.4802E-001		-2.6928E-001
	463.38	10.35	1.2703E+000		5.5012E-001
	600.56	17.80	7.0381E-001		-8.7124E-002
	606.64	5.02	3.0200E+000		2.2156E+000
	635.90	11.32	1.0591E+000		4.0269E-001
Cs-134	563.23	8.38	1.5183E+000	1.37E-001	6.0606E-001
	569.32	15.43	8.0133E-001		3.1252E-001
	604.70	97.60	1.5267E-001		-4.3115E-002
	795.84	85.40	1.3734E-001		1.3359E-001
	801.93	8.73	1.2341E+000		-1.4370E+000
Cs-137	661.65	85.12	1.4235E-001	1.42E-001	8.5879E-002
Eu-152	121.78	28.40	1.0049E+000	4.69E-001	-2.3971E-001
	244.69	7.49	2.2722E+000		-1.8053E+000
	344.27	26.50	5.2184E-001		-3.1443E-001
	778.89	12.74	8.9705E-001		-6.4683E-001
	867.32	4.16	2.7831E+000		-3.3567E+000
	964.01	14.40	1.0495E+000		-3.5448E-002
	1085.78	10.00	1.0876E+000		9.6151E-002
	1112.02	13.30	8.8288E-001		-4.5117E-001
	1407.95	20.70	4.6920E-001		3.8432E-001
Eu-154	123.07	40.50	6.9175E-001	3.06E-001	-5.7215E-001
	247.94	6.60	2.4738E+000		-1.6308E+000
	591.81	4.83	2.5875E+000		-5.5519E-001
	723.30	19.70	7.0931E-001		4.9531E-001
	756.87	4.33	2.8832E+000		-4.5558E-001
	873.19	11.50	9.7420E-001		-6.1495E-001
	996.32	10.30	1.1117E+000		6.1007E-002
	1004.76	17.90	6.1183E-001		-4.8238E-001
	1274.45	35.50	3.0632E-001		8.6005E-002
Eu-155	86.54	30.90	1.8030E+000	1.77E+000	1.1631E+000
	105.31	20.70	1.7686E+000		8.8359E-001
Am-241	59.54	35.90	4.1570E+000	4.16E+000	-7.9195E-001
Cm-243	228.19	10.56	1.7050E+000	1.10E+000	1.6382E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0983E+000	1.10E+000	-8.8588E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 10:52:47 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-02-134-F-
Sample Title: OOL-09-02-134-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 10:42:45 AM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: ORG7829
Log Number: OOL-09-02-134-F-
Title: OOL-09-02-134-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	313	291.46	72.87	1.11	1.53E+002	46.59	8.26E+002
m	2	285-	313	300.59	75.15	1.11	4.04E+002	56.74	1.00E+003
m	3	285-	313	309.21	77.30	1.12	6.80E+001	43.74	8.26E+002
	4	949-	960	954.79	238.71	1.11	2.65E+002	56.06	2.21E+002
	5	1346-	1358	1353.13	338.30	0.90	7.81E+001	37.41	1.09E+002
	6	1398-	1415	1408.08	352.04	0.41	1.13E+002	50.69	1.71E+002
	7	2325-	2342	2332.08	583.06	1.32	1.34E+002	37.55	7.14E+001
	8	2428-	2447	2437.14	609.33	0.62	1.50E+002	40.15	7.70E+001
	9	3635-	3654	3644.51	911.19	1.51	1.30E+002	34.81	5.26E+001
	10	3866-	3885	3875.98	969.06	0.92	5.96E+001	30.56	5.24E+001
	11	4475-	4489	4483.03	1120.84	0.62	4.70E+001	23.16	3.20E+001
	12	4948-	4959	4953.18	1238.38	0.50	2.34E+001	16.12	1.76E+001
	13	5832-	5857	5844.45	1461.22	1.82	8.45E+002	59.29	1.64E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.994	1460.81*	10.67	1.91969E+001	2.05709E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.98100E-001	9.23697E-002
		860.37	12.46		
Pb-212	0.855	74.81* @	10.70	1.56664E+001	3.77668E+000
		77.11* @	18.00	1.42072E+000	9.55025E-001
		87.30 @	8.00		
		238.63*	44.60	8.66076E-001	2.27872E-001
Bi-214	0.703	609.31*	46.30	6.17925E-001	1.82089E-001
		1120.29*	15.10	6.93386E-001	3.49489E-001
		1764.49	15.80		
PB-214	0.368	74.82* @	6.21	2.69937E+001	6.79596E+000
		77.11* @	10.50	2.43552E+000	1.64725E+000
		87.30 @	4.67		
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	4.85595E-001	2.32456E-001
Ac-228	1.000	338.32*	11.40	1.08429E+000	5.46724E-001
		911.07*	27.70	9.92260E-001	2.88506E-001
		969.11*	16.60	7.69291E-001	4.02671E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40		0.994	1.919686E+001	2.057089E+000
TL-208		0.471	2.981002E-001	9.236973E-002
Pb-212	@	0.855	8.660761E-001	2.278722E-001
Bi-214		0.703	6.340355E-001	1.614855E-001
PB-214	@	0.368	4.855951E-001	2.308206E-001
Ac-228		1.000	9.426834E-001	2.155307E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.87	2.5573E-001	30.37
12	1238.38	3.8943E-002	68.98

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2008E-001	7.75E-002	5.3892E-002
	1332.49	100.00	7.7474E-002		-6.9470E-002
Nb-94	702.63	100.00	1.2021E-001	1.13E-001	2.3598E-002
	871.10	100.00	1.1286E-001		1.0623E-002
Ag-108m	79.20	7.10	1.0465E+001	1.42E-001	-6.0001E+000
	433.93	89.90	1.4244E-001		-8.8106E-003
	614.37	90.40	1.7543E-001		-1.1407E-001
	722.95	90.50	1.4782E-001		8.2380E-002
Sb-125	176.33	6.89	2.8941E+000	4.54E-001	3.8864E-002
	427.89	29.33	4.5381E-001		1.0114E-002
	463.38	10.35	1.2703E+000		4.5950E-001
	600.56	17.80	7.0381E-001		1.7588E-001
	606.64	5.02	3.3247E+000		6.8346E+000
	635.90	11.32	1.0898E+000		5.4694E-001
Cs-134	563.23	8.38	1.5649E+000	1.29E-001	-1.1397E+000
	569.32	15.43	8.5687E-001		-3.8889E-001
	604.70	97.60	1.6525E-001		4.4869E-002
	795.84	85.40	1.2851E-001		-6.7562E-002
	801.93	8.73	1.2592E+000		-9.1497E-002
Cs-137	661.65	85.12	1.4319E-001	1.43E-001	2.3479E-002
Eu-152	121.78	28.40	1.0179E+000	3.68E-001	7.8465E-001
	244.69	7.49	2.2628E+000		-3.4203E+000
	344.27	26.50	5.4666E-001		-2.7026E-001
	778.89	12.74	8.9381E-001		-9.1272E-001
	867.32	4.16	2.7313E+000		-4.7344E+000
	964.01	14.40	1.0207E+000		2.5136E-002
	1085.78	10.00	1.0927E+000		5.6020E-001
	1112.02	13.30	8.8648E-001		-5.8647E-002
	1407.95	20.70	3.6793E-001		-2.6501E-001
Eu-154	123.07	40.50	7.0911E-001	2.83E-001	6.0653E-001
	247.94	6.60	2.4893E+000		-1.1392E+000
	591.81	4.83	2.6140E+000		1.2739E+000
	723.30	19.70	6.8766E-001		8.9911E-001
	756.87	4.33	2.6694E+000		1.1916E+000
	873.19	11.50	1.0045E+000		5.5358E-001
	996.32	10.30	1.1252E+000		-3.5636E-002
	1004.76	17.90	6.3329E-001		1.4507E-001
	1274.45	35.50	2.8292E-001		-1.2992E-001
Eu-155	86.54	30.90	1.8034E+000	1.76E+000	2.6267E+000
	105.31	20.70	1.7560E+000		-6.1685E-001
Am-241	59.54	35.90	4.1676E+000	4.17E+000	-6.7255E-001
Cm-243	228.19	10.56	1.6609E+000	1.12E+000	1.4467E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1227E+000	1.12E+000	3.2294E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 11:28:04 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-02-135-F-
Sample Title: OOL-09-02-135-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 11:18:02 AM
Live Time: 600.0 seconds
Real Time: 600.8 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: ORG7829
Log Number: OOL-09-02-135-F-
Title: OOL-09-02-135-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.87	72.97	1.08	2.00E+002	46.71	8.56E+002
m	2	282-	306	300.93	75.23	1.08	3.73E+002	55.82	8.74E+002
	3	332-	346	339.74	84.94	1.23	1.59E+002	104.49	9.28E+002
	4	946-	961	954.72	238.69	1.11	2.04E+002	62.23	2.68E+002
	5	1348-	1360	1352.89	338.24	1.24	6.64E+001	34.05	8.86E+001
	6	1401-	1414	1408.21	352.08	0.71	6.24E+001	40.57	1.33E+002
	7	2039-	2053	2043.64	510.94	1.44	1.08E+002	34.38	6.85E+001
	8	2322-	2341	2332.30	583.11	1.22	1.05E+002	36.28	6.76E+001
	9	2427-	2446	2436.93	609.27	1.38	1.12E+002	37.38	7.18E+001
	10	2903-	2915	2909.40	727.40	0.32	2.40E+001	23.87	4.70E+001
	11	3637-	3653	3644.73	911.25	1.27	1.10E+002	27.81	2.94E+001
	12	3869-	3882	3875.71	969.00	1.07	4.44E+001	23.67	3.66E+001
	13	4476-	4488	4481.19	1120.38	0.61	2.68E+001	19.99	2.93E+001
	14	5831-	5858	5843.95	1461.09	1.98	7.32E+002	57.88	3.13E+001
	15	7053-	7067	7059.78	1765.07	0.72	2.80E+001	15.93	1.20E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	1.000	511.00*	100.00	1.94840E-001	6.71647E-002
K-40	0.997	1460.81*	10.67	1.66313E+001	1.88252E+000
TL-208	0.753	277.35	6.80		
		510.84*	21.60	9.02038E-001	3.19555E-001
		583.14*	84.20	2.35269E-001	8.65770E-002
		860.37	12.46		
Bi-212	0.998	727.17*	11.80	4.07752E-001	4.08192E-001
Pb-212	0.593	74.81* @	10.70	1.43880E+001	3.54909E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.65920E-001	2.28403E-001
Bi-214	0.998	609.31*	46.30	4.62146E-001	1.64211E-001
		1120.29*	15.10	3.94623E-001	2.97829E-001
		1764.49*	15.80	4.55355E-001	2.62971E-001
Ac-228	0.999	338.32*	11.40	9.22643E-001	4.94596E-001
		911.07*	27.70	8.34547E-001	2.32410E-001
		969.11*	16.60	5.73707E-001	3.11436E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN		1.000	1.440221E-001	6.969987E-002
K-40		0.997	1.663135E+001	1.882516E+000
TL-208		0.753	2.352687E-001	8.623688E-002
Bi-212		0.998	4.077517E-001	4.081920E-001
Pb-212	@	0.593	6.659197E-001	2.284026E-001
Bi-214		0.998	4.484651E-001	1.261697E-001
Ac-228		0.999	7.637764E-001	1.743113E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.97	3.3394E-001	23.31
3	84.94	2.6577E-001	65.52
6	352.08	1.0397E-001	65.03

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1862E-001	9.06E-002	2.2354E-002
	1332.49	100.00	9.0643E-002		1.0560E-002
Nb-94	702.63	100.00	1.1170E-001	1.11E-001	3.7720E-002
	871.10	100.00	1.1064E-001		4.2432E-002
Ag-108m	79.20	7.10	1.0544E+001	1.37E-001	-1.2018E+001
	433.93	89.90	1.3698E-001		1.3491E-002
	614.37	90.40	1.5955E-001		4.6236E-002
	722.95	90.50	1.4404E-001		3.0409E-002
Sb-125	176.33	6.89	2.8645E+000	4.34E-001	-1.8396E+000
	427.89	29.33	4.3365E-001		-1.6720E-001
	463.38	10.35	1.2528E+000		8.4207E-002
	600.56	17.80	6.7967E-001		4.0026E-001
	606.64	5.02	3.1043E+000		3.6757E+000
	635.90	11.32	1.0559E+000		9.6700E-001
Cs-134	563.23	8.38	1.5109E+000	1.27E-001	1.5066E+000
	569.32	15.43	8.1154E-001		1.0022E-001
	604.70	97.60	1.6082E-001		2.6654E-002
	795.84	85.40	1.2697E-001		1.1133E-001
	801.93	8.73	1.2642E+000		-1.1173E+000
Cs-137	661.65	85.12	1.3892E-001	1.39E-001	1.1934E-001
Eu-152	121.78	28.40	9.9112E-001	3.89E-001	3.7052E-001
	244.69	7.49	2.2384E+000		4.8373E-001
	344.27	26.50	4.9897E-001		-1.2953E-001
	778.89	12.74	8.5392E-001		-8.2916E-002
	867.32	4.16	2.6025E+000		-2.1660E+000
	964.01	14.40	9.5506E-001		7.2296E-001
	1085.78	10.00	1.0927E+000		5.4046E-001
	1112.02	13.30	8.8648E-001		5.0222E-001
	1407.95	20.70	3.8885E-001		4.5552E-001
Eu-154	123.07	40.50	6.8999E-001	2.72E-001	6.7807E-001
	247.94	6.60	2.4515E+000		-1.0378E+000
	591.81	4.83	2.2894E+000		7.9995E-001
	723.30	19.70	6.6000E-001		1.9291E-001
	756.87	4.33	2.4765E+000		2.4777E+000
	873.19	11.50	9.5472E-001		5.8771E-001
	996.32	10.30	9.9224E-001		-3.4509E-001
	1004.76	17.90	5.8096E-001		-7.3618E-002
	1274.45	35.50	2.7224E-001		4.7360E-002
Eu-155	86.54	30.90	1.7943E+000	1.78E+000	2.6833E+000
	105.31	20.70	1.7756E+000		5.1943E-001
Am-241	59.54	35.90	4.1623E+000	4.16E+000	-4.3701E+000
Cm-243	228.19	10.56	1.5332E+000	1.05E+000	-9.3102E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0452E+000	1.05E+000	-2.9469E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 11:09:49 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-02-136-F-
Sample Title: OOL-09-02-136-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 10:59:43 AM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: ORG7829
Log Number: OOL-09-02-136-F-
Title: OOL-09-02-136-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	307	291.91	72.98	1.28	2.25E+002	49.31	9.15E+002
m	2	283-	307	300.63	75.16	1.28	4.23E+002	58.31	1.10E+003
	3	947-	960	954.57	238.66	1.04	2.40E+002	61.98	2.77E+002
	4	1173-	1186	1181.68	295.44	0.81	7.76E+001	44.92	1.62E+002
	5	1399-	1415	1407.43	351.88	0.94	1.34E+002	44.47	1.21E+002
	6	2036-	2050	2042.38	510.63	1.43	9.09E+001	36.70	9.01E+001
	7	2322-	2343	2332.05	583.05	1.48	1.65E+002	45.92	1.02E+002
	8	2428-	2443	2436.67	609.21	1.10	1.09E+002	35.38	7.20E+001
	9	2902-	2916	2907.52	726.93	0.73	3.16E+001	26.17	4.84E+001
	10	3636-	3652	3644.44	911.17	1.46	1.21E+002	28.16	2.73E+001
	11	3867-	3883	3874.38	968.66	1.00	6.11E+001	26.68	3.89E+001
	12	5832-	5857	5843.89	1461.08	1.76	7.64E+002	57.33	2.20E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.995	511.00*		100.00	1.63176E-001	6.95256E-002
K-40	0.998	1460.81*		10.67	1.73645E+001	1.91693E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	7.55443E-001	3.27737E-001
		583.14*		84.20	3.68434E-001	1.13172E-001
		860.37		12.46		
Bi-212	0.998	727.17*		11.80	5.36851E-001	4.48895E-001
Pb-212	0.594	74.81*	@	10.70	1.63671E+001	3.92325E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.81775E-001	2.36555E-001
Bi-214	0.402	609.31*		46.30	4.49192E-001	1.55922E-001
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.627	74.82*	@	6.21	2.82010E+001	7.06306E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	6.19543E-001	3.73443E-001
		351.92*		37.20	5.73726E-001	2.13813E-001
Ac-228	0.631	338.32		11.40		
		911.07*		27.70	9.18581E-001	2.38949E-001
		969.11*		16.60	7.89054E-001	3.54265E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN		0.995	8.359385E-002	7.365222E-002
K-40		0.998	1.736446E+001	1.916933E+000
TL-208		0.752	3.684343E-001	1.125329E-001
Bi-212		0.998	5.368505E-001	4.488948E-001
Pb-212	@	0.594	7.817747E-001	2.365548E-001
Bi-214		0.402	4.491924E-001	1.559220E-001
PB-214	@	0.627	5.850376E-001	1.855520E-001
Ac-228		0.631	8.780794E-001	1.980993E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.98	3.7423E-001	21.96

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1764E-001	9.35E-002	-4.3624E-002
	1332.49	100.00	9.3452E-002		3.6012E-002
Nb-94	702.63	100.00	1.2709E-001	1.10E-001	4.1210E-002
	871.10	100.00	1.1019E-001		4.7631E-002
Ag-108m	79.20	7.10	1.0390E+001	1.33E-001	-8.5434E+000
	433.93	89.90	1.3342E-001		-2.2787E-002
	614.37	90.40	1.6236E-001		-4.2640E-003
	722.95	90.50	1.4442E-001		-1.4913E-003
Sb-125	176.33	6.89	2.8749E+000	4.24E-001	2.3797E+000
	427.89	29.33	4.2408E-001		-3.4399E-001
	463.38	10.35	1.2603E+000		8.0482E-001
	600.56	17.80	7.3414E-001		6.0156E-001
	606.64	5.02	3.2314E+000		5.9531E+000
	635.90	11.32	9.9448E-001		2.0026E-001
Cs-134	563.23	8.38	1.5073E+000	1.36E-001	4.2499E-001
	569.32	15.43	8.1559E-001		3.3222E-002
	604.70	97.60	1.6907E-001		9.2995E-002
	795.84	85.40	1.3639E-001		1.4982E-002
	801.93	8.73	1.2839E+000		-3.9719E-001
Cs-137	661.65	85.12	1.4022E-001	1.40E-001	1.0538E-001
Eu-152	121.78	28.40	1.0167E+000	3.81E-001	5.2806E-001
	244.69	7.49	2.2534E+000		-3.9515E+000
	344.27	26.50	5.3628E-001		-7.0277E-001
	778.89	12.74	8.8073E-001		2.3072E-001
	867.32	4.16	2.6891E+000		-9.6703E-001
	964.01	14.40	9.9596E-001		1.0134E-001
	1085.78	10.00	1.1180E+000		6.5189E-001
	1112.02	13.30	8.4973E-001		2.7975E-001
	1407.95	20.70	3.8063E-001		1.6410E-002
Eu-154	123.07	40.50	7.0092E-001	2.74E-001	4.6767E-001
	247.94	6.60	2.5612E+000		-7.1405E-001
	591.81	4.83	2.4713E+000		-4.4951E-001
	723.30	19.70	6.6877E-001		-1.8686E-001
	756.87	4.33	2.8313E+000		6.6528E-001
	873.19	11.50	9.4283E-001		-9.6103E-001
	996.32	10.30	1.0562E+000		-2.0439E-001
	1004.76	17.90	6.1456E-001		5.2888E-001
	1274.45	35.50	2.7405E-001		1.5366E-001
Eu-155	86.54	30.90	1.7580E+000	1.73E+000	1.6893E+000
	105.31	20.70	1.7337E+000		1.3695E-002
Am-241	59.54	35.90	4.1853E+000	4.19E+000	5.6274E-001
Cm-243	228.19	10.56	1.6334E+000	1.14E+000	4.4081E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1353E+000	1.14E+000	2.0683E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 5:42:58 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-137-F-
Sample Title: OOL-09-02-137-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 5:32:56 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-137-F-
Title: OOL-09-02-137-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	309	300.15	74.94	0.76	4.94E+002	137.25	1.58E+003
2	329-	344	338.47	84.52	0.25	2.21E+002	130.32	1.39E+003
3	947-	961	954.20	238.50	1.47	2.22E+002	71.69	3.85E+002
4	1171-	1186	1180.66	295.13	1.08	1.19E+002	50.94	1.85E+002
5	1399-	1414	1406.84	351.68	0.43	1.19E+002	48.84	1.67E+002
6	2321-	2338	2331.33	582.87	1.78	1.62E+002	42.13	9.21E+001
7	2426-	2445	2435.66	608.96	2.04	1.57E+002	41.76	8.47E+001
8	3633-	3653	3643.43	910.98	0.97	1.52E+002	38.63	6.54E+001
9	3866-	3881	3873.74	968.57	1.13	5.51E+001	32.62	7.39E+001
10	5115-	5128	5121.86	1280.69	1.40	2.09E+001	14.43	1.21E+001
11	5828-	5859	5843.44	1461.13	2.02	1.18E+003	70.01	1.99E+001
12	7051-	7066	7059.64	1765.26	2.00	5.12E+001	16.21	5.79E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
K-40	0.997	1460.81*	10.67	2.03669E+001	2.04607E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.82605E-001	8.22260E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	7.32916E+000	2.49303E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.57906E-001	2.00036E-001
Bi-214	0.692	609.31*	46.30	5.06573E-001	1.48237E-001
		1120.29	15.10		
		1764.49*	15.80	6.21262E-001	2.06198E-001
PB-214	0.582	74.82* @	6.21	1.26283E+001	4.39229E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	7.33934E-001	3.38784E-001
		351.92*	37.20	3.99712E-001	1.77173E-001
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	8.96465E-001	2.50636E-001
		969.11*	16.60	5.53171E-001	3.32593E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
K-40		0.997	2.036691E+001	2.046074E+000
TL-208		0.469	2.826046E-001	8.222598E-002
Pb-212	@	0.521	5.579062E-001	2.000359E-001
Bi-214		0.692	5.456507E-001	1.203619E-001
PB-214	@	0.582	4.714896E-001	1.570000E-001
Ac-228		0.631	7.721240E-001	2.001642E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.52	3.6806E-001	59.01
10	1280.69	3.4798E-002	69.13

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0799E-001	8.27E-002	8.6311E-002
	1332.49	100.00	8.2657E-002		-1.4367E-002
Nb-94	702.63	100.00	1.0184E-001	9.52E-002	-7.1413E-002
	871.10	100.00	9.5210E-002		-5.9868E-002
Ag-108m	79.20	7.10	5.3015E+000	1.28E-001	-4.6690E+000
	433.93	89.90	1.2819E-001		8.5483E-002
	614.37	90.40	1.3688E-001		-7.1798E-002
	722.95	90.50	1.3075E-001		5.9608E-002
Sb-125	176.33	6.89	2.3284E+000	3.83E-001	4.5915E-001
	427.89	29.33	3.8283E-001		1.6835E-001
	463.38	10.35	1.0856E+000		1.1207E-001
	600.56	17.80	5.9795E-001		-1.2788E-001
	606.64	5.02	2.6437E+000		4.8154E+000
	635.90	11.32	9.1085E-001		-4.5938E-001
Cs-134	563.23	8.38	1.2703E+000	1.19E-001	-3.0342E-001
	569.32	15.43	6.9092E-001		9.0722E-002
	604.70	97.60	1.3564E-001		-7.4671E-002
	795.84	85.40	1.1941E-001		2.7486E-002
	801.93	8.73	1.1205E+000		-7.8225E-001
Cs-137	661.65	85.12	1.2509E-001	1.25E-001	-6.2494E-002
Eu-152	121.78	28.40	7.3604E-001	3.18E-001	-7.0186E-001
	244.69	7.49	1.9510E+000		-2.8312E+000
	344.27	26.50	4.5647E-001		-6.7482E-001
	778.89	12.74	8.3124E-001		-1.4572E-001
	867.32	4.16	2.4603E+000		3.4867E-001
	964.01	14.40	9.1815E-001		3.7930E-001
	1085.78	10.00	9.2755E-001		-5.8140E-001
	1112.02	13.30	7.9247E-001		-8.4261E-001
	1407.95	20.70	3.1811E-001		6.3793E-003
Eu-154	123.07	40.50	5.1567E-001	2.59E-001	3.0291E-001
	247.94	6.60	2.1435E+000		-2.0166E-001
	591.81	4.83	2.3635E+000		1.3145E+000
	723.30	19.70	6.0420E-001		3.5859E-001
	756.87	4.33	2.3246E+000		-6.3428E-001
	873.19	11.50	8.3645E-001		1.0930E-001
	996.32	10.30	9.1599E-001		-8.6460E-001
	1004.76	17.90	5.3590E-001		-1.1240E-001
	1274.45	35.50	2.5913E-001		1.9249E-001
Eu-155	86.54	30.90	1.0802E+000	1.08E+000	3.1278E-001
	105.31	20.70	1.2041E+000		1.7305E-001
Am-241	59.54	35.90	1.3410E+000	1.34E+000	-9.2833E-001
Cm-243	228.19	10.56	1.3368E+000	9.91E-001	-2.7196E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.9115E-001	9.91E-001	-2.5623E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 7:06:29 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-138-F-
Sample Title: OOL-09-02-138-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 6:56:27 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-138-F-
Title: OOL-09-02-138-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	308	299.87	74.87	1.08	4.65E+002	139.92	1.66E+003
2	330-	343	339.16	84.70	0.87	1.85E+002	121.80	1.33E+003
3	945-	961	953.75	238.38	1.41	3.05E+002	75.88	3.80E+002
4	1169-	1187	1180.57	295.10	0.91	1.02E+002	61.98	2.66E+002
5	1397-	1417	1406.95	351.71	1.98	1.81E+002	57.65	1.89E+002
6	2030-	2053	2042.80	510.72	1.80	1.39E+002	56.66	1.74E+002
7	2321-	2342	2331.05	582.80	1.55	1.98E+002	49.49	1.16E+002
8	2426-	2447	2435.23	608.85	1.51	1.80E+002	44.85	9.17E+001
9	3633-	3653	3642.86	910.84	1.93	1.85E+002	40.71	6.80E+001
10	3864-	3883	3874.80	968.84	0.34	6.21E+001	37.04	8.29E+001
11	4472-	4488	4478.92	1119.91	0.42	5.17E+001	28.77	5.23E+001
12	5828-	5858	5843.24	1461.08	2.18	1.24E+003	74.43	4.23E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.997	511.00*		100.00	1.95408E-001	8.39940E-002
K-40	0.998	1460.81*		10.67	2.13970E+001	2.15855E+000
TL-208	0.749	277.35		6.80		
		510.84*		21.60	9.04668E-001	3.95817E-001
		583.14*		84.20	3.45132E-001	9.73630E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	6.91926E+000	2.48312E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.64834E-001	2.25006E-001
Bi-214	0.695	609.31*		46.30	5.80507E-001	1.61154E-001
		1120.29*		15.10	5.94587E-001	3.36820E-001
		1764.49		15.80		
PB-214	0.582	74.82*	@	6.21	1.19221E+001	4.36514E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	6.31754E-001	3.98289E-001
		351.92*		37.20	6.09585E-001	2.18848E-001
Ac-228	0.632	338.32		11.40		
		911.07*		27.70	1.09363E+000	2.71634E-001
		969.11*		16.60	6.23451E-001	3.77534E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.997	1.208599E-001	8.655264E-002
K-40		0.998	2.139696E+001	2.158546E+000
TL-208		0.749	3.451316E-001	9.671113E-002
Pb-212	@	0.520	7.648344E-001	2.250059E-001
Bi-214		0.695	5.831298E-001	1.453717E-001
PB-214	@	0.582	6.147260E-001	1.918012E-001
Ac-228		0.632	9.332506E-001	2.204932E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.70	3.0863E-001	65.78

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	9.9526E-002	8.62E-002	-4.4102E-002
	1332.49	100.00	8.6234E-002		-4.7565E-002
Nb-94	702.63	100.00	1.0343E-001	9.92E-002	3.9602E-002
	871.10	100.00	9.9194E-002		3.9555E-002
Ag-108m	79.20	7.10	5.3955E+000	1.27E-001	-5.0197E+000
	433.93	89.90	1.2665E-001		-7.0872E-002
	614.37	90.40	1.3888E-001		2.3666E-002
	722.95	90.50	1.3023E-001		6.5890E-002
Sb-125	176.33	6.89	2.3535E+000	3.77E-001	-8.3805E-001
	427.89	29.33	3.7680E-001		1.6926E-001
	463.38	10.35	1.1430E+000		1.3260E+000
	600.56	17.80	6.4566E-001		3.4756E-002
	606.64	5.02	2.8127E+000		4.6291E+000
	635.90	11.32	8.8621E-001		2.3934E-001
Cs-134	563.23	8.38	1.3096E+000	1.22E-001	-7.5755E-001
	569.32	15.43	6.9382E-001		2.5400E-001
	604.70	97.60	1.4612E-001		-5.0744E-002
	795.84	85.40	1.2233E-001		-4.7052E-002
	801.93	8.73	1.1406E+000		-5.8548E-001
Cs-137	661.65	85.12	1.3382E-001	1.34E-001	6.7974E-002
Eu-152	121.78	28.40	7.5631E-001	3.59E-001	2.8202E-001
	244.69	7.49	1.9600E+000		-1.5662E+000
	344.27	26.50	4.5967E-001		-7.5726E-001
	778.89	12.74	7.6785E-001		-4.4174E-001
	867.32	4.16	2.3967E+000		-6.5432E-001
	964.01	14.40	8.8323E-001		-4.1645E-002
	1085.78	10.00	9.4557E-001		-6.7807E-001
	1112.02	13.30	7.6023E-001		-5.5928E-002
	1407.95	20.70	3.5859E-001		2.7488E-001
Eu-154	123.07	40.50	5.2169E-001	2.40E-001	-9.0255E-002
	247.94	6.60	2.1298E+000		1.7943E+000
	591.81	4.83	2.1197E+000		-1.6435E+000
	723.30	19.70	5.9004E-001		-6.0294E-002
	756.87	4.33	2.0503E+000		-1.0697E+000
	873.19	11.50	8.4717E-001		-2.8230E-001
	996.32	10.30	9.0268E-001		-2.3636E-002
	1004.76	17.90	5.2066E-001		-2.3518E-001
	1274.45	35.50	2.4040E-001		-1.5996E-001
Eu-155	86.54	30.90	1.1086E+000	1.11E+000	-6.7412E-002
	105.31	20.70	1.1865E+000		-4.8263E-001
Am-241	59.54	35.90	1.3303E+000	1.33E+000	-7.7687E-001
Cm-243	228.19	10.56	1.3726E+000	9.79E-001	-1.0839E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.7940E-001	9.79E-001	3.1751E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 11:00:20 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-139-F-
Sample Title: OOL-09-02-139-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 10:50:17 PM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-139-F-
Title: OOL-09-02-139-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	316	291.77	72.77	1.01	4.04E+002	63.82	1.12E+003
m	2	286-	316	300.34	74.91	1.01	8.01E+002	75.00	1.37E+003
m	3	286-	316	309.28	77.15	1.02	1.34E+002	54.40	1.35E+003
	4	332-	344	339.99	84.83	0.97	1.92E+002	116.05	1.26E+003
	5	834-	841	837.09	209.14	0.41	3.74E+001	41.16	2.01E+002
	6	928-	961	953.60	238.28	1.08	2.54E+002	130.32	7.93E+002
	7	1170-	1185	1179.90	294.87	0.51	1.04E+002	53.05	2.09E+002
	8	1343-	1361	1350.96	337.65	1.03	1.30E+002	54.12	1.87E+002
	9	1401-	1414	1406.26	351.48	1.25	1.34E+002	45.82	1.49E+002
	10	1551-	1560	1555.20	388.72	0.49	2.96E+001	27.78	7.54E+001
	11	2323-	2338	2331.24	582.79	1.05	1.59E+002	40.34	8.81E+001
	12	2424-	2443	2435.16	608.78	1.42	1.50E+002	45.62	1.12E+002
	13	2900-	2914	2906.86	726.74	1.54	5.46E+001	26.39	4.34E+001
	14	3432-	3445	3439.70	859.99	1.19	3.68E+001	20.45	2.62E+001
	15	3634-	3651	3642.33	910.66	0.85	1.58E+002	34.86	4.87E+001
M	16	3852-	3883	3857.61	964.50	1.61	3.27E+001	15.03	3.13E+001
m	17	3852-	3883	3873.58	968.49	1.61	1.21E+002	23.22	4.06E+001
	18	4471-	4486	4478.46	1119.76	1.03	6.37E+001	27.28	4.33E+001
	19	5827-	5855	5841.31	1460.57	2.02	1.27E+003	74.74	3.98E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.998	1460.81*	10.67	2.13037E+001	2.13218E+000
TL-208	0.619	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.68882E-001	7.67109E-002
		860.37*	12.46	4.62147E-001	2.63036E-001
Bi-212	0.994	727.17*	11.80	6.99874E-001	3.48355E-001
Pb-212	0.841	74.81* @	10.70	1.14676E+001	2.49066E+000
		77.11* @	18.00	1.09779E+000	4.93720E-001
		87.30 @	8.00		
		238.63*	44.60	6.16605E-001	3.31122E-001
Bi-214	0.692	609.31*	46.30	4.69084E-001	1.53704E-001
		1120.29*	15.10	7.09505E-001	3.13302E-001
		1764.49	15.80		
PB-214	0.759	74.82* @	6.21	1.97589E+001	4.52483E+000
		77.11* @	10.50	1.88193E+000	8.57963E-001
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	6.26759E-001	3.35270E-001
		351.92*	37.20	4.37776E-001	1.66161E-001
Ac-228	0.990	338.32*	11.40	1.36384E+000	6.07344E-001
		911.07*	27.70	9.05659E-001	2.25070E-001
		969.11*	16.60	1.17977E+000	2.57420E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.998	2.130368E+001	2.132178E+000
TL-208		0.619	2.840307E-001	7.364308E-002
Bi-212		0.994	6.998743E-001	3.483553E-001
Pb-212	@	0.841	6.166050E-001	3.311220E-001
Bi-214		0.692	5.157234E-001	1.379923E-001
PB-214	@	0.759	4.750414E-001	1.488795E-001
Ac-228		0.990	1.048928E+000	1.632063E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.77	6.7333E-001	15.80
4	84.83	3.1936E-001	60.56
5	209.14	6.2374E-002	109.97
10	388.72	4.9254E-002	94.02
M 16	964.50	5.4552E-002	45.91

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.4069E-002	7.42E-002	-4.4356E-002
	1332.49	100.00	7.4164E-002		5.3547E-002
Nb-94	702.63	100.00	9.5019E-002	8.49E-002	-1.6018E-002
	871.10	100.00	8.4890E-002		5.5565E-003
Ag-108m	79.20	7.10	4.5547E+000	1.16E-001	-1.9137E+000
	433.93	89.90	1.1640E-001		-3.3074E-002
	614.37	90.40	1.2161E-001		2.7702E-002
	722.95	90.50	1.1852E-001		1.3292E-002
Sb-125	176.33	6.89	2.1468E+000	3.71E-001	9.7724E-001
	427.89	29.33	3.7054E-001		-1.1373E-001
	463.38	10.35	1.0100E+000		2.9058E-001
	600.56	17.80	5.4711E-001		2.1046E-001
	606.64	5.02	2.6448E+000		3.9025E+000
	635.90	11.32	8.3012E-001		-1.9906E-001
Cs-134	563.23	8.38	1.1405E+000	1.15E-001	-7.2885E-001
	569.32	15.43	6.2313E-001		4.4303E-001
	604.70	97.60	1.3372E-001		3.5769E-003
	795.84	85.40	1.1533E-001		1.6104E-001
	801.93	8.73	1.0688E+000		-3.6019E-001
Cs-137	661.65	85.12	1.2298E-001	1.23E-001	4.5731E-002
Eu-152	121.78	28.40	6.8696E-001	3.80E-001	-8.7019E-003
	244.69	7.49	1.7823E+000		-1.7732E-001
	344.27	26.50	4.0776E-001		-4.9031E-001
	778.89	12.74	6.9103E-001		-9.8007E-001
	867.32	4.16	2.1014E+000		-1.0774E+000
	964.01	14.40	8.6177E-001		-2.0530E-001
	1085.78	10.00	8.9888E-001		-5.5744E-001
	1112.02	13.30	7.6575E-001		-2.3883E-001
	1407.95	20.70	3.8046E-001		3.8065E-001
Eu-154	123.07	40.50	4.7980E-001	2.58E-001	2.0870E-001
	247.94	6.60	1.8980E+000		-1.3973E+000
	591.81	4.83	1.9361E+000		-1.1429E+000
	723.30	19.70	5.3962E-001		7.7533E-002
	756.87	4.33	2.1500E+000		3.4525E-001
	873.19	11.50	7.5557E-001		-4.9530E-001
	996.32	10.30	8.5120E-001		4.7744E-001
	1004.76	17.90	5.3516E-001		4.2325E-001
	1274.45	35.50	2.5777E-001		2.0758E-001
Eu-155	86.54	30.90	9.8206E-001	9.82E-001	-2.0659E-001
	105.31	20.70	1.1555E+000		-8.3126E-002
Am-241	59.54	35.90	1.2252E+000	1.23E+000	-1.7121E-001
Cm-243	228.19	10.56	1.2709E+000	9.05E-001	6.7692E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.0511E-001	9.05E-001	8.3432E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/17/2006 2:47:47 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-140-F-G
Sample ID: OOL-09-02-140
Sample Title: OOL-09-02-140-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 11:40:18 PM
Live Time: 600.0 seconds
Real Time: 602.1 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-140-F-G
Log Number: OOL-09-02-140
Title: OOL-09-02-140-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	308	291.71	72.83	1.11	3.23E+002	70.37	2.14E+003
m	2	283-	308	299.34	74.74	1.11	7.37E+002	80.08	2.13E+003
F	3	945-	959	953.13	238.23	1.31	2.48E+002	42.79	4.16E+002
F	4	1172-	1184	1178.10	294.49	1.36	6.74E+001	50.41	1.94E+002
F	5	1344-	1356	1349.18	337.27	1.39	7.77E+001	27.50	1.69E+002
F	6	1397-	1412	1405.20	351.27	1.40	1.69E+002	74.13	1.63E+002
F	7	2320-	2337	2328.39	582.13	1.56	1.43E+002	28.96	1.24E+002
F	8	2425-	2444	2433.96	608.53	1.57	1.24E+002	25.05	8.26E+001
F	9	3430-	3443	3436.29	859.18	1.71	2.63E+001	15.02	3.48E+001
F	10	3629-	3650	3639.69	910.05	1.73	1.53E+002	55.60	7.48E+001
F	11	3862-	3879	3870.57	967.78	1.76	8.36E+001	21.40	4.92E+001
F	12	5822-	5851	5837.82	1459.72	1.97	1.15E+003	97.37	1.83E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-140-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
K-40	0.963	1460.81*	10.67	2.07675E+001	2.17241E+000
TL-208	0.595	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.62116E-001	5.89521E-002
		860.37*	12.46	3.63011E-001	2.08813E-001
Pb-212	0.518	74.81* @	10.70	1.09011E+001	2.08666E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.32742E-001	1.44927E-001
Bi-214	0.387	609.31*	46.30	4.18472E-001	9.27625E-002
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.571	74.82* @	6.21	1.87829E+001	3.84523E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.27519E-001	3.26555E-001
		351.92*	37.20	5.88197E-001	2.70608E-001
Ac-228	0.960	338.32*	11.40	8.70176E-001	3.27918E-001
		911.07*	27.70	9.64628E-001	3.54824E-001
		969.11*	16.60	8.90574E-001	2.33583E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-140-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
K-40		0.963	2.076750E+001	2.172410E+000
TL-208		0.595	2.695640E-001	5.673449E-002
Pb-212	@	0.518	6.327420E-001	1.449266E-001
Bi-214		0.387	4.184724E-001	9.276252E-002
PB-214	@	0.571	5.227808E-001	2.083634E-001
Ac-228		0.960	9.017772E-001	1.676695E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.83	5.3890E-001	21.76

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-140-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.1431E-001	9.34E-002	9.5991E-002
	1332.49	100.00	9.3379E-002		1.1044E-001
Nb-94	702.63	100.00	1.1416E-001	1.02E-001	1.6685E-002
	871.10	100.00	1.0188E-001		-1.3674E-001
Ag-108m	79.20	7.10	6.2193E+000	1.35E-001	-1.1115E+001
	433.93	89.90	1.3505E-001		2.8151E-002
	614.37	90.40	1.3581E-001		-5.0318E-002
	722.95	90.50	1.3695E-001		6.8147E-002
Sb-125	176.33	6.89	2.6514E+000	4.22E-001	1.0304E-001
	427.89	29.33	4.2154E-001		2.0383E-001
	463.38	10.35	1.1803E+000		3.4990E-001
	600.56	17.80	6.2892E-001		-6.5623E-001
	606.64	5.02	2.7287E+000		3.1541E+000
	635.90	11.32	1.0235E+000		3.8576E-001
Cs-134	563.23	8.38	1.4415E+000	1.32E-001	-9.8384E-002
	569.32	15.43	7.4820E-001		-1.2826E-001
	604.70	97.60	1.4122E-001		3.5843E-002
	795.84	85.40	1.3214E-001		6.6256E-002
	801.93	8.73	1.2214E+000		-4.9424E-001
Cs-137	661.65	85.12	1.3362E-001	1.34E-001	-2.4854E-002
Eu-152	121.78	28.40	9.0402E-001	3.39E-001	-3.9905E-002
	244.69	7.49	2.0688E+000		-1.3650E+000
	344.27	26.50	4.7542E-001		-4.4529E-001
	778.89	12.74	8.1151E-001		-8.6146E-001
	867.32	4.16	2.4544E+000		6.2431E-002
	964.01	14.40	9.6041E-001		2.1639E+000
	1085.78	10.00	1.0118E+000		4.5376E-001
	1112.02	13.30	8.0300E-001		-1.1250E+000
	1407.95	20.70	3.3904E-001		-1.1848E-002
Eu-154	123.07	40.50	6.2372E-001	2.83E-001	-4.4545E-001
	247.94	6.60	2.2029E+000		-2.3880E+000
	591.81	4.83	2.2719E+000		1.0145E+000
	723.30	19.70	6.2800E-001		4.4572E-001
	756.87	4.33	2.3834E+000		-6.9622E-001
	873.19	11.50	8.8932E-001		-5.6605E-001
	996.32	10.30	1.0669E+000		8.8112E-001
	1004.76	17.90	5.8320E-001		5.5555E-002
	1274.45	35.50	2.8296E-001		1.0025E-001
Eu-155	86.54	30.90	1.3036E+000	1.30E+000	2.0481E+000
	105.31	20.70	1.4379E+000		6.5925E-001
Am-241	59.54	35.90	1.7444E+000	1.74E+000	3.2410E-001
Cm-243	228.19	10.56	1.4897E+000	1.05E+000	-3.2416E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0493E+000	1.05E+000	4.1405E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 12:52:26 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-02-141
Sample Title: OOL-09-02-141-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 12:42:24 AM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: ORG7829
Log Number: OOL-09-02-141
Title: OOL-09-02-141-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	305	291.55	72.89	1.03	1.45E+002	45.15	7.02E+002
m	2	286-	305	299.41	74.85	1.03	2.73E+002	53.46	9.44E+002
M	3	943-	972	953.69	238.43	1.17	2.62E+002	39.19	2.84E+002
m	4	943-	972	965.84	241.47	1.18	4.44E+001	27.39	2.94E+002
	5	1400-	1412	1406.13	351.55	0.94	1.16E+002	39.99	1.13E+002
	6	2029-	2050	2040.89	510.26	1.44	1.17E+002	47.33	1.24E+002
	7	2321-	2339	2329.56	582.43	0.78	1.06E+002	40.97	9.75E+001
	8	2426-	2442	2433.64	608.45	1.48	1.07E+002	36.01	7.16E+001
	9	3630-	3648	3640.49	910.19	1.35	1.42E+002	29.21	2.36E+001
	10	3863-	3879	3870.56	967.71	0.60	5.94E+001	26.04	3.66E+001
	11	5823-	5850	5837.71	1459.53	1.59	8.34E+002	61.26	3.16E+001
	12	7047-	7060	7053.99	1763.63	1.55	3.37E+001	12.84	3.31E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.982	511.00*		100.00	2.10444E-001	8.96534E-002
K-40	0.947	1460.81*		10.67	1.89593E+001	2.07206E+000
TL-208	0.740	277.35		6.80		
		510.84*		21.60	9.74277E-001	4.22619E-001
		583.14*		84.20	2.37560E-001	9.65075E-002
		860.37		12.46		
Pb-212	0.593	74.81*	@	10.70	1.07055E+001	2.96848E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.55067E-001	1.85284E-001
Bi-214	0.678	609.31*		46.30	4.42238E-001	1.58014E-001
		1120.29		15.10		
		1764.49*		15.80	5.47739E-001	2.15781E-001
PB-214	0.386	74.82*	@	6.21	1.84459E+001	5.28714E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98*		7.49	8.64808E-001	5.52887E-001
		295.21		19.20		
		351.92*		37.20	4.98048E-001	1.90890E-001
Ac-228	0.601	338.32		11.40		
		911.07*		27.70	1.08393E+000	2.54977E-001
		969.11*		16.60	7.66392E-001	3.45546E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN		0.982	1.591307E-001	9.202974E-002
K-40		0.947	1.895932E+001	2.072061E+000
TL-208		0.740	2.375604E-001	9.619652E-002
Pb-212	@	0.593	8.550672E-001	1.852843E-001
Bi-214		0.678	4.790643E-001	1.274869E-001
PB-214	@	0.386	5.371115E-001	1.804386E-001
Ac-228		0.601	9.719853E-001	2.051674E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.89	2.4209E-001	31.08

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2247E-001	9.68E-002	-4.5697E-003
	1332.49	100.00	9.6842E-002		1.5689E-002
Nb-94	702.63	100.00	1.1369E-001	1.09E-001	3.9776E-003
	871.10	100.00	1.0883E-001		1.0802E-001
Ag-108m	79.20	7.10	9.9533E+000	1.37E-001	-5.4118E+000
	433.93	89.90	1.4244E-001		-1.0896E-001
	614.37	90.40	1.5012E-001		-4.7700E-002
	722.95	90.50	1.3655E-001		8.6357E-002
Sb-125	176.33	6.89	2.8645E+000	4.49E-001	-7.3042E-001
	427.89	29.33	4.4885E-001		-1.4946E-001
	463.38	10.35	1.2273E+000		1.2718E+000
	600.56	17.80	7.0015E-001		2.7197E-001
	606.64	5.02	3.1761E+000		4.3589E+000
	635.90	11.32	1.0496E+000		4.0569E-001
Cs-134	563.23	8.38	1.4587E+000	1.39E-001	6.3030E-001
	569.32	15.43	7.9099E-001		-6.0752E-001
	604.70	97.60	1.6318E-001		-4.0014E-003
	795.84	85.40	1.3876E-001		-5.3878E-002
	801.93	8.73	1.3458E+000		-1.1560E-001
Cs-137	661.65	85.12	1.4975E-001	1.50E-001	4.9568E-002
Eu-152	121.78	28.40	9.7711E-001	3.64E-001	2.3088E-001
	244.69	7.49	2.3311E+000		4.8274E-002
	344.27	26.50	5.3402E-001		5.5444E-002
	778.89	12.74	8.9056E-001		3.8733E-001
	867.32	4.16	2.5580E+000		-2.7926E+000
	964.01	14.40	9.5767E-001		8.3819E-001
	1085.78	10.00	1.0876E+000		-3.9764E-003
	1112.02	13.30	8.3454E-001		-1.3247E+000
	1407.95	20.70	3.6358E-001		-5.7919E-001
Eu-154	123.07	40.50	6.7371E-001	2.76E-001	-1.4476E-001
	247.94	6.60	2.5633E+000		-1.3973E+000
	591.81	4.83	2.4783E+000		-2.0716E+000
	723.30	19.70	6.2736E-001		3.2260E-001
	756.87	4.33	2.6787E+000		1.1090E+000
	873.19	11.50	9.6256E-001		6.9308E-001
	996.32	10.30	1.0173E+000		-1.1758E+000
	1004.76	17.90	6.3065E-001		1.4042E-001
	1274.45	35.50	2.7585E-001		-2.0202E-001
Eu-155	86.54	30.90	1.7006E+000	1.70E+000	8.2583E-001
	105.31	20.70	1.7550E+000		1.5443E+000
Am-241	59.54	35.90	3.9322E+000	3.93E+000	-3.1928E+000
Cm-243	228.19	10.56	1.6757E+000	1.07E+000	9.8865E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0672E+000	1.07E+000	-6.7131E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 3:43:22 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-142-F-
Sample Title: OOL-09-02-142-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 3:33:15 PM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-142-F-
Title: OOL-09-02-142-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	292-	309	300.92	75.13	1.53	8.69E+002	170.97	2.07E+003
2	333-	344	339.81	84.86	1.11	2.32E+002	112.26	1.22E+003
3	945-	960	954.52	238.58	1.62	3.21E+002	75.49	3.87E+002
4	1346-	1364	1353.17	338.26	0.39	8.74E+001	58.69	2.39E+002
5	1397-	1418	1407.11	351.75	1.21	1.73E+002	62.20	2.22E+002
6	2324-	2341	2332.05	583.05	1.86	2.14E+002	44.44	9.21E+001
7	2427-	2447	2436.08	609.06	1.63	1.34E+002	48.54	1.32E+002
8	3066-	3077	3071.67	768.00	0.51	2.43E+001	22.25	4.17E+001
9	3337-	3348	3342.33	835.69	0.36	2.40E+001	20.50	3.40E+001
10	3632-	3655	3645.10	911.40	1.39	1.81E+002	40.23	6.00E+001
11	3866-	3885	3874.80	968.84	1.59	1.04E+002	36.28	6.77E+001
12	4476-	4489	4482.44	1120.79	1.45	4.08E+001	27.47	5.62E+001
13	5830-	5860	5845.19	1461.57	2.08	1.28E+003	71.71	1.17E+001
14	6364-	6377	6370.75	1592.99	0.28	1.04E+001	11.45	8.62E+000
15	7055-	7071	7061.95	1765.84	0.56	3.92E+001	17.46	1.28E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
K-40	0.982	1460.81*	10.67	2.21707E+001	2.18208E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.73386E-001	9.15382E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.28494E+001	3.56926E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.05415E-001	2.27681E-001
Bi-214	0.986	609.31*	46.30	4.30586E-001	1.65068E-001
		1120.29*	15.10	4.69520E-001	3.19891E-001
		1764.49*	15.80	4.75826E-001	2.17131E-001
Ac-228	0.998	338.32*	11.40	9.47608E-001	6.53511E-001
		911.07*	27.70	1.07035E+000	2.67844E-001
		969.11*	16.60	1.04733E+000	3.80439E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
K-40		0.982	2.217069E+001	2.182075E+000
TL-208		0.471	3.733859E-001	9.153817E-002
Pb-212	@	0.521	8.054155E-001	2.276812E-001
Bi-214		0.986	4.503843E-001	1.215506E-001
Ac-228		0.998	1.051097E+000	2.076590E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.86	3.8621E-001	48.44
5	351.75	2.8764E-001	36.04
8	768.00	4.0442E-002	91.70
9	835.69	3.9943E-002	85.54
14	1592.99	1.7303E-002	110.33

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0668E-001	8.36E-002	5.4984E-002
	1332.49	100.00	8.3566E-002		-4.5798E-002
Nb-94	702.63	100.00	1.1126E-001	9.52E-002	6.9016E-002
	871.10	100.00	9.5210E-002		-5.7559E-002
Ag-108m	79.20	7.10	5.6645E+000	1.24E-001	-6.9550E+000
	433.93	89.90	1.2350E-001		-4.9464E-002
	614.37	90.40	1.4554E-001		8.5861E-002
	722.95	90.50	1.2895E-001		1.5986E-001
Sb-125	176.33	6.89	2.4080E+000	3.99E-001	-1.6692E+000
	427.89	29.33	3.9920E-001		-1.9747E-001
	463.38	10.35	1.1225E+000		1.1690E+000
	600.56	17.80	5.9925E-001		-7.1435E-002
	606.64	5.02	2.7952E+000		4.6066E+000
	635.90	11.32	9.5397E-001		-6.2395E-001
Cs-134	563.23	8.38	1.3626E+000	1.20E-001	-2.6441E-001
	569.32	15.43	7.3861E-001		4.0162E-002
	604.70	97.60	1.3997E-001		4.7441E-003
	795.84	85.40	1.2039E-001		-3.5405E-002
	801.93	8.73	1.1036E+000		-9.0753E-001
Cs-137	661.65	85.12	1.3490E-001	1.35E-001	8.4215E-002
Eu-152	121.78	28.40	7.8706E-001	3.61E-001	-2.5619E-001
	244.69	7.49	2.0376E+000		-3.8300E+000
	344.27	26.50	4.7485E-001		1.9778E-001
	778.89	12.74	8.2067E-001		-5.4047E-002
	867.32	4.16	2.4039E+000		-1.1942E+000
	964.01	14.40	9.2303E-001		-1.6963E-001
	1085.78	10.00	9.9081E-001		5.6710E-001
	1112.02	13.30	7.6023E-001		-9.5966E-001
	1407.95	20.70	3.6111E-001		-3.4784E-002
Eu-154	123.07	40.50	5.4921E-001	2.70E-001	8.9334E-002
	247.94	6.60	2.2195E+000		-3.3374E-001
	591.81	4.83	2.2310E+000		-9.5052E-002
	723.30	19.70	5.8645E-001		2.5812E-001
	756.87	4.33	2.4191E+000		-1.7097E+000
	873.19	11.50	8.7077E-001		4.4519E-001
	996.32	10.30	9.3558E-001		2.6760E-001
	1004.76	17.90	5.3777E-001		-6.3029E-001
	1274.45	35.50	2.7014E-001		-3.8938E-002
Eu-155	86.54	30.90	1.1457E+000	1.15E+000	8.9825E-001
	105.31	20.70	1.2458E+000		1.4215E-001
Am-241	59.54	35.90	1.3980E+000	1.40E+000	-5.3383E-001
Cm-243	228.19	10.56	1.4186E+000	1.03E+000	1.7373E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0271E+000	1.03E+000	8.1335E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/20/2006 3:27:24 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-143-F-G
Sample ID: OOL-09-02-143
Sample Title: OOL-09-02-143-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/19/2006 7:34:23 AM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-143-F-G
Log Number: OOL-09-02-143
Title: OOL-09-02-143-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	306	300.44	75.01	1.31	4.23E+002	134.35	1.69E+003
2	330-	346	339.39	84.75	1.43	2.61E+002	147.83	1.73E+003
3	947-	960	953.93	238.43	1.49	3.25E+002	71.68	3.63E+002
4	1076-	1086	1081.44	270.31	0.72	3.63E+001	42.10	1.79E+002
5	1172-	1187	1180.58	295.10	1.34	1.02E+002	53.21	2.10E+002
6	1331-	1364	1352.93	338.20	1.63	1.38E+002	89.41	3.67E+002
7	1401-	1414	1407.51	351.85	1.74	1.04E+002	45.51	1.58E+002
8	2032-	2053	2043.67	510.94	1.23	1.35E+002	50.22	1.38E+002
9	2322-	2342	2332.35	583.12	1.65	2.37E+002	47.97	9.98E+001
10	2426-	2446	2437.20	609.34	1.77	2.00E+002	46.47	9.93E+001
11	2640-	2655	2647.02	661.81	0.36	2.70E+001	27.82	5.80E+001
12	2902-	2918	2911.58	727.97	0.34	5.64E+001	34.14	7.66E+001
13	3634-	3656	3645.14	911.41	1.08	2.00E+002	41.34	6.33E+001
14	3869-	3886	3877.06	969.40	0.67	1.01E+002	33.95	6.13E+001
15	4476-	4489	4483.14	1120.96	0.54	2.87E+001	26.23	5.43E+001
16	5833-	5861	5846.67	1461.94	1.87	1.18E+003	72.20	3.91E+001
17	7056-	7070	7063.86	1766.31	0.57	5.15E+001	17.42	9.46E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-143-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	1.000	511.00*	100.00	1.90094E-001	7.52001E-002
K-40	0.961	1460.81*	10.67	2.03823E+001	2.06973E+000
Cs-137	0.999	661.65*	85.12	4.86245E-002	5.04077E-002
TL-208	0.752	277.35	6.80		
		510.84*	21.60	8.80066E-001	3.55490E-001
		583.14*	84.20	4.14117E-001	9.95906E-002
		860.37	12.46		
Bi-212	0.980	727.17*	11.80	7.47325E-001	4.60494E-001
Pb-212	0.520	74.81* @	10.70	6.27783E+000	2.34125E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.15401E-001	2.20668E-001
Bi-214	0.976	609.31*	46.30	6.43144E-001	1.69333E-001
		1120.29*	15.10	3.30359E-001	3.03758E-001
		1764.49*	15.80	6.25349E-001	2.20444E-001
PB-214	0.583	74.82* @	6.21	1.08169E+001	4.10975E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	6.30574E-001	3.46179E-001
		351.92*	37.20	3.49797E-001	1.63719E-001
Ac-228	0.997	338.32*	11.40	1.49210E+000	9.97181E-001
		911.07*	27.70	1.18123E+000	2.79690E-001
		969.11*	16.60	1.01124E+000	3.56962E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-143-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		1.000	1.006449E-001	7.816205E-002
K-40		0.961	2.038230E+001	2.069730E+000
Cs-137		0.999	4.862446E-002	5.040770E-002
TL-208		0.752	4.141172E-001	9.867200E-002
Bi-212		0.980	7.473246E-001	4.604944E-001
Pb-212	@	0.520	8.154009E-001	2.206675E-001
Bi-214		0.976	5.864830E-001	1.228211E-001
PB-214	@	0.583	4.011185E-001	1.480023E-001
Ac-228		0.997	1.134021E+000	2.149816E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.75	4.3525E-001	56.61
4	270.31	6.0417E-002	116.14

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-143-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
	Co-60	1173.22	100.00	1.0734E-001	7.89E-002	-7.3352E-002
		1332.49	100.00	7.8908E-002		3.6198E-002
	Nb-94	702.63	100.00	1.1101E-001	1.04E-001	-5.2761E-002
		871.10	100.00	1.0416E-001		5.1506E-002
	Ag-108m	79.20	7.10	5.7124E+000	1.20E-001	-8.0898E+000
		433.93	89.90	1.2027E-001		-5.8056E-002
		614.37	90.40	1.5331E-001		-1.1155E-002
		722.95	90.50	1.3352E-001		7.5211E-003
	Sb-125	176.33	6.89	2.3978E+000	3.86E-001	-1.1787E+000
		427.89	29.33	3.8640E-001		-1.5013E-001
		463.38	10.35	1.1362E+000		8.8554E-001
		600.56	17.80	6.0445E-001		-4.1019E-001
		606.64	5.02	2.9487E+000		6.6102E+000
		635.90	11.32	9.7889E-001		5.7162E-001
	Cs-134	563.23	8.38	1.2809E+000	1.28E-001	-6.2417E-001
		569.32	15.43	7.1658E-001		-1.6541E-001
		604.70	97.60	1.4577E-001		4.4226E-002
		795.84	85.40	1.2827E-001		6.8504E-002
		801.93	8.73	1.1922E+000		-1.2717E+000
+	Cs-137	661.65*	85.12	8.3099E-002	8.31E-002	4.8624E-002
	Eu-152	121.78	28.40	8.0401E-001	3.59E-001	4.4877E-001
		244.69	7.49	2.0327E+000		-3.2347E+000
		344.27	26.50	4.7278E-001		-1.6516E-001
		778.89	12.74	7.9692E-001		-1.1851E+000
		867.32	4.16	2.5957E+000		-2.0253E+000
		964.01	14.40	9.4702E-001		1.1750E-001
		1085.78	10.00	9.7020E-001		-6.5992E-001
		1112.02	13.30	7.9731E-001		-1.0733E-001
		1407.95	20.70	3.5859E-001		8.8663E-002
	Eu-154	123.07	40.50	5.5903E-001	2.68E-001	4.7533E-001
		247.94	6.60	2.1721E+000		-1.1780E+000
		591.81	4.83	2.3277E+000		2.8083E+000
		723.30	19.70	6.1688E-001		-3.5930E-002
		756.87	4.33	2.4375E+000		-2.1093E-002
		873.19	11.50	8.9373E-001		-1.5825E-001
		996.32	10.30	9.2584E-001		6.4475E-001
		1004.76	17.90	5.1678E-001		2.4728E-001
		1274.45	35.50	2.6798E-001		2.4781E-001
	Eu-155	86.54	30.90	1.1491E+000	1.15E+000	-1.5837E-002
		105.31	20.70	1.2735E+000		-1.0666E+000
	Am-241	59.54	35.90	1.4310E+000	1.43E+000	6.9072E-001
	Cm-243	228.19	10.56	1.3805E+000	1.01E+000	-2.0999E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0104E+000	1.01E+000	-3.9060E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 3:45:01 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-02-144-F-
Sample Title: OOL-09-02-144-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 3:34:58 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: ORG7829
Log Number: OOL-09-02-144-F-
Title: OOL-09-02-144-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	291.90	72.98	0.91	1.65E+002	44.25	7.09E+002
m	2	285-	306	300.51	75.13	0.92	3.29E+002	54.65	8.00E+002
	3	334-	355	340.37	85.09	0.51	1.86E+002	139.95	1.30E+003
	4	948-	961	954.64	238.67	1.51	2.14E+002	62.90	2.95E+002
	5	1346-	1361	1352.96	338.26	0.41	5.30E+001	46.90	1.72E+002
	6	1402-	1414	1407.26	351.84	1.03	1.33E+002	39.58	1.04E+002
	7	1789-	1801	1794.87	448.75	0.86	2.44E+001	26.31	5.76E+001
M	8	2323-	2361	2332.65	583.20	1.13	1.28E+002	26.35	7.23E+001
m	9	2323-	2361	2355.88	589.01	1.13	2.28E+001	15.13	5.81E+001
	10	2431-	2445	2437.24	609.35	1.39	1.14E+002	32.20	5.36E+001
	11	3636-	3653	3644.31	911.14	1.23	1.26E+002	33.87	5.24E+001
	12	3866-	3883	3874.99	968.82	1.58	7.69E+001	26.15	3.11E+001
	13	5831-	5858	5844.17	1461.15	1.68	8.92E+002	60.37	1.32E+001
	14	7054-	7067	7061.00	1765.38	0.37	3.81E+001	14.84	6.93E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.996	1460.81*	10.67	2.02698E+001	2.13919E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.85647E-001	6.95788E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	1.27606E+001	3.27848E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.98367E-001	2.32693E-001
Bi-214	0.692	609.31*	46.30	4.71530E-001	1.44826E-001
		1120.29	15.10		
		1764.49*	15.80	6.19098E-001	2.49149E-001
Ac-228	0.999	338.32*	11.40	7.36099E-001	6.61579E-001
		911.07*	27.70	9.56006E-001	2.80298E-001
		969.11*	16.60	9.92372E-001	3.53209E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40		0.996	2.026984E+001	2.139186E+000
TL-208		0.471	2.856468E-001	6.957879E-002
Pb-212	@	0.594	6.983670E-001	2.326929E-001
Bi-214		0.692	5.087992E-001	1.252091E-001
Ac-228		0.999	9.468459E-001	2.083861E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.98	2.7471E-001	26.84
3	85.09	3.0997E-001	75.25
6	351.84	2.2240E-001	29.66
7	448.75	4.0686E-002	107.79
m 9	589.01	3.8032E-002	66.29

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1665E-001	8.85E-002	-3.5334E-002
	1332.49	100.00	8.8473E-002		9.9152E-003
Nb-94	702.63	100.00	1.1642E-001	1.16E-001	-3.6234E-002
	871.10	100.00	1.1716E-001		7.0929E-002
Ag-108m	79.20	7.10	1.0345E+001	1.36E-001	-9.2118E+000
	433.93	89.90	1.3610E-001		-1.1052E-001
	614.37	90.40	1.6267E-001		-2.5126E-002
	722.95	90.50	1.4894E-001		6.3797E-003
Sb-125	176.33	6.89	2.8556E+000	4.13E-001	-2.9077E-001
	427.89	29.33	4.1337E-001		-2.9966E-001
	463.38	10.35	1.2678E+000		4.9979E-001
	600.56	17.80	7.0199E-001		-3.0391E-001
	606.64	5.02	3.1301E+000		7.4418E+000
	635.90	11.32	1.0077E+000		-3.6339E-001
Cs-134	563.23	8.38	1.4511E+000	1.41E-001	-7.4311E-002
	569.32	15.43	8.2959E-001		1.8567E-001
	604.70	97.60	1.5976E-001		-5.7840E-002
	795.84	85.40	1.4062E-001		1.6423E-001
	801.93	8.73	1.2790E+000		-5.3260E-001
Cs-137	661.65	85.12	1.5174E-001	1.52E-001	3.5384E-002
Eu-152	121.78	28.40	1.0009E+000	4.16E-001	1.1554E-001
	244.69	7.49	2.3201E+000		-7.8360E-002
	344.27	26.50	5.4593E-001		-5.7705E-002
	778.89	12.74	9.0989E-001		-3.6790E-001
	867.32	4.16	2.8238E+000		-1.6711E+000
	964.01	14.40	1.0542E+000		1.2239E-001
	1085.78	10.00	1.0773E+000		-8.8364E-002
	1112.02	13.30	8.6831E-001		7.2660E-001
	1407.95	20.70	4.1624E-001		1.0369E-001
Eu-154	123.07	40.50	6.9153E-001	2.85E-001	-1.7034E-001
	247.94	6.60	2.6016E+000		2.2993E-001
	591.81	4.83	2.7925E+000		7.2625E-001
	723.30	19.70	6.9774E-001		5.8565E-001
	756.87	4.33	2.7695E+000		1.3378E-001
	873.19	11.50	1.0045E+000		4.4344E-001
	996.32	10.30	1.1773E+000		-1.7294E-001
	1004.76	17.90	6.3853E-001		3.9103E-001
	1274.45	35.50	2.8466E-001		1.4052E-001
Eu-155	86.54	30.90	1.7398E+000	1.73E+000	2.0933E+000
	105.31	20.70	1.7306E+000		-2.2924E-001
Am-241	59.54	35.90	4.0307E+000	4.03E+000	1.5953E+000
Cm-243	228.19	10.56	1.6560E+000	1.11E+000	-5.5342E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1135E+000	1.11E+000	-4.7965E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 3:30:47 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-02-145-F-
Sample Title: OOL-09-02-145-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 3:20:45 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: ORG7829
Log Number: OOL-09-02-145-F-
Title: OOL-09-02-145-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	291.96	72.99	0.96	1.48E+002	45.65	8.22E+002
m	2	284-	305	300.75	75.19	0.96	3.24E+002	55.56	8.20E+002
	3	336-	346	339.85	84.96	0.83	1.12E+002	84.79	7.25E+002
	4	946-	962	954.88	238.73	1.06	2.07E+002	71.94	3.65E+002
	5	1173-	1190	1180.55	295.16	0.59	6.79E+001	54.38	2.15E+002
	6	1403-	1413	1407.74	351.96	0.68	1.18E+002	35.36	8.71E+001
	7	2037-	2054	2042.89	510.76	0.56	1.30E+002	44.49	1.17E+002
M	8	2296-	2342	2301.14	575.32	1.36	2.33E+001	13.75	3.44E+001
m	9	2296-	2342	2331.65	582.95	1.37	1.46E+002	26.76	6.55E+001
	10	2428-	2445	2436.60	609.19	1.37	1.27E+002	34.85	5.83E+001
	11	3634-	3654	3644.54	911.20	0.89	1.31E+002	34.07	4.73E+001
M	12	3851-	3884	3857.95	964.56	1.36	3.20E+001	15.10	3.84E+001
m	13	3851-	3884	3875.70	968.99	1.36	7.05E+001	19.68	3.67E+001
	14	4474-	4486	4480.46	1120.20	0.34	3.51E+001	20.88	2.89E+001
	15	5831-	5858	5844.31	1461.18	1.92	8.32E+002	60.03	2.39E+001
	16	7054-	7067	7060.12	1765.16	0.48	3.05E+001	12.83	4.48E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.998	511.00*		100.00	2.33602E-001	8.59603E-002
K-40	0.995	1460.81*		10.67	1.89124E+001	2.05094E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	1.08149E+000	4.07647E-001
		583.14*		84.20	3.25453E-001	7.32333E-002
		860.37		12.46		
Pb-212	0.593	74.81*	@	10.70	1.25200E+001	3.26176E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.76790E-001	2.57717E-001
Bi-214	0.997	609.31*		46.30	5.21883E-001	1.57334E-001
		1120.29*		15.10	5.17229E-001	3.12832E-001
		1764.49*		15.80	4.96367E-001	2.14477E-001
PB-214	0.627	74.82*	@	6.21	2.15723E+001	5.83419E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.41833E-001	4.43417E-001
		351.92*		37.20	5.06795E-001	1.73965E-001
Ac-228	0.632	338.32		11.40		
		911.07*		27.70	9.95246E-001	2.83495E-001
		969.11*		16.60	9.10353E-001	2.71347E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN		0.998	1.633040E-001	8.737362E-002
K-40		0.995	1.891243E+001	2.050941E+000
TL-208		0.752	3.254534E-001	7.246115E-002
Pb-212	@	0.593	6.767904E-001	2.577172E-001
Bi-214		0.997	5.135597E-001	1.175619E-001
PB-214	@	0.627	5.114688E-001	1.619476E-001
Ac-228		0.632	9.509416E-001	1.960255E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.99	2.4597E-001	30.93
3	84.96	1.8732E-001	75.44
M 8	575.32	3.8807E-002	59.06
M 12	964.56	5.3410E-002	47.13

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1813E-001	9.48E-002	9.3956E-002
	1332.49	100.00	9.4824E-002		5.6314E-002
Nb-94	702.63	100.00	1.2532E-001	1.14E-001	1.4117E-002
	871.10	100.00	1.1417E-001		2.2117E-002
Ag-108m	79.20	7.10	1.0485E+001	1.46E-001	-1.4314E+001
	433.93	89.90	1.4550E-001		7.5108E-002
	614.37	90.40	1.6512E-001		3.4436E-003
	722.95	90.50	1.4632E-001		1.5031E-001
Sb-125	176.33	6.89	2.8615E+000	4.45E-001	-5.4832E-001
	427.89	29.33	4.4468E-001		7.6788E-002
	463.38	10.35	1.2653E+000		5.7923E-002
	600.56	17.80	7.3763E-001		6.0957E-001
	606.64	5.02	3.1301E+000		3.7121E+000
	635.90	11.32	1.0528E+000		-5.7853E-002
Cs-134	563.23	8.38	1.5578E+000	1.44E-001	-1.2617E-001
	569.32	15.43	7.7838E-001		-5.6939E-002
	604.70	97.60	1.6292E-001		3.1717E-002
	795.84	85.40	1.4382E-001		5.5351E-002
	801.93	8.73	1.3176E+000		-6.1443E-001
Cs-137	661.65	85.12	1.4692E-001	1.47E-001	7.2240E-002
Eu-152	121.78	28.40	1.0198E+000	4.01E-001	2.3786E-001
	244.69	7.49	2.3073E+000		2.8217E-001
	344.27	26.50	5.4372E-001		-3.7941E-001
	778.89	12.74	8.8073E-001		-8.7575E-001
	867.32	4.16	2.9133E+000		4.7647E-001
	964.01	14.40	1.0660E+000		-1.8951E-001
	1085.78	10.00	1.0773E+000		-3.6427E-001
	1112.02	13.30	8.9007E-001		1.5129E-001
	1407.95	20.70	4.0084E-001		-7.5725E-002
Eu-154	123.07	40.50	7.0438E-001	2.61E-001	2.9787E-001
	247.94	6.60	2.5353E+000		-2.4180E+000
	591.81	4.83	2.6663E+000		-1.6967E-001
	723.30	19.70	6.7915E-001		7.7906E-001
	756.87	4.33	2.6414E+000		-8.4159E-001
	873.19	11.50	9.7420E-001		-7.4786E-001
	996.32	10.30	1.0369E+000		6.2628E-002
	1004.76	17.90	6.5908E-001		-4.5238E-002
	1274.45	35.50	2.6109E-001		-4.3849E-001
Eu-155	86.54	30.90	1.7844E+000	1.78E+000	1.9245E+000
	105.31	20.70	1.7846E+000		1.3864E+000
Am-241	59.54	35.90	4.1570E+000	4.16E+000	-3.5341E-001
Cm-243	228.19	10.56	1.6233E+000	1.13E+000	-5.8024E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1285E+000	1.13E+000	1.0134E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 11:56:50 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-02-146-F-
Sample Title: OOL-09-02-146-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 11:46:48 AM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: ORG7829
Log Number: OOL-09-02-146-F-
Title: OOL-09-02-146-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	292.13	73.03	1.12	1.79E+002	47.98	8.91E+002
m	2	284-	306	300.40	75.10	1.12	3.09E+002	54.80	1.00E+003
	3	949-	960	954.63	238.67	1.29	1.90E+002	52.95	2.15E+002
	4	1174-	1188	1180.16	295.06	0.79	6.78E+001	45.48	1.63E+002
	5	1348-	1359	1353.09	338.29	0.95	6.14E+001	37.30	1.20E+002
	6	1398-	1434	1407.84	351.98	1.12	1.01E+002	81.50	2.84E+002
	7	1849-	1858	1853.06	463.30	0.54	2.14E+001	25.66	6.56E+001
	8	2036-	2052	2042.85	510.75	0.63	8.38E+001	38.96	9.92E+001
	9	2322-	2341	2331.74	582.98	1.32	1.31E+002	37.08	6.48E+001
	10	2430-	2445	2437.69	609.46	1.02	1.14E+002	35.41	6.80E+001
	11	3636-	3654	3644.97	911.31	0.90	1.17E+002	29.83	3.35E+001
	12	3869-	3882	3875.56	968.96	1.18	4.45E+001	25.06	4.25E+001
	13	4477-	4489	4482.45	1120.69	0.82	3.59E+001	19.57	2.41E+001
	14	5831-	5857	5844.89	1461.33	2.02	8.54E+002	58.75	1.02E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.998	511.00*		100.00	1.50496E-001	7.28802E-002
K-40	0.991	1460.81*		10.67	1.94073E+001	2.06209E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	6.96741E-001	3.42173E-001
		583.14*		84.20	2.92859E-001	9.11167E-002
		860.37		12.46		
Pb-212	0.594	74.81*	@	10.70	1.19966E+001	3.17145E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.21400E-001	1.98403E-001
Bi-214	0.704	609.31*		46.30	4.69630E-001	1.56946E-001
		1120.29*		15.10	5.28970E-001	2.94169E-001
		1764.49		15.80		
PB-214	0.627	74.82*	@	6.21	2.06704E+001	5.66676E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.40731E-001	3.74133E-001
		351.92*		37.20	4.34344E-001	3.57661E-001
Ac-228	0.999	338.32*		11.40	8.52139E-001	5.34988E-001
		911.07*		27.70	8.94317E-001	2.49283E-001
		969.11*		16.60	5.74315E-001	3.29072E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN		0.998	8.723844E-002	7.546273E-002
K-40		0.991	1.940726E+001	2.062091E+000
TL-208		0.752	2.928589E-001	9.061547E-002
Pb-212	@	0.594	6.214004E-001	1.984029E-001
Bi-214		0.704	4.827780E-001	1.384712E-001
PB-214	@	0.627	4.851441E-001	2.585317E-001
Ac-228		0.999	7.866698E-001	1.862723E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.03	2.9870E-001	26.77
7	463.30	3.5603E-002	120.10

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1714E-001	9.28E-002	1.3027E-002
	1332.49	100.00	9.2759E-002		-4.8334E-002
Nb-94	702.63	100.00	1.1642E-001	1.08E-001	4.3864E-002
	871.10	100.00	1.0837E-001		4.0871E-002
Ag-108m	79.20	7.10	1.0236E+001	1.36E-001	-8.6146E+000
	433.93	89.90	1.4984E-001		-4.6209E-002
	614.37	90.40	1.7021E-001		1.0161E-001
	722.95	90.50	1.3573E-001		-2.3826E-002
Sb-125	176.33	6.89	2.8436E+000	4.56E-001	7.6047E-001
	427.89	29.33	4.5626E-001		1.3833E-001
	463.38	10.35	1.3047E+000		1.4327E+000
	600.56	17.80	6.5851E-001		2.6084E-002
	606.64	5.02	3.0939E+000		4.9143E+000
	635.90	11.32	1.0401E+000		2.5499E-001
Cs-134	563.23	8.38	1.5364E+000	1.34E-001	4.2954E-001
	569.32	15.43	8.5879E-001		-2.6091E-002
	604.70	97.60	1.5351E-001		-9.9156E-002
	795.84	85.40	1.3398E-001		-3.6233E-002
	801.93	8.73	1.3271E+000		-9.0202E-001
Cs-137	661.65	85.12	1.6020E-001	1.60E-001	1.6592E-001
Eu-152	121.78	28.40	9.9616E-001	4.01E-001	3.1544E-001
	244.69	7.49	2.2346E+000		-1.8364E+000
	344.27	26.50	5.3327E-001		4.2841E-002
	778.89	12.74	8.7410E-001		-1.1906E+000
	867.32	4.16	2.6135E+000		-2.4630E+000
	964.01	14.40	9.8843E-001		1.0026E-001
	1085.78	10.00	1.1329E+000		4.4384E-001
	1112.02	13.30	8.3837E-001		-2.8830E-001
	1407.95	20.70	4.0084E-001		1.7222E-001
Eu-154	123.07	40.50	6.9700E-001	3.17E-001	1.2367E-001
	247.94	6.60	2.4312E+000		-2.0202E+000
	591.81	4.83	2.4432E+000		9.9489E-001
	723.30	19.70	6.2362E-001		-5.5884E-002
	756.87	4.33	2.4664E+000		1.3062E+000
	873.19	11.50	9.4681E-001		-3.9477E-001
	996.32	10.30	1.0418E+000		5.4030E-001
	1004.76	17.90	5.9520E-001		-3.3887E-001
	1274.45	35.50	3.1734E-001		4.9042E-003
Eu-155	86.54	30.90	1.7914E+000	1.75E+000	1.4779E+000
	105.31	20.70	1.7474E+000		7.2059E-001
Am-241	59.54	35.90	4.0635E+000	4.06E+000	-3.6792E+000
Cm-243	228.19	10.56	1.6770E+000	1.14E+000	1.4339E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1399E+000	1.14E+000	7.1828E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 11:42:26 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-02-147-F-
Sample Title: OOL-09-02-147-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 11:32:25 AM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: ORG7829
Log Number: OOL-09-02-147-F-
Title: OOL-09-02-147-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	308	291.50	72.88	1.13	1.70E+002	47.60	9.99E+002
m	2	282-	308	300.50	75.13	1.13	2.92E+002	54.65	1.08E+003
M	3	333-	357	340.22	85.06	0.94	1.27E+002	47.31	8.45E+002
m	4	333-	357	349.08	87.27	0.94	8.67E+001	44.13	8.24E+002
	5	948-	963	955.12	238.79	1.20	2.20E+002	64.01	2.78E+002
	6	1173-	1190	1181.30	295.34	0.81	5.98E+001	53.58	2.11E+002
	7	1343-	1358	1353.35	338.36	0.43	5.74E+001	41.96	1.34E+002
	8	1403-	1418	1407.26	351.84	0.99	8.86E+001	44.00	1.34E+002
	9	2325-	2341	2332.73	583.22	1.02	1.29E+002	36.59	6.99E+001
	10	2428-	2445	2436.28	609.11	1.17	7.58E+001	37.14	8.62E+001
	11	2902-	2914	2907.62	726.96	0.40	5.26E+001	22.02	2.74E+001
	12	3636-	3656	3644.44	911.18	1.33	1.52E+002	29.17	1.87E+001
	13	3868-	3885	3875.07	968.84	0.78	6.22E+001	25.47	3.28E+001
	14	5832-	5857	5844.91	1461.33	1.60	7.36E+002	56.14	1.96E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.991	1460.81*	10.67	1.67376E+001	1.86130E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.88138E-001	8.98854E-002
		860.37	12.46		
Bi-212	0.998	727.17*	11.80	8.92794E-001	3.88372E-001
Pb-212	0.737	74.81* @	10.70	1.13173E+001	3.06845E+000
		77.11 @	18.00		
		87.30* @	8.00	2.67370E+000	1.45863E+000
		238.63*	44.60	7.18006E-001	2.37372E-001
Bi-214	0.402	609.31*	46.30	3.12485E-001	1.57809E-001
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.703	74.82* @	6.21	1.95000E+001	5.47324E+000
		77.11 @	10.50		
		87.30* @	4.67	4.58022E+000	2.52256E+000
		241.98	7.49		
		295.21*	19.20	4.76974E-001	4.35145E-001
		351.92*	37.20	3.80643E-001	1.99475E-001
Ac-228	0.999	338.32*	11.40	7.97798E-001	5.96078E-001
		911.07*	27.70	1.15949E+000	2.59002E-001
		969.11*	16.60	8.02797E-001	3.39431E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40		0.991	1.673757E+001	1.861302E+000
TL-208		0.471	2.881378E-001	8.988542E-002
Bi-212		0.998	8.927943E-001	3.883723E-001
Pb-212	@	0.737	7.180057E-001	2.373718E-001
Bi-214		0.402	3.124852E-001	1.578089E-001
PB-214	@	0.703	3.973711E-001	1.813303E-001
Ac-228		0.999	1.003669E+000	1.946208E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.88	2.8326E-001	28.01
M 3	85.06	2.1149E-001	37.28

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2199E-001	9.06E-002	5.1155E-002
	1332.49	100.00	9.0643E-002		2.5006E-002
Nb-94	702.63	100.00	1.1170E-001	1.11E-001	2.9836E-002
	871.10	100.00	1.1108E-001		-5.9787E-002
Ag-108m	79.20	7.10	1.0554E+001	1.33E-001	-3.4578E+000
	433.93	89.90	1.3312E-001		-7.4669E-002
	614.37	90.40	1.5892E-001		-1.6932E-002
	722.95	90.50	1.4707E-001		-1.4232E-002
Sb-125	176.33	6.89	2.8897E+000	4.13E-001	-1.2345E+000
	427.89	29.33	4.1337E-001		1.7761E-001
	463.38	10.35	1.2273E+000		-6.1457E-001
	600.56	17.80	6.9092E-001		4.3956E-001
	606.64	5.02	3.0146E+000		5.0863E+000
	635.90	11.32	1.0337E+000		7.1106E-001
Cs-134	563.23	8.38	1.4511E+000	1.30E-001	-3.5533E-001
	569.32	15.43	7.6986E-001		-2.6865E-002
	604.70	97.60	1.5155E-001		4.1607E-002
	795.84	85.40	1.2952E-001		1.7525E-002
	801.93	8.73	1.1218E+000		-1.0932E+000
Cs-137	661.65	85.12	1.4064E-001	1.41E-001	-3.8694E-003
Eu-152	121.78	28.40	1.0404E+000	4.09E-001	-2.5589E-001
	244.69	7.49	2.1866E+000		-1.0330E+000
	344.27	26.50	5.0058E-001		-5.3162E-001
	778.89	12.74	9.0670E-001		-5.5209E-001
	867.32	4.16	2.7417E+000		-4.1464E+000
	964.01	14.40	9.3924E-001		1.9097E-002
	1085.78	10.00	1.0616E+000		-7.1824E-001
	1112.02	13.30	7.6227E-001		-2.2694E-001
	1407.95	20.70	4.0862E-001		1.8475E-001
Eu-154	123.07	40.50	7.2248E-001	2.85E-001	-1.9642E-001
	247.94	6.60	2.4694E+000		-5.2048E-001
	591.81	4.83	2.5471E+000		1.1006E+000
	723.30	19.70	6.7051E-001		5.3363E-001
	756.87	4.33	2.7336E+000		-6.1614E-002
	873.19	11.50	9.5472E-001		-7.9450E-001
	996.32	10.30	1.0609E+000		6.4925E-001
	1004.76	17.90	6.3065E-001		-2.3478E-001
	1274.45	35.50	2.8466E-001		-2.5737E-001
Eu-155	86.54	30.90	1.8112E+000	1.77E+000	1.3329E+000
	105.31	20.70	1.7726E+000		-6.9380E-001
Am-241	59.54	35.90	4.3259E+000	4.33E+000	2.3065E+000
Cm-243	228.19	10.56	1.6584E+000	1.14E+000	3.7567E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1376E+000	1.14E+000	-5.1392E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 6:00:52 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-148-F-
Sample Title: OOL-09-02-148-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 5:50:51 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-148-F-
Title: OOL-09-02-148-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	309	300.30	74.98	0.94	5.92E+002	175.41	2.19E+003
2	946-	963	953.41	238.30	1.06	3.03E+002	82.43	4.50E+002
3	1401-	1415	1406.70	351.65	0.40	1.61E+002	49.51	1.65E+002
4	2030-	2053	2041.27	510.34	1.14	1.77E+002	55.49	1.56E+002
5	2320-	2342	2330.78	582.73	1.81	2.06E+002	50.51	1.18E+002
6	2423-	2446	2436.13	609.08	1.82	1.99E+002	49.70	1.11E+002
7	3337-	3349	3343.32	835.93	0.62	2.67E+001	21.20	3.33E+001
8	3631-	3652	3643.51	911.00	1.09	1.53E+002	40.06	7.05E+001
9	3865-	3884	3874.61	968.79	0.59	9.56E+001	36.62	7.24E+001
10	4474-	4489	4480.63	1120.34	0.33	5.18E+001	29.94	6.03E+001
11	5828-	5858	5843.46	1461.13	2.33	1.26E+003	73.73	3.11E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.986	511.00*		100.00	2.48925E-001	8.50304E-002
K-40	0.997	1460.81*		10.67	2.18507E+001	2.18103E+000
TL-208	0.747	277.35		6.80		
		510.84*		21.60	1.15243E+000	4.04753E-001
		583.14*		84.20	3.59509E-001	9.98078E-002
		860.37		12.46		
Pb-212	0.519	74.81*	@	10.70	8.78728E+000	3.12064E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.59655E-001	2.38658E-001
Bi-214	0.699	609.31*		46.30	6.40892E-001	1.78453E-001
		1120.29*		15.10	5.95176E-001	3.50136E-001
		1764.49		15.80		
Ac-228	0.632	338.32		11.40		
		911.07*		27.70	9.07562E-001	2.58863E-001
		969.11*		16.60	9.59527E-001	3.81172E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.986	1.712709E-001	8.768426E-002
K-40		0.997	2.185066E+001	2.181028E+000
TL-208		0.747	3.595095E-001	9.911773E-002
Pb-212	@	0.519	7.596554E-001	2.386582E-001
Bi-214		0.699	6.314659E-001	1.589937E-001
Ac-228		0.632	9.239637E-001	2.141477E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	351.65	2.6907E-001	30.67
7	835.93	4.4556E-002	79.32

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0569E-001	8.71E-002	-3.4536E-002
	1332.49	100.00	8.7103E-002		6.8243E-002
Nb-94	702.63	100.00	1.0264E-001	1.03E-001	-8.5429E-002
	871.10	100.00	1.0302E-001		5.7072E-002
Ag-108m	79.20	7.10	5.5015E+000	1.27E-001	-4.5014E+000
	433.93	89.90	1.2723E-001		3.2939E-002
	614.37	90.40	1.4491E-001		-2.0828E-002
	722.95	90.50	1.2764E-001		1.3101E-001
Sb-125	176.33	6.89	2.4312E+000	3.88E-001	3.2089E+000
	427.89	29.33	3.8758E-001		1.1309E-003
	463.38	10.35	1.1345E+000		7.3046E-001
	600.56	17.80	5.9925E-001		-4.1126E-001
	606.64	5.02	2.8713E+000		5.9961E+000
	635.90	11.32	9.1085E-001		-2.5961E-002
Cs-134	563.23	8.38	1.3250E+000	1.24E-001	7.4495E-001
	569.32	15.43	7.0245E-001		3.0801E-003
	604.70	97.60	1.4630E-001		-1.5728E-002
	795.84	85.40	1.2424E-001		-6.8770E-004
	801.93	8.73	1.1339E+000		-1.0445E+000
Cs-137	661.65	85.12	1.2797E-001	1.28E-001	6.1214E-002
Eu-152	121.78	28.40	7.8252E-001	3.78E-001	3.6052E-001
	244.69	7.49	2.0004E+000		-2.4520E+000
	344.27	26.50	4.8402E-001		-4.3326E-001
	778.89	12.74	7.9472E-001		-1.4352E+000
	867.32	4.16	2.5825E+000		-1.2518E-001
	964.01	14.40	9.4069E-001		8.8006E-001
	1085.78	10.00	1.0076E+000		-2.4564E-002
	1112.02	13.30	7.9247E-001		-7.7178E-002
	1407.95	20.70	3.7829E-001		-3.2899E-002
Eu-154	123.07	40.50	5.4283E-001	2.69E-001	-3.9863E-003
	247.94	6.60	2.1359E+000		-3.2858E+000
	591.81	4.83	2.1640E+000		-6.8607E-001
	723.30	19.70	5.8524E-001		5.8830E-001
	756.87	4.33	2.6428E+000		4.1479E-001
	873.19	11.50	8.9875E-001		8.8145E-002
	996.32	10.30	9.7663E-001		-3.2106E-002
	1004.76	17.90	5.7039E-001		4.8785E-001
	1274.45	35.50	2.6906E-001		-2.0224E-001
Eu-155	86.54	30.90	1.1007E+000	1.10E+000	2.0208E+000
	105.31	20.70	1.2087E+000		7.5447E-001
Am-241	59.54	35.90	1.3233E+000	1.32E+000	-9.9563E-001
Cm-243	228.19	10.56	1.4117E+000	1.03E+000	-4.9060E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0346E+000	1.03E+000	-3.0670E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 6:51:38 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-149-F-
Sample Title: OOL-09-02-149-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 6:41:36 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-149-F-
Title: OOL-09-02-149-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	295-	309	300.33	74.99	1.24	4.23E+002	147.40	1.80E+003
	2	330-	345	339.54	84.79	0.89	3.69E+002	129.16	1.32E+003
M	3	947-	974	953.81	238.40	1.53	2.96E+002	42.33	3.22E+002
m	4	947-	974	966.58	241.59	1.53	6.95E+001	30.85	4.20E+002
	5	1344-	1358	1352.13	338.00	0.85	8.74E+001	48.74	1.83E+002
	6	1399-	1413	1406.62	351.63	1.22	1.58E+002	50.76	1.78E+002
	7	2032-	2053	2042.30	510.59	1.29	1.20E+002	52.67	1.60E+002
	8	2322-	2342	2331.53	582.92	1.79	1.88E+002	44.46	8.95E+001
	9	2427-	2447	2435.17	608.84	1.05	2.02E+002	44.76	8.82E+001
	10	3633-	3654	3642.53	910.76	1.31	1.54E+002	36.35	5.08E+001
	11	3868-	3883	3875.18	968.93	0.96	6.35E+001	30.83	6.05E+001
	12	4471-	4488	4479.45	1120.04	1.81	5.23E+001	27.56	4.47E+001
	13	5830-	5858	5843.42	1461.13	2.24	1.20E+003	72.81	3.89E+001
	14	7051-	7066	7058.29	1764.92	0.75	4.90E+001	20.47	2.00E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.995	511.00*		100.00	1.69032E-001	7.75484E-002
K-40	0.997	1460.81*		10.67	2.07981E+001	2.10293E+000
TL-208	0.751	277.35		6.80		
		510.84*		21.60	7.82556E-001	3.64664E-001
		583.14*		84.20	3.28936E-001	8.86299E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	6.27959E+000	2.50911E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.41737E-001	1.57506E-001
Bi-214	0.994	609.31*		46.30	6.49856E-001	1.64876E-001
		1120.29*		15.10	6.01149E-001	3.23264E-001
		1764.49*		15.80	5.94473E-001	2.55310E-001
PB-214	0.358	74.82*	@	6.21	1.08199E+001	4.39403E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98*		7.49	1.04165E+000	4.94044E-001
		295.21		19.20		
		351.92*		37.20	5.31173E-001	1.92249E-001
Ac-228	0.998	338.32*		11.40	9.47092E-001	5.48866E-001
		911.07*		27.70	9.11439E-001	2.39162E-001
		969.11*		16.60	6.37884E-001	3.16680E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.995	9.798186E-002	7.984292E-002
K-40		0.997	2.079808E+001	2.102930E+000
TL-208		0.751	3.289362E-001	8.797922E-002
Pb-212	@	0.520	7.417366E-001	1.575063E-001
Bi-214		0.994	6.285299E-001	1.273114E-001
PB-214	@	0.358	5.983065E-001	1.791620E-001
Ac-228		0.998	8.266467E-001	1.802639E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.79	6.1489E-001	35.01

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0668E-001	7.39E-002	3.5048E-003
	1332.49	100.00	7.3935E-002		3.6184E-003
Nb-94	702.63	100.00	1.0576E-001	1.02E-001	-2.1037E-003
	871.10	100.00	1.0215E-001		8.6206E-002
Ag-108m	79.20	7.10	5.3649E+000	1.21E-001	-2.7054E+000
	433.93	89.90	1.2129E-001		-3.1488E-003
	614.37	90.40	1.4701E-001		4.6369E-002
	722.95	90.50	1.2419E-001		1.6889E-001
Sb-125	176.33	6.89	2.3368E+000	3.66E-001	-8.7531E-001
	427.89	29.33	3.6570E-001		-5.9078E-001
	463.38	10.35	1.0784E+000		-3.8184E-001
	600.56	17.80	6.2353E-001		2.8960E-001
	606.64	5.02	2.8301E+000		3.1509E+000
	635.90	11.32	9.1526E-001		2.6580E-001
Cs-134	563.23	8.38	1.2516E+000	1.12E-001	-4.2630E-001
	569.32	15.43	7.4132E-001		4.3183E-001
	604.70	97.60	1.4541E-001		3.2304E-002
	795.84	85.40	1.1158E-001		-8.3315E-002
	801.93	8.73	1.1070E+000		-1.0858E+000
Cs-137	661.65	85.12	1.2797E-001	1.28E-001	2.4832E-002
Eu-152	121.78	28.40	7.5474E-001	3.40E-001	6.8733E-001
	244.69	7.49	1.9342E+000		5.5693E-001
	344.27	26.50	4.6179E-001		-3.5369E-001
	778.89	12.74	7.9692E-001		-1.4673E+000
	867.32	4.16	2.5492E+000		-3.6313E+000
	964.01	14.40	8.8323E-001		3.3638E-002
	1085.78	10.00	9.5268E-001		-8.6432E-001
	1112.02	13.30	7.9004E-001		2.0595E-001
	1407.95	20.70	3.4035E-001		1.4386E-001
Eu-154	123.07	40.50	5.2239E-001	2.64E-001	-6.0577E-002
	247.94	6.60	2.0787E+000		-1.1124E+000
	591.81	4.83	2.2451E+000		8.7656E-001
	723.30	19.70	5.6061E-001		3.9212E-001
	756.87	4.33	2.2659E+000		-1.7573E+000
	873.19	11.50	8.7849E-001		2.4145E-001
	996.32	10.30	8.9256E-001		-1.5080E-001
	1004.76	17.90	5.0693E-001		-1.2198E-001
	1274.45	35.50	2.6359E-001		-6.4940E-002
Eu-155	86.54	30.90	1.0917E+000	1.09E+000	1.2531E-002
	105.31	20.70	1.2191E+000		9.9780E-001
Am-241	59.54	35.90	1.3540E+000	1.35E+000	5.6946E-001
Cm-243	228.19	10.56	1.3919E+000	9.54E-001	8.1636E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.5383E-001	9.54E-001	-5.9141E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 10:08:53 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-150-F-
Sample Title: OOL-09-02-150-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 9:58:51 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-150-F-
Title: OOL-09-02-150-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	291.81	72.78	0.98	3.97E+002	64.27	1.37E+003
m	2	284-	305	300.15	74.87	0.99	6.27E+002	74.10	1.37E+003
	3	330-	344	338.76	84.52	0.92	1.94E+002	126.76	1.38E+003
	4	833-	845	836.94	209.10	0.91	6.95E+001	54.84	2.67E+002
	5	944-	959	954.04	238.39	1.00	3.23E+002	73.88	3.65E+002
	6	1174-	1188	1179.87	294.86	0.51	8.39E+001	50.33	1.99E+002
	7	1344-	1360	1352.41	338.01	0.81	5.66E+001	48.72	1.77E+002
	8	1398-	1416	1406.71	351.59	0.84	1.73E+002	51.47	1.53E+002
	9	1847-	1856	1851.72	462.88	0.48	3.31E+001	24.74	5.59E+001
	10	2037-	2052	2041.18	510.26	1.16	1.38E+002	43.48	1.17E+002
	11	2323-	2338	2331.07	582.75	1.13	1.70E+002	42.52	1.00E+002
	12	2429-	2443	2435.40	608.84	1.00	1.48E+002	37.13	7.29E+001
	13	3065-	3076	3070.64	767.70	0.93	2.93E+001	23.14	4.37E+001
	14	3634-	3654	3642.76	910.77	1.14	1.83E+002	38.17	5.42E+001
M	15	3851-	3884	3856.38	964.19	1.76	2.14E+001	16.64	5.91E+001
m	16	3851-	3884	3873.92	968.58	1.77	9.09E+001	22.14	7.69E+001
	17	4471-	4486	4479.75	1120.08	1.01	6.41E+001	24.79	3.19E+001
	18	5828-	5855	5842.15	1460.78	1.79	1.28E+003	71.87	1.39E+001
	19	7049-	7065	7056.96	1764.58	0.46	5.53E+001	18.58	1.08E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.981	511.00*		100.00	1.88528E-001	6.45635E-002
K-40	1.000	1460.81*		10.67	2.15031E+001	2.11754E+000
TL-208	0.746	277.35		6.80		
		510.84*		21.60	8.72814E-001	3.07287E-001
		583.14*		84.20	2.87469E-001	8.11022E-002
		860.37		12.46		
Pb-212	0.519	74.81*	@	10.70	8.98432E+000	2.05594E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.83860E-001	2.17597E-001
Bi-214	0.995	609.31*		46.30	4.62258E-001	1.29146E-001
		1120.29*		15.10	7.14174E-001	2.86530E-001
		1764.49*		15.80	6.49115E-001	2.27696E-001
PB-214	0.580	74.82*	@	6.21	1.54802E+001	3.71640E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.03563E-001	3.13631E-001
		351.92*		37.20	5.63076E-001	1.92203E-001
Ac-228	0.995	338.32*		11.40	5.94166E-001	5.20233E-001
		911.07*		27.70	1.04624E+000	2.49416E-001
		969.11*		16.60	8.83283E-001	2.34303E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.981	1.264345E-001	6.686728E-002
K-40		1.000	2.150306E+001	2.117542E+000
TL-208		0.746	2.874694E-001	8.055933E-002
Pb-212	@	0.519	7.838596E-001	2.175975E-001
Bi-214		0.995	5.352418E-001	1.045846E-001
PB-214	@	0.580	5.468274E-001	1.638777E-001
Ac-228		0.995	9.241198E-001	1.622524E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.78	6.6219E-001	16.17
3	84.52	3.2405E-001	65.19
4	209.10	1.1585E-001	78.89
9	462.88	5.5243E-002	74.64
13	767.70	4.8824E-002	78.98
M 15	964.19	3.5643E-002	77.82

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0312E-001	7.75E-002	7.2602E-002
	1332.49	100.00	7.7460E-002		4.8619E-002
Nb-94	702.63	100.00	9.3936E-002	8.59E-002	-3.8753E-002
	871.10	100.00	8.5875E-002		-2.6378E-002
Ag-108m	79.20	7.10	4.6157E+000	1.15E-001	-7.5012E+000
	433.93	89.90	1.1520E-001		4.6398E-002
	614.37	90.40	1.1970E-001		-3.2284E-002
	722.95	90.50	1.2319E-001		3.5816E-002
Sb-125	176.33	6.89	2.1329E+000	3.43E-001	-3.1295E-001
	427.89	29.33	3.4277E-001		-3.1002E-001
	463.38	10.35	1.0118E+000		4.1470E-001
	600.56	17.80	5.2930E-001		2.8412E-001
	606.64	5.02	2.4865E+000		4.7420E+000
	635.90	11.32	7.9268E-001		-2.7173E-001
Cs-134	563.23	8.38	1.1897E+000	1.15E-001	3.7525E-001
	569.32	15.43	6.5132E-001		1.4751E-001
	604.70	97.60	1.2446E-001		-9.3316E-002
	795.84	85.40	1.1469E-001		1.0902E-001
	801.93	8.73	1.0037E+000		-6.8236E-001
Cs-137	661.65	85.12	1.2682E-001	1.27E-001	1.0901E-001
Eu-152	121.78	28.40	6.7902E-001	3.25E-001	-3.9943E-001
	244.69	7.49	1.8111E+000		2.6418E-001
	344.27	26.50	4.1725E-001		2.7517E-001
	778.89	12.74	7.2590E-001		-5.9631E-001
	867.32	4.16	2.0068E+000		-1.0496E+000
	964.01	14.40	8.8588E-001		-2.7158E-002
	1085.78	10.00	9.6674E-001		7.0989E-004
	1112.02	13.30	7.0673E-001		1.2514E-001
	1407.95	20.70	3.2476E-001		2.4284E-002
Eu-154	123.07	40.50	4.7237E-001	2.41E-001	-1.1007E-001
	247.94	6.60	1.8540E+000		-7.9612E-001
	591.81	4.83	2.0359E+000		-6.3720E-002
	723.30	19.70	5.6716E-001		-5.0687E-003
	756.87	4.33	2.1434E+000		7.4010E-001
	873.19	11.50	7.7496E-001		-2.4720E-001
	996.32	10.30	8.2747E-001		-2.1127E-001
	1004.76	17.90	4.6929E-001		-7.2583E-002
	1274.45	35.50	2.4127E-001		-3.7341E-002
Eu-155	86.54	30.90	9.6629E-001	9.66E-001	4.6316E-001
	105.31	20.70	1.1164E+000		4.4398E-001
Am-241	59.54	35.90	1.2441E+000	1.24E+000	-5.0385E-002
Cm-243	228.19	10.56	1.2610E+000	8.63E-001	-5.5106E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.6324E-001	8.63E-001	-1.8640E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 9:53:47 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-151-F-
Sample Title: OOL-09-02-151-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 9:43:43 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-151-F-
Title: OOL-09-02-151-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	313	291.51	72.71	1.04	3.67E+002	61.19	1.30E+003
m	2	283-	313	300.44	74.94	1.05	8.13E+002	74.65	1.31E+003
m	3	283-	313	308.43	76.94	1.05	1.57E+002	55.27	1.22E+003
	4	333-	344	338.95	84.57	0.91	1.26E+002	107.25	1.15E+003
	5	946-	960	954.05	238.39	0.99	2.61E+002	64.52	2.85E+002
	6	1175-	1187	1180.25	294.96	0.89	6.80E+001	42.18	1.50E+002
	7	1347-	1359	1352.89	338.13	0.84	8.55E+001	40.74	1.32E+002
	8	1399-	1413	1406.63	351.57	1.42	1.44E+002	45.47	1.37E+002
	9	2033-	2053	2041.98	510.46	1.52	1.44E+002	48.21	1.27E+002
	10	2323-	2339	2331.57	582.87	1.20	1.97E+002	42.25	8.56E+001
	11	2428-	2446	2435.36	608.83	1.31	1.85E+002	42.66	8.49E+001
	12	3434-	3447	3439.97	860.06	0.99	4.56E+001	23.04	3.34E+001
	13	3634-	3652	3643.15	910.87	1.68	1.54E+002	33.49	4.05E+001
M	14	3848-	3883	3857.30	964.42	1.67	5.35E+001	16.78	3.34E+001
m	15	3848-	3883	3874.10	968.62	1.67	8.90E+001	20.68	4.56E+001
	16	4473-	4486	4480.66	1120.31	0.39	3.78E+001	23.44	3.82E+001
	17	5829-	5854	5842.83	1460.95	1.94	1.16E+003	69.79	2.57E+001
	18	7052-	7066	7059.85	1765.30	1.10	5.08E+001	15.88	5.17E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.990	511.00*		100.00	1.95898E-001	7.09062E-002
K-40	0.999	1460.81*		10.67	1.94442E+001	1.96176E+000
TL-208	0.900	277.35		6.80		
		510.84*		21.60	9.06934E-001	3.36522E-001
		583.14*		84.20	3.34089E-001	8.36961E-002
		860.37*		12.46	5.72687E-001	2.97812E-001
Pb-212	0.842	74.81*	@	10.70	1.16258E+001	2.51636E+000
		77.11*	@	18.00	1.29028E+000	5.18946E-001
		87.30	@	8.00		
		238.63*		44.60	6.33988E-001	1.85675E-001
Bi-214	0.991	609.31*		46.30	5.77990E-001	1.51033E-001
		1120.29*		15.10	4.21711E-001	2.65138E-001
		1764.49*		15.80	5.97237E-001	1.95913E-001
PB-214	0.760	74.82*	@	6.21	2.00316E+001	4.57311E+000
		77.11*	@	10.50	2.21191E+000	9.04823E-001
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	4.08122E-001	2.62241E-001
		351.92*		37.20	4.68916E-001	1.67527E-001
Ac-228	0.997	338.32*		11.40	8.97933E-001	4.50623E-001
		911.07*		27.70	8.84093E-001	2.16986E-001
		969.11*		16.60	8.64870E-001	2.20561E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.990	1.200074E-001	7.297777E-002
K-40		0.999	1.944418E+001	1.961757E+000
TL-208		0.900	3.513445E-001	7.992784E-002
Pb-212	@	0.842	6.339883E-001	1.856751E-001
Bi-214		0.991	5.575231E-001	1.090325E-001
PB-214	@	0.760	4.512966E-001	1.411780E-001
Ac-228		0.997	8.770941E-001	1.463017E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.71	6.1125E-001	16.69
4	84.57	2.0925E-001	85.43
M 14	964.42	8.9119E-002	31.38

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.5813E-002	6.92E-002	-1.7816E-002
	1332.49	100.00	6.9164E-002		-1.1526E-002
Nb-94	702.63	100.00	9.1171E-002	8.36E-002	4.6322E-003
	871.10	100.00	8.3557E-002		1.3478E-002
Ag-108m	79.20	7.10	4.5025E+000	1.11E-001	-6.9419E-001
	433.93	89.90	1.1069E-001		-2.2736E-002
	614.37	90.40	1.1652E-001		-3.7689E-002
	722.95	90.50	1.1984E-001		2.3591E-002
Sb-125	176.33	6.89	2.0938E+000	3.18E-001	4.8954E-001
	427.89	29.33	3.1793E-001		-2.2053E-001
	463.38	10.35	1.0208E+000		7.3118E-001
	600.56	17.80	5.4576E-001		-2.9090E-001
	606.64	5.02	2.6622E+000		-1.4143E-001
	635.90	11.32	8.0221E-001		-5.4188E-001
Cs-134	563.23	8.38	1.2187E+000	1.18E-001	7.5423E-001
	569.32	15.43	6.5853E-001		-2.2894E-001
	604.70	97.60	1.3372E-001		1.1964E-002
	795.84	85.40	1.1817E-001		8.1831E-002
	801.93	8.73	1.0621E+000		-7.9034E-001
Cs-137	661.65	85.12	1.1667E-001	1.17E-001	1.7456E-002
Eu-152	121.78	28.40	6.6913E-001	3.03E-001	-8.8359E-002
	244.69	7.49	1.7436E+000		1.9206E+000
	344.27	26.50	4.0720E-001		6.1204E-002
	778.89	12.74	7.0286E-001		-1.7158E-001
	867.32	4.16	2.1167E+000		-1.7148E+000
	964.01	14.40	8.4696E-001		8.4442E-002
	1085.78	10.00	9.1288E-001		2.9375E-001
	1112.02	13.30	6.6432E-001		2.4594E-001
	1407.95	20.70	3.0280E-001		1.4821E-001
Eu-154	123.07	40.50	4.6730E-001	2.28E-001	4.9282E-002
	247.94	6.60	1.8123E+000		-3.1990E-001
	591.81	4.83	1.9103E+000		-2.8317E-001
	723.30	19.70	5.5774E-001		4.7634E-001
	756.87	4.33	2.1695E+000		-2.1335E+000
	873.19	11.50	7.0615E-001		-3.9006E-001
	996.32	10.30	8.6774E-001		2.6528E-001
	1004.76	17.90	4.8322E-001		2.1564E-001
	1274.45	35.50	2.2836E-001		-3.4770E-001
Eu-155	86.54	30.90	9.3974E-001	9.40E-001	-6.2363E-002
	105.31	20.70	1.1175E+000		7.2250E-001
Am-241	59.54	35.90	1.2154E+000	1.22E+000	4.8439E-001
Cm-243	228.19	10.56	1.1712E+000	8.54E-001	4.2743E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.5393E-001	8.54E-001	-9.3000E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 9:41:06 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-152-F-
Sample Title: OOL-09-02-152-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 9:31:04 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-152-F-
Title: OOL-09-02-152-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	291.53	72.71	0.88	3.03E+002	61.72	1.28E+003
m	2	285-	306	300.20	74.88	0.89	6.55E+002	76.26	1.36E+003
	3	332-	345	339.38	84.68	1.01	2.83E+002	124.21	1.35E+003
	4	948-	960	954.12	238.41	0.73	2.41E+002	62.09	2.88E+002
	5	1177-	1186	1180.62	295.05	1.02	6.00E+001	35.15	1.14E+002
	6	1347-	1363	1353.20	338.21	1.44	1.07E+002	50.94	1.81E+002
	7	1398-	1415	1406.56	351.55	1.14	1.55E+002	52.26	1.71E+002
	8	2030-	2053	2041.85	510.42	1.75	2.10E+002	51.94	1.23E+002
	9	2325-	2339	2331.75	582.92	1.55	1.84E+002	40.56	8.49E+001
	10	2429-	2447	2436.01	608.99	0.90	1.79E+002	44.94	1.03E+002
	11	2901-	2914	2907.77	726.97	0.60	3.58E+001	28.00	6.12E+001
	12	3634-	3652	3643.73	911.01	1.95	1.56E+002	33.96	4.26E+001
	13	3866-	3884	3874.80	968.80	0.71	1.07E+002	31.45	4.45E+001
	14	5827-	5856	5842.81	1460.95	1.97	1.21E+003	69.69	1.09E+001
	15	6347-	6360	6353.07	1588.55	0.99	1.77E+001	12.26	7.32E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.988	511.00*	100.00	2.86311E-001	8.07647E-002
K-40	0.999	1460.81*	10.67	2.03645E+001	2.02109E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	1.32551E+000	3.89265E-001
		583.14*	84.20	3.11456E-001	7.97160E-002
		860.37	12.46		
Bi-212	0.999	727.17*	11.80	4.59078E-001	3.63312E-001
Pb-212	0.520	74.81* @	10.70	9.38155E+000	2.13856E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.86306E-001	1.76701E-001
Bi-214	0.396	609.31*	46.30	5.60305E-001	1.56382E-001
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.580	74.82* @	6.21	1.61647E+001	3.86713E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.60130E-001	2.19461E-001
		351.92*	37.20	5.05419E-001	1.89971E-001
Ac-228	0.999	338.32*	11.40	1.12068E+000	5.63374E-001
		911.07*	27.70	8.94849E-001	2.19946E-001
		969.11*	16.60	1.04484E+000	3.24803E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.988	2.190361E-001	8.255070E-002
K-40		0.999	2.036451E+001	2.021095E+000
TL-208		0.750	3.114561E-001	7.906716E-002
Bi-212		0.999	4.590779E-001	3.633119E-001
Pb-212	@	0.520	5.863058E-001	1.767013E-001
Bi-214		0.396	5.603052E-001	1.563824E-001
PB-214	@	0.580	4.431854E-001	1.436329E-001
Ac-228		0.999	9.589082E-001	1.732894E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.71	5.0533E-001	20.35
3	84.68	4.7113E-001	43.94
15	1588.55	2.9467E-002	69.35

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.6501E-002	7.17E-002	2.0383E-002
	1332.49	100.00	7.1711E-002		-4.0002E-002
Nb-94	702.63	100.00	1.0226E-001	9.40E-002	-1.6567E-002
	871.10	100.00	9.3964E-002		2.6915E-003
Ag-108m	79.20	7.10	4.6945E+000	1.16E-001	-1.4812E+000
	433.93	89.90	1.1719E-001		-6.4259E-002
	614.37	90.40	1.2535E-001		-1.4555E-002
	722.95	90.50	1.1638E-001		-5.0971E-002
Sb-125	176.33	6.89	2.1210E+000	3.64E-001	-7.1914E-001
	427.89	29.33	3.6410E-001		-1.8735E-001
	463.38	10.35	1.0297E+000		7.2933E-001
	600.56	17.80	5.0794E-001		-4.5959E-001
	606.64	5.02	2.6726E+000		-9.4088E-001
	635.90	11.32	8.0928E-001		-6.5390E-001
Cs-134	563.23	8.38	1.2291E+000	1.11E-001	-5.1525E-001
	569.32	15.43	6.3217E-001		3.3704E-002
	604.70	97.60	1.3226E-001		-6.0783E-002
	795.84	85.40	1.1077E-001		-2.7566E-002
	801.93	8.73	1.1014E+000		1.1736E-001
Cs-137	661.65	85.12	1.3028E-001	1.30E-001	7.6969E-002
Eu-152	121.78	28.40	7.0943E-001	3.60E-001	-2.0405E-001
	244.69	7.49	1.7797E+000		4.1860E-001
	344.27	26.50	4.1670E-001		-7.6208E-002
	778.89	12.74	7.0286E-001		-1.0947E+000
	867.32	4.16	2.2497E+000		-4.7777E+000
	964.01	14.40	8.4696E-001		-4.1967E-002
	1085.78	10.00	9.5358E-001		-2.6604E-001
	1112.02	13.30	7.1944E-001		-6.7989E-001
	1407.95	20.70	3.5976E-001		1.8014E-002
Eu-154	123.07	40.50	4.9183E-001	2.30E-001	-7.9426E-002
	247.94	6.60	1.8622E+000		-1.2740E-001
	591.81	4.83	2.0934E+000		8.6678E-001
	723.30	19.70	5.4451E-001		6.6853E-001
	756.87	4.33	2.2396E+000		-5.4725E-001
	873.19	11.50	7.8850E-001		9.3612E-003
	996.32	10.30	7.9943E-001		-3.1384E-001
	1004.76	17.90	4.5491E-001		2.1342E-002
	1274.45	35.50	2.2957E-001		-3.1771E-002
Eu-155	86.54	30.90	1.0136E+000	1.01E+000	4.2906E-001
	105.31	20.70	1.1539E+000		-1.5752E-001
Am-241	59.54	35.90	1.2703E+000	1.27E+000	1.0185E-001
Cm-243	228.19	10.56	1.2727E+000	8.96E-001	1.3166E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.9625E-001	8.96E-001	-5.3300E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 12:09:26 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-02-153
Sample Title: OOL-09-02-153-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/15/2006 11:59:24 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: ORG7829
Log Number: OOL-09-02-153
Title: OOL-09-02-153-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	296-	309	300.60	75.15	0.92	2.31E+002	105.66	9.65E+002
	2	947-	961	954.01	238.52	1.10	2.59E+002	65.73	2.98E+002
	3	1194-	1203	1198.77	299.71	1.05	3.55E+001	32.26	1.02E+002
	4	1345-	1358	1351.35	337.86	0.77	6.63E+001	41.58	1.39E+002
	5	1399-	1414	1406.22	351.58	0.97	9.61E+001	48.41	1.71E+002
	6	2029-	2045	2039.54	509.92	0.63	5.85E+001	42.97	1.34E+002
	7	2320-	2338	2329.65	582.45	0.45	1.14E+002	40.92	9.47E+001
	8	2423-	2443	2434.52	608.67	1.44	1.11E+002	44.36	1.10E+002
	9	3632-	3650	3640.46	910.18	1.18	1.07E+002	33.32	5.38E+001
M	10	3849-	3881	3854.35	963.66	1.71	2.45E+001	14.94	3.85E+001
m	11	3849-	3881	3871.54	967.95	1.71	7.37E+001	19.46	4.09E+001
	12	5824-	5850	5837.70	1459.53	2.09	9.41E+002	61.08	6.81E+000
	13	7046-	7061	7053.55	1763.52	1.39	4.44E+001	17.42	1.16E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.947	1460.81*	10.67	2.13851E+001	2.21898E+000
TL-208	0.737	277.35	6.80		
		510.84*	21.60	4.86170E-001	3.65351E-001
		583.14*	84.20	2.55116E-001	9.71682E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	8.94458E+000	4.45360E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.44804E-001	2.52139E-001
Bi-214	0.683	609.31*	46.30	4.55708E-001	1.91162E-001
		1120.29	15.10		
		1764.49*	15.80	7.21897E-001	2.92318E-001
Ac-228	0.973	338.32*	11.40	9.21112E-001	5.95102E-001
		911.07*	27.70	8.15369E-001	2.70402E-001
		969.11*	16.60	9.50880E-001	2.70241E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
X	ANN		0.962		
	K-40		0.947	2.138515E+001	2.218975E+000
	TL-208		0.737	2.703792E-001	9.390384E-002
	Pb-212	@	0.593	8.448041E-001	2.521387E-001
	Bi-214		0.683	5.354453E-001	1.599893E-001
	Ac-228		0.973	8.867138E-001	1.819889E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	299.71	5.9200E-002	90.84
5	351.58	1.6010E-001	50.40
M 10	963.66	4.0848E-002	60.95

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1463E-001	9.41E-002	-4.3668E-002
	1332.49	100.00	9.4141E-002		5.3639E-002
Nb-94	702.63	100.00	1.1795E-001	1.15E-001	1.1625E-001
	871.10	100.00	1.1503E-001		-4.1723E-002
Ag-108m	79.20	7.10	1.0345E+001	1.47E-001	-3.1968E+000
	433.93	89.90	1.4741E-001		1.1687E-001
	614.37	90.40	1.5860E-001		-1.8900E-002
	722.95	90.50	1.4856E-001		1.8264E-001
Sb-125	176.33	6.89	2.9924E+000	4.44E-001	-9.1532E-001
	427.89	29.33	4.4385E-001		2.1326E-002
	463.38	10.35	1.1906E+000		-3.1954E-001
	600.56	17.80	7.2181E-001		4.1448E-001
	606.64	5.02	3.3295E+000		7.1690E+000
	635.90	11.32	1.0746E+000		-1.1715E-001
Cs-134	563.23	8.38	1.4925E+000	1.33E-001	-3.0241E-001
	569.32	15.43	7.7838E-001		-1.8423E-001
	604.70	97.60	1.7007E-001		2.5346E-002
	795.84	85.40	1.3251E-001		-1.3888E-002
	801.93	8.73	1.3271E+000		-2.7667E-001
Cs-137	661.65	85.12	1.4651E-001	1.47E-001	3.3723E-002
Eu-152	121.78	28.40	9.9270E-001	4.31E-001	-1.1275E-001
	244.69	7.49	2.2981E+000		-3.8064E-001
	344.27	26.50	5.5323E-001		-2.4000E-001
	778.89	12.74	9.6546E-001		-1.0159E+000
	867.32	4.16	2.8035E+000		8.7865E-002
	964.01	14.40	1.0255E+000		-3.7339E-001
	1085.78	10.00	1.0294E+000		-2.2488E-001
	1112.02	13.30	8.0327E-001		-1.4121E+000
	1407.95	20.70	4.3105E-001		1.5111E-002
Eu-154	123.07	40.50	6.9766E-001	3.11E-001	6.4584E-001
	247.94	6.60	2.5868E+000		-1.4005E+000
	591.81	4.83	2.4573E+000		-1.1799E+000
	723.30	19.70	6.7915E-001		8.3551E-001
	756.87	4.33	2.7063E+000		2.2272E-002
	873.19	11.50	9.9328E-001		4.2381E-001
	996.32	10.30	1.1296E+000		1.3344E+000
	1004.76	17.90	6.7405E-001		9.9389E-002
	1274.45	35.50	3.1109E-001		1.8167E-001
Eu-155	86.54	30.90	1.7508E+000	1.73E+000	1.4424E+000
	105.31	20.70	1.7347E+000		5.8829E-001
Am-241	59.54	35.90	4.1177E+000	4.12E+000	1.6382E+000
Cm-243	228.19	10.56	1.6560E+000	1.13E+000	-8.4879E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1296E+000	1.13E+000	-8.4114E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/17/2006 1:58:59 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-154-F-G
Sample ID: OOL-09-02-154
Sample Title: OOL-09-02-154-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 9:02:09 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-154-F-G
Log Number: OOL-09-02-154
Title: OOL-09-02-154-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	316	292.00	72.83	0.96	4.36E+002	112.11	1.44E+003
m	2	284-	316	300.17	74.87	0.96	8.07E+002	175.26	1.43E+003
m	3	284-	316	308.80	77.03	0.96	1.84E+002	65.73	1.51E+003
M	4	331-	355	339.63	84.74	0.98	3.33E+002	144.57	1.45E+003
m	5	331-	355	349.68	87.25	0.98	1.24E+002	68.36	1.76E+003
F	6	948-	960	954.10	238.40	1.18	3.36E+002	44.44	3.06E+002
F	7	1173-	1187	1180.58	295.04	1.23	7.97E+001	27.24	2.15E+002
F	8	1345-	1359	1352.18	337.95	1.27	1.04E+002	27.86	1.84E+002
F	9	1398-	1416	1407.17	351.71	1.28	1.76E+002	69.69	2.00E+002
F	10	2037-	2049	2042.57	510.60	2.10	7.16E+001	27.36	1.30E+002
F	11	2324-	2341	2331.96	582.97	1.45	1.80E+002	29.19	9.83E+001
F	12	2429-	2445	2436.25	609.05	1.47	1.72E+002	28.45	7.91E+001
F	13	2902-	2916	2909.13	727.31	1.54	4.80E+001	17.43	4.66E+001
F	14	3173-	3187	3179.97	795.04	1.58	3.56E+001	17.01	5.22E+001
F	15	3634-	3655	3644.29	911.15	1.64	1.81E+002	52.74	4.70E+001
F	16	3868-	3883	3875.43	968.96	1.67	9.88E+001	23.38	5.74E+001
F	17	4473-	4488	4481.26	1120.46	1.75	7.25E+001	55.37	4.00E+001
F	18	5828-	5855	5843.90	1461.22	1.90	1.30E+003	113.70	4.20E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-154-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.994	1460.81*	10.67	2.28494E+001	2.72624E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	4.74584E-001	1.96337E-001
		583.14*	84.20	3.20683E-001	6.65797E-002
		860.37	12.46		
Bi-212	0.999	727.17*	11.80	6.46331E-001	2.46825E-001
Pb-212	0.999	74.81* @	10.70	1.21350E+001	3.54973E+000
		77.11* @	18.00	1.58202E+000	6.44487E-001
		87.30* @	8.00	2.01840E+000	1.18192E+000
		238.63*	44.60	8.57427E-001	1.75891E-001
Bi-214	0.698	609.31*	46.30	5.64900E-001	1.16366E-001
		1120.29*	15.10	8.49119E-001	6.54397E-001
		1764.49	15.80		
PB-214	0.849	74.82* @	6.21	2.09090E+001	6.30180E+000
		77.11* @	10.50	2.71204E+000	1.12324E+000
		87.30* @	4.67	3.45765E+000	2.04148E+000
		241.98	7.49		
		295.21*	19.20	5.02055E-001	1.91309E-001
		351.92*	37.20	6.00088E-001	2.58544E-001
Ac-228	0.999	338.32*	11.40	1.14264E+000	3.55728E-001
		911.07*	27.70	1.08528E+000	3.40628E-001
		969.11*	16.60	1.00824E+000	2.61022E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-154-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
X	ANN		0.995		
	K-40		0.994	2.284942E+001	2.726240E+000
X	Eu-155		0.322		
	TL-208		0.751	3.365553E-001	6.305294E-002
	Bi-212		0.999	6.463314E-001	2.468245E-001
	Pb-212	@	0.999	8.574269E-001	1.758911E-001
	Bi-214		0.698	5.736116E-001	1.145690E-001
	PB-214	@	0.849	5.367400E-001	1.537860E-001
	Ac-228		0.999	1.063564E+000	1.790332E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.83	7.2727E-001	25.69
M 4	84.74	5.5504E-001	43.41
F 14	795.04	5.9272E-002	47.84

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-02-154-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1158E-001	7.42E-002	1.0318E-001
	1332.49	100.00	7.4239E-002		-6.9592E-002
Nb-94	702.63	100.00	1.0659E-001	9.68E-002	-6.0631E-003
	871.10	100.00	9.6772E-002		-1.9744E-002
Ag-108m	79.20	7.10	5.0794E+000	1.24E-001	-2.7569E-001
	433.93	89.90	1.2367E-001		-6.2635E-002
	614.37	90.40	1.3258E-001		8.3516E-003
	722.95	90.50	1.2583E-001		2.9259E-002
Sb-125	176.33	6.89	2.2293E+000	3.88E-001	-3.2689E+000
	427.89	29.33	3.8785E-001		3.1547E-002
	463.38	10.35	1.1302E+000		-3.7606E-001
	600.56	17.80	6.1931E-001		-4.7244E-002
	606.64	5.02	2.7989E+000		6.0949E+000
	635.90	11.32	8.9060E-001		-1.7376E-001
Cs-134	563.23	8.38	1.3227E+000	1.25E-001	6.2849E-001
	569.32	15.43	7.0191E-001		5.1089E-001
	604.70	97.60	1.3926E-001		-1.0839E-001
	795.84	85.40	1.2506E-001		4.4754E-002
	801.93	8.73	1.0760E+000		6.3284E-001
Cs-137	661.65	85.12	1.2556E-001	1.26E-001	2.4416E-002
Eu-152	121.78	28.40	7.6477E-001	3.55E-001	-2.8477E-001
	244.69	7.49	1.8770E+000		1.9572E+000
	344.27	26.50	4.4898E-001		7.9249E-003
	778.89	12.74	7.7633E-001		-9.8284E-001
	867.32	4.16	2.3012E+000		-3.6691E+000
	964.01	14.40	9.3017E-001		-1.1920E-001
	1085.78	10.00	1.0082E+000		-5.8172E-001
	1112.02	13.30	7.5277E-001		-1.0017E+000
	1407.95	20.70	3.5460E-001		1.2128E-001
Eu-154	123.07	40.50	5.3087E-001	2.77E-001	-2.7658E-001
	247.94	6.60	1.9895E+000		-1.8851E+000
	591.81	4.83	2.2713E+000		-1.9600E-001
	723.30	19.70	5.8438E-001		1.4254E-001
	756.87	4.33	2.2916E+000		-1.7197E+000
	873.19	11.50	8.1370E-001		-9.2815E-001
	996.32	10.30	9.2137E-001		-5.7906E-001
	1004.76	17.90	5.6376E-001		-5.1208E-001
	1274.45	35.50	2.7727E-001		9.3533E-002
Eu-155	86.54*	30.90	8.3452E-001	8.35E-001	5.2256E-001
	105.31	20.70	1.2248E+000		-1.2331E+000
Am-241	59.54	35.90	1.3474E+000	1.35E+000	-7.0626E-001
Cm-243	228.19	10.56	1.3788E+000	9.76E-001	2.0979E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.7609E-001	9.76E-001	9.9805E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 8:40:58 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-155-F-
Sample Title: OOL-09-02-155-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 8:30:56 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-155-F-
Title: OOL-09-02-155-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	292.02	72.83	0.89	3.22E+002	63.24	1.43E+003
m	2	285-	305	300.51	74.96	0.90	6.37E+002	76.42	1.40E+003
	3	332-	344	340.03	84.84	0.93	3.36E+002	118.70	1.27E+003
M	4	949-	972	954.73	238.56	1.18	3.72E+002	46.03	2.69E+002
m	5	949-	972	965.71	241.31	1.18	9.64E+001	30.18	3.11E+002
	6	1348-	1360	1352.97	338.15	1.00	5.74E+001	44.47	1.73E+002
	7	1401-	1417	1407.10	351.69	1.08	1.58E+002	51.10	1.66E+002
	8	2034-	2052	2043.13	510.74	1.50	1.37E+002	48.74	1.42E+002
	9	2324-	2339	2332.32	583.06	1.52	2.54E+002	43.31	7.80E+001
	10	2429-	2445	2436.68	609.16	1.45	1.79E+002	40.32	7.80E+001
	11	3634-	3652	3644.53	911.21	1.32	1.61E+002	39.34	7.15E+001
	12	3869-	3883	3875.47	968.97	1.39	1.02E+002	29.97	4.57E+001
	13	4474-	4488	4481.63	1120.55	1.20	6.04E+001	25.00	3.56E+001
	14	5831-	5857	5844.19	1461.29	1.85	1.22E+003	71.88	2.97E+001
	15	7052-	7067	7060.15	1765.38	0.74	3.27E+001	18.67	1.93E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.998	511.00*		100.00	1.86760E-001	7.11280E-002
K-40	0.992	1460.81*		10.67	2.04010E+001	2.04489E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	8.64628E-001	3.36782E-001
		583.14*		84.20	4.29775E-001	9.22139E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	9.11325E+000	2.09387E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	9.04650E-001	1.80666E-001
Bi-214	0.993	609.31*		46.30	5.58966E-001	1.43502E-001
		1120.29*		15.10	6.73760E-001	2.87744E-001
		1764.49*		15.80	3.83899E-001	2.22733E-001
PB-214	0.357	74.82*	@	6.21	1.57024E+001	3.78359E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98*		7.49	1.39970E+000	4.96121E-001
		295.21		19.20		
		351.92*		37.20	5.15027E-001	1.87352E-001
Ac-228	0.999	338.32*		11.40	6.02903E-001	4.76724E-001
		911.07*		27.70	9.18631E-001	2.48747E-001
		969.11*		16.60	9.94348E-001	3.09410E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.998	9.392816E-002	7.380230E-002
K-40		0.992	2.040102E+001	2.044894E+000
TL-208		0.752	4.297754E-001	9.114410E-002
Pb-212	@	0.520	9.046498E-001	1.806663E-001
Bi-214		0.993	5.324500E-001	1.112517E-001
PB-214	@	0.357	6.254410E-001	1.752705E-001
Ac-228		0.999	8.993343E-001	1.795842E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.83	5.3747E-001	19.61
3	84.84	5.5997E-001	35.33

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0248E-001	7.32E-002	4.0630E-003
	1332.49	100.00	7.3194E-002		-3.0502E-002
Nb-94	702.63	100.00	9.7410E-002	8.88E-002	-6.2129E-002
	871.10	100.00	8.8763E-002		9.1400E-003
Ag-108m	79.20	7.10	4.7903E+000	1.15E-001	-8.0015E+000
	433.93	89.90	1.1500E-001		-4.1245E-002
	614.37	90.40	1.2876E-001		-5.9312E-002
	722.95	90.50	1.2114E-001		5.8308E-002
Sb-125	176.33	6.89	2.1628E+000	3.55E-001	-1.6790E-001
	427.89	29.33	3.5512E-001		7.7818E-002
	463.38	10.35	1.0490E+000		1.1324E-001
	600.56	17.80	5.6953E-001		5.8409E-002
	606.64	5.02	2.6483E+000		4.7655E+000
	635.90	11.32	8.6368E-001		6.1902E-001
Cs-134	563.23	8.38	1.1708E+000	1.20E-001	3.2748E-002
	569.32	15.43	6.7411E-001		2.8869E-001
	604.70	97.60	1.3040E-001		-4.3646E-002
	795.84	85.40	1.2033E-001		1.1039E-001
	801.93	8.73	1.0588E+000		-6.1395E-001
Cs-137	661.65	85.12	1.3028E-001	1.30E-001	6.3713E-002
Eu-152	121.78	28.40	7.0531E-001	3.14E-001	-4.6429E-001
	244.69	7.49	1.8433E+000		5.0747E-001
	344.27	26.50	4.4136E-001		-5.4570E-002
	778.89	12.74	7.6982E-001		3.1657E-001
	867.32	4.16	2.2136E+000		-1.6167E-001
	964.01	14.40	8.7471E-001		-2.8622E-001
	1085.78	10.00	9.2665E-001		-6.6449E-001
	1112.02	13.30	7.0673E-001		-3.8866E-001
	1407.95	20.70	3.1399E-001		-1.1459E-001
Eu-154	123.07	40.50	5.0046E-001	2.23E-001	3.7954E-001
	247.94	6.60	1.9862E+000		1.6388E+000
	591.81	4.83	2.1494E+000		1.4789E+000
	723.30	19.70	5.5297E-001		6.8149E-002
	756.87	4.33	2.1369E+000		1.2869E+000
	873.19	11.50	7.4425E-001		-4.8166E-003
	996.32	10.30	8.9352E-001		3.7092E-001
	1004.76	17.90	5.1724E-001		-3.1523E-001
	1274.45	35.50	2.2347E-001		-3.7220E-001
Eu-155	86.54	30.90	1.0191E+000	1.02E+000	-5.6894E-001
	105.31	20.70	1.1792E+000		-7.2445E-001
Am-241	59.54	35.90	1.2438E+000	1.24E+000	-4.6978E-001
Cm-243	228.19	10.56	1.2502E+000	8.91E-001	-5.1424E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.9056E-001	8.91E-001	6.8739E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 8:55:24 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-156-F-
Sample Title: OOL-09-02-156-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 8:45:23 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-156-F-
Title: OOL-09-02-156-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	305	291.66	72.74	0.96	3.77E+002	67.21	1.29E+003
m	2	287-	305	300.28	74.90	0.96	6.87E+002	79.07	1.60E+003
	3	332-	346	339.99	84.83	1.15	2.56E+002	138.19	1.63E+003
	4	944-	961	954.35	238.47	1.08	3.60E+002	84.95	4.67E+002
	5	1346-	1361	1352.91	338.14	1.10	9.35E+001	47.07	1.60E+002
	6	1397-	1416	1407.42	351.77	1.16	1.50E+002	61.03	2.33E+002
	7	2035-	2053	2042.31	510.54	0.68	1.44E+002	51.20	1.59E+002
	8	2325-	2340	2331.81	582.94	0.95	1.76E+002	43.30	1.04E+002
	9	2429-	2447	2436.25	609.05	1.32	2.05E+002	43.43	8.38E+001
	10	3633-	3656	3644.26	911.15	1.33	1.83E+002	37.25	4.46E+001
	11	3866-	3885	3875.04	968.86	0.41	7.74E+001	34.35	6.56E+001
	12	4473-	4488	4480.79	1120.34	1.11	7.10E+001	26.65	3.80E+001
	13	5831-	5858	5843.85	1461.21	1.93	1.29E+003	73.64	2.74E+001
	14	7053-	7068	7059.43	1765.20	0.30	2.82E+001	17.71	1.78E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.993	511.00*	100.00	1.96445E-001	7.47230E-002
K-40	0.994	1460.81*	10.67	2.16302E+001	2.14304E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	9.09467E-001	3.53823E-001
		583.14*	84.20	2.98183E-001	8.29188E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	9.83847E+000	2.23590E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.75857E-001	2.47980E-001
Bi-214	0.995	609.31*	46.30	6.40787E-001	1.56908E-001
		1120.29*	15.10	7.92040E-001	3.08787E-001
		1764.49*	15.80	3.31540E-001	2.10745E-001
Ac-228	0.999	338.32*	11.40	9.82714E-001	5.18042E-001
		911.07*	27.70	1.04975E+000	2.45029E-001
		969.11*	16.60	7.52223E-001	3.43154E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.993	1.320373E-001	7.681087E-002
K-40	0.994	2.163020E+001	2.143035E+000
TL-208	0.750	2.981834E-001	8.234744E-002
Pb-212 @	0.520	8.758572E-001	2.479797E-001
Bi-214	0.995	5.677555E-001	1.165468E-001
Ac-228	0.999	9.535917E-001	1.860991E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.74	6.2763E-001	17.85
3	84.83	4.2606E-001	54.06
6	351.77	2.4970E-001	40.73

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0312E-001	7.22E-002	-2.0350E-002
	1332.49	100.00	7.2209E-002		2.2854E-002
Nb-94	702.63	100.00	9.9484E-002	9.06E-002	-1.6736E-002
	871.10	100.00	9.0634E-002		-3.8445E-002
Ag-108m	79.20	7.10	4.9473E+000	1.12E-001	-6.2452E+000
	433.93	89.90	1.1837E-001		-3.3791E-002
	614.37	90.40	1.2695E-001		-1.6038E-003
	722.95	90.50	1.1169E-001		2.7447E-002
Sb-125	176.33	6.89	2.2225E+000	3.65E-001	4.8634E-001
	427.89	29.33	3.6528E-001		-2.2632E-001
	463.38	10.35	1.0747E+000		8.9257E-003
	600.56	17.80	5.3897E-001		-3.3245E-001
	606.64	5.02	2.7137E+000		-1.4868E+000
	635.90	11.32	8.3012E-001		-2.3753E-001
Cs-134	563.23	8.38	1.1626E+000	1.20E-001	-8.8040E-001
	569.32	15.43	6.3664E-001		-9.5870E-002
	604.70	97.60	1.3170E-001		-1.6389E-001
	795.84	85.40	1.2002E-001		9.7277E-002
	801.93	8.73	1.0419E+000		-1.2959E+000
Cs-137	661.65	85.12	1.2763E-001	1.28E-001	7.5027E-002
Eu-152	121.78	28.40	7.3801E-001	3.03E-001	-1.9636E-002
	244.69	7.49	1.8471E+000		8.1092E-001
	344.27	26.50	4.0946E-001		3.4075E-003
	778.89	12.74	7.6769E-001		-2.4766E-001
	867.32	4.16	2.1620E+000		-3.1130E+000
	964.01	14.40	8.7792E-001		4.6700E-001
	1085.78	10.00	8.5915E-001		1.3345E-001
	1112.02	13.30	7.0157E-001		-1.2612E-001
	1407.95	20.70	3.0280E-001		2.4421E-001
Eu-154	123.07	40.50	5.1067E-001	2.35E-001	-4.5510E-002
	247.94	6.60	1.9785E+000		-1.3165E+000
	591.81	4.83	1.9866E+000		1.0016E-001
	723.30	19.70	5.1828E-001		3.2915E-001
	756.87	4.33	2.1104E+000		1.7756E-001
	873.19	11.50	7.9916E-001		5.1559E-001
	996.32	10.30	8.6774E-001		-4.0895E-001
	1004.76	17.90	5.2448E-001		9.8442E-002
	1274.45	35.50	2.3549E-001		-9.0465E-002
Eu-155	86.54	30.90	1.0546E+000	1.05E+000	3.1504E-001
	105.31	20.70	1.2119E+000		-7.3155E-001
Am-241	59.54	35.90	1.3331E+000	1.33E+000	5.3530E-001
Cm-243	228.19	10.56	1.2538E+000	9.17E-001	-8.7511E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.1705E-001	9.17E-001	2.2611E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 3:09:47 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-02-157-F-
Sample Title: OOL-09-02-157-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 2:59:44 PM
Live Time: 600.0 seconds
Real Time: 600.8 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: ORG7829
Log Number: OOL-09-02-157-F-
Title: OOL-09-02-157-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	307	291.43	72.86	0.96	1.91E+002	49.36	8.40E+002
m	2	285-	307	300.62	75.16	0.97	3.18E+002	55.71	9.29E+002
	3	331-	347	340.34	85.09	0.61	1.39E+002	118.56	1.12E+003
	4	505-	515	508.49	127.13	0.58	6.59E+001	67.79	4.72E+002
	5	945-	961	954.69	238.69	1.26	1.56E+002	69.60	3.53E+002
	6	1399-	1415	1407.48	351.89	0.81	8.29E+001	45.47	1.45E+002
	7	2034-	2051	2042.65	510.70	1.11	1.19E+002	42.30	1.06E+002
	8	2323-	2341	2332.83	583.25	1.18	1.44E+002	37.19	6.40E+001
	9	2428-	2445	2436.63	609.20	1.46	1.18E+002	35.64	6.54E+001
	10	2641-	2653	2646.67	661.71	1.01	2.43E+001	25.83	5.58E+001
	11	3636-	3654	3643.98	911.06	0.99	1.03E+002	27.99	3.01E+001
M	12	3853-	3884	3859.77	965.01	1.40	2.15E+001	14.54	4.57E+001
m	13	3853-	3884	3875.47	968.94	1.40	4.95E+001	19.02	5.56E+001
	14	5831-	5856	5844.22	1461.16	1.75	8.44E+002	59.21	1.62E+001
	15	7052-	7068	7059.16	1764.92	0.40	4.60E+001	14.13	1.95E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.997	511.00*	100.00	2.13871E-001	8.13165E-002
K-40	0.996	1460.81*	10.67	1.91784E+001	2.05478E+000
Cs-137	1.000	661.65*	85.12	5.59088E-002	5.99236E-002
TL-208	0.752	277.35	6.80		
		510.84*	21.60	9.90144E-001	3.85052E-001
		583.14*	84.20	3.21390E-001	9.29721E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.23048E+001	3.23635E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.08547E-001	2.40797E-001
Bi-214	0.696	609.31*	46.30	4.84668E-001	1.58529E-001
		1120.29	15.10		
		1764.49*	15.80	7.48825E-001	2.41597E-001
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	7.83314E-001	2.31356E-001
		969.11*	16.60	6.38724E-001	2.54547E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN		0.997	1.444509E-001	8.372901E-002
K-40		0.996	1.917840E+001	2.054780E+000
Cs-137		1.000	5.590877E-002	5.992364E-002
TL-208		0.752	3.213897E-001	9.238028E-002
Pb-212	@	0.593	5.085467E-001	2.407968E-001
Bi-214		0.696	5.641730E-001	1.325428E-001
Ac-228		0.632	7.179039E-001	1.712065E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.86	3.1799E-001	25.87
3	85.09	2.3187E-001	85.22
4	127.13	1.0985E-001	102.85
6	351.89	1.3814E-001	54.86
M 12	965.01	3.5840E-002	67.63

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
	Co-60	1173.22	100.00	1.1310E-001	9.28E-002	-2.7072E-002
		1332.49	100.00	9.2759E-002		-8.0506E-002
	Nb-94	702.63	100.00	1.1757E-001	1.10E-001	-6.8188E-003
		871.10	100.00	1.1019E-001		-4.9438E-002
	Ag-108m	79.20	7.10	1.0355E+001	1.38E-001	-3.3804E+000
		433.93	89.90	1.4328E-001		1.1765E-001
		614.37	90.40	1.6962E-001		-1.9182E-002
		722.95	90.50	1.3816E-001		1.1919E-001
	Sb-125	176.33	6.89	2.9248E+000	4.21E-001	2.2579E+000
		427.89	29.33	4.2143E-001		-3.3434E-001
		463.38	10.35	1.2753E+000		5.5868E-001
		600.56	17.80	6.7587E-001		-3.1494E-001
		606.64	5.02	3.0413E+000		2.3951E+000
		635.90	11.32	1.0044E+000		-5.9494E-001
	Cs-134	563.23	8.38	1.4813E+000	1.41E-001	2.2162E-001
		569.32	15.43	8.0747E-001		5.5752E-001
		604.70	97.60	1.5544E-001		1.0937E-003
		795.84	85.40	1.4062E-001		6.5841E-002
		801.93	8.73	1.2442E+000		-1.0684E+000
+	Cs-137	661.65*	85.12	9.8976E-002	9.90E-002	5.5909E-002
	Eu-152	121.78	28.40	1.0059E+000	4.31E-001	-3.3557E-002
		244.69	7.49	2.2289E+000		-6.4866E-001
		344.27	26.50	5.2797E-001		-8.5523E-001
		778.89	12.74	8.9056E-001		-2.8106E-001
		867.32	4.16	2.8035E+000		1.9380E-001
		964.01	14.40	1.0566E+000		4.5358E-002
		1085.78	10.00	1.0668E+000		1.3876E-001
		1112.02	13.30	8.5348E-001		-1.2728E+000
		1407.95	20.70	4.3105E-001		-3.3819E-001
	Eu-154	123.07	40.50	6.9700E-001	2.88E-001	-2.3435E-001
		247.94	6.60	2.4425E+000		-1.3715E+000
		591.81	4.83	2.5335E+000		1.6856E+000
		723.30	19.70	6.4026E-001		8.7238E-001
		756.87	4.33	2.4664E+000		-4.8710E-002
		873.19	11.50	9.7034E-001		4.9753E-001
		996.32	10.30	1.0418E+000		8.5289E-003
		1004.76	17.90	5.7224E-001		-5.8831E-001
		1274.45	35.50	2.8811E-001		-1.2790E-001
	Eu-155	86.54	30.90	1.7984E+000	1.78E+000	-9.9417E-002
		105.31	20.70	1.7811E+000		-5.9193E-001
	Am-241	59.54	35.90	4.0067E+000	4.01E+000	-5.6012E+000
	Cm-243	228.19	10.56	1.7050E+000	1.08E+000	5.7644E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0757E+000	1.08E+000	5.9796E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 6:17:00 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-158-F-
Sample Title: OOL-09-02-158-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 6:06:58 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-158-F-
Title: OOL-09-02-158-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	309	291.34	72.74	1.49	3.97E+002	68.18	1.45E+003
m	2	284-	309	300.19	74.95	1.49	7.21E+002	77.36	2.15E+003
	3	331-	347	338.18	84.45	1.19	1.93E+002	139.41	1.55E+003
	4	944-	964	954.43	238.55	1.49	2.55E+002	88.08	4.86E+002
	5	1400-	1417	1406.68	351.65	1.47	1.21E+002	52.83	1.85E+002
	6	2033-	2051	2041.93	510.50	1.98	1.21E+002	45.55	1.24E+002
	7	2321-	2341	2331.44	582.90	1.54	1.93E+002	46.73	1.04E+002
	8	2426-	2445	2435.81	609.00	1.31	1.83E+002	44.37	9.32E+001
	9	2901-	2914	2907.66	726.99	0.62	4.98E+001	24.40	3.82E+001
	10	3632-	3654	3643.29	910.95	1.35	1.56E+002	40.61	7.06E+001
	11	3867-	3882	3874.17	968.68	1.93	7.34E+001	30.75	5.66E+001
	12	5829-	5859	5843.66	1461.18	2.36	1.23E+003	70.90	1.55E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.992	511.00*	100.00	1.70567E-001	6.81188E-002
K-40	0.996	1460.81*	10.67	2.13249E+001	2.11792E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	7.89664E-001	3.21891E-001
		583.14*	84.20	3.37529E-001	9.26396E-002
		860.37	12.46		
Bi-212	0.999	727.17*	11.80	6.59230E-001	3.32228E-001
Pb-212	0.521	74.81* @	10.70	1.07043E+001	2.39172E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.39977E-001	2.42764E-001
Bi-214	0.396	609.31*	46.30	5.88654E-001	1.60219E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	9.24659E-001	2.62659E-001
		969.11*	16.60	7.36673E-001	3.18247E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN	0.992	9.766111E-002	7.095728E-002
K-40	0.996	2.132486E+001	2.117919E+000
TL-208	0.750	3.375294E-001	9.198422E-002
Bi-212	0.999	6.592296E-001	3.322278E-001
Pb-212 @	0.521	6.399775E-001	2.427642E-001
Bi-214	0.396	5.886536E-001	1.602189E-001
Ac-228	0.631	8.484919E-001	2.025754E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.74	6.6084E-001	17.20
3	84.45	3.2119E-001	72.34
5	351.65	2.0162E-001	43.67

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0831E-001	7.84E-002	7.4454E-002
	1332.49	100.00	7.8425E-002		6.0411E-002
Nb-94	702.63	100.00	1.0290E-001	9.52E-002	-3.5962E-003
	871.10	100.00	9.5210E-002		2.5132E-002
Ag-108m	79.20	7.10	5.3737E+000	1.23E-001	-4.4901E+000
	433.93	89.90	1.2330E-001		3.4132E-002
	614.37	90.40	1.4596E-001		1.2441E-002
	722.95	90.50	1.2365E-001		-7.8470E-003
Sb-125	176.33	6.89	2.3937E+000	3.79E-001	-1.3361E-001
	427.89	29.33	3.7862E-001		8.9807E-002
	463.38	10.35	1.1514E+000		1.3187E+000
	600.56	17.80	5.8472E-001		-4.9279E-001
	606.64	5.02	2.8057E+000		4.8275E+000
	635.90	11.32	8.8393E-001		3.8077E-001
Cs-134	563.23	8.38	1.3122E+000	1.26E-001	1.4180E+000
	569.32	15.43	6.8362E-001		-4.8876E-001
	604.70	97.60	1.4235E-001		-3.7339E-002
	795.84	85.40	1.2642E-001		-6.7740E-003
	801.93	8.73	1.1504E+000		-1.4097E+000
Cs-137	661.65	85.12	1.1662E-001	1.17E-001	-5.2156E-002
Eu-152	121.78	28.40	7.5964E-001	3.69E-001	8.9690E-002
	244.69	7.49	1.9134E+000		-9.1396E-002
	344.27	26.50	4.5593E-001		-7.2619E-001
	778.89	12.74	8.0996E-001		-8.8985E-001
	867.32	4.16	2.3823E+000		-2.4301E+000
	964.01	14.40	8.7298E-001		-2.3552E-001
	1085.78	10.00	1.0009E+000		-3.9266E-001
	1112.02	13.30	8.3955E-001		-1.1623E+000
	1407.95	20.70	3.6858E-001		2.2101E-001
Eu-154	123.07	40.50	5.3121E-001	2.58E-001	2.4477E-001
	247.94	6.60	2.0519E+000		-8.3148E-001
	591.81	4.83	2.2683E+000		1.0207E+000
	723.30	19.70	5.7183E-001		7.6980E-001
	756.87	4.33	2.3818E+000		-1.0746E+000
	873.19	11.50	8.1180E-001		-5.0815E-001
	996.32	10.30	8.7194E-001		-8.6551E-001
	1004.76	17.90	5.0494E-001		4.9389E-002
	1274.45	35.50	2.5800E-001		5.8297E-002
Eu-155	86.54	30.90	1.0813E+000	1.08E+000	3.7171E-001
	105.31	20.70	1.1991E+000		-4.4093E-001
Am-241	59.54	35.90	1.3146E+000	1.31E+000	3.3695E-001
Cm-243	228.19	10.56	1.3423E+000	1.00E+000	-5.8702E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0020E+000	1.00E+000	3.8488E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 6:33:02 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-09-02-159-F-
Sample Title: OOL-09-02-159-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 6:23:01 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/22/2006
Eff Calibration Date: 10/3/2005
Calibration Efficiency: RED_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: RED6264
Log Number: OOL-09-02-159-F-
Title: OOL-09-02-159-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	308	300.09	74.92	1.38	4.74E+002	143.58	1.69E+003
2	331-	348	339.07	84.67	1.08	2.59E+002	144.76	1.60E+003
3	947-	960	954.01	238.45	1.20	2.94E+002	68.22	3.33E+002
4	1174-	1188	1179.64	294.87	0.35	1.09E+002	52.46	2.10E+002
5	1347-	1359	1353.03	338.23	1.57	7.41E+001	42.07	1.47E+002
6	1399-	1416	1406.70	351.65	1.40	1.51E+002	56.94	2.12E+002
7	2031-	2053	2042.37	510.61	0.97	1.53E+002	52.59	1.46E+002
8	2321-	2343	2331.25	582.85	1.17	1.67E+002	50.32	1.27E+002
9	2426-	2444	2436.67	609.21	1.21	1.49E+002	41.36	8.76E+001
10	3634-	3654	3642.62	910.78	1.46	1.39E+002	38.56	6.83E+001
11	3867-	3886	3875.25	968.95	1.46	9.18E+001	34.91	6.42E+001
12	4079-	4091	4085.08	1021.42	0.35	3.18E+001	16.91	1.63E+001
13	4944-	4960	4952.02	1238.22	0.74	5.44E+001	23.29	2.76E+001
14	5829-	5858	5843.35	1461.11	2.27	1.30E+003	73.88	2.57E+001
15	7057-	7070	7063.12	1766.13	0.53	2.61E+001	18.56	2.19E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.995	511.00*		100.00	2.14605E-001	7.94886E-002
K-40	0.997	1460.81*		10.67	2.24972E+001	2.22521E+000
TL-208	0.750	277.35		6.80		
		510.84*		21.60	9.93543E-001	3.76842E-001
		583.14*		84.20	2.91046E-001	9.56446E-002
		860.37		12.46		
Pb-212	0.521	74.81*	@	10.70	7.03601E+000	2.53935E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.37924E-001	2.06612E-001
Bi-214	0.681	609.31*		46.30	4.81103E-001	1.45771E-001
		1120.29		15.10		
		1764.49*		15.80	3.16489E-001	2.27469E-001
PB-214	0.581	74.82*	@	6.21	1.21232E+001	4.46300E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	6.72346E-001	3.43979E-001
		351.92*		37.20	5.06960E-001	2.09222E-001
Ac-228	0.998	338.32*		11.40	8.03347E-001	4.73185E-001
		911.07*		27.70	8.20344E-001	2.46778E-001
		969.11*		16.60	9.22201E-001	3.63540E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.995	1.517393E-001	8.210388E-002
K-40		0.997	2.249720E+001	2.225211E+000
TL-208		0.750	2.910458E-001	9.517314E-002
Pb-212	@	0.521	7.379242E-001	2.066120E-001
Bi-214		0.681	4.331808E-001	1.227320E-001
PB-214	@	0.581	5.516223E-001	1.787532E-001
Ac-228		0.998	8.447627E-001	1.874712E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.67	4.3157E-001	55.90
12	1021.42	5.2917E-002	53.27
13	1238.22	9.0640E-002	42.83

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0668E-001	7.89E-002	-3.0768E-002
	1332.49	100.00	7.8908E-002		3.5068E-002
Nb-94	702.63	100.00	1.0130E-001	9.61E-002	-2.2348E-002
	871.10	100.00	9.6145E-002		-1.8577E-002
Ag-108m	79.20	7.10	5.2856E+000	1.25E-001	-4.8901E+000
	433.93	89.90	1.2469E-001		-7.7918E-002
	614.37	90.40	1.4680E-001		-6.1271E-002
	722.95	90.50	1.3794E-001		1.9225E-001
Sb-125	176.33	6.89	2.3041E+000	3.95E-001	4.6160E-001
	427.89	29.33	3.9517E-001		-2.6995E-001
	463.38	10.35	1.1138E+000		8.4233E-001
	600.56	17.80	6.0703E-001		2.5519E-001
	606.64	5.02	2.6879E+000		4.7642E+000
	635.90	11.32	8.8621E-001		8.6449E-003
Cs-134	563.23	8.38	1.3122E+000	1.19E-001	5.0270E-002
	569.32	15.43	6.9959E-001		2.9083E-002
	604.70	97.60	1.3526E-001		-4.1927E-002
	795.84	85.40	1.1941E-001		5.8902E-003
	801.93	8.73	1.0898E+000		-1.3379E+000
Cs-137	661.65	85.12	1.3382E-001	1.34E-001	1.1714E-001
Eu-152	121.78	28.40	7.5984E-001	3.71E-001	1.5411E-002
	244.69	7.49	1.8454E+000		-3.7855E+000
	344.27	26.50	4.2073E-001		-4.1784E-001
	778.89	12.74	8.1426E-001		-2.4975E-002
	867.32	4.16	2.3823E+000		-2.9241E+000
	964.01	14.40	9.0003E-001		1.0333E-001
	1085.78	10.00	9.4913E-001		-2.4886E+000
	1112.02	13.30	7.5002E-001		-1.7120E+000
	1407.95	20.70	3.7103E-001		3.0920E-001
Eu-154	123.07	40.50	5.3039E-001	2.60E-001	-1.6309E-001
	247.94	6.60	2.0834E+000		-3.2007E-001
	591.81	4.83	2.2776E+000		8.8347E-001
	723.30	19.70	6.3042E-001		6.7333E-001
	756.87	4.33	2.3692E+000		7.7209E-001
	873.19	11.50	8.5511E-001		1.3555E-001
	996.32	10.30	9.5791E-001		-2.3323E-001
	1004.76	17.90	5.7215E-001		2.7408E-002
	1274.45	35.50	2.6025E-001		-6.9479E-002
Eu-155	86.54	30.90	1.0794E+000	1.08E+000	-2.3454E-001
	105.31	20.70	1.2068E+000		1.0794E+000
Am-241	59.54	35.90	1.2928E+000	1.29E+000	-6.3184E-001
Cm-243	228.19	10.56	1.3423E+000	1.01E+000	-2.7989E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0097E+000	1.01E+000	-4.4145E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 10:30:52 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-160-F-
Sample Title: OOL-09-02-160-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 10:20:49 PM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-160-F-
Title: OOL-09-02-160-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	306	291.72	72.76	0.91	3.58E+002	63.36	1.12E+003
m	2	287-	306	300.36	74.92	0.91	6.05E+002	73.22	1.27E+003
	3	332-	345	339.07	84.60	0.90	1.79E+002	118.85	1.26E+003
	4	946-	961	953.89	238.35	1.07	2.67E+002	72.94	3.72E+002
	5	1175-	1186	1180.52	295.02	0.60	6.56E+001	42.73	1.62E+002
	6	1348-	1357	1352.81	338.11	0.49	8.30E+001	34.45	1.00E+002
	7	1399-	1416	1406.14	351.45	1.08	2.04E+002	54.24	1.73E+002
	8	2032-	2053	2041.90	510.44	1.75	1.65E+002	44.42	9.30E+001
	9	2325-	2340	2331.15	582.77	1.21	1.67E+002	39.79	8.00E+001
	10	2427-	2442	2435.58	608.89	1.08	1.34E+002	37.61	7.80E+001
	11	2751-	2761	2756.01	689.02	0.66	1.62E+001	18.87	3.18E+001
	12	3631-	3653	3642.80	910.78	1.58	1.81E+002	35.37	3.74E+001
M	13	3851-	3883	3857.53	964.48	1.66	3.20E+001	15.99	4.68E+001
m	14	3851-	3883	3873.93	968.58	1.66	9.16E+001	21.85	6.33E+001
	15	4472-	4487	4478.87	1119.86	1.48	5.78E+001	30.72	6.22E+001
	16	5827-	5853	5841.78	1460.69	2.27	1.25E+003	72.67	2.75E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.989	511.00*		100.00	2.24963E-001	6.78123E-002
K-40	1.000	1460.81*		10.67	2.10078E+001	2.09245E+000
TL-208	0.748	277.35		6.80		
		510.84*		21.60	1.04150E+000	3.25263E-001
		583.14*		84.20	2.82572E-001	7.67250E-002
		860.37		12.46		
Pb-212	0.519	74.81*	@	10.70	8.65838E+000	1.99432E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.48264E-001	2.04344E-001
Bi-214	0.694	609.31*		46.30	4.18359E-001	1.28232E-001
		1120.29*		15.10	6.44595E-001	3.49187E-001
		1764.49		15.80		
PB-214	0.579	74.82*	@	6.21	1.49186E+001	3.60288E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.93359E-001	2.64810E-001
		351.92*		37.20	6.65312E-001	2.08679E-001
Ac-228	0.995	338.32*		11.40	8.71718E-001	3.86945E-001
		911.07*		27.70	1.03357E+000	2.34770E-001
		969.11*		16.60	8.90538E-001	2.32013E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.989	1.639274E-001	6.977964E-002
K-40		1.000	2.100782E+001	2.092454E+000
TL-208		0.748	2.825718E-001	7.617037E-002
Pb-212	@	0.519	6.482643E-001	2.043441E-001
Bi-214		0.694	4.452428E-001	1.203717E-001
PB-214	@	0.579	5.611280E-001	1.639035E-001
Ac-228		0.995	9.474368E-001	1.517958E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.76	5.9662E-001	17.70
3	84.60	2.9751E-001	66.58
11	689.02	2.7005E-002	116.46
M 13	964.48	5.3334E-002	49.96

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.8536E-002	7.37E-002	1.9680E-003
	1332.49	100.00	7.3681E-002		-4.5016E-002
Nb-94	702.63	100.00	9.6355E-002	9.34E-002	2.6755E-002
	871.10	100.00	9.3368E-002		8.7438E-003
Ag-108m	79.20	7.10	4.4537E+000	1.17E-001	-2.8188E+000
	433.93	89.90	1.2315E-001		1.6259E-002
	614.37	90.40	1.1652E-001		-8.7114E-002
	722.95	90.50	1.2166E-001		1.0293E-001
Sb-125	176.33	6.89	2.1188E+000	3.61E-001	5.9837E-001
	427.89	29.33	3.6113E-001		-4.9151E-001
	463.38	10.35	1.0350E+000		1.4036E-001
	600.56	17.80	5.5778E-001		-5.2354E-001
	606.64	5.02	2.5343E+000		3.9741E+000
	635.90	11.32	8.3694E-001		-9.7216E-001
Cs-134	563.23	8.38	1.2003E+000	1.18E-001	7.3546E-001
	569.32	15.43	6.5132E-001		3.6954E-001
	604.70	97.60	1.2775E-001		-1.7603E-002
	795.84	85.40	1.1817E-001		1.4407E-001
	801.93	8.73	1.0655E+000		-7.8223E-001
Cs-137	661.65	85.12	1.1459E-001	1.15E-001	3.5436E-003
Eu-152	121.78	28.40	6.8453E-001	3.14E-001	-1.6959E-001
	244.69	7.49	1.7744E+000		-3.6146E-001
	344.27	26.50	4.0607E-001		-1.7365E-001
	778.89	12.74	7.2590E-001		-4.0935E-001
	867.32	4.16	2.2781E+000		-1.7052E+000
	964.01	14.40	8.8429E-001		5.4557E-002
	1085.78	10.00	9.5025E-001		-2.8192E-001
	1112.02	13.30	7.0673E-001		-6.3144E-001
	1407.95	20.70	3.1399E-001		-1.7168E-002
Eu-154	123.07	40.50	4.7681E-001	2.41E-001	-1.5208E-001
	247.94	6.60	1.9426E+000		7.7188E-001
	591.81	4.83	2.1076E+000		-1.4900E+000
	723.30	19.70	5.5536E-001		6.2716E-001
	756.87	4.33	2.3497E+000		-8.3585E-002
	873.19	11.50	7.8850E-001		-5.5845E-001
	996.32	10.30	8.9034E-001		1.5277E-001
	1004.76	17.90	5.1906E-001		1.0200E-001
	1274.45	35.50	2.4127E-001		-2.8300E-002
Eu-155	86.54	30.90	9.5878E-001	9.59E-001	2.3492E-001
	105.31	20.70	1.1569E+000		1.1476E+000
Am-241	59.54	35.90	1.2111E+000	1.21E+000	-6.6851E-001
Cm-243	228.19	10.56	1.2816E+000	8.77E-001	6.9886E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.7660E-001	8.77E-001	-5.3752E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 10:45:56 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-161-F-
Sample Title: OOL-09-02-161-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 10:35:54 PM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-161-F-
Title: OOL-09-02-161-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	291.65	72.74	1.02	3.64E+002	62.95	1.35E+003
m	2	284-	305	300.29	74.90	1.02	6.62E+002	74.43	1.42E+003
	3	332-	346	338.88	84.55	0.94	2.37E+002	127.53	1.37E+003
	4	946-	959	954.06	238.39	1.04	3.39E+002	66.75	2.98E+002
	5	1174-	1185	1180.37	294.99	1.28	5.85E+001	45.13	1.89E+002
	6	1345-	1358	1352.38	338.00	0.76	6.78E+001	41.77	1.40E+002
	7	1400-	1411	1406.29	351.48	0.57	1.44E+002	44.03	1.44E+002
	8	1843-	1856	1851.19	462.74	0.55	4.15E+001	32.58	8.45E+001
	9	2029-	2052	2040.91	510.19	1.86	1.92E+002	54.75	1.47E+002
	10	2323-	2338	2331.37	582.83	1.15	1.78E+002	39.18	7.39E+001
	11	2425-	2445	2435.69	608.91	1.05	1.54E+002	48.26	1.24E+002
	12	3633-	3650	3643.05	910.84	1.31	1.64E+002	36.12	5.40E+001
M	13	3850-	3883	3856.41	964.20	1.40	4.36E+001	17.00	3.75E+001
m	14	3850-	3883	3873.55	968.49	1.40	1.07E+002	23.14	4.50E+001
	15	4472-	4489	4479.98	1120.14	1.78	7.23E+001	28.64	4.17E+001
	16	5827-	5855	5841.53	1460.63	1.96	1.22E+003	70.67	1.82E+001
	17	7048-	7064	7056.64	1764.50	0.50	4.63E+001	18.19	1.27E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.977	511.00*		100.00	2.61718E-001	8.26537E-002
K-40	0.999	1460.81*		10.67	2.03920E+001	2.03237E+000
TL-208	0.747	277.35		6.80		
		510.84*		21.60	1.21166E+000	3.95243E-001
		583.14*		84.20	3.01441E-001	7.70518E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	9.46958E+000	2.13997E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.24763E-001	2.07480E-001
Bi-214	0.997	609.31*		46.30	4.81004E-001	1.61892E-001
		1120.29*		15.10	8.05445E-001	3.30505E-001
		1764.49*		15.80	5.44218E-001	2.20519E-001
PB-214	0.579	74.82*	@	6.21	1.63163E+001	3.87280E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.50717E-001	2.77164E-001
		351.92*		37.20	4.69634E-001	1.63438E-001
Ac-228	0.994	338.32*		11.40	7.12678E-001	4.52838E-001
		911.07*		27.70	9.38541E-001	2.33233E-001
		969.11*		16.60	1.04310E+000	2.50105E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.977	1.966070E-001	8.428596E-002
K-40		0.999	2.039204E+001	2.032375E+000
TL-208		0.747	3.014408E-001	7.642305E-002
Pb-212	@	0.520	8.247629E-001	2.074796E-001
Bi-214		0.997	5.439167E-001	1.213808E-001
PB-214	@	0.579	4.389523E-001	1.407837E-001
Ac-228		0.994	9.530664E-001	1.596248E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.74	6.0634E-001	17.30
3	84.55	3.9524E-001	53.78
8	462.74	6.9147E-002	78.52
M 13	964.20	7.2694E-002	38.97

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.6844E-002	7.27E-002	2.4143E-002
	1332.49	100.00	7.2703E-002		1.3306E-002
Nb-94	702.63	100.00	9.6620E-002	9.19E-002	-3.3355E-002
	871.10	100.00	9.1860E-002		3.7868E-004
Ag-108m	79.20	7.10	4.4967E+000	1.18E-001	-6.0621E+000
	433.93	89.90	1.2648E-001		8.2409E-002
	614.37	90.40	1.2397E-001		3.0003E-002
	722.95	90.50	1.1825E-001		9.1019E-002
Sb-125	176.33	6.89	2.1628E+000	3.53E-001	1.3663E+000
	427.89	29.33	3.5330E-001		-2.8748E-001
	463.38	10.35	1.0064E+000		5.6071E-001
	600.56	17.80	5.7595E-001		5.6485E-002
	606.64	5.02	2.6932E+000		4.3678E+000
	635.90	11.32	8.5487E-001		-6.3937E-001
Cs-134	563.23	8.38	1.1923E+000	1.13E-001	1.2019E+000
	569.32	15.43	6.5996E-001		-8.1191E-002
	604.70	97.60	1.3696E-001		1.7732E-002
	795.84	85.40	1.1340E-001		-1.5308E-002
	801.93	8.73	1.0487E+000		-8.3389E-001
Cs-137	661.65	85.12	1.2015E-001	1.20E-001	-1.3025E-002
Eu-152	121.78	28.40	6.8432E-001	3.40E-001	5.9965E-001
	244.69	7.49	1.7889E+000		1.1373E+000
	344.27	26.50	4.0093E-001		-1.4352E-001
	778.89	12.74	7.1447E-001		-6.0721E-002
	867.32	4.16	2.2710E+000		-1.0785E+000
	964.01	14.40	9.1700E-001		6.9681E-002
	1085.78	10.00	9.2665E-001		1.8307E-001
	1112.02	13.30	6.8055E-001		-8.9427E-001
	1407.95	20.70	3.4024E-001		-3.8025E-001
Eu-154	123.07	40.50	4.6686E-001	2.42E-001	-3.1268E-001
	247.94	6.60	1.8932E+000		1.8270E-001
	591.81	4.83	2.0456E+000		-3.5873E-001
	723.30	19.70	5.3467E-001		6.1202E-002
	756.87	4.33	2.1434E+000		-1.2952E+000
	873.19	11.50	7.4710E-001		-9.0230E-001
	996.32	10.30	8.0654E-001		-2.8009E-002
	1004.76	17.90	4.7332E-001		-2.7355E-002
	1274.45	35.50	2.4240E-001		4.5462E-002
Eu-155	86.54	30.90	9.6685E-001	9.67E-001	1.7616E-001
	105.31	20.70	1.1428E+000		1.0002E+000
Am-241	59.54	35.90	1.2014E+000	1.20E+000	-7.5398E-001
Cm-243	228.19	10.56	1.2601E+000	8.92E-001	6.9770E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.9219E-001	8.92E-001	-2.3515E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 9:28:02 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-162-F-
Sample Title: OOL-09-02-162-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 9:17:59 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-162-F-
Title: OOL-09-02-162-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	291.58	72.72	1.00	3.57E+002	63.13	1.37E+003
m	2	284-	308	300.33	74.91	1.01	6.42E+002	72.98	1.39E+003
	3	334-	346	338.80	84.53	1.36	2.55E+002	115.25	1.21E+003
	4	947-	961	954.31	238.46	1.11	2.55E+002	69.67	3.50E+002
	5	1401-	1416	1407.25	351.72	0.87	1.37E+002	50.79	1.77E+002
	6	2031-	2046	2041.79	510.41	0.41	7.10E+001	40.71	1.20E+002
	7	2326-	2340	2331.76	582.92	0.95	1.92E+002	38.41	6.61E+001
	8	2427-	2444	2435.95	608.98	1.28	1.58E+002	39.06	7.23E+001
	9	2899-	2916	2908.03	727.03	0.47	6.68E+001	27.99	4.22E+001
	10	3633-	3653	3644.43	911.19	1.44	1.25E+002	36.35	6.03E+001
M	11	3853-	3884	3858.97	964.84	1.66	2.26E+001	15.06	4.40E+001
m	12	3853-	3884	3874.47	968.72	1.66	8.30E+001	21.21	6.33E+001
	13	4473-	4487	4479.87	1120.11	0.75	5.61E+001	28.84	5.29E+001
	14	5829-	5857	5843.56	1461.14	1.96	1.22E+003	70.72	1.80E+001
	15	7053-	7067	7059.67	1765.26	0.37	3.46E+001	16.88	1.34E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.996	1460.81*	10.67	2.04468E+001	2.03649E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	4.47939E-001	2.66617E-001
		583.14*	84.20	3.24704E-001	7.75372E-002
		860.37	12.46		
Bi-212	0.999	727.17*	11.80	8.56667E-001	3.72972E-001
Pb-212	0.520	74.81* @	10.70	9.18014E+000	2.08040E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.20980E-001	1.95346E-001
Bi-214	0.993	609.31*	46.30	4.92254E-001	1.36199E-001
		1120.29*	15.10	6.24988E-001	3.28249E-001
		1764.49*	15.80	4.06706E-001	2.02452E-001
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	7.13883E-001	2.23667E-001
		969.11*	16.60	8.06463E-001	2.22853E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
X	ANN		0.988		
	K-40		0.996	2.044682E+001	2.036493E+000
	TL-208		0.750	3.343143E-001	7.445263E-002
	Bi-212		0.999	8.566666E-001	3.729725E-001
	Pb-212	@	0.520	6.209802E-001	1.953465E-001
	Bi-214		0.993	4.824890E-001	1.068513E-001
	Ac-228		0.632	7.603418E-001	1.578677E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.72	5.9544E-001	17.67
3	84.53	4.2505E-001	45.19
5	351.72	2.2755E-001	37.20
M 11	964.84	3.7708E-002	66.55

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.3006E-002	7.61E-002	-4.8814E-002
	1332.49	100.00	7.6066E-002		1.2746E-002
Nb-94	702.63	100.00	9.9484E-002	8.65E-002	8.2337E-003
	871.10	100.00	8.6526E-002		-3.9835E-002
Ag-108m	79.20	7.10	4.4733E+000	1.16E-001	-2.9094E+000
	433.93	89.90	1.1620E-001		1.0391E-001
	614.37	90.40	1.2535E-001		5.9032E-002
	722.95	90.50	1.1611E-001		1.0374E-002
Sb-125	176.33	6.89	2.1134E+000	3.41E-001	9.2261E-001
	427.89	29.33	3.4088E-001		-1.6136E-001
	463.38	10.35	1.0455E+000		5.4492E-001
	600.56	17.80	5.2087E-001		2.7678E-001
	606.64	5.02	2.5013E+000		4.6527E+000
	635.90	11.32	7.9508E-001		-2.7186E-001
Cs-134	563.23	8.38	1.2697E+000	1.12E-001	5.6797E-001
	569.32	15.43	6.6139E-001		1.6649E-001
	604.70	97.60	1.2128E-001		1.0468E-002
	795.84	85.40	1.1176E-001		9.5864E-002
	801.93	8.73	1.0213E+000		-1.2144E-001
Cs-137	661.65	85.12	1.2270E-001	1.23E-001	1.1228E-001
Eu-152	121.78	28.40	6.7780E-001	3.22E-001	-7.7204E-002
	244.69	7.49	1.7436E+000		5.0363E-001
	344.27	26.50	4.1058E-001		-2.9038E-001
	778.89	12.74	6.8625E-001		-9.2617E-001
	867.32	4.16	2.1167E+000		-1.4335E+000
	964.01	14.40	8.1996E-001		-1.6227E-001
	1085.78	10.00	8.9535E-001		-4.7263E-002
	1112.02	13.30	6.6157E-001		-1.8346E-001
	1407.95	20.70	3.2211E-001		1.2508E-001
Eu-154	123.07	40.50	4.7452E-001	2.37E-001	1.8554E-001
	247.94	6.60	1.8851E+000		-4.9689E-001
	591.81	4.83	2.0601E+000		1.6580E+000
	723.30	19.70	5.3467E-001		2.4298E-001
	756.87	4.33	2.2081E+000		9.1032E-001
	873.19	11.50	7.5276E-001		-1.8785E-001
	996.32	10.30	8.1358E-001		9.0577E-002
	1004.76	17.90	4.7731E-001		-1.8907E-001
	1274.45	35.50	2.3666E-001		-1.2175E-002
Eu-155	86.54	30.90	9.6179E-001	9.62E-001	-1.6802E-001
	105.31	20.70	1.1319E+000		5.7269E-002
Am-241	59.54	35.90	1.2163E+000	1.22E+000	-3.0910E-001
Cm-243	228.19	10.56	1.1818E+000	8.76E-001	-5.0759E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.7577E-001	8.76E-001	1.4458E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/15/2006 10:37:00 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-02-163
Sample Title: OOL-09-02-163-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/15/2006 10:26:55 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: ORG7829
Log Number: OOL-09-02-163
Title: OOL-09-02-163-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	309	292.03	73.01	1.20	2.19E+002	50.05	9.08E+002
m	2	284-	309	300.41	75.10	1.21	4.10E+002	57.12	1.03E+003
	3	330-	345	339.14	84.79	1.08	1.44E+002	113.56	1.07E+003
	4	943-	959	953.94	238.50	1.55	2.19E+002	69.96	3.35E+002
	5	1172-	1188	1180.20	295.07	1.27	8.91E+001	50.36	1.82E+002
	6	1348-	1357	1352.04	338.03	0.84	6.21E+001	31.85	8.89E+001
	7	1399-	1413	1405.72	351.45	0.37	1.09E+002	46.01	1.53E+002
	8	2037-	2053	2042.07	510.55	1.23	7.27E+001	44.69	1.40E+002
	9	2321-	2338	2329.83	582.50	1.21	1.44E+002	41.06	9.03E+001
	10	2422-	2441	2434.51	608.67	1.46	1.41E+002	41.19	8.54E+001
	11	3630-	3648	3640.81	910.27	1.05	1.28E+002	31.82	4.03E+001
	12	3862-	3880	3871.02	967.82	0.85	6.81E+001	29.20	4.49E+001
	13	4469-	4483	4476.47	1119.20	0.49	3.22E+001	25.77	4.88E+001
	14	5828-	5853	5838.46	1459.72	1.76	8.59E+002	59.99	1.99E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.961	1460.81*	10.67	1.95216E+001	2.08718E+000
TL-208	0.743	277.35	6.80		
		510.84*	21.60	6.04356E-001	3.83656E-001
		583.14*	84.20	3.20527E-001	1.00672E-001
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.59098E+001	3.82656E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.14434E-001	2.54325E-001
Bi-214	0.689	609.31*	46.30	5.79243E-001	1.84081E-001
		1120.29*	15.10	4.74763E-001	3.83377E-001
		1764.49	15.80		
PB-214	0.624	74.82* @	6.21	2.74131E+001	6.88703E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	7.11089E-001	4.19286E-001
		351.92*	37.20	4.70262E-001	2.12690E-001
Ac-228	0.973	338.32*	11.40	8.62312E-001	4.62422E-001
		911.07*	27.70	9.72123E-001	2.66802E-001
		969.11*	16.60	8.78957E-001	3.87971E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
X	ANN		0.993		
	K-40		0.961	1.952161E+001	2.087178E+000
	TL-208		0.743	3.388104E-001	9.737498E-002
	Pb-212	@	0.593	7.144337E-001	2.543248E-001
	Bi-214		0.689	5.596683E-001	1.659431E-001
	PB-214	@	0.624	5.195488E-001	1.896812E-001
	Ac-228		0.973	9.274812E-001	1.985429E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.01	3.6506E-001	22.85
3	84.79	2.4026E-001	78.77

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2434E-001	8.85E-002	-2.8810E-002
	1332.49	100.00	8.8473E-002		3.2209E-003
Nb-94	702.63	100.00	1.1369E-001	1.07E-001	-9.6994E-002
	871.10	100.00	1.0652E-001		2.0765E-002
Ag-108m	79.20	7.10	1.0219E+001	1.43E-001	-1.0275E+001
	433.93	89.90	1.5405E-001		-3.4151E-002
	614.37	90.40	1.5700E-001		2.4834E-004
	722.95	90.50	1.4288E-001		9.1102E-002
Sb-125	176.33	6.89	2.9595E+000	4.55E-001	3.6395E-002
	427.89	29.33	4.5544E-001		4.2979E-001
	463.38	10.35	1.3476E+000		1.2253E+000
	600.56	17.80	7.2536E-001		2.2186E-001
	606.64	5.02	3.3584E+000		5.5527E+000
	635.90	11.32	1.1373E+000		-1.5533E-001
Cs-134	563.23	8.38	1.5578E+000	1.47E-001	2.0576E-001
	569.32	15.43	8.4334E-001		-2.6858E-001
	604.70	97.60	1.7230E-001		7.0206E-002
	795.84	85.40	1.4695E-001		1.6399E-001
	801.93	8.73	1.3914E+000		-2.5240E-001
Cs-137	661.65	85.12	1.5174E-001	1.52E-001	-2.5529E-003
Eu-152	121.78	28.40	1.0222E+000	4.45E-001	9.8324E-002
	244.69	7.49	2.3760E+000		-1.5435E+000
	344.27	26.50	5.5541E-001		-1.2101E-001
	778.89	12.74	9.0350E-001		-1.3219E-001
	867.32	4.16	2.5127E+000		-3.7395E+000
	964.01	14.40	1.0376E+000		7.4997E-001
	1085.78	10.00	1.2181E+000		3.0653E-001
	1112.02	13.30	9.1128E-001		-6.4619E-001
	1407.95	20.70	4.4533E-001		3.7402E-002
Eu-154	123.07	40.50	7.0092E-001	3.16E-001	-1.9657E-001
	247.94	6.60	2.6887E+000		1.5846E+000
	591.81	4.83	2.5267E+000		1.4534E+000
	723.30	19.70	6.5823E-001		6.9249E-001
	756.87	4.33	2.6787E+000		-1.2375E+000
	873.19	11.50	9.4283E-001		-8.3661E-002
	996.32	10.30	1.0843E+000		-5.7883E-002
	1004.76	17.90	6.3592E-001		3.2179E-001
	1274.45	35.50	3.1579E-001		9.2055E-002
Eu-155	86.54	30.90	1.8214E+000	1.79E+000	2.0905E-001
	105.31	20.70	1.7856E+000		9.7165E-001
Am-241	59.54	35.90	4.1836E+000	4.18E+000	1.4471E+000
Cm-243	228.19	10.56	1.7502E+000	1.11E+000	4.9895E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1146E+000	1.11E+000	-2.3914E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 7:00:17 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-164-F-
Sample Title: OOL-09-02-164-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 6:50:15 PM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-164-F-
Title: OOL-09-02-164-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	314	291.61	72.73	1.13	4.97E+002	69.17	1.63E+003
m	2	283-	314	300.29	74.90	1.13	9.72E+002	80.60	1.69E+003
m	3	283-	314	308.94	77.06	1.14	2.22E+002	60.48	1.46E+003
M	4	332-	357	339.57	84.73	1.15	3.14E+002	64.85	1.49E+003
m	5	332-	357	349.76	87.27	1.16	1.52E+002	58.85	1.66E+003
	6	946-	961	954.25	238.44	1.26	2.95E+002	78.51	4.36E+002
	7	1170-	1189	1180.74	295.08	0.40	1.09E+002	61.91	2.53E+002
	8	1348-	1362	1353.25	338.22	0.85	5.52E+001	49.50	2.02E+002
	9	1401-	1415	1407.63	351.82	0.99	1.27E+002	51.62	1.93E+002
	10	2032-	2053	2042.69	510.63	1.43	1.61E+002	53.97	1.59E+002
	11	2323-	2340	2333.10	583.26	0.84	2.36E+002	44.47	8.55E+001
	12	2428-	2447	2437.59	609.39	1.53	1.94E+002	46.02	1.02E+002
	13	3634-	3654	3645.71	911.51	1.61	1.77E+002	38.54	5.77E+001
	14	3870-	3887	3875.88	969.07	1.55	1.01E+002	30.01	4.13E+001
	15	4475-	4491	4482.46	1120.76	0.75	6.29E+001	28.70	4.81E+001
	16	5831-	5859	5845.63	1461.65	1.94	1.35E+003	76.48	3.63E+001
	17	7055-	7070	7061.75	1765.78	1.09	5.10E+001	17.00	8.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.995	511.00*	100.00	2.19092E-001	7.93690E-002
K-40	0.975	1460.81*	10.67	2.27069E+001	2.24177E+000
Eu-155	0.322	86.54*	30.90	6.08671E-001	2.64741E-001
		105.31	20.70		
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.01432E+000	3.76670E-001
		583.14*	84.20	4.00269E-001	9.15353E-002
		860.37	12.46		
Pb-212	0.999	74.81* @	10.70	1.39181E+001	2.96184E+000
		77.11* @	18.00	1.81976E+000	6.09952E-001
		87.30* @	8.00	2.35099E+000	1.02256E+000
		238.63*	44.60	7.17040E-001	2.21488E-001
Bi-214	0.987	609.31*	46.30	6.05488E-001	1.61894E-001
		1120.29*	15.10	7.00989E-001	3.28502E-001
		1764.49*	15.80	5.99262E-001	2.08539E-001
PB-214	0.850	74.82* @	6.21	2.39813E+001	5.39209E+000
		77.11* @	10.50	3.11959E+000	1.07126E+000
		87.30* @	4.67	4.02739E+000	1.77794E+000
		241.98	7.49		
		295.21*	19.20	6.54882E-001	3.87476E-001
		351.92*	37.20	4.14390E-001	1.81832E-001
Ac-228	0.997	338.32*	11.40	5.79726E-001	5.28051E-001
		911.07*	27.70	1.01470E+000	2.49545E-001
		969.11*	16.60	9.79119E-001	3.09321E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.995	1.326340E-001	8.174606E-002
K-40		0.975	2.270687E+001	2.241768E+000
Eu-155		0.322	3.538785E-001	2.720018E-001
TL-208		0.751	4.002694E-001	9.060107E-002
Pb-212	@	0.999	7.170400E-001	2.214881E-001
Bi-214		0.987	6.160225E-001	1.191699E-001
PB-214	@	0.850	4.575501E-001	1.632666E-001
Ac-228		0.997	9.505110E-001	1.822819E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.73	8.2791E-001	13.92
M 4	84.73	5.2344E-001	20.65

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	9.4069E-002	8.19E-002	5.4347E-002
		1332.49	100.00	8.1925E-002		7.2183E-002
	Nb-94	702.63	100.00	1.0375E-001	9.00E-002	-2.4766E-002
		871.10	100.00	9.0015E-002		-4.5494E-005
	Ag-108m	79.20	7.10	4.8744E+000	1.18E-001	3.2015E-001
		433.93	89.90	1.1758E-001		1.9895E-003
		614.37	90.40	1.4294E-001		2.9985E-002
		722.95	90.50	1.1799E-001		4.7092E-002
	Sb-125	176.33	6.89	2.3106E+000	3.71E-001	1.8584E+000
		427.89	29.33	3.7112E-001		1.1715E-001
		463.38	10.35	1.1625E+000		9.3052E-001
		600.56	17.80	5.8607E-001		-1.2387E-001
		606.64	5.02	2.8071E+000		3.5903E-001
		635.90	11.32	8.8104E-001		4.9475E-001
	Cs-134	563.23	8.38	1.1654E+000	1.25E-001	1.0172E-001
		569.32	15.43	6.4403E-001		1.4720E-002
		604.70	97.60	1.2890E-001		3.8743E-003
		795.84	85.40	1.2512E-001		6.3195E-002
		801.93	8.73	1.1014E+000		-1.9031E+000
	Cs-137	661.65	85.12	1.2353E-001	1.24E-001	1.1896E-001
	Eu-152	121.78	28.40	7.3007E-001	3.57E-001	-4.4649E-001
		244.69	7.49	1.8176E+000		-1.5418E+000
		344.27	26.50	4.2814E-001		-4.0134E-001
		778.89	12.74	7.7195E-001		6.3245E-002
		867.32	4.16	2.1470E+000		-3.4870E+000
		964.01	14.40	8.8588E-001		-6.4850E-002
		1085.78	10.00	9.3346E-001		6.6530E-001
		1112.02	13.30	7.5385E-001		2.7751E-001
		1407.95	20.70	3.5738E-001		1.5549E-001
	Eu-154	123.07	40.50	5.1094E-001	2.59E-001	1.3406E-001
		247.94	6.60	1.9938E+000		-3.8410E-001
		591.81	4.83	2.0697E+000		-6.0806E-001
		723.30	19.70	5.4451E-001		5.6994E-001
		756.87	4.33	2.3136E+000		-6.8724E-001
		873.19	11.50	7.7769E-001		-7.0793E-001
		996.32	10.30	9.0299E-001		-9.3198E-001
		1004.76	17.90	5.1906E-001		1.6716E-002
		1274.45	35.50	2.5883E-001		2.9107E-002
+	Eu-155	86.54*	30.90	7.7225E-001	7.72E-001	6.0867E-001
		105.31	20.70	1.2183E+000		-7.0701E-001
	Am-241	59.54	35.90	1.2724E+000	1.27E+000	-9.1528E-001
	Cm-243	228.19	10.56	1.3200E+000	9.33E-001	-1.9083E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.3273E-001	9.33E-001	6.6305E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 7:16:32 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-165-F-
Sample Title: OOL-09-02-165-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 7:06:29 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-165-F-
Title: OOL-09-02-165-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	291.99	72.83	0.98	2.81E+002	63.69	1.60E+003
m	2	284-	305	300.11	74.86	0.99	7.12E+002	79.21	1.54E+003
M	3	333-	358	340.19	84.88	1.02	2.51E+002	64.10	1.47E+003
m	4	333-	358	350.44	87.44	1.03	1.31E+002	57.11	1.51E+003
	5	931-	960	954.58	238.52	0.73	2.63E+002	119.30	7.19E+002
	6	1175-	1190	1181.07	295.16	1.32	1.14E+002	54.60	2.20E+002
	7	1348-	1358	1353.05	338.17	0.69	6.01E+001	39.13	1.42E+002
	8	1397-	1415	1408.00	351.91	0.89	1.77E+002	57.73	2.04E+002
	9	1847-	1858	1851.90	462.92	0.77	3.20E+001	31.44	9.00E+001
	10	2325-	2341	2332.29	583.05	1.15	1.46E+002	41.95	9.74E+001
	11	2427-	2444	2436.87	609.21	1.48	2.13E+002	43.14	8.34E+001
	12	3436-	3450	3442.90	860.79	0.73	3.70E+001	23.89	3.80E+001
	13	3636-	3655	3644.89	911.30	1.63	1.75E+002	37.91	5.74E+001
	14	3869-	3884	3876.66	969.26	1.19	8.55E+001	32.75	6.45E+001
	15	4235-	4246	4240.09	1060.15	0.25	1.51E+001	16.84	2.29E+001
	16	4475-	4488	4482.24	1120.71	0.54	4.59E+001	21.27	2.61E+001
	17	5833-	5858	5845.46	1461.61	2.05	1.30E+003	74.75	3.56E+001
	18	6350-	6363	6356.00	1589.29	0.81	1.45E+001	12.97	9.47E+000
	19	7056-	7070	7062.73	1766.02	1.06	3.65E+001	14.98	7.47E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.978	1460.81*	10.67	2.18639E+001	2.16922E+000
Eu-155	0.316	86.54*	30.90	5.25827E-001	2.50880E-001
		105.31	20.70		
TL-208	0.621	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.46365E-001	7.79010E-002
		860.37*	12.46	4.64540E-001	3.05509E-001
Pb-212	0.677	74.81* @	10.70	1.01922E+001	2.29740E+000
		77.11 @	18.00		
		87.30* @	8.00	2.03101E+000	9.69024E-001
		238.63*	44.60	6.40190E-001	3.06883E-001
Bi-214	0.982	609.31*	46.30	6.63809E-001	1.57565E-001
		1120.29*	15.10	5.11537E-001	2.43305E-001
		1764.49*	15.80	4.29229E-001	1.81124E-001
PB-214	0.670	74.82* @	6.21	1.75615E+001	4.15869E+000
		77.11 @	10.50		
		87.30* @	4.67	3.47924E+000	1.68068E+000
		241.98	7.49		
		295.21*	19.20	6.84109E-001	3.47324E-001
		351.92*	37.20	5.75464E-001	2.11185E-001
Ac-228	0.999	338.32*	11.40	6.31296E-001	4.22931E-001
		911.07*	27.70	9.99578E-001	2.45545E-001
		969.11*	16.60	8.31503E-001	3.30172E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.978	2.186387E+001	2.169215E+000
Eu-155		0.316	2.687126E-001	2.645386E-001
TL-208		0.621	2.596845E-001	7.548569E-002
Pb-212	@	0.677	6.401900E-001	3.068834E-001
Bi-214		0.982	5.528859E-001	1.068105E-001
PB-214	@	0.670	6.045627E-001	1.784364E-001
Ac-228		0.999	8.847218E-001	1.786010E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.83	4.6802E-001	22.68
M 3	84.88	4.1798E-001	25.56
9	462.92	5.3333E-002	98.24
15	1060.15	2.5208E-002	111.35
18	1589.29	2.4219E-002	89.25

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	9.4069E-002	7.61E-002	-1.3638E-002
		1332.49	100.00	7.6066E-002		-2.3398E-002
	Nb-94	702.63	100.00	1.0101E-001	9.46E-002	1.9814E-003
		871.10	100.00	9.4556E-002		8.4163E-002
	Ag-108m	79.20	7.10	4.9083E+000	1.18E-001	-8.7994E+000
		433.93	89.90	1.2202E-001		1.7259E-002
		614.37	90.40	1.3229E-001		-6.2783E-002
		722.95	90.50	1.1825E-001		-4.5305E-002
	Sb-125	176.33	6.89	2.2246E+000	3.66E-001	-1.1498E+000
		427.89	29.33	3.6587E-001		-6.7497E-002
		463.38	10.35	1.0781E+000		1.5172E-001
		600.56	17.80	5.4033E-001		2.3094E-001
		606.64	5.02	2.7541E+000		6.3080E+000
		635.90	11.32	8.1629E-001		-8.4165E-002
	Cs-134	563.23	8.38	1.2572E+000	1.17E-001	2.6193E-001
		569.32	15.43	6.6707E-001		4.4692E-001
		604.70	97.60	1.3115E-001		-1.0270E-001
		795.84	85.40	1.1723E-001		2.7889E-002
		801.93	8.73	1.0588E+000		-2.2911E-001
	Cs-137	661.65	85.12	1.2491E-001	1.25E-001	7.6777E-003
	Eu-152	121.78	28.40	7.2434E-001	3.30E-001	-4.4701E-001
		244.69	7.49	1.8446E+000		1.1195E-001
		344.27	26.50	4.4499E-001		-4.3652E-002
		778.89	12.74	6.7900E-001		-1.4637E+000
		867.32	4.16	2.2281E+000		-3.0867E-001
		964.01	14.40	8.8429E-001		-1.5599E-001
		1085.78	10.00	9.4357E-001		-2.4094E-001
		1112.02	13.30	7.3440E-001		3.1618E-002
		1407.95	20.70	3.3001E-001		3.3769E-001
	Eu-154	123.07	40.50	5.0573E-001	2.56E-001	-7.4339E-002
		247.94	6.60	1.9109E+000		-9.0325E-001
		591.81	4.83	2.0164E+000		5.9562E-001
		723.30	19.70	5.4936E-001		2.9771E-001
		756.87	4.33	2.2144E+000		9.1838E-001
		873.19	11.50	7.8581E-001		-9.1268E-001
		996.32	10.30	8.7426E-001		5.7125E-001
		1004.76	17.90	4.9864E-001		3.0508E-001
		1274.45	35.50	2.5563E-001		9.9375E-002
+	Eu-155	86.54*	30.90	7.3616E-001	7.36E-001	5.2583E-001
		105.31	20.70	1.2198E+000		-2.1320E-001
	Am-241	59.54	35.90	1.3158E+000	1.32E+000	6.4759E-002
	Cm-243	228.19	10.56	1.2869E+000	8.78E-001	3.0112E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.7825E-001	8.78E-001	-6.4794E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 2:12:59 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-166-F-
Sample Title: OOL-09-02-166-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 2:02:56 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-166-F-
Title: OOL-09-02-166-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	291.74	72.76	0.95	3.24E+002	61.18	1.15E+003
m	2	286-	306	300.39	74.93	0.95	6.52E+002	74.09	1.42E+003
	3	334-	345	339.58	84.73	0.91	1.92E+002	106.34	1.09E+003
	4	947-	963	954.41	238.48	1.09	3.34E+002	76.80	3.82E+002
	5	1173-	1189	1180.16	294.94	1.12	1.30E+002	53.23	1.94E+002
	6	1344-	1361	1353.67	338.33	1.24	9.51E+001	53.26	1.98E+002
	7	1397-	1413	1406.96	351.65	1.32	1.24E+002	49.56	1.65E+002
	8	2032-	2047	2042.80	510.66	0.50	9.16E+001	45.52	1.47E+002
	9	2324-	2344	2332.57	583.12	1.22	2.41E+002	45.50	8.31E+001
	10	2428-	2445	2436.88	609.21	0.82	1.73E+002	40.62	7.88E+001
	11	3434-	3449	3442.68	860.74	1.37	4.42E+001	25.53	4.18E+001
	12	3635-	3655	3644.77	911.28	1.34	1.68E+002	38.82	6.20E+001
	13	3869-	3885	3876.50	969.22	1.54	8.11E+001	34.12	7.09E+001
	14	4476-	4490	4483.06	1120.91	0.39	3.65E+001	26.01	4.85E+001
	15	5506-	5517	5511.53	1378.11	1.17	2.30E+001	13.10	7.96E+000
	16	5831-	5858	5845.62	1461.65	1.77	1.31E+003	74.15	2.80E+001
	17	7052-	7068	7060.82	1765.54	1.75	4.61E+001	20.72	2.09E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.975	1460.81*	10.67	2.18904E+001	2.16516E+000
TL-208	0.902	277.35	6.80		
		510.84*	21.60	5.78144E-001	3.01601E-001
		583.14*	84.20	4.07651E-001	9.35176E-002
		860.37*	12.46	5.55557E-001	3.27873E-001
Pb-212	0.520	74.81* @	10.70	9.32760E+000	2.11322E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.12094E-001	2.25965E-001
Bi-214	0.989	609.31*	46.30	5.40856E-001	1.43280E-001
		1120.29*	15.10	4.06894E-001	2.93188E-001
		1764.49*	15.80	5.41856E-001	2.49454E-001
PB-214	0.581	74.82* @	6.21	1.60717E+001	3.82348E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	7.81471E-001	3.45377E-001
		351.92*	37.20	4.04237E-001	1.74955E-001
Ac-228	0.999	338.32*	11.40	9.98917E-001	5.81195E-001
		911.07*	27.70	9.61315E-001	2.48196E-001
		969.11*	16.60	7.88089E-001	3.41866E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
X	ANN		0.996		
	K-40		0.975	2.189040E+001	2.165159E+000
	TL-208		0.902	4.317911E-001	8.618141E-002
	Pb-212	@	0.520	8.120940E-001	2.259652E-001
	Bi-214		0.989	5.206719E-001	1.143961E-001
	PB-214	@	0.581	4.812706E-001	1.560728E-001
	Ac-228		0.999	9.119150E-001	1.898308E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.76	5.3952E-001	18.90
3	84.73	3.1956E-001	55.46
15	1378.11	3.8401E-002	56.85

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0216E-001	7.61E-002	2.2220E-002
	1332.49	100.00	7.6066E-002		-3.0303E-003
Nb-94	702.63	100.00	9.8970E-002	9.40E-002	-4.4570E-002
	871.10	100.00	9.3964E-002		6.1417E-002
Ag-108m	79.20	7.10	4.3944E+000	1.16E-001	-3.9927E+000
	433.93	89.90	1.2240E-001		-1.6656E-002
	614.37	90.40	1.2831E-001		-5.3367E-002
	722.95	90.50	1.1583E-001		7.5763E-002
Sb-125	176.33	6.89	2.0794E+000	3.76E-001	-1.0104E-001
	427.89	29.33	3.7630E-001		-1.7336E-002
	463.38	10.35	1.0332E+000		3.7641E-001
	600.56	17.80	5.8607E-001		4.4408E-002
	606.64	5.02	2.6587E+000		4.9172E+000
	635.90	11.32	8.5265E-001		3.4317E-001
Cs-134	563.23	8.38	1.2291E+000	1.11E-001	-4.4647E-001
	569.32	15.43	6.6282E-001		6.1387E-001
	604.70	97.60	1.2927E-001		5.3392E-003
	795.84	85.40	1.1110E-001		-2.5253E-002
	801.93	8.73	1.0754E+000		-6.3111E-001
Cs-137	661.65	85.12	1.2601E-001	1.26E-001	9.9660E-002
Eu-152	121.78	28.40	6.7739E-001	3.50E-001	3.5189E-001
	244.69	7.49	1.7503E+000		-1.0892E+000
	344.27	26.50	4.1449E-001		4.3548E-002
	778.89	12.74	7.3936E-001		-7.9451E-001
	867.32	4.16	2.2281E+000		-1.1399E+000
	964.01	14.40	8.8904E-001		-5.0033E-002
	1085.78	10.00	9.8615E-001		-3.1751E-001
	1112.02	13.30	7.0929E-001		-9.7846E-001
	1407.95	20.70	3.5015E-001		3.6930E-002
Eu-154	123.07	40.50	4.7595E-001	2.35E-001	5.4072E-001
	247.94	6.60	1.8867E+000		-1.3595E+000
	591.81	4.83	2.0310E+000		2.1999E-001
	723.30	19.70	5.3715E-001		4.1580E-001
	756.87	4.33	2.2144E+000		-6.2293E-001
	873.19	11.50	8.0180E-001		2.9292E-001
	996.32	10.30	9.2775E-001		6.4587E-001
	1004.76	17.90	4.8126E-001		-4.8473E-001
	1274.45	35.50	2.3549E-001		1.1026E-002
Eu-155	86.54	30.90	9.4759E-001	9.48E-001	1.4776E-002
	105.31	20.70	1.1195E+000		-5.5834E-003
Am-241	59.54	35.90	1.1707E+000	1.17E+000	-4.2760E-001
Cm-243	228.19	10.56	1.2789E+000	9.10E-001	-2.9483E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.0990E-001	9.10E-001	1.1079E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 2:29:07 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-167-F-
Sample Title: OOL-09-02-167-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 2:19:05 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-167-F-
Title: OOL-09-02-167-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	307	291.41	72.68	0.89	2.90E+002	57.60	1.07E+003
m	2	283-	307	300.37	74.92	0.89	6.21E+002	73.48	1.24E+003
	3	331-	345	339.64	84.74	0.67	1.34E+002	125.94	1.39E+003
	4	945-	959	954.74	238.56	0.90	3.22E+002	70.10	3.33E+002
	5	1174-	1187	1180.87	295.11	1.25	7.75E+001	49.24	2.00E+002
	6	1342-	1358	1352.86	338.12	0.84	5.55E+001	52.81	2.14E+002
	7	1400-	1416	1406.98	351.66	0.83	1.20E+002	55.59	2.16E+002
	8	2031-	2053	2042.34	510.55	0.82	1.97E+002	50.17	1.18E+002
	9	2325-	2342	2332.75	583.17	1.37	1.88E+002	42.57	8.75E+001
	10	2427-	2446	2437.37	609.33	1.49	1.84E+002	44.91	9.74E+001
	11	3636-	3653	3645.00	911.33	1.15	1.47E+002	36.57	6.12E+001
M	12	3849-	3887	3858.93	964.83	1.65	3.87E+001	15.78	4.21E+001
m	13	3849-	3887	3876.36	969.19	1.65	1.21E+002	23.02	4.08E+001
	14	4474-	4489	4482.06	1120.66	1.42	7.27E+001	26.49	3.63E+001
	15	5832-	5858	5845.71	1461.68	2.17	1.22E+003	70.98	2.03E+001
	16	7052-	7072	7061.76	1765.78	0.33	6.32E+001	17.55	4.82E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.993	511.00*		100.00	2.69062E-001	7.75300E-002
K-40	0.974	1460.81*		10.67	2.05108E+001	2.04330E+000
TL-208	0.751	277.35		6.80		
		510.84*		21.60	1.24566E+000	3.73073E-001
		583.14*		84.20	3.17408E-001	8.30582E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	8.88400E+000	2.03402E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.83538E-001	2.10090E-001
Bi-214	0.987	609.31*		46.30	5.73333E-001	1.57003E-001
		1120.29*		15.10	8.10694E-001	3.07644E-001
		1764.49*		15.80	7.42338E-001	2.19131E-001
PB-214	0.581	74.82*	@	6.21	1.53074E+001	3.67662E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	4.65052E-001	3.05694E-001
		351.92*		37.20	3.89611E-001	1.92381E-001
Ac-228	0.998	338.32*		11.40	5.83229E-001	5.62378E-001
		911.07*		27.70	8.40359E-001	2.30547E-001
		969.11*		16.60	1.17381E+000	2.55347E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.993	2.005014E-001	7.954733E-002
K-40		0.974	2.051078E+001	2.043297E+000
TL-208		0.751	3.174080E-001	8.241158E-002
Pb-212	@	0.520	7.835384E-001	2.100896E-001
Bi-214		0.987	6.570959E-001	1.178845E-001
PB-214	@	0.581	4.110130E-001	1.628215E-001
Ac-228		0.998	9.556320E-001	1.637083E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.68	4.8393E-001	19.84
3	84.74	2.2323E-001	94.03
M 12	964.83	6.4550E-002	40.75

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0248E-001	8.06E-002	2.0147E-003
	1332.49	100.00	8.0613E-002		1.1427E-002
Nb-94	702.63	100.00	9.3116E-002	9.31E-002	-8.4370E-002
	871.10	100.00	9.3964E-002		1.4728E-002
Ag-108m	79.20	7.10	4.5518E+000	1.19E-001	-2.6735E-001
	433.93	89.90	1.1934E-001		9.8618E-002
	614.37	90.40	1.3487E-001		3.3933E-002
	722.95	90.50	1.1878E-001		1.5305E-001
Sb-125	176.33	6.89	2.1329E+000	3.62E-001	2.1947E+000
	427.89	29.33	3.6173E-001		3.2382E-001
	463.38	10.35	1.0781E+000		1.2092E+000
	600.56	17.80	5.5513E-001		1.9627E-002
	606.64	5.02	2.7708E+000		1.7235E+000
	635.90	11.32	8.5265E-001		-1.3901E-001
Cs-134	563.23	8.38	1.2082E+000	1.18E-001	1.2513E-001
	569.32	15.43	6.2161E-001		-7.0306E-002
	604.70	97.60	1.3170E-001		5.9183E-002
	795.84	85.40	1.1755E-001		-2.7807E-002
	801.93	8.73	9.8947E-001		-1.3821E+000
Cs-137	661.65	85.12	1.2129E-001	1.21E-001	-8.2336E-002
Eu-152	121.78	28.40	6.9659E-001	3.17E-001	9.6738E-002
	244.69	7.49	1.7783E+000		-2.0098E-001
	344.27	26.50	4.3718E-001		1.4574E-002
	778.89	12.74	7.6340E-001		2.5071E-001
	867.32	4.16	2.2063E+000		-1.7934E+000
	964.01	14.40	8.8588E-001		1.7380E-001
	1085.78	10.00	9.5025E-001		6.6917E-001
	1112.02	13.30	6.8851E-001		-6.2421E-001
	1407.95	20.70	3.1672E-001		9.3947E-002
Eu-154	123.07	40.50	4.8234E-001	2.35E-001	-8.2113E-002
	247.94	6.60	1.9379E+000		1.6426E+000
	591.81	4.83	2.0887E+000		9.2561E-001
	723.30	19.70	5.3839E-001		3.5821E-001
	756.87	4.33	2.1630E+000		5.8317E-001
	873.19	11.50	8.3282E-001		8.5167E-001
	996.32	10.30	8.7100E-001		1.7118E-001
	1004.76	17.90	5.2087E-001		1.3473E-001
	1274.45	35.50	2.3549E-001		-3.1466E-002
Eu-155	86.54	30.90	9.4224E-001	9.42E-001	-9.8661E-002
	105.31	20.70	1.0985E+000		-1.2691E+000
Am-241	59.54	35.90	1.2030E+000	1.20E+000	1.2463E+000
Cm-243	228.19	10.56	1.2290E+000	9.21E-001	-8.9152E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.2099E-001	9.21E-001	4.9111E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 3:50:57 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-168-F-
Sample Title: OOL-09-02-168-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 3:40:55 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-168-F-
Title: OOL-09-02-168-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	316	291.97	72.82	1.08	3.83E+002	63.68	1.10E+003
m	2	287-	316	300.38	74.92	1.08	8.22E+002	74.87	1.32E+003
m	3	287-	316	308.87	77.05	1.09	1.88E+002	55.26	1.35E+003
	4	333-	344	339.35	84.67	0.80	1.74E+002	106.43	1.11E+003
	5	949-	960	955.04	238.64	1.31	3.18E+002	62.42	2.78E+002
	6	1346-	1363	1353.17	338.20	1.37	1.05E+002	52.95	1.92E+002
	7	1400-	1417	1408.17	351.95	1.43	1.48E+002	53.64	1.84E+002
	8	2039-	2054	2043.20	510.76	1.27	1.51E+002	45.22	1.26E+002
	9	2324-	2343	2332.72	583.16	1.52	1.97E+002	46.45	1.04E+002
	10	2427-	2447	2437.84	609.45	1.37	1.82E+002	44.92	9.45E+001
	11	3636-	3656	3645.80	911.53	1.10	1.54E+002	37.82	6.02E+001
M	12	3853-	3887	3859.73	965.03	1.52	3.61E+001	16.31	4.40E+001
m	13	3853-	3887	3878.02	969.60	1.52	9.41E+001	22.15	5.78E+001
	14	5831-	5861	5846.76	1461.94	2.08	1.30E+003	72.07	1.16E+001
	15	7055-	7071	7063.71	1766.27	1.33	4.12E+001	17.05	1.08E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.998	511.00*	100.00	2.05836E-001	6.76893E-002
K-40	0.957	1460.81*	10.67	2.17295E+001	2.13465E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	9.52942E-001	3.22895E-001
		583.14*	84.20	3.33189E-001	8.97809E-002
		860.37	12.46		
Pb-212	0.844	74.81* @	10.70	1.17549E+001	2.54074E+000
		77.11* @	18.00	1.54224E+000	5.43960E-001
		87.30 @	8.00		
		238.63*	44.60	7.73503E-001	1.94267E-001
Bi-214	0.676	609.31*	46.30	5.69929E-001	1.56855E-001
		1120.29	15.10		
		1764.49*	15.80	4.84045E-001	2.06065E-001
PB-214	0.390	74.82* @	6.21	2.02541E+001	4.61808E+000
		77.11* @	10.50	2.64384E+000	9.53170E-001
		87.30 @	4.67		
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	4.80574E-001	1.92285E-001
Ac-228	0.994	338.32*	11.40	1.10750E+000	5.82837E-001
		911.07*	27.70	8.80182E-001	2.38943E-001
		969.11*	16.60	9.14785E-001	2.35717E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.998	1.338668E-001	7.037341E-002
K-40		0.957	2.172950E+001	2.134652E+000
TL-208		0.752	3.331886E-001	8.912185E-002
Pb-212	@	0.844	7.735032E-001	1.942672E-001
Bi-214		0.676	5.384223E-001	1.248104E-001
PB-214	@	0.390	4.805742E-001	1.903465E-001
Ac-228		0.994	9.137771E-001	1.612557E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.82	6.3854E-001	16.62
4	84.67	2.9038E-001	61.09
M 12	965.03	6.0219E-002	45.14

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0151E-001	7.88E-002	-5.4787E-003
	1332.49	100.00	7.8828E-002		-1.8867E-003
Nb-94	702.63	100.00	9.7147E-002	9.60E-002	-4.8423E-003
	871.10	100.00	9.6020E-002		3.7720E-002
Ag-108m	79.20	7.10	4.5190E+000	1.20E-001	-3.1574E-001
	433.93	89.90	1.1953E-001		-4.2690E-003
	614.37	90.40	1.4193E-001		3.4120E-002
	722.95	90.50	1.2140E-001		7.5201E-002
Sb-125	176.33	6.89	2.1713E+000	3.80E-001	9.5495E-001
	427.89	29.33	3.7971E-001		-1.8434E-001
	463.38	10.35	1.0490E+000		6.5983E-003
	600.56	17.80	5.1660E-001		-1.1390E-002
	606.64	5.02	2.6483E+000		1.1473E-001
	635.90	11.32	9.3715E-001		1.1034E+000
Cs-134	563.23	8.38	1.2161E+000	1.16E-001	-2.9287E-001
	569.32	15.43	6.6707E-001		-4.0379E-001
	604.70	97.60	1.2249E-001		5.3814E-004
	795.84	85.40	1.1565E-001		1.3169E-001
	801.93	8.73	1.0852E+000		-4.4188E-001
Cs-137	661.65	85.12	1.3159E-001	1.32E-001	1.6875E-001
Eu-152	121.78	28.40	6.9580E-001	3.22E-001	5.1157E-001
	244.69	7.49	1.7981E+000		-2.6204E-001
	344.27	26.50	4.1781E-001		-4.1373E-001
	778.89	12.74	7.4158E-001		-3.1496E-001
	867.32	4.16	2.3816E+000		-2.0433E+000
	964.01	14.40	8.4530E-001		-1.1550E-001
	1085.78	10.00	9.1288E-001		-1.2417E-001
	1112.02	13.30	7.4419E-001		-4.8720E-001
	1407.95	20.70	3.2211E-001		7.2657E-002
Eu-154	123.07	40.50	4.7795E-001	2.53E-001	-3.0197E-001
	247.94	6.60	1.9363E+000		6.2499E-001
	591.81	4.83	2.0359E+000		1.8884E+000
	723.30	19.70	5.6011E-001		5.7940E-001
	756.87	4.33	2.2892E+000		1.5507E+000
	873.19	11.50	8.2262E-001		2.8327E-001
	996.32	10.30	9.4288E-001		5.3115E-001
	1004.76	17.90	5.3691E-001		8.6904E-002
	1274.45	35.50	2.5348E-001		-1.7029E-001
Eu-155	86.54	30.90	9.5840E-001	9.58E-001	2.2950E-002
	105.31	20.70	1.1184E+000		4.4348E-001
Am-241	59.54	35.90	1.1669E+000	1.17E+000	1.2201E-001
Cm-243	228.19	10.56	1.2895E+000	8.70E-001	2.8832E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.6994E-001	8.70E-001	3.3894E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 4:19:55 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-169-F-
Sample Title: OOL-09-02-169-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 4:09:52 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-169-F-
Title: OOL-09-02-169-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	317	291.81	72.78	1.16	4.09E+002	63.20	1.17E+003
m	2	285-	317	300.28	74.90	1.17	9.23E+002	76.62	1.41E+003
m	3	285-	317	309.36	77.17	1.17	2.07E+002	56.68	1.41E+003
	4	332-	344	339.86	84.80	0.74	1.87E+002	113.24	1.19E+003
	5	947-	961	954.52	238.51	1.21	2.74E+002	72.30	3.76E+002
	6	1344-	1360	1353.60	338.31	0.76	6.79E+001	52.09	2.04E+002
	7	1399-	1413	1406.97	351.65	0.65	1.32E+002	50.53	1.84E+002
	8	2030-	2052	2041.62	510.36	1.31	1.40E+002	54.98	1.67E+002
	9	2325-	2343	2333.11	583.26	0.74	1.90E+002	41.71	7.81E+001
	10	2430-	2444	2437.05	609.25	1.70	1.92E+002	41.11	8.60E+001
	11	3636-	3655	3645.01	911.34	1.92	1.83E+002	39.00	6.04E+001
	12	3869-	3885	3876.31	969.18	1.25	7.76E+001	32.25	6.14E+001
	13	4474-	4492	4481.58	1120.54	0.63	6.02E+001	30.50	5.38E+001
	14	5831-	5860	5846.03	1461.76	1.96	1.25E+003	73.20	2.99E+001
	15	6350-	6363	6356.07	1589.30	0.93	1.80E+001	11.96	7.00E+000
	16	7054-	7073	7063.05	1766.10	0.89	7.25E+001	19.02	6.51E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.986	511.00*	100.00	1.91234E-001	7.93245E-002
K-40	0.969	1460.81*	10.67	2.10204E+001	2.09855E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	8.85344E-001	3.74293E-001
		583.14*	84.20	3.21408E-001	8.20595E-002
		860.37	12.46		
Pb-212	0.843	74.81* @	10.70	1.32091E+001	2.81168E+000
		77.11* @	18.00	1.68777E+000	5.68911E-001
		87.30 @	8.00		
		238.63*	44.60	6.65575E-001	2.04388E-001
Bi-214	0.981	609.31*	46.30	5.99621E-001	1.48088E-001
		1120.29*	15.10	6.71477E-001	3.47426E-001
		1764.49*	15.80	8.51773E-001	2.39126E-001
PB-214	0.389	74.82* @	6.21	2.27596E+001	5.11857E+000
		77.11* @	10.50	2.89332E+000	9.98917E-001
		87.30 @	4.67		
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	4.28677E-001	1.79473E-001
Ac-228	0.999	338.32*	11.40	7.13383E-001	5.58722E-001
		911.07*	27.70	1.04528E+000	2.53519E-001
		969.11*	16.60	7.54672E-001	3.23341E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.986	1.218102E-001	8.124921E-002
K-40		0.969	2.102035E+001	2.098553E+000
TL-208		0.750	3.214080E-001	8.138825E-002
Pb-212	@	0.843	6.655749E-001	2.043879E-001
Bi-214		0.981	6.697463E-001	1.183684E-001
PB-214	@	0.389	4.286771E-001	1.778210E-001
Ac-228		0.999	9.096231E-001	1.878876E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.78	6.8202E-001	15.44
4	84.80	3.1123E-001	60.64
15	1589.30	3.0000E-002	66.47

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1200E-001	8.15E-002	1.7976E-002
	1332.49	100.00	8.1490E-002		3.3283E-002
Nb-94	702.63	100.00	9.8452E-002	9.06E-002	2.8078E-002
	871.10	100.00	9.0634E-002		-3.9177E-002
Ag-108m	79.20	7.10	4.4811E+000	1.18E-001	7.8249E-001
	433.93	89.90	1.1837E-001		-2.6818E-002
	614.37	90.40	1.3803E-001		-8.4573E-002
	722.95	90.50	1.2546E-001		-6.6285E-003
Sb-125	176.33	6.89	2.2059E+000	3.61E-001	8.3064E-001
	427.89	29.33	3.6113E-001		2.1598E-001
	463.38	10.35	1.0915E+000		3.0832E-001
	600.56	17.80	5.4846E-001		-8.1734E-001
	606.64	5.02	2.7907E+000		5.0076E+000
	635.90	11.32	8.3012E-001		2.5544E-001
Cs-134	563.23	8.38	1.3067E+000	1.22E-001	-2.1530E-001
	569.32	15.43	6.8107E-001		-3.6949E-002
	604.70	97.60	1.3299E-001		-1.2761E-001
	795.84	85.40	1.2154E-001		1.4788E-001
	801.93	8.73	1.0487E+000		-2.2031E+000
Cs-137	661.65	85.12	1.1872E-001	1.19E-001	-9.0158E-002
Eu-152	121.78	28.40	7.0017E-001	3.71E-001	1.7514E-001
	244.69	7.49	1.7928E+000		6.2016E-001
	344.27	26.50	4.3875E-001		-1.1375E-001
	778.89	12.74	7.6125E-001		3.0116E-003
	867.32	4.16	2.1090E+000		-6.0673E+000
	964.01	14.40	8.5358E-001		6.9105E-001
	1085.78	10.00	9.6018E-001		-1.6139E+000
	1112.02	13.30	7.1692E-001		-3.0289E-001
	1407.95	20.70	3.7141E-001		5.4085E-001
Eu-154	123.07	40.50	4.8361E-001	2.55E-001	1.1636E-001
	247.94	6.60	1.9552E+000		1.9467E+000
	591.81	4.83	2.0164E+000		4.2026E-001
	723.30	19.70	5.8214E-001		1.3167E-001
	756.87	4.33	2.1825E+000		-5.2908E-001
	873.19	11.50	8.2005E-001		3.1058E-001
	996.32	10.30	8.7426E-001		1.9900E-001
	1004.76	17.90	5.2268E-001		-1.3172E-002
	1274.45	35.50	2.5456E-001		-2.3380E-001
Eu-155	86.54	30.90	9.5595E-001	9.56E-001	-6.2506E-002
	105.31	20.70	1.1482E+000		7.5801E-001
Am-241	59.54	35.90	1.2163E+000	1.22E+000	-2.1614E-001
Cm-243	228.19	10.56	1.2825E+000	8.96E-001	-9.9669E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.9625E-001	8.96E-001	2.7311E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 5:47:39 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-170-F-
Sample Title: OOL-09-02-170-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 5:37:36 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-170-F-
Title: OOL-09-02-170-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	291.94	72.81	1.03	3.61E+002	62.94	1.44E+003
m	2	284-	305	300.14	74.86	1.03	6.40E+002	73.56	1.41E+003
M	3	331-	357	339.30	84.66	1.24	3.03E+002	60.56	1.32E+003
m	4	331-	357	349.72	87.26	1.24	2.13E+002	58.82	1.63E+003
	5	947-	959	954.55	238.52	0.90	2.49E+002	65.41	3.28E+002
	6	1348-	1361	1353.30	338.23	0.79	7.83E+001	45.59	1.67E+002
	7	1396-	1413	1407.04	351.67	0.74	1.35E+002	54.55	1.96E+002
	8	2031-	2053	2042.52	510.59	1.23	1.47E+002	54.81	1.64E+002
	9	2322-	2342	2332.05	583.00	1.35	2.04E+002	48.89	1.16E+002
	10	2430-	2448	2436.78	609.19	1.50	2.04E+002	41.70	7.44E+001
	11	2903-	2917	2909.12	727.31	0.38	4.65E+001	29.66	6.25E+001
	12	3637-	3657	3645.63	911.49	1.79	1.62E+002	38.07	5.94E+001
	13	3867-	3886	3876.62	969.25	0.47	1.03E+002	35.47	6.42E+001
	14	4474-	4490	4483.02	1120.90	0.55	5.09E+001	28.87	5.31E+001
	15	5832-	5859	5846.26	1461.81	1.85	1.28E+003	72.27	1.72E+001
	16	7054-	7071	7062.34	1765.92	0.40	5.80E+001	18.31	9.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.994	511.00*	100.00	2.00727E-001	7.95463E-002
K-40	0.966	1460.81*	10.67	2.15181E+001	2.12244E+000
Eu-155	0.322	86.54*	30.90	8.55736E-001	2.89754E-001
		105.31	20.70		
TL-208	0.751	277.35	6.80		
		510.84*	21.60	9.29292E-001	3.76008E-001
		583.14*	84.20	3.44376E-001	9.41041E-002
		860.37	12.46		
Bi-212	0.999	727.17*	11.80	5.96913E-001	3.86976E-001
Pb-212	0.677	74.81* @	10.70	9.16437E+000	2.08240E+000
		77.11 @	18.00		
		87.30* @	8.00	3.30528E+000	1.11917E+000
		238.63*	44.60	6.04134E-001	1.85069E-001
Bi-214	0.983	609.31*	46.30	6.35863E-001	1.51951E-001
		1120.29*	15.10	5.67152E-001	3.27478E-001
		1764.49*	15.80	6.81524E-001	2.25658E-001
Ac-228	0.997	338.32*	11.40	8.22444E-001	4.96124E-001
		911.07*	27.70	9.25039E-001	2.42457E-001
		969.11*	16.60	9.99720E-001	3.60449E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.994	1.263419E-001	8.206645E-002
K-40		0.966	2.151809E+001	2.122441E+000
Eu-155		0.322	6.993257E-001	2.936889E-001
TL-208		0.751	3.443760E-001	9.343251E-002
Bi-212		0.999	5.969125E-001	3.869759E-001
Pb-212	@	0.677	6.041342E-001	1.850692E-001
Bi-214		0.983	6.394048E-001	1.176281E-001
Ac-228		0.997	9.305302E-001	1.864342E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	6.0161E-001	17.44
M 3	84.66	5.0457E-001	20.00
7	351.67	2.2513E-001	40.39

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	9.6158E-002	6.81E-002	-1.2872E-002
		1332.49	100.00	6.8117E-002		-5.5012E-003
	Nb-94	702.63	100.00	1.0665E-001	9.03E-002	6.0921E-002
		871.10	100.00	9.0325E-002		-6.7930E-002
	Ag-108m	79.20	7.10	4.4635E+000	1.18E-001	-9.1490E+000
		433.93	89.90	1.1758E-001		-3.3228E-002
		614.37	90.40	1.3423E-001		1.0774E-002
		722.95	90.50	1.2421E-001		5.8854E-002
	Sb-125	176.33	6.89	2.1575E+000	3.81E-001	1.3135E+000
		427.89	29.33	3.8084E-001		3.4528E-001
		463.38	10.35	1.0525E+000		8.9597E-001
		600.56	17.80	5.6564E-001		8.8943E-002
		606.64	5.02	2.7103E+000		-1.4969E+000
		635.90	11.32	8.6368E-001		1.8952E-002
	Cs-134	563.23	8.38	1.2672E+000	1.16E-001	8.2771E-001
		569.32	15.43	6.7271E-001		-2.5169E-001
		604.70	97.60	1.2833E-001		-9.2055E-002
		795.84	85.40	1.1565E-001		6.0754E-002
		801.93	8.73	1.0852E+000		-8.8777E-001
	Cs-137	661.65	85.12	1.2409E-001	1.24E-001	-7.6187E-003
	Eu-152	121.78	28.40	6.8837E-001	3.38E-001	4.6870E-001
		244.69	7.49	1.7691E+000		-9.4158E-002
		344.27	26.50	4.2868E-001		2.9109E-001
		778.89	12.74	7.0753E-001		-1.1471E+000
		867.32	4.16	2.2063E+000		-3.5343E+000
		964.01	14.40	8.6014E-001		-1.2351E-001
		1085.78	10.00	9.4022E-001		-4.1170E-001
		1112.02	13.30	7.0929E-001		2.1786E-001
		1407.95	20.70	3.3771E-001		-5.9534E-003
	Eu-154	123.07	40.50	4.7381E-001	2.52E-001	1.0327E-001
		247.94	6.60	1.8932E+000		-3.5251E-001
		591.81	4.83	2.0262E+000		-4.8397E-001
		723.30	19.70	5.6833E-001		7.4494E-002
		756.87	4.33	2.3075E+000		4.6697E-001
		873.19	11.50	7.8581E-001		-2.9931E-002
		996.32	10.30	9.3686E-001		2.0930E-001
		1004.76	17.90	5.1173E-001		-7.0978E-002
		1274.45	35.50	2.5240E-001		9.2685E-002
+	Eu-155	86.54*	30.90	7.6519E-001	7.65E-001	8.5574E-001
		105.31	20.70	1.1200E+000		1.9825E-002
	Am-241	59.54	35.90	1.1936E+000	1.19E+000	1.0582E+000
	Cm-243	228.19	10.56	1.2337E+000	9.06E-001	-5.8525E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.0591E-001	9.06E-001	2.1835E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 6:22:44 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-171-F-
Sample Title: OOL-09-02-171-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 6:12:42 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-171-F-
Title: OOL-09-02-171-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	291.58	72.72	1.06	3.27E+002	62.21	1.36E+003
m	2	284-	306	300.35	74.92	1.07	5.80E+002	72.77	1.55E+003
	3	332-	345	340.17	84.87	1.01	2.03E+002	117.74	1.23E+003
	4	949-	962	954.78	238.57	0.99	2.66E+002	67.23	3.26E+002
	5	1334-	1361	1353.67	338.33	0.82	6.57E+001	73.45	2.97E+002
	6	1403-	1414	1408.11	351.94	0.81	8.46E+001	42.93	1.56E+002
	7	1781-	1792	1787.43	446.80	0.38	3.20E+001	26.67	6.10E+001
	8	2033-	2053	2042.92	510.69	0.95	1.24E+002	50.92	1.52E+002
	9	2325-	2341	2332.67	583.15	1.11	1.80E+002	43.50	1.00E+002
	10	2428-	2446	2436.36	609.08	1.38	1.88E+002	41.93	7.99E+001
	11	2903-	2915	2909.34	727.36	0.47	3.72E+001	26.24	5.38E+001
	12	3173-	3187	3180.27	795.11	0.86	4.99E+001	23.45	3.21E+001
	13	3635-	3655	3645.34	911.42	1.28	1.77E+002	38.06	5.52E+001
	14	3870-	3886	3876.10	969.12	1.26	7.83E+001	31.11	5.27E+001
	15	5833-	5858	5845.73	1461.68	1.96	1.24E+003	71.00	1.61E+001
	16	7052-	7070	7061.79	1765.79	1.18	5.38E+001	17.33	7.15E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.997	511.00*	100.00	1.69141E-001	7.31326E-002
K-40	0.974	1460.81*	10.67	2.08649E+001	2.06688E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	7.83058E-001	3.44563E-001
		583.14*	84.20	3.04438E-001	8.36100E-002
		860.37	12.46		
Bi-212	0.999	727.17*	11.80	4.77873E-001	3.41274E-001
Pb-212	0.520	74.81* @	10.70	8.30087E+000	1.93158E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.47702E-001	1.92426E-001
Bi-214	0.685	609.31*	46.30	5.87340E-001	1.49588E-001
		1120.29	15.10		
		1764.49*	15.80	6.32731E-001	2.13201E-001
Ac-228	0.998	338.32*	11.40	6.90750E-001	7.79476E-001
		911.07*	27.70	1.01214E+000	2.46979E-001
		969.11*	16.60	7.61094E-001	3.12856E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.997	1.033819E-001	7.529899E-002
K-40		0.974	2.086490E+001	2.066879E+000
TL-208		0.752	3.044379E-001	8.301926E-002
Bi-212		0.999	4.778728E-001	3.412737E-001
Pb-212	@	0.520	6.477024E-001	1.924258E-001
Bi-214		0.685	6.023138E-001	1.224532E-001
Ac-228		0.998	9.026460E-001	1.881229E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.72	5.4465E-001	19.04
3	84.87	3.3781E-001	58.09
6	351.94	1.4105E-001	50.72
7	446.80	5.3253E-002	83.46
12	795.11	8.3227E-002	46.96

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.6501E-002	7.97E-002	7.7197E-002
	1332.49	100.00	7.9726E-002		3.8740E-002
Nb-94	702.63	100.00	9.4208E-002	9.42E-002	-8.8716E-002
	871.10	100.00	9.4261E-002		9.1014E-002
Ag-108m	79.20	7.10	4.5316E+000	1.18E-001	-1.5567E+000
	433.93	89.90	1.1837E-001		-2.7311E-002
	614.37	90.40	1.2763E-001		-5.3727E-002
	722.95	90.50	1.1984E-001		2.1553E-003
Sb-125	176.33	6.89	2.1522E+000	3.34E-001	5.8419E-001
	427.89	29.33	3.3384E-001		-4.0322E-001
	463.38	10.35	1.0100E+000		-4.0973E-002
	600.56	17.80	5.6041E-001		1.2984E-001
	606.64	5.02	2.5920E+000		-1.1238E+000
	635.90	11.32	8.3694E-001		-1.8372E-001
Cs-134	563.23	8.38	1.1488E+000	1.14E-001	-9.5752E-002
	569.32	15.43	6.4256E-001		9.4077E-002
	604.70	97.60	1.2814E-001		-8.7069E-002
	795.84	85.40	1.1373E-001		-1.0807E-002
	801.93	8.73	9.9306E-001		4.0135E-001
Cs-137	661.65	85.12	1.2326E-001	1.23E-001	6.9179E-002
Eu-152	121.78	28.40	6.7677E-001	3.22E-001	-2.2201E-001
	244.69	7.49	1.7797E+000		-1.1299E+000
	344.27	26.50	4.1170E-001		3.5124E-001
	778.89	12.74	7.1447E-001		-1.1135E-001
	867.32	4.16	2.2425E+000		-2.7130E+000
	964.01	14.40	8.3189E-001		1.0949E-001
	1085.78	10.00	9.1634E-001		8.4696E-002
	1112.02	13.30	7.2446E-001		-5.6173E-001
	1407.95	20.70	3.2211E-001		2.4526E-001
Eu-154	123.07	40.50	4.7121E-001	2.39E-001	8.5488E-002
	247.94	6.60	1.9205E+000		6.4499E-001
	591.81	4.83	2.0553E+000		-1.6350E-001
	723.30	19.70	5.5536E-001		-6.6436E-002
	756.87	4.33	2.3075E+000		1.4584E+000
	873.19	11.50	7.9385E-001		-1.4796E-001
	996.32	10.30	8.6116E-001		-1.9312E-001
	1004.76	17.90	5.2448E-001		1.8027E-001
	1274.45	35.50	2.3897E-001		-3.2283E-001
Eu-155	86.54	30.90	9.4358E-001	9.44E-001	-1.6227E-002
	105.31	20.70	1.0993E+000		-1.4379E-001
Am-241	59.54	35.90	1.1643E+000	1.16E+000	-5.0681E-001
Cm-243	228.19	10.56	1.2619E+000	8.70E-001	-3.1683E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.6994E-001	8.70E-001	-7.4645E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 6:43:13 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-172-F-
Sample Title: OOL-09-02-172-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 6:33:11 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-172-F-
Title: OOL-09-02-172-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.87	72.80	0.90	3.37E+002	61.85	1.28E+003
m	2	285-	305	300.43	74.94	0.91	5.93E+002	73.83	1.31E+003
	3	330-	346	338.82	84.54	1.04	1.68E+002	139.96	1.57E+003
M	4	947-	974	955.28	238.70	1.16	2.79E+002	41.21	3.20E+002
m	5	947-	974	969.31	242.21	1.17	6.23E+001	27.75	2.59E+002
	6	1176-	1187	1180.02	294.90	0.54	5.10E+001	41.98	1.59E+002
	7	1345-	1361	1353.55	338.30	1.04	6.78E+001	49.48	1.81E+002
	8	1403-	1415	1407.38	351.76	0.83	1.41E+002	44.71	1.42E+002
	9	2031-	2054	2043.17	510.75	1.39	1.88E+002	50.66	1.20E+002
	10	2327-	2342	2332.90	583.21	1.25	1.66E+002	39.66	7.99E+001
	11	2427-	2446	2437.16	609.28	1.27	1.67E+002	43.02	8.99E+001
	12	3636-	3655	3645.39	911.43	1.59	1.39E+002	36.77	6.04E+001
	13	3868-	3887	3875.65	969.01	0.78	7.85E+001	35.75	7.25E+001
	14	4475-	4488	4481.80	1120.59	0.39	4.38E+001	22.78	3.32E+001
	15	5831-	5859	5845.74	1461.68	1.96	1.13E+003	68.82	2.19E+001
	16	6348-	6361	6354.92	1589.02	1.29	2.57E+001	12.61	5.30E+000
	17	7054-	7070	7061.91	1765.82	1.21	4.31E+001	16.65	8.87E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.998	511.00*		100.00	2.56406E-001	7.73442E-002
K-40	0.974	1460.81*		10.67	1.89740E+001	1.92159E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	1.18707E+000	3.70966E-001
		583.14*		84.20	2.81074E-001	7.64458E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	8.47915E+000	1.96902E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.78299E-001	1.46118E-001
Bi-214	0.987	609.31*		46.30	5.21791E-001	1.48913E-001
		1120.29*		15.10	4.88405E-001	2.59222E-001
		1764.49*		15.80	5.06844E-001	2.02149E-001
PB-214	0.731	74.82*	@	6.21	1.46098E+001	3.55458E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98*		7.49	9.05415E-001	4.30519E-001
		295.21*		19.20	3.06128E-001	2.57091E-001
		351.92*		37.20	4.59209E-001	1.64600E-001
Ac-228	0.998	338.32*		11.40	7.11976E-001	5.31770E-001
		911.07*		27.70	7.93476E-001	2.29372E-001
		969.11*		16.60	7.62866E-001	3.56642E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.998	1.956945E-001	7.906243E-002
K-40		0.974	1.897398E+001	1.921590E+000
TL-208		0.752	2.810736E-001	7.589502E-002
Pb-212	@	0.520	6.782991E-001	1.461181E-001
Bi-214		0.987	5.115764E-001	1.088187E-001
PB-214	@	0.731	4.607996E-001	1.319511E-001
Ac-228		0.998	7.760825E-001	1.813523E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.80	5.6119E-001	18.37
3	84.54	2.7946E-001	83.47
16	1589.02	4.2836E-002	49.06

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0053E-001	8.15E-002	6.3195E-002
	1332.49	100.00	8.1490E-002		1.0430E-001
Nb-94	702.63	100.00	9.0039E-002	9.00E-002	-5.5294E-002
	871.10	100.00	9.3964E-002		5.2454E-002
Ag-108m	79.20	7.10	4.6005E+000	1.14E-001	-5.5194E+000
	433.93	89.90	1.1439E-001		2.7611E-002
	614.37	90.40	1.2397E-001		-5.1084E-002
	722.95	90.50	1.2010E-001		4.5420E-002
Sb-125	176.33	6.89	2.0728E+000	3.40E-001	4.6468E-001
	427.89	29.33	3.4025E-001		2.3371E-002
	463.38	10.35	1.0332E+000		8.6386E-001
	600.56	17.80	5.4980E-001		9.9685E-002
	606.64	5.02	2.5955E+000		-5.2947E-001
	635.90	11.32	8.0693E-001		-5.8397E-001
Cs-134	563.23	8.38	1.1321E+000	1.08E-001	3.2168E-001
	569.32	15.43	6.2616E-001		3.1306E-001
	604.70	97.60	1.2486E-001		-1.1409E-002
	795.84	85.40	1.0841E-001		1.9710E-003
	801.93	8.73	1.0213E+000		3.9788E-001
Cs-137	661.65	85.12	1.2129E-001	1.21E-001	5.1829E-002
Eu-152	121.78	28.40	6.9259E-001	3.53E-001	2.1485E-001
	244.69	7.49	1.7849E+000		3.9018E-001
	344.27	26.50	4.3665E-001		2.3499E-001
	778.89	12.74	7.1447E-001		-2.6185E-001
	867.32	4.16	2.2063E+000		-2.9489E+000
	964.01	14.40	8.6340E-001		3.3573E-001
	1085.78	10.00	8.8106E-001		1.7680E-001
	1112.02	13.30	6.9115E-001		-5.7496E-001
	1407.95	20.70	3.5258E-001		5.1346E-002
Eu-154	123.07	40.50	4.8333E-001	2.33E-001	2.3007E-001
	247.94	6.60	1.9125E+000		1.3394E+000
	591.81	4.83	1.9615E+000		4.9457E-001
	723.30	19.70	5.5774E-001		5.2586E-001
	756.87	4.33	2.0835E+000		-2.6797E+000
	873.19	11.50	8.1747E-001		1.4269E-001
	996.32	10.30	8.5120E-001		2.3707E-001
	1004.76	17.90	5.0430E-001		-5.1396E-002
	1274.45	35.50	2.3314E-001		3.5304E-002
Eu-155	86.54	30.90	9.6835E-001	9.68E-001	8.4386E-002
	105.31	20.70	1.1133E+000		-5.0553E-001
Am-241	59.54	35.90	1.2163E+000	1.22E+000	6.6379E-001
Cm-243	228.19	10.56	1.2132E+000	9.00E-001	-2.0014E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.0029E-001	9.00E-001	2.4929E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 11:49:04 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-173-F-
Sample Title: OOL-09-02-173-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 11:39:01 AM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-173-F-
Title: OOL-09-02-173-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	221-	228	224.16	55.86	0.72	5.53E+001	61.89	4.68E+002
M	2	284-	306	291.47	72.70	0.99	3.33E+002	61.24	1.29E+003
m	3	284-	306	300.36	74.92	0.99	6.26E+002	73.79	1.43E+003
	4	331-	346	339.70	84.76	0.95	2.06E+002	133.11	1.45E+003
	5	950-	961	954.41	238.48	1.19	2.57E+002	64.56	3.23E+002
	6	1176-	1189	1180.16	294.94	0.92	8.92E+001	49.72	1.95E+002
	7	1344-	1357	1352.81	338.11	0.40	7.08E+001	47.50	1.87E+002
	8	1400-	1412	1407.66	351.83	1.16	2.00E+002	46.24	1.35E+002
	9	1845-	1858	1851.84	462.91	1.18	4.18E+001	30.60	7.32E+001
	10	2326-	2340	2332.12	583.01	1.15	1.83E+002	40.26	8.25E+001
	11	2428-	2448	2436.45	609.10	1.44	1.80E+002	47.51	1.12E+002
	12	2901-	2915	2908.31	727.10	1.00	3.27E+001	26.94	5.43E+001
	13	3134-	3146	3140.07	785.06	0.56	1.70E+001	19.76	3.20E+001
	14	3173-	3185	3179.17	794.84	0.33	2.79E+001	25.08	5.11E+001
	15	3636-	3654	3644.57	911.23	1.89	1.95E+002	38.31	5.56E+001
	16	3868-	3883	3875.70	969.02	1.39	1.14E+002	31.50	4.80E+001
	17	4474-	4489	4481.69	1120.57	1.43	5.40E+001	26.76	4.40E+001
	18	5831-	5858	5844.38	1461.34	1.74	1.32E+003	73.98	2.40E+001
	19	7053-	7070	7061.30	1765.67	1.34	5.86E+001	17.43	6.41E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.990	1460.81*	10.67	2.21076E+001	2.17792E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.08841E-001	7.91144E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	4.19291E-001	3.49098E-001
Pb-212	0.520	74.81* @	10.70	8.94904E+000	2.04722E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.24193E-001	1.84937E-001
Bi-214	0.989	609.31*	46.30	5.61971E-001	1.63702E-001
		1120.29*	15.10	6.02023E-001	3.05130E-001
		1764.49*	15.80	6.88465E-001	2.16095E-001
PB-214	0.582	74.82* @	6.21	1.54194E+001	3.70075E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.35304E-001	3.11591E-001
		351.92*	37.20	6.50952E-001	1.85778E-001
Ac-228	0.999	338.32*	11.40	7.43689E-001	5.12469E-001
		911.07*	27.70	1.11845E+000	2.54227E-001
		969.11*	16.60	1.10837E+000	3.27564E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.990	2.210764E+001	2.177921E+000
TL-208		0.471	3.088412E-001	7.911441E-002
Bi-212		1.000	4.192908E-001	3.490980E-001
Pb-212	@	0.520	6.241925E-001	1.849372E-001
Bi-214		0.989	6.071554E-001	1.199770E-001
PB-214	@	0.582	6.206230E-001	1.595684E-001
Ac-228		0.999	1.065272E+000	1.869898E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
	1	55.86	9.2191E-002	111.89
M	2	72.70	5.5568E-001	18.37
	4	84.76	3.4409E-001	64.47
	9	462.91	6.9717E-002	73.16
	13	785.06	2.8333E-002	116.24
	14	794.84	4.6582E-002	89.72

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0502E-001	8.24E-002	9.4886E-002
	1332.49	100.00	8.2357E-002		8.8849E-002
Nb-94	702.63	100.00	9.3664E-002	9.19E-002	-4.2327E-002
	871.10	100.00	9.1860E-002		4.1584E-002
Ag-108m	79.20	7.10	4.4390E+000	1.11E-001	-4.1437E+000
	433.93	89.90	1.1856E-001		-7.5024E-003
	614.37	90.40	1.3487E-001		3.5732E-002
	722.95	90.50	1.1140E-001		-3.7247E-002
Sb-125	176.33	6.89	2.1861E+000	3.73E-001	1.9282E+000
	427.89	29.33	3.7286E-001		-1.9489E-001
	463.38	10.35	1.0297E+000		-3.3966E-001
	600.56	17.80	5.7467E-001		-1.6153E-001
	606.64	5.02	2.7574E+000		1.0994E-001
	635.90	11.32	8.5265E-001		-4.2373E-001
Cs-134	563.23	8.38	1.2419E+000	1.22E-001	-2.8360E-001
	569.32	15.43	6.2465E-001		-6.1931E-001
	604.70	97.60	1.3170E-001		-5.2374E-002
	795.84	85.40	1.2215E-001		4.3285E-002
	801.93	8.73	1.0787E+000		5.1226E-002
Cs-137	661.65	85.12	1.2736E-001	1.27E-001	1.3117E-001
Eu-152	121.78	28.40	6.9420E-001	3.40E-001	2.5719E-001
	244.69	7.49	1.8176E+000		-7.7176E-001
	344.27	26.50	4.1504E-001		-3.3569E-001
	778.89	12.74	7.3490E-001		2.9326E-001
	867.32	4.16	2.1470E+000		-3.2110E+000
	964.01	14.40	9.0623E-001		7.7439E-002
	1085.78	10.00	9.6018E-001		-6.5890E-001
	1112.02	13.30	6.9638E-001		-8.1616E-001
	1407.95	20.70	3.4024E-001		5.1402E-002
Eu-154	123.07	40.50	4.8234E-001	2.70E-001	9.7192E-002
	247.94	6.60	1.9614E+000		-7.4933E-001
	591.81	4.83	2.1076E+000		7.9705E-001
	723.30	19.70	5.1441E-001		6.0824E-002
	756.87	4.33	2.2584E+000		-2.1747E+000
	873.19	11.50	8.0706E-001		2.4232E-001
	996.32	10.30	9.1236E-001		1.7807E-001
	1004.76	17.90	5.1906E-001		3.4624E-001
	1274.45	35.50	2.7021E-001		1.6706E-001
Eu-155	86.54	30.90	9.6179E-001	9.62E-001	1.9680E-001
	105.31	20.70	1.1007E+000		2.1046E-001
Am-241	59.54	35.90	1.1546E+000	1.15E+000	-7.0846E-001
Cm-243	228.19	10.56	1.2429E+000	8.77E-001	-8.7573E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.7660E-001	8.77E-001	-1.3856E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 2:44:02 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-174-F-
Sample Title: OOL-09-02-174-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 2:34:00 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-174-F-
Title: OOL-09-02-174-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	307	291.73	72.76	1.11	3.84E+002	62.62	1.33E+003
m	2	284-	307	300.53	74.96	1.11	7.16E+002	74.91	1.63E+003
	3	945-	961	955.28	238.70	0.80	3.09E+002	74.87	3.68E+002
	4	1344-	1361	1353.40	338.26	0.80	1.05E+002	55.21	2.10E+002
	5	1400-	1414	1407.53	351.80	1.19	1.95E+002	48.35	1.44E+002
	6	2032-	2054	2043.49	510.83	1.51	1.53E+002	55.13	1.64E+002
	7	2321-	2343	2333.18	583.28	1.24	2.26E+002	46.86	8.90E+001
	8	2427-	2446	2437.17	609.28	1.21	1.95E+002	42.26	7.71E+001
	9	3633-	3657	3646.88	911.80	0.90	1.70E+002	34.63	3.44E+001
	10	3867-	3887	3877.70	969.52	1.71	1.31E+002	35.07	5.23E+001
	11	5508-	5519	5513.54	1378.61	0.70	2.43E+001	12.19	5.73E+000
	12	5831-	5861	5846.87	1461.96	1.86	1.36E+003	74.26	1.55E+001
	13	7054-	7071	7063.22	1766.15	0.61	6.10E+001	18.62	9.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*	100.00	2.08355E-001	8.03273E-002
K-40	0.954	1460.81*	10.67	2.28050E+001	2.22725E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	9.64607E-001	3.80138E-001
		583.14*	84.20	3.82579E-001	9.36557E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.02355E+001	2.27414E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.51763E-001	2.16867E-001
Bi-214	0.679	609.31*	46.30	6.08495E-001	1.51746E-001
		1120.29	15.10		
		1764.49*	15.80	7.16793E-001	2.30279E-001
Ac-228	0.989	338.32*	11.40	1.10040E+000	6.05316E-001
		911.07*	27.70	9.70796E-001	2.27468E-001
		969.11*	16.60	1.27081E+000	3.66072E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.999	1.257182E-001	8.279168E-002
K-40	0.954	2.280500E+001	2.227246E+000
TL-208	0.751	3.825788E-001	9.282213E-002
Pb-212 @	0.520	7.517626E-001	2.168666E-001
Bi-214	0.679	6.412840E-001	1.267089E-001
Ac-228	0.989	1.058622E+000	1.840582E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.76	6.3971E-001	16.31
5	351.80	3.2538E-001	24.77
11	1378.61	4.0444E-002	50.23

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1489E-001	8.57E-002	1.3350E-001
	1332.49	100.00	8.5732E-002		2.7250E-002
Nb-94	702.63	100.00	9.9484E-002	9.66E-002	-1.1860E-001
	871.10	100.00	9.6599E-002		6.6863E-002
Ag-108m	79.20	7.10	4.4616E+000	1.15E-001	-1.4786E+000
	433.93	89.90	1.2334E-001		2.4006E-002
	614.37	90.40	1.3487E-001		-5.5408E-002
	722.95	90.50	1.1474E-001		-1.5818E-002
Sb-125	176.33	6.89	2.1436E+000	3.59E-001	-1.8216E+000
	427.89	29.33	3.5874E-001		-2.0731E-001
	463.38	10.35	1.0965E+000		9.7759E-001
	600.56	17.80	5.8356E-001		2.7236E-001
	606.64	5.02	2.6932E+000		4.7958E-001
	635.90	11.32	8.7673E-001		3.3014E-001
Cs-134	563.23	8.38	1.1870E+000	1.13E-001	-9.4205E-001
	569.32	15.43	6.5277E-001		1.3976E-002
	604.70	97.60	1.2852E-001		-3.5499E-002
	795.84	85.40	1.1340E-001		4.1624E-002
	801.93	8.73	1.0885E+000		-1.0609E+000
Cs-137	661.65	85.12	1.2270E-001	1.23E-001	9.2364E-002
Eu-152	121.78	28.40	6.8331E-001	3.50E-001	-3.5319E-002
	244.69	7.49	1.8085E+000		5.2048E-001
	344.27	26.50	4.3823E-001		1.0904E-001
	778.89	12.74	7.1447E-001		-6.7412E-001
	867.32	4.16	2.3339E+000		-1.8300E+000
	964.01	14.40	8.6827E-001		2.5740E-001
	1085.78	10.00	9.6018E-001		2.9345E-001
	1112.02	13.30	7.6101E-001		1.6102E-001
	1407.95	20.70	3.5015E-001		1.5858E-001
Eu-154	123.07	40.50	4.7638E-001	2.58E-001	1.8029E-001
	247.94	6.60	1.8996E+000		-9.6523E-001
	591.81	4.83	1.9565E+000		-1.0908E+000
	723.30	19.70	5.3591E-001		4.9328E-001
	756.87	4.33	2.1695E+000		2.7484E-001
	873.19	11.50	8.4540E-001		-6.2318E-002
	996.32	10.30	9.1855E-001		-1.8066E-001
	1004.76	17.90	5.3162E-001		2.9275E-001
	1274.45	35.50	2.5777E-001		1.6969E-001
Eu-155	86.54	30.90	9.4415E-001	9.44E-001	1.7613E+000
	105.31	20.70	1.1211E+000		-1.6599E-001
Am-241	59.54	35.90	1.1405E+000	1.14E+000	-9.4400E-001
Cm-243	228.19	10.56	1.2682E+000	9.08E-001	9.1845E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.0831E-001	9.08E-001	-1.9183E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 3:02:47 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-175-F-
Sample Title: OOL-09-02-175-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 2:52:44 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-175-F-
Title: OOL-09-02-175-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	291.80	72.78	1.10	3.80E+002	61.77	1.30E+003
m	2	284-	308	300.40	74.93	1.10	7.40E+002	74.64	1.58E+003
M	3	334-	355	339.59	84.73	1.26	3.32E+002	62.06	1.18E+003
m	4	334-	355	350.04	87.34	1.27	1.90E+002	56.86	1.39E+003
	5	948-	962	954.64	238.54	0.97	2.94E+002	72.07	3.63E+002
	6	1171-	1189	1180.75	295.08	1.17	8.62E+001	62.22	2.73E+002
	7	1346-	1359	1352.94	338.14	0.39	6.52E+001	44.43	1.63E+002
	8	1400-	1416	1407.80	351.86	1.06	1.88E+002	53.17	1.75E+002
	9	2034-	2053	2042.51	510.59	1.66	1.68E+002	48.49	1.27E+002
	10	2324-	2341	2333.24	583.29	1.64	2.29E+002	44.64	8.94E+001
	11	2429-	2446	2437.60	609.39	1.46	1.97E+002	44.01	9.45E+001
	12	2901-	2916	2908.68	727.20	0.85	4.60E+001	29.86	6.20E+001
	13	3637-	3654	3645.74	911.52	0.67	1.32E+002	38.95	8.08E+001
	14	3867-	3886	3877.18	969.39	1.47	1.07E+002	34.50	5.76E+001
	15	4474-	4491	4482.64	1120.81	1.13	7.48E+001	27.64	3.82E+001
	16	5832-	5859	5846.41	1461.85	1.66	1.27E+003	72.42	2.12E+001
	17	7055-	7069	7062.69	1766.01	0.33	4.87E+001	17.68	1.13E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.994	511.00*	100.00	2.29254E-001	7.30707E-002
K-40	0.963	1460.81*	10.67	2.12833E+001	2.10833E+000
Eu-155	0.320	86.54*	30.90	7.60419E-001	2.72473E-001
		105.31	20.70		
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.06136E+000	3.49218E-001
		583.14*	84.20	3.86979E-001	9.08108E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	5.90037E-001	3.89338E-001
Pb-212	0.677	74.81* @	10.70	1.05794E+001	2.33231E+000
		77.11 @	18.00		
		87.30* @	8.00	2.93712E+000	1.05243E+000
		238.63*	44.60	7.14306E-001	2.07936E-001
Bi-214	0.982	609.31*	46.30	6.13657E-001	1.56838E-001
		1120.29*	15.10	8.33950E-001	3.20684E-001
		1764.49*	15.80	5.72741E-001	2.15525E-001
PB-214	0.670	74.82* @	6.21	1.82287E+001	4.23090E+000
		77.11 @	10.50		
		87.30* @	4.67	5.03146E+000	1.84251E+000
		241.98	7.49		
		295.21*	19.20	5.17154E-001	3.83341E-001
		351.92*	37.20	6.11931E-001	2.01119E-001
Ac-228	0.995	338.32*	11.40	6.84663E-001	4.79012E-001
		911.07*	27.70	7.56567E-001	2.39302E-001
		969.11*	16.60	1.04400E+000	3.52852E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.994	1.456663E-001	7.560855E-002
K-40		0.963	2.128330E+001	2.108325E+000
Eu-155		0.320	4.860345E-001	2.790081E-001
TL-208		0.751	3.869794E-001	8.993081E-002
Bi-212		1.000	5.900368E-001	3.893377E-001
Pb-212	@	0.677	7.143062E-001	2.079359E-001
Bi-214		0.982	6.311980E-001	1.179283E-001
PB-214	@	0.670	5.918678E-001	1.757694E-001
Ac-228		0.995	8.234031E-001	1.830244E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.78	6.3386E-001	16.24
M 3	84.73	5.5297E-001	18.71

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0020E-001	7.93E-002	-2.5499E-002
		1332.49	100.00	7.9278E-002		8.7902E-004
	Nb-94	702.63	100.00	1.0350E-001	9.28E-002	-5.4470E-002
		871.10	100.00	9.2768E-002		-1.1024E-002
	Ag-108m	79.20	7.10	4.4870E+000	1.22E-001	-4.5470E+000
		433.93	89.90	1.2202E-001		2.8029E-002
		614.37	90.40	1.3948E-001		-8.8482E-002
		722.95	90.50	1.2166E-001		3.3959E-002
	Sb-125	176.33	6.89	2.1297E+000	3.91E-001	4.1564E-001
		427.89	29.33	3.9086E-001		2.3595E-001
		463.38	10.35	1.0998E+000		9.8259E-001
		600.56	17.80	5.6564E-001		5.6648E-001
		606.64	5.02	2.7474E+000		-6.7667E-002
		635.90	11.32	8.9804E-001		4.7513E-001
	Cs-134	563.23	8.38	1.2291E+000	1.11E-001	-1.5874E-001
		569.32	15.43	6.5566E-001		3.6221E-001
		604.70	97.60	1.2908E-001		-3.1976E-002
		795.84	85.40	1.1077E-001		8.3436E-002
		801.93	8.73	9.8587E-001		-8.0038E-001
	Cs-137	661.65	85.12	1.3002E-001	1.30E-001	6.0985E-002
	Eu-152	121.78	28.40	6.7492E-001	3.17E-001	-3.5556E-002
		244.69	7.49	1.8007E+000		-4.4888E-003
		344.27	26.50	4.2545E-001		-2.7023E-001
		778.89	12.74	7.1447E-001		-2.9677E-001
		867.32	4.16	2.2710E+000		-1.0903E+000
		964.01	14.40	8.4030E-001		4.4765E-002
		1085.78	10.00	9.6018E-001		4.1970E-001
		1112.02	13.30	7.1184E-001		-3.9547E-001
		1407.95	20.70	3.1672E-001		-5.0789E-002
	Eu-154	123.07	40.50	4.7035E-001	2.74E-001	-3.7168E-002
		247.94	6.60	1.9877E+000		9.6960E-001
		591.81	4.83	1.9916E+000		6.0144E-002
		723.30	19.70	5.6365E-001		6.3651E-002
		756.87	4.33	2.1825E+000		1.3086E-001
		873.19	11.50	8.2005E-001		2.3363E-001
		996.32	10.30	8.6774E-001		4.5007E-002
		1004.76	17.90	4.9484E-001		-3.3030E-001
		1274.45	35.50	2.7423E-001		-2.1575E-002
+	Eu-155	86.54*	30.90	7.0674E-001	7.07E-001	7.6042E-001
		105.31	20.70	1.1136E+000		3.3079E-001
	Am-241	59.54	35.90	1.1623E+000	1.16E+000	-1.5263E-001
	Cm-243	228.19	10.56	1.2682E+000	9.15E-001	-2.2131E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.1467E-001	9.15E-001	6.0067E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 3:37:15 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-176-F-
Sample Title: OOL-09-02-176-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 3:27:12 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-176-F-
Title: OOL-09-02-176-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	315	291.75	72.77	1.13	4.73E+002	64.51	1.26E+003
m	2	284-	315	300.60	74.98	1.14	8.18E+002	73.89	1.42E+003
m	3	284-	315	309.35	77.17	1.14	1.66E+002	55.34	1.33E+003
	4	948-	961	954.86	238.59	1.02	3.03E+002	66.74	3.11E+002
	5	1349-	1363	1353.10	338.18	0.60	7.05E+001	47.01	1.73E+002
	6	1400-	1417	1407.70	351.84	1.57	2.17E+002	54.94	1.72E+002
	7	1730-	1742	1737.12	434.22	0.48	2.91E+001	28.79	7.09E+001
	8	2036-	2054	2042.93	510.69	1.82	1.33E+002	45.56	1.20E+002
	9	2325-	2340	2332.94	583.22	1.58	1.69E+002	41.72	9.43E+001
	10	2429-	2444	2437.38	609.34	1.67	1.88E+002	41.12	8.40E+001
	11	2904-	2918	2909.52	727.41	0.84	5.03E+001	28.53	5.57E+001
	12	3176-	3187	3181.51	795.42	0.40	2.20E+001	21.49	3.90E+001
	13	3435-	3451	3442.47	860.68	1.20	3.78E+001	28.06	5.32E+001
	14	3634-	3655	3645.68	911.50	1.68	1.88E+002	35.69	3.84E+001
	15	3869-	3884	3876.44	969.21	0.51	7.84E+001	31.80	6.16E+001
	16	4475-	4492	4484.33	1121.23	0.89	6.59E+001	28.02	4.21E+001
	17	5831-	5860	5846.50	1461.87	2.29	1.31E+003	72.41	1.12E+001
	18	7057-	7072	7063.31	1766.17	0.43	4.52E+001	17.74	1.18E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.997	511.00*	100.00	1.80767E-001	6.67907E-002
K-40	0.961	1460.81*	10.67	2.20054E+001	2.15623E+000
TL-208	0.902	277.35	6.80		
		510.84*	21.60	8.36882E-001	3.16679E-001
		583.14*	84.20	2.85458E-001	7.97870E-002
		860.37*	12.46	4.74355E-001	3.57271E-001
Bi-212	0.998	727.17*	11.80	6.45537E-001	3.73888E-001
Pb-212	0.843	74.81* @	10.70	1.16848E+001	2.52191E+000
		77.11* @	18.00	1.35585E+000	5.24247E-001
		87.30 @	8.00		
		238.63*	44.60	7.36346E-001	1.99142E-001
Bi-214	0.974	609.31*	46.30	5.87244E-001	1.47365E-001
		1120.29*	15.10	7.35261E-001	3.22003E-001
		1764.49*	15.80	5.31618E-001	2.15074E-001
PB-214	0.390	74.82* @	6.21	2.01332E+001	4.58452E+000
		77.11* @	10.50	2.32432E+000	9.15313E-001
		87.30 @	4.67		
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	7.05147E-001	2.14248E-001
Ac-228	0.997	338.32*	11.40	7.40772E-001	5.07436E-001
		911.07*	27.70	1.07409E+000	2.38736E-001
		969.11*	16.60	7.62727E-001	3.19351E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.997	1.171910E-001	6.884913E-002
K-40		0.961	2.200543E+001	2.156233E+000
TL-208		0.902	2.943312E-001	7.735920E-002
Bi-212		0.998	6.455370E-001	3.738885E-001
Pb-212	@	0.843	7.363461E-001	1.991416E-001
Bi-214		0.974	5.901541E-001	1.137313E-001
PB-214	@	0.390	7.051468E-001	2.104877E-001
Ac-228		0.997	9.348990E-001	1.789300E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.77	7.8828E-001	13.64
7	434.22	4.8533E-002	98.88
12	795.42	3.6667E-002	97.69

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.9868E-002	7.88E-002	1.6485E-002
	1332.49	100.00	7.8828E-002		-8.7902E-004
Nb-94	702.63	100.00	1.0545E-001	8.97E-002	-1.4732E-002
	871.10	100.00	8.9704E-002		4.9444E-002
Ag-108m	79.20	7.10	4.5006E+000	1.12E-001	7.3457E-001
	433.93	89.90	1.1173E-001		-1.0277E-001
	614.37	90.40	1.3636E-001		-1.2408E-001
	722.95	90.50	1.1957E-001		-4.2328E-002
Sb-125	176.33	6.89	2.1575E+000	3.61E-001	4.2389E-001
	427.89	29.33	3.6054E-001		1.3839E-001
	463.38	10.35	1.1031E+000		5.8969E-001
	600.56	17.80	5.8607E-001		-2.6408E-001
	606.64	5.02	2.7874E+000		6.3039E+000
	635.90	11.32	8.4371E-001		4.1564E-001
Cs-134	563.23	8.38	1.2161E+000	1.16E-001	-2.8142E-002
	569.32	15.43	6.4403E-001		-3.6226E-002
	604.70	97.60	1.3244E-001		-3.6217E-002
	795.84	85.40	1.1629E-001		1.3491E-001
	801.93	8.73	1.0721E+000		-1.3957E-001
Cs-137	661.65	85.12	1.3107E-001	1.31E-001	-8.6132E-002
Eu-152	121.78	28.40	6.8534E-001	3.50E-001	3.2865E-003
	244.69	7.49	1.7876E+000		-2.8735E-001
	344.27	26.50	4.3454E-001		2.0134E-001
	778.89	12.74	7.3713E-001		-4.7397E-001
	867.32	4.16	2.2353E+000		-1.6132E-001
	964.01	14.40	8.5850E-001		9.5245E-002
	1085.78	10.00	9.0240E-001		-4.9756E-001
	1112.02	13.30	7.1439E-001		-1.9029E-001
	1407.95	20.70	3.5015E-001		2.1357E-001
Eu-154	123.07	40.50	4.7667E-001	2.27E-001	-2.8948E-001
	247.94	6.60	1.9645E+000		1.1752E-001
	591.81	4.83	2.1029E+000		1.5293E-001
	723.30	19.70	5.5297E-001		-2.4900E-001
	756.87	4.33	2.2831E+000		-5.2270E-002
	873.19	11.50	7.6394E-001		-1.1096E-001
	996.32	10.30	9.1236E-001		2.2256E-001
	1004.76	17.90	4.8713E-001		-1.3710E-001
	1274.45	35.50	2.2715E-001		-2.2414E-001
Eu-155	86.54	30.90	9.5538E-001	9.55E-001	1.7626E+000
	105.31	20.70	1.1021E+000		-1.9677E-001
Am-241	59.54	35.90	1.1936E+000	1.19E+000	5.1618E-001
Cm-243	228.19	10.56	1.2318E+000	8.93E-001	-1.1863E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.9300E-001	8.93E-001	-5.5848E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 6:07:40 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-177-F-
Sample Title: OOL-09-02-177-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 5:57:37 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-177-F-
Title: OOL-09-02-177-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	291.76	72.77	0.86	3.18E+002	59.92	1.12E+003
m	2	284-	306	300.16	74.87	0.87	5.86E+002	72.77	1.27E+003
	3	335-	345	338.78	84.53	1.01	2.23E+002	100.45	1.01E+003
	4	949-	961	954.38	238.47	1.19	2.73E+002	66.87	3.37E+002
M	5	1163-	1186	1167.24	291.71	0.88	3.00E+001	21.61	1.39E+002
m	6	1163-	1186	1180.60	295.05	0.88	8.84E+001	28.12	1.66E+002
	7	1348-	1360	1353.65	338.32	0.27	8.18E+001	43.21	1.53E+002
	8	1400-	1415	1407.36	351.75	1.28	2.27E+002	49.93	1.40E+002
	9	2035-	2054	2043.06	510.73	1.54	1.62E+002	53.69	1.68E+002
	10	2248-	2257	2252.62	563.13	0.48	2.14E+001	22.23	4.76E+001
	11	2325-	2338	2332.78	583.18	1.13	1.45E+002	39.81	9.55E+001
	12	2425-	2444	2436.87	609.21	1.18	2.13E+002	44.94	8.98E+001
	13	2903-	2915	2908.72	727.21	0.32	3.68E+001	28.47	6.62E+001
	14	3636-	3655	3646.06	911.60	1.51	1.66E+002	35.28	4.51E+001
	15	3869-	3885	3876.38	969.19	1.07	9.83E+001	30.77	4.68E+001
	16	4476-	4490	4483.13	1120.93	0.52	3.55E+001	26.36	5.05E+001
	17	5831-	5859	5845.75	1461.69	2.01	1.29E+003	73.94	2.91E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.997	511.00*		100.00	2.20806E-001	7.91040E-002
K-40	0.974	1460.81*		10.67	2.16035E+001	2.14423E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	1.02225E+000	3.75617E-001
		583.14*		84.20	2.44586E-001	7.45182E-002
		860.37		12.46		
Bi-212	1.000	727.17*		11.80	4.71788E-001	3.69474E-001
Pb-212	0.520	74.81*	@	10.70	8.39326E+000	1.94736E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.63883E-001	1.93020E-001
Bi-214	0.696	609.31*		46.30	6.65720E-001	1.62515E-001
		1120.29*		15.10	3.95358E-001	2.96864E-001
		1764.49		15.80		
PB-214	0.582	74.82*	@	6.21	1.44618E+001	3.51575E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.30551E-001	1.90882E-001
		351.92*		37.20	7.39202E-001	2.04220E-001
Ac-228	0.995	338.32*		11.40	8.59137E-001	4.73619E-001
		911.07*		27.70	9.49766E-001	2.29587E-001
		969.11*		16.60	9.55293E-001	3.15440E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.997	1.679753E-001	8.070661E-002
K-40		0.974	2.160347E+001	2.144232E+000
TL-208		0.752	2.445856E-001	7.409065E-002
Bi-212		1.000	4.717884E-001	3.694736E-001
Pb-212	@	0.520	6.638828E-001	1.930204E-001
Bi-214		0.696	6.033779E-001	1.425524E-001
PB-214	@	0.582	6.278411E-001	1.394513E-001
Ac-228		0.995	9.393575E-001	1.728261E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.77	5.2985E-001	18.85
3	84.53	3.7232E-001	44.97
M 5	291.71	4.9964E-002	72.10
10	563.13	3.5737E-002	103.69

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.2649E-002	7.93E-002	-9.4683E-002
	1332.49	100.00	7.9278E-002		1.0225E-002
Nb-94	702.63	100.00	1.0784E-001	8.46E-002	7.8754E-002
	871.10	100.00	8.4559E-002		3.4827E-002
Ag-108m	79.20	7.10	4.6138E+000	1.13E-001	-3.3951E+000
	433.93	89.90	1.1297E-001		-1.4315E-001
	614.37	90.40	1.3402E-001		-5.4201E-002
	722.95	90.50	1.2745E-001		-9.6370E-002
Sb-125	176.33	6.89	2.1924E+000	3.57E-001	2.9590E-001
	427.89	29.33	3.5694E-001		-3.0564E-001
	463.38	10.35	1.0662E+000		3.1987E-001
	600.56	17.80	5.5380E-001		4.7738E-001
	606.64	5.02	2.7306E+000		3.5856E+000
	635.90	11.32	8.4595E-001		-1.7812E-001
Cs-134	563.23	8.38	1.2445E+000	1.11E-001	-4.3738E-001
	569.32	15.43	6.6849E-001		2.8514E-001
	604.70	97.60	1.3281E-001		-5.6522E-002
	795.84	85.40	1.1077E-001		-4.9939E-002
	801.93	8.73	1.0885E+000		-1.1069E+000
Cs-137	661.65	85.12	1.2682E-001	1.27E-001	3.0845E-002
Eu-152	121.78	28.40	6.8817E-001	3.60E-001	8.1211E-002
	244.69	7.49	1.7624E+000		-1.3733E+000
	344.27	26.50	4.4240E-001		9.8783E-002
	778.89	12.74	7.4158E-001		-5.6444E-001
	867.32	4.16	2.0704E+000		-3.3553E+000
	964.01	14.40	8.4696E-001		-9.0028E-001
	1085.78	10.00	1.0083E+000		1.2928E+000
	1112.02	13.30	7.3931E-001		-1.9494E-001
	1407.95	20.70	3.5976E-001		1.9952E-001
Eu-154	123.07	40.50	4.8022E-001	2.38E-001	-1.8705E-003
	247.94	6.60	1.8996E+000		-1.3268E+000
	591.81	4.83	2.0114E+000		-8.7453E-001
	723.30	19.70	5.7872E-001		-4.8944E-001
	756.87	4.33	2.2459E+000		9.3353E-001
	873.19	11.50	7.2400E-001		-3.1396E-001
	996.32	10.30	8.9352E-001		1.7470E-001
	1004.76	17.90	4.7929E-001		-2.2720E-001
	1274.45	35.50	2.3782E-001		-2.7091E-002
Eu-155	86.54	30.90	9.5953E-001	9.60E-001	1.5468E+000
	105.31	20.70	1.1275E+000		1.7552E-001
Am-241	59.54	35.90	1.1497E+000	1.15E+000	-7.2493E-001
Cm-243	228.19	10.56	1.2646E+000	8.98E-001	1.0390E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.9787E-001	8.98E-001	2.8207E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 11:34:34 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-178-F-
Sample Title: OOL-09-02-178-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 11:24:32 AM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-178-F-
Title: OOL-09-02-178-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	305	291.80	72.78	1.04	3.81E+002	62.58	1.37E+003
m	2	283-	305	300.13	74.86	1.04	6.54E+002	74.05	1.40E+003
	3	331-	345	339.41	84.68	0.77	1.45E+002	125.68	1.38E+003
M	4	948-	971	954.60	238.53	1.19	3.45E+002	44.25	2.90E+002
m	5	948-	971	966.32	241.46	1.20	7.23E+001	29.71	2.93E+002
	6	1348-	1359	1352.98	338.15	1.01	4.97E+001	42.85	1.69E+002
	7	1396-	1416	1406.91	351.64	1.31	1.73E+002	62.47	2.31E+002
	8	1846-	1860	1851.63	462.85	0.81	6.13E+001	35.42	9.17E+001
	9	2323-	2340	2332.20	583.03	1.19	2.07E+002	43.38	8.71E+001
	10	2429-	2445	2436.37	609.08	1.15	1.80E+002	38.70	6.65E+001
	11	3065-	3078	3072.07	768.05	1.49	2.80E+001	21.38	3.30E+001
	12	3173-	3186	3179.74	794.98	0.53	3.05E+001	25.92	5.25E+001
	13	3635-	3655	3643.73	911.01	1.43	1.84E+002	38.42	5.48E+001
	14	3867-	3884	3875.04	968.86	1.74	1.01E+002	32.19	5.17E+001
	15	4471-	4487	4479.75	1120.08	0.61	6.02E+001	28.61	4.88E+001
	16	5830-	5858	5844.21	1461.30	1.83	1.27E+003	72.47	2.12E+001
	17	7052-	7066	7059.44	1765.20	1.31	4.68E+001	17.43	1.13E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.992	1460.81*	10.67	2.13158E+001	2.11091E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.50135E-001	8.64152E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	9.36339E+000	2.11961E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.39048E-001	1.69934E-001
Bi-214	0.995	609.31*	46.30	5.60607E-001	1.39173E-001
		1120.29*	15.10	6.70646E-001	3.26821E-001
		1764.49*	15.80	5.49288E-001	2.12042E-001
PB-214	0.357	74.82* @	6.21	1.61334E+001	3.83533E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98*	7.49	1.05030E+000	4.65434E-001
		295.21	19.20		
		351.92*	37.20	5.62053E-001	2.24050E-001
Ac-228	0.999	338.32*	11.40	5.22431E-001	4.57671E-001
		911.07*	27.70	1.05414E+000	2.51103E-001
		969.11*	16.60	9.85205E-001	3.29551E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.992	2.131577E+001	2.110905E+000
TL-208		0.471	3.501350E-001	8.641517E-002
Pb-212	@	0.520	8.390480E-001	1.699337E-001
Bi-214		0.995	5.699598E-001	1.096111E-001
PB-214	@	0.357	6.539071E-001	2.018778E-001
Ac-228		0.999	9.478082E-001	1.830578E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.78	6.3490E-001	16.43
3	84.68	2.4098E-001	86.92
8	462.85	1.0222E-001	57.76
11	768.05	4.6660E-002	76.38
12	794.98	5.0833E-002	85.00

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0151E-001	7.32E-002	2.8278E-002
	1332.49	100.00	7.3194E-002		-1.0485E-002
Nb-94	702.63	100.00	1.0350E-001	8.91E-002	4.5575E-003
	871.10	100.00	8.9078E-002		-2.0774E-002
Ag-108m	79.20	7.10	4.4527E+000	1.19E-001	-7.3053E+000
	433.93	89.90	1.1895E-001		3.9617E-002
	614.37	90.40	1.2898E-001		1.5923E-002
	722.95	90.50	1.2319E-001		-2.4229E-002
Sb-125	176.33	6.89	2.2184E+000	3.65E-001	-1.4040E-001
	427.89	29.33	3.6469E-001		-1.2844E-001
	463.38	10.35	1.0815E+000		5.8192E-001
	600.56	17.80	5.4441E-001		1.9795E-001
	606.64	5.02	2.5777E+000		3.5684E+000
	635.90	11.32	8.9382E-001		3.7127E-001
Cs-134	563.23	8.38	1.2597E+000	1.22E-001	4.3287E-001
	569.32	15.43	6.8932E-001		1.5204E-001
	604.70	97.60	1.2795E-001		-2.1009E-002
	795.84	85.40	1.2215E-001		7.2685E-002
	801.93	8.73	1.1205E+000		-2.9530E-001
Cs-137	661.65	85.12	1.2573E-001	1.26E-001	1.0171E-001
Eu-152	121.78	28.40	6.9259E-001	3.67E-001	3.7440E-001
	244.69	7.49	1.7994E+000		-1.2751E-001
	344.27	26.50	4.3189E-001		-4.3361E-001
	778.89	12.74	7.5257E-001		-9.2005E-001
	867.32	4.16	2.1319E+000		-1.6668E+000
	964.01	14.40	8.5850E-001		-2.5194E-001
	1085.78	10.00	9.1634E-001		1.2928E-001
	1112.02	13.30	7.4904E-001		-4.2813E-001
	1407.95	20.70	3.6680E-001		1.8885E-001
Eu-154	123.07	40.50	4.7923E-001	2.38E-001	1.5139E-001
	247.94	6.60	1.9473E+000		-7.6300E-001
	591.81	4.83	2.1586E+000		1.4213E-001
	723.30	19.70	5.7642E-001		4.0253E-001
	756.87	4.33	2.2646E+000		-1.8025E+000
	873.19	11.50	7.6116E-001		3.0086E-002
	996.32	10.30	8.8073E-001		-5.4500E-001
	1004.76	17.90	4.8322E-001		3.0957E-003
	1274.45	35.50	2.3782E-001		-2.1676E-001
Eu-155	86.54	30.90	9.4166E-001	9.42E-001	-7.5933E-002
	105.31	20.70	1.1278E+000		5.0340E-001
Am-241	59.54	35.90	1.1892E+000	1.19E+000	-7.8597E-001
Cm-243	228.19	10.56	1.2556E+000	9.09E-001	-6.0092E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.0911E-001	9.09E-001	-7.7132E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/16/2006 3:21:00 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-02-179-F-
Sample Title: OOL-09-02-179-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/16/2006 3:10:58 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-02-179-F-
Title: OOL-09-02-179-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	304	291.69	72.75	0.93	3.09E+002	60.27	1.23E+003
m	2	284-	304	300.41	74.93	0.93	5.70E+002	72.74	1.25E+003
	3	347-	358	350.28	87.40	0.63	1.37E+002	99.36	9.65E+002
	4	832-	841	836.54	209.00	0.39	5.90E+001	45.77	2.15E+002
	5	948-	961	954.24	238.44	1.09	2.51E+002	72.34	4.00E+002
	6	1174-	1188	1180.61	295.05	0.55	7.09E+001	51.48	2.14E+002
	7	1346-	1359	1353.11	338.19	1.20	1.21E+002	44.30	1.42E+002
	8	1397-	1412	1407.63	351.82	1.34	1.63E+002	51.62	1.74E+002
	9	2326-	2342	2332.56	583.12	1.34	1.74E+002	43.13	9.88E+001
	10	2429-	2446	2437.16	609.28	1.01	1.94E+002	40.41	7.11E+001
	11	2903-	2916	2909.62	727.43	0.40	6.27E+001	26.32	4.23E+001
	12	3634-	3656	3644.44	911.19	1.73	1.98E+002	40.01	5.65E+001
	13	3869-	3884	3875.82	969.05	1.22	7.97E+001	31.73	6.03E+001
	14	4476-	4489	4482.32	1120.73	0.68	4.56E+001	25.09	4.24E+001
	15	5118-	5129	5123.58	1281.09	0.31	1.87E+001	15.93	1.83E+001
	16	5502-	5513	5507.79	1377.17	0.43	1.27E+001	14.52	1.53E+001
	17	5832-	5859	5844.91	1461.47	2.01	1.25E+003	73.32	3.40E+001
	18	7054-	7070	7061.48	1765.71	0.58	5.20E+001	17.74	9.02E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.985	1460.81*	10.67	2.09505E+001	2.09513E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.94758E-001	8.24670E-002
		860.37	12.46		
Bi-212	0.998	727.17*	11.80	8.04378E-001	3.50698E-001
Pb-212	0.676	74.81* @	10.70	8.15533E+000	1.90726E+000
		77.11 @	18.00		
		87.30* @	8.00	2.11541E+000	1.59312E+000
		238.63*	44.60	6.10108E-001	2.00169E-001
Bi-214	0.988	609.31*	46.30	6.05389E-001	1.46559E-001
		1120.29*	15.10	5.08738E-001	2.84844E-001
		1764.49*	15.80	6.10767E-001	2.17251E-001
PB-214	0.669	74.82* @	6.21	1.40519E+001	3.44093E+000
		77.11 @	10.50		
		87.30* @	4.67	3.62383E+000	2.74281E+000
		241.98	7.49		
		295.21*	19.20	4.25642E-001	3.17086E-001
		351.92*	37.20	5.30813E-001	1.90080E-001
Ac-228	1.000	338.32*	11.40	1.27553E+000	5.06637E-001
		911.07*	27.70	1.13582E+000	2.63630E-001
		969.11*	16.60	7.74620E-001	3.18995E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
	K-40		0.985	2.095049E+001	2.095134E+000
X	Eu-155		0.318		
	TL-208		0.471	2.947575E-001	8.246699E-002
	Bi-212		0.998	8.043777E-001	3.506977E-001
	Pb-212	@	0.676	6.101075E-001	2.001686E-001
	Bi-214		0.988	5.919345E-001	1.117558E-001
	PB-214	@	0.669	5.030103E-001	1.630310E-001
	Ac-228		1.000	1.028914E+000	1.886071E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.75	5.1437E-001	19.53
4	209.00	9.8333E-002	77.57
15	1281.09	3.1216E-002	85.08
16	1377.17	2.1220E-002	114.05

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0376E-001	7.51E-002	-6.5615E-004
	1332.49	100.00	7.5122E-002		-5.1785E-002
Nb-94	702.63	100.00	1.0202E-001	8.68E-002	8.6380E-002
	871.10	100.00	8.6849E-002		2.7351E-002
Ag-108m	79.20	7.10	4.5190E+000	1.21E-001	-1.5895E+001
	433.93	89.90	1.2126E-001		-1.3038E-002
	614.37	90.40	1.3487E-001		2.1139E-002
	722.95	90.50	1.2140E-001		-9.0101E-002
Sb-125	176.33	6.89	2.1618E+000	3.80E-001	7.7673E-001
	427.89	29.33	3.7971E-001		3.0902E-001
	463.38	10.35	1.0798E+000		-5.6060E-002
	600.56	17.80	5.3347E-001		-2.3756E-001
	606.64	5.02	2.6518E+000		-5.7664E-001
	635.90	11.32	8.5708E-001		8.5283E-002
Cs-134	563.23	8.38	1.2945E+000	1.15E-001	5.8965E-001
	569.32	15.43	6.9341E-001		4.3220E-001
	604.70	97.60	1.2756E-001		-1.9869E-002
	795.84	85.40	1.1533E-001		-4.6138E-003
	801.93	8.73	1.0487E+000		-2.2667E+000
Cs-137	661.65	85.12	1.2843E-001	1.28E-001	1.3008E-001
Eu-152	121.78	28.40	6.7554E-001	3.64E-001	1.2858E-001
	244.69	7.49	1.8446E+000		8.0614E-001
	344.27	26.50	4.3928E-001		-2.1549E-001
	778.89	12.74	7.4600E-001		-6.3501E-001
	867.32	4.16	2.0859E+000		-1.3930E+000
	964.01	14.40	8.4197E-001		1.5074E-001
	1085.78	10.00	9.8294E-001		4.3813E-001
	1112.02	13.30	7.1439E-001		3.4087E-001
	1407.95	20.70	3.6447E-001		1.4740E-001
Eu-154	123.07	40.50	4.6716E-001	2.70E-001	-4.6354E-001
	247.94	6.60	1.9205E+000		-1.4267E-001
	591.81	4.83	2.0649E+000		6.6707E-001
	723.30	19.70	5.6365E-001		-4.1205E-001
	756.87	4.33	2.3377E+000		1.2247E+000
	873.19	11.50	7.3564E-001		-9.6719E-002
	996.32	10.30	8.9034E-001		-1.3109E-001
	1004.76	17.90	5.1357E-001		-5.0371E-001
	1274.45	35.50	2.7021E-001		2.2559E-001
Eu-155	86.54*	30.90	6.6131E-001	6.61E-001	5.4768E-001
	105.31	20.70	1.1122E+000		-1.0025E+000
Am-241	59.54	35.90	1.1581E+000	1.16E+000	-2.2495E-002
Cm-243	228.19	10.56	1.2502E+000	9.25E-001	-1.0513E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.2492E-001	9.25E-001	2.7594E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 7:00:30 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-101-F-G
Sample ID: OOL-09-03-101-F
Sample Title: OOL-09-03-101-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 2:41:41 PM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-101-F-G
Log Number: OOL-09-03-101-F
Title: OOL-09-03-101-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	308	300.90	75.05	1.03	2.66E+002	110.53	1.05E+003
2	949-	959	954.61	238.53	1.52	9.46E+001	36.79	1.08E+002
3	2324-	2341	2331.52	582.86	1.38	8.74E+001	27.47	3.36E+001
4	2427-	2442	2435.34	608.83	1.01	6.61E+001	27.15	4.19E+001
5	3637-	3651	3643.48	910.95	0.71	4.98E+001	22.19	2.72E+001
6	5323-	5334	5328.96	1332.45	0.30	1.85E+001	14.19	1.35E+001
7	5830-	5854	5841.97	1460.74	1.84	3.85E+002	41.49	1.55E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-101-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	2.04976E+001	2.76489E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.69112E-001	1.59935E-001
		860.37	12.46		
Pb-212	0.524	74.81* @	10.70	1.30985E+001	6.02012E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.74760E-001	3.24819E-001
Bi-214	0.394	609.31*	46.30	6.52315E-001	2.80054E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-101-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	1.000	2.049760E+001	2.764890E+000
TL-208	0.471	4.691117E-001	1.599346E-001
Pb-212 @	0.524	7.747600E-001	3.248187E-001
Bi-214	0.394	6.523148E-001	2.800541E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
5	910.95	8.3068E-002	44.53
6	1332.45	3.0807E-002	76.74

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-101-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.3149E-001	2.31E-001	-4.3559E-003
	1332.49	100.00	2.3218E-001		3.1369E-001
Nb-94	702.63	100.00	2.5074E-001	2.42E-001	4.7501E-002
	871.10	100.00	2.4182E-001		3.1343E-002
Ag-108m	79.20	7.10	1.2442E+001	2.74E-001	-7.9384E+000
	433.93	89.90	2.7768E-001		-1.1917E-001
	614.37	90.40	2.7417E-001		-1.0222E-001
	722.95	90.50	2.8423E-001		2.9679E-001
Sb-125	176.33	6.89	5.0831E+000	8.45E-001	1.7274E+000
	427.89	29.33	8.4535E-001		2.4844E-001
	463.38	10.35	2.4381E+000		1.0930E+000
	600.56	17.80	1.4524E+000		-3.3165E-003
	606.64	5.02	5.9243E+000		4.6747E+000
	635.90	11.32	2.1035E+000		5.1245E-001
Cs-134	563.23	8.38	2.8570E+000	2.90E-001	8.2966E-002
	569.32	15.43	1.4990E+000		-3.2201E-001
	604.70	97.60	3.0768E-001		-3.0224E-003
	795.84	85.40	2.8979E-001		3.5756E-001
	801.93	8.73	2.5075E+000		-1.6345E+000
Cs-137	661.65	85.12	2.6763E-001	2.68E-001	-1.7836E-002
Eu-152	121.78	28.40	1.7318E+000	7.21E-001	3.1105E-001
	244.69	7.49	4.1365E+000		2.6572E+000
	344.27	26.50	9.1701E-001		-7.3028E-001
	778.89	12.74	1.8739E+000		3.9635E-001
	867.32	4.16	5.9719E+000		-6.2144E-001
	964.01	14.40	1.9238E+000		1.0879E+000
	1085.78	10.00	2.1697E+000		-6.6340E-001
	1112.02	13.30	1.5509E+000		-8.8110E-001
	1407.95	20.70	7.2052E-001		-9.6121E-001
Eu-154	123.07	40.50	1.1688E+000	5.49E-001	-8.5169E-001
	247.94	6.60	4.3859E+000		2.8741E+000
	591.81	4.83	5.2942E+000		5.0492E+000
	723.30	19.70	1.2956E+000		5.1446E-001
	756.87	4.33	5.2991E+000		2.3665E+000
	873.19	11.50	1.9902E+000		2.4822E-001
	996.32	10.30	2.1308E+000		6.3345E-002
	1004.76	17.90	1.2975E+000		2.5731E-001
	1274.45	35.50	5.4855E-001		-6.5670E-001
Eu-155	86.54	30.90	2.6478E+000	2.65E+000	2.6769E+000
	105.31	20.70	2.9237E+000		-1.6411E+000
Am-241	59.54	35.90	3.6075E+000	3.61E+000	-9.3763E-001
Cm-243	228.19	10.56	2.6372E+000	2.03E+000	7.7265E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0292E+000	2.03E+000	-7.2591E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 7:01:03 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-102-F-G
Sample ID: OOL-09-03-102-F
Sample Title: OOL-09-03-102-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 3:00:05 PM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-102-F-G
Log Number: OOL-09-03-102-F
Title: OOL-09-03-102-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	308	291.93	72.81	1.12	1.75E+002	51.55	7.42E+002
m	2	288-	308	300.48	74.95	1.13	3.98E+002	59.14	1.11E+003
	3	944-	960	953.74	238.31	1.28	1.29E+002	45.82	1.32E+002
	4	1399-	1412	1406.84	351.62	0.62	5.23E+001	28.47	5.77E+001
	5	2326-	2339	2331.77	582.93	0.33	4.64E+001	25.94	4.66E+001
	6	3636-	3649	3643.01	910.83	0.62	4.55E+001	20.83	2.45E+001
	7	5322-	5336	5328.77	1332.40	0.40	3.87E+001	15.85	9.29E+000
	8	5830-	5854	5842.41	1460.85	1.96	3.90E+002	41.16	1.25E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-102-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	2.07630E+001	2.76420E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.48905E-001	1.43030E-001
		860.37	12.46		
Pb-212	0.523	74.81* @	10.70	1.96293E+001	4.82920E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.05214E+000	4.09769E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-102-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	1.000	2.076300E+001	2.764201E+000
TL-208	0.472	2.489048E-001	1.430296E-001
Pb-212 @	0.523	1.052136E+000	4.097685E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	2.9174E-001	29.45
4	351.62	8.7201E-002	54.42
6	910.83	7.5833E-002	45.79
7	1332.40	6.4514E-002	40.95

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-102-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.3149E-001	2.31E-001	2.0272E-001
	1332.49	100.00	2.4129E-001		3.4715E-001
Nb-94	702.63	100.00	2.3167E-001	2.21E-001	-1.7558E-001
	871.10	100.00	2.2129E-001		1.0147E-001
Ag-108m	79.20	7.10	1.2589E+001	2.69E-001	1.2868E+000
	433.93	89.90	2.8206E-001		1.8450E-001
	614.37	90.40	2.8257E-001		-3.1586E-001
	722.95	90.50	2.6944E-001		2.0852E-001
Sb-125	176.33	6.89	5.0072E+000	8.82E-001	-1.3271E+000
	427.89	29.33	8.8241E-001		5.1883E-001
	463.38	10.35	2.5306E+000		3.4622E-002
	600.56	17.80	1.3291E+000		-1.8093E-001
	606.64	5.02	5.6330E+000		3.7573E+000
	635.90	11.32	2.0761E+000		-3.1107E-002
Cs-134	563.23	8.38	2.9904E+000	2.56E-001	1.5260E+000
	569.32	15.43	1.5435E+000		-6.8639E-001
	604.70	97.60	2.8168E-001		1.0596E-001
	795.84	85.40	2.5594E-001		-3.9729E-002
	801.93	8.73	2.5075E+000		3.0415E-001
Cs-137	661.65	85.12	2.8388E-001	2.84E-001	5.3509E-002
Eu-152	121.78	28.40	1.7240E+000	7.68E-001	-7.0886E-001
	244.69	7.49	4.0973E+000		7.0570E-001
	344.27	26.50	9.1976E-001		-1.7194E-001
	778.89	12.74	1.8023E+000		-1.1363E+000
	867.32	4.16	5.4351E+000		1.0909E+000
	964.01	14.40	1.9889E+000		2.9641E+000
	1085.78	10.00	2.1697E+000		-2.4780E+000
	1112.02	13.30	1.6441E+000		-1.3962E+000
	1407.95	20.70	7.6849E-001		-5.7248E-002
Eu-154	123.07	40.50	1.1885E+000	6.21E-001	-6.2576E-002
	247.94	6.60	4.5880E+000		6.5487E-001
	591.81	4.83	5.0015E+000		1.8746E-001
	723.30	19.70	1.2486E+000		8.0462E-001
	756.87	4.33	5.0257E+000		1.1181E+000
	873.19	11.50	1.8577E+000		3.8034E-001
	996.32	10.30	2.1443E+000		7.4800E-002
	1004.76	17.90	1.2217E+000		5.0541E-001
	1274.45	35.50	6.2091E-001		5.8315E-001
Eu-155	86.54	30.90	2.6619E+000	2.66E+000	5.3996E+000
	105.31	20.70	2.9457E+000		-9.5730E-001
Am-241	59.54	35.90	3.6027E+000	3.60E+000	-8.7909E-001
Cm-243	228.19	10.56	2.5509E+000	1.85E+000	-2.6185E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.8522E+000	1.85E+000	-1.4283E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 6:54:32 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-103-F-G
Sample ID: OOL-09-03-103-F
Sample Title: OOL-09-03-103-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 3:13:56 PM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-103-F-G
Log Number: OOL-09-03-103-F
Title: OOL-09-03-103-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	292.06	72.84	1.00	2.23E+002	51.05	8.37E+002
m	2	286-	306	300.36	74.92	1.00	3.07E+002	56.00	9.35E+002
	3	336-	347	339.68	84.75	0.87	1.15E+002	85.38	7.08E+002
	4	949-	962	953.84	238.34	1.00	9.15E+001	43.71	1.47E+002
	5	1402-	1413	1407.86	351.88	0.50	2.37E+001	27.75	7.03E+001
	6	2032-	2049	2043.06	510.73	0.35	8.00E+001	37.46	8.70E+001
	7	2428-	2446	2435.65	608.90	1.13	8.73E+001	27.58	3.17E+001
	8	5829-	5855	5842.80	1460.95	1.98	3.85E+002	40.60	1.01E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-103-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.997	511.00*	100.00	3.49068E-001	1.70665E-001
K-40	0.999	1460.81*	10.67	2.05197E+001	2.72838E+000
Pb-212	0.523	74.81* @	10.70	1.51718E+001	4.06082E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.48949E-001	3.76600E-001
Bi-214	0.395	609.31*	46.30	8.61487E-001	2.92697E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-103-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.997	3.490682E-001	1.706651E-001
K-40	0.999	2.051974E+001	2.728382E+000
Pb-212 @	0.523	7.489489E-001	3.765999E-001
Bi-214	0.395	8.614873E-001	2.926974E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.84	3.7244E-001	22.84
3	84.75	1.9116E-001	74.44
5	351.88	3.9424E-002	117.31

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-103-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.2555E-001	2.26E-001	4.2488E-002
	1332.49	100.00	2.3678E-001		2.2821E-001
Nb-94	702.63	100.00	2.6264E-001	2.38E-001	-1.6694E-002
	871.10	100.00	2.3834E-001		-2.1052E-001
Ag-108m	79.20	7.10	1.2564E+001	2.83E-001	-5.6991E+000
	433.93	89.90	2.9396E-001		1.0893E-001
	614.37	90.40	2.8257E-001		5.7178E-003
	722.95	90.50	2.9294E-001		-1.6801E-001
Sb-125	176.33	6.89	5.0344E+000	8.37E-001	5.6678E+000
	427.89	29.33	8.3718E-001		-3.4456E-001
	463.38	10.35	2.4303E+000		-5.5518E-001
	600.56	17.80	1.4108E+000		7.5730E-001
	606.64	5.02	6.0027E+000		8.3658E-001
	635.90	11.32	2.0012E+000		-9.4840E-001
Cs-134	563.23	8.38	2.9577E+000	2.95E-001	-4.9056E-001
	569.32	15.43	1.4990E+000		-1.2733E+000
	604.70	97.60	2.9456E-001		-6.8470E-003
	795.84	85.40	3.0099E-001		2.4114E-001
	801.93	8.73	2.8391E+000		1.5979E+000
Cs-137	661.65	85.12	3.2655E-001	3.27E-001	-1.0694E-001
Eu-152	121.78	28.40	1.7887E+000	7.33E-001	5.5448E-001
	244.69	7.49	4.1300E+000		-6.6279E-001
	344.27	26.50	1.0260E+000		-1.9299E-001
	778.89	12.74	1.8294E+000		-8.6980E-001
	867.32	4.16	6.1049E+000		6.2121E-001
	964.01	14.40	1.9311E+000		1.6013E-001
	1085.78	10.00	2.4089E+000		-1.9234E-001
	1112.02	13.30	1.7636E+000		-2.3365E+000
	1407.95	20.70	7.3284E-001		1.6659E-001
Eu-154	123.07	40.50	1.2345E+000	6.77E-001	-4.8360E-001
	247.94	6.60	4.4491E+000		-2.6516E+000
	591.81	4.83	5.4067E+000		3.2791E+000
	723.30	19.70	1.3409E+000		-4.1639E-001
	756.87	4.33	5.2991E+000		-5.8240E-001
	873.19	11.50	2.1038E+000		1.7281E+000
	996.32	10.30	2.4201E+000		3.0249E+000
	1004.76	17.90	1.3758E+000		3.8416E-001
	1274.45	35.50	6.7698E-001		2.7850E-001
Eu-155	86.54	30.90	2.6236E+000	2.62E+000	2.9491E+000
	105.31	20.70	2.9967E+000		-2.0585E-002
Am-241	59.54	35.90	3.6424E+000	3.64E+000	-1.2387E+000
Cm-243	228.19	10.56	2.8982E+000	2.09E+000	1.3374E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0926E+000	2.09E+000	3.9911E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 6:55:06 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-104-F-G
Sample ID: OOL-09-03-104-F
Sample Title: OOL-09-03-104-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 3:29:10 PM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-104-F-G
Log Number: OOL-09-03-104-F
Title: OOL-09-03-104-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	307	300.27	74.90	1.08	3.22E+002	100.58	9.14E+002
2	945-	961	954.55	238.52	1.18	7.08E+001	49.86	1.83E+002
3	2032-	2052	2043.42	510.82	1.67	1.07E+002	35.89	6.30E+001
4	2325-	2337	2330.93	582.72	0.76	4.47E+001	27.10	5.43E+001
5	3637-	3653	3644.01	911.08	0.51	5.48E+001	25.64	3.72E+001
6	3868-	3879	3873.51	968.48	0.44	2.86E+001	16.35	1.64E+001
7	5324-	5337	5330.23	1332.77	0.36	3.33E+001	18.46	1.97E+001
8	5831-	5853	5842.49	1460.87	2.00	3.41E+002	40.63	2.29E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-104-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*	100.00	4.67049E-001	1.69827E-001
K-40	1.000	1460.81*	10.67	1.81854E+001	2.61889E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	2.16226E+000	8.05821E-001
		583.14*	84.20	2.40018E-001	1.48833E-001
		860.37	12.46		
Pb-212	0.524	74.81* @	10.70	1.58944E+001	5.86459E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.79489E-001	4.18261E-001
Ac-228	0.636	338.32	11.40		
		911.07*	27.70	9.87397E-001	4.75512E-001
		969.11*	16.60	8.77297E-001	5.09721E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-104-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.999	4.152051E-001	1.728346E-001
K-40	1.000	1.818544E+001	2.618887E+000
TL-208	0.749	2.400176E-001	1.486275E-001
Pb-212 @	0.524	5.794892E-001	4.182611E-001
Ac-228	0.636	9.361655E-001	3.477032E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
7	1332.77	5.5550E-002	55.37

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-104-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.4011E-001	2.40E-001	-8.2531E-002
	1332.49	100.00	2.6666E-001		2.9515E-001
Nb-94	702.63	100.00	2.5276E-001	2.30E-001	-7.7066E-002
	871.10	100.00	2.2998E-001		-1.8162E-001
Ag-108m	79.20	7.10	1.2643E+001	2.73E-001	-1.3096E+001
	433.93	89.90	2.7412E-001		2.5054E-001
	614.37	90.40	3.0918E-001		-3.7324E-001
	722.95	90.50	2.7293E-001		-8.2563E-003
Sb-125	176.33	6.89	4.9578E+000	8.04E-001	-1.2095E-001
	427.89	29.33	8.0366E-001		-1.0470E-001
	463.38	10.35	2.4925E+000		-4.7872E-001
	600.56	17.80	1.4421E+000		-1.0447E+000
	606.64	5.02	5.9086E+000		4.1615E+000
	635.90	11.32	2.1921E+000		4.2925E-001
Cs-134	563.23	8.38	2.9686E+000	2.69E-001	1.4161E+000
	569.32	15.43	1.5435E+000		2.2202E-001
	604.70	97.60	3.0365E-001		3.7535E-001
	795.84	85.40	2.6865E-001		-4.1456E-002
	801.93	8.73	2.4789E+000		-3.9320E+000
Cs-137	661.65	85.12	2.7651E-001	2.77E-001	5.5117E-002
Eu-152	121.78	28.40	1.7868E+000	8.24E-001	-4.6056E-001
	244.69	7.49	3.9160E+000		-5.8929E-001
	344.27	26.50	9.8341E-001		6.3000E-001
	778.89	12.74	1.8651E+000		-1.5379E+000
	867.32	4.16	5.4942E+000		3.6603E+000
	964.01	14.40	1.9164E+000		4.5444E-001
	1085.78	10.00	2.2714E+000		-1.1093E+000
	1112.02	13.30	1.6327E+000		-2.1353E+000
	1407.95	20.70	8.2416E-001		-2.8624E-001
Eu-154	123.07	40.50	1.2438E+000	6.03E-001	-1.7308E-002
	247.94	6.60	4.3055E+000		2.3081E+000
	591.81	4.83	5.4067E+000		2.9821E+000
	723.30	19.70	1.2539E+000		7.7675E-001
	756.87	4.33	5.5835E+000		-3.3247E+000
	873.19	11.50	2.1038E+000		2.1467E-001
	996.32	10.30	2.2614E+000		1.1318E+000
	1004.76	17.90	1.1899E+000		1.8911E-001
	1274.45	35.50	6.0253E-001		-1.3477E-001
Eu-155	86.54	30.90	2.6035E+000	2.60E+000	1.1979E+000
	105.31	20.70	2.9431E+000		-1.6409E+000
Am-241	59.54	35.90	3.6268E+000	3.63E+000	2.4639E+000
Cm-243	228.19	10.56	2.9297E+000	2.08E+000	-9.9574E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0770E+000	2.08E+000	1.6176E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 6:55:39 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-105-F-G
Sample ID: OOL-09-03-105-F
Sample Title: OOL-09-03-105-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 3:44:33 PM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-105-F-G
Log Number: OOL-09-03-105-F
Title: OOL-09-03-105-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	291.58	72.72	1.07	1.75E+002	48.34	8.38E+002
m	2	284-	306	300.19	74.88	1.07	3.58E+002	57.62	9.54E+002
	3	552-	567	559.19	139.65	0.92	8.30E+001	62.86	3.14E+002
M	4	931-	959	935.17	233.67	1.08	2.84E+001	16.82	6.28E+001
m	5	931-	959	954.21	238.43	1.08	9.37E+001	25.64	1.20E+002
	6	2324-	2342	2331.93	582.96	0.28	5.75E+001	29.61	4.85E+001
	7	2427-	2443	2435.78	608.94	1.23	6.77E+001	28.14	4.43E+001
	8	3638-	3651	3643.42	910.94	0.78	4.12E+001	21.05	2.68E+001
	9	5830-	5856	5842.31	1460.83	1.90	3.98E+002	41.72	1.29E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-105-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	2.12204E+001	2.81033E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.08391E-001	1.64072E-001
		860.37	12.46		
Pb-212	0.524	74.81* @	10.70	1.77151E+001	4.49051E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.67374E-001	2.41963E-001
Bi-214	0.396	609.31*	46.30	6.68383E-001	2.90013E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-105-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	1.000	2.122041E+001	2.810335E+000
TL-208	0.472	3.083911E-001	1.640715E-001
Pb-212 @	0.524	7.673737E-001	2.419633E-001
Bi-214	0.396	6.683825E-001	2.900135E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.72	2.9191E-001	27.60
3	139.65	1.3827E-001	75.77
M 4	233.67	4.7340E-002	59.20
8	910.94	6.8676E-002	51.09

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-105-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.3149E-001	2.31E-001	-1.0952E-001
	1332.49	100.00	2.3062E-001		2.2327E-002
Nb-94	702.63	100.00	2.5577E-001	2.20E-001	-5.9486E-002
	871.10	100.00	2.2001E-001		-4.8894E-003
Ag-108m	79.20	7.10	1.2379E+001	2.78E-001	-1.2556E+001
	433.93	89.90	2.7768E-001		-3.6595E-003
	614.37	90.40	2.8972E-001		-5.4640E-002
	722.95	90.50	2.8862E-001		1.3879E-001
Sb-125	176.33	6.89	4.7027E+000	7.66E-001	1.5025E+000
	427.89	29.33	7.6559E-001		1.6559E-001
	463.38	10.35	2.3985E+000		1.0596E+000
	600.56	17.80	1.3064E+000		-1.0841E+000
	606.64	5.02	6.0182E+000		8.4356E+000
	635.90	11.32	2.0107E+000		1.3578E+000
Cs-134	563.23	8.38	2.9022E+000	2.82E-001	-4.2013E-001
	569.32	15.43	1.5373E+000		-6.5511E-001
	604.70	97.60	2.9790E-001		-3.4736E-002
	795.84	85.40	2.8206E-001		1.9764E-001
	801.93	8.73	2.6721E+000		-1.6123E+000
Cs-137	661.65	85.12	2.9574E-001	2.96E-001	1.1349E-001
Eu-152	121.78	28.40	1.7377E+000	7.80E-001	1.1248E+000
	244.69	7.49	3.7399E+000		2.6929E-001
	344.27	26.50	9.2251E-001		-4.5647E-001
	778.89	12.74	1.7839E+000		-1.3135E+000
	867.32	4.16	5.7243E+000		4.7733E+000
	964.01	14.40	1.8638E+000		4.6185E-001
	1085.78	10.00	2.3274E+000		-1.4025E-001
	1112.02	13.30	1.6776E+000		-9.9688E-001
	1407.95	20.70	7.7998E-001		-2.5458E-001
Eu-154	123.07	40.50	1.1941E+000	6.30E-001	-1.2201E-001
	247.94	6.60	4.1652E+000		1.7368E+000
	591.81	4.83	4.8999E+000		5.2825E-001
	723.30	19.70	1.3310E+000		5.8574E-001
	756.87	4.33	4.6751E+000		-9.6200E-001
	873.19	11.50	1.7756E+000		-2.4266E+000
	996.32	10.30	2.2231E+000		1.5882E+000
	1004.76	17.90	1.2295E+000		-5.1374E-001
	1274.45	35.50	6.2988E-001		3.8935E-001
Eu-155	86.54	30.90	2.5967E+000	2.60E+000	2.4006E+000
	105.31	20.70	2.9815E+000		1.7256E+000
Am-241	59.54	35.90	3.5465E+000	3.55E+000	-1.9407E+000
Cm-243	228.19	10.56	2.6322E+000	1.99E+000	7.7650E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.9927E+000	1.99E+000	-3.6620E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 6:56:17 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-106-F-G
Sample ID: OOL-09-03-106-F
Sample Title: OOL-09-03-106-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 3:59:58 PM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-106-F-G
Log Number: OOL-09-03-106-F
Title: OOL-09-03-106-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	307	300.22	74.88	1.25	2.46E+002	97.33	8.77E+002
2	330-	346	338.27	84.40	0.78	1.73E+002	107.57	9.01E+002
3	947-	959	953.72	238.31	0.70	7.63E+001	38.96	1.21E+002
4	1398-	1414	1407.66	351.83	1.33	7.46E+001	33.88	7.14E+001
5	2326-	2340	2330.90	582.71	1.29	6.92E+001	24.03	2.78E+001
6	2432-	2443	2436.88	609.21	0.49	4.79E+001	21.97	2.91E+001
7	3870-	3881	3875.08	968.87	0.78	1.98E+001	17.12	2.22E+001
8	5323-	5335	5328.74	1332.39	0.92	2.38E+001	15.35	1.42E+001
9	5831-	5855	5843.21	1461.05	1.51	3.66E+002	38.78	6.25E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-106-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.998	1460.81*	10.67	1.94975E+001	2.60126E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.71473E-001	1.38001E-001
		860.37	12.46		
Pb-212	0.523	74.81* @	10.70	1.21591E+001	5.36758E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.24879E-001	3.33631E-001
Bi-214	0.399	609.31*	46.30	4.73027E-001	2.24800E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-106-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.998	1.949754E+001	2.601258E+000
TL-208	0.469	3.714728E-001	1.380007E-001
Pb-212 @	0.523	6.248787E-001	3.336305E-001
Bi-214	0.399	4.730265E-001	2.248005E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.40	2.8813E-001	62.23
4	351.83	1.2426E-001	45.45
7	968.87	3.2996E-002	86.46
8	1332.39	3.9715E-002	64.42

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-106-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.4977E-001	2.34E-001	1.4442E-001
	1332.49	100.00	2.3372E-001		2.5030E-001
Nb-94	702.63	100.00	2.3496E-001	2.19E-001	-7.4881E-002
	871.10	100.00	2.1873E-001		-2.7219E-001
Ag-108m	79.20	7.10	1.2366E+001	2.49E-001	-4.4780E+000
	433.93	89.90	2.4870E-001		3.2798E-002
	614.37	90.40	2.6986E-001		-1.3393E-001
	722.95	90.50	2.7976E-001		2.3597E-001
Sb-125	176.33	6.89	5.1631E+000	7.98E-001	3.9550E+000
	427.89	29.33	7.9792E-001		-2.9580E-001
	463.38	10.35	2.5306E+000		2.1607E+000
	600.56	17.80	1.2111E+000		-1.0165E+000
	606.64	5.02	5.4641E+000		7.6925E+000
	635.90	11.32	2.1304E+000		2.2272E-001
Cs-134	563.23	8.38	2.8341E+000	2.53E-001	1.6487E+000
	569.32	15.43	1.4730E+000		-3.9031E-001
	604.70	97.60	2.7456E-001		-1.4762E-001
	795.84	85.40	2.5302E-001		7.2521E-003
	801.93	8.73	2.5636E+000		-7.5051E-001
Cs-137	661.65	85.12	2.8987E-001	2.90E-001	1.5731E-002
Eu-152	121.78	28.40	1.7061E+000	7.91E-001	-7.3507E-001
	244.69	7.49	3.8465E+000		-1.3183E+000
	344.27	26.50	9.7051E-001		-4.4039E-001
	778.89	12.74	1.8114E+000		1.0029E+000
	867.32	4.16	5.3451E+000		8.9291E-001
	964.01	14.40	1.8017E+000		-1.2044E+000
	1085.78	10.00	2.2714E+000		-1.0195E+000
	1112.02	13.30	1.8253E+000		-1.2335E+000
	1407.95	20.70	7.9128E-001		4.9751E-001
Eu-154	123.07	40.50	1.2031E+000	6.03E-001	2.7778E-001
	247.94	6.60	4.2647E+000		-2.8001E+000
	591.81	4.83	5.0813E+000		4.7199E+000
	723.30	19.70	1.2592E+000		1.2069E-002
	756.87	4.33	5.4043E+000		-2.7157E+000
	873.19	11.50	1.9902E+000		3.0030E-001
	996.32	10.30	2.0900E+000		4.9498E-001
	1004.76	17.90	1.2602E+000		6.5801E-001
	1274.45	35.50	6.0253E-001		5.2095E-001
Eu-155	86.54	30.90	2.6178E+000	2.62E+000	6.5050E-001
	105.31	20.70	2.9954E+000		1.2024E-001
Am-241	59.54	35.90	3.5070E+000	3.51E+000	-1.2059E+000
Cm-243	228.19	10.56	2.5145E+000	1.92E+000	-2.0288E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.9216E+000	1.92E+000	-5.0476E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/14/2006 10:56:09 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: OOL-09-03-107-F-
Sample Title: OOL-09-03-107-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 10:46:06 AM
Live Time: 600.0 seconds
Real Time: 600.7 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: YEL7810
Log Number: OOL-09-03-107-F-
Title: OOL-09-03-107-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	297-	306	301.88	75.49	0.61	1.41E+002	79.71	6.69E+002
2	2440-	2453	2447.47	611.94	1.07	3.44E+001	23.29	3.86E+001
3	3656-	3667	3661.46	915.47	0.44	2.78E+001	20.28	3.12E+001
4	5348-	5360	5353.70	1338.57	1.67	2.53E+001	17.51	2.07E+001
5	5856-	5879	5868.89	1467.37	1.16	2.26E+002	32.39	1.18E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	75.49	2.3525E-001	56.47
2	611.94	5.7272E-002	67.77
3	915.47	4.6292E-002	73.02
4	1338.57	4.2246E-002	69.08
5	1467.37	3.7696E-001	14.32

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.0832E-001	9.36E-002	7.9239E-002
	1332.49	100.00	9.3624E-002		-1.1151E-001
Nb-94	702.63	100.00	1.0107E-001	9.33E-002	-1.0261E-001
	871.10	100.00	9.3314E-002		-3.8056E-002
Ag-108m	79.20	7.10	8.1241E+000	1.06E-001	-9.6969E+000
	433.93	89.90	1.0567E-001		-7.7637E-002
	614.37	90.40	1.2263E-001		9.0098E-002
	722.95	90.50	1.0882E-001		-2.7330E-002
Sb-125	176.33	6.89	2.0674E+000	3.43E-001	-9.9694E-001
	427.89	29.33	3.4268E-001		2.3702E-002
	463.38	10.35	1.0021E+000		-1.8854E-002
	600.56	17.80	5.7864E-001		-1.5412E-001
	606.64	5.02	2.1449E+000		-5.8567E-001
	635.90	11.32	9.0533E-001		3.0892E-001
Cs-134	563.23	8.38	1.2075E+000	1.06E-001	4.3988E-001
	569.32	15.43	6.3837E-001		-6.1912E-001
	604.70	97.60	1.0622E-001		-3.5307E-002
	795.84	85.40	1.2365E-001		1.5053E-001
	801.93	8.73	1.0320E+000		-6.6667E-001
Cs-137	661.65	85.12	1.2378E-001	1.24E-001	-5.8230E-003
Eu-152	121.78	28.40	7.7164E-001	3.25E-001	-2.8236E-001
	244.69	7.49	1.6951E+000		-3.3896E+000
	344.27	26.50	4.0085E-001		2.0397E-001
	778.89	12.74	8.2862E-001		3.1333E-003
	867.32	4.16	2.4018E+000		1.5644E+000
	964.01	14.40	6.7832E-001		1.1916E-001
	1085.78	10.00	8.7492E-001		-5.5329E-001
	1112.02	13.30	7.1248E-001		-1.5890E-001
	1407.95	20.70	3.2496E-001		9.4852E-002
Eu-154	123.07	40.50	5.3574E-001	2.72E-001	7.1856E-002
	247.94	6.60	1.8470E+000		1.3694E+000
	591.81	4.83	2.1202E+000		-4.4311E+000
	723.30	19.70	5.0231E-001		-4.4742E-003
	756.87	4.33	2.3075E+000		-7.8644E-001
	873.19	11.50	7.9775E-001		6.7438E-002
	996.32	10.30	8.4429E-001		-1.0880E-001
	1004.76	17.90	5.0036E-001		3.3136E-001
	1274.45	35.50	2.7158E-001		1.8130E-001
Eu-155	86.54	30.90	1.4345E+000	1.43E+000	1.4872E+000
	105.31	20.70	1.4662E+000		-1.0404E+000
Am-241	59.54	35.90	3.2415E+000	3.24E+000	-7.2217E-001
Cm-243	228.19	10.56	1.2025E+000	8.25E-001	3.2992E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.2485E-001	8.25E-001	-7.1496E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/14/2006 11:43:05 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: OOL-09-03-108-F-
Sample Title: OOL-09-03-108-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 11:33:02 AM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: YEL7810
Log Number: OOL-09-03-108-F-
Title: OOL-09-03-108-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	298-	310	301.69	75.44	0.62	9.00E+001	89.52	7.52E+002
2	946-	962	955.34	238.87	1.02	6.70E+001	54.06	2.21E+002
3	2033-	2046	2041.14	510.35	0.47	3.86E+001	31.59	8.04E+001
4	5827-	5851	5840.45	1460.27	1.83	3.44E+002	38.91	1.23E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.985	511.00*	100.00	2.13529E-001	1.77508E-001
K-40	0.989	1460.81*	10.67	2.52397E+001	3.51306E+000
Pb-212	0.561	74.81* @	10.70	7.85199E+000	7.95953E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.65460E-001	5.47080E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN	0.985	2.135294E-001	1.775080E-001
K-40	0.989	2.523974E+001	3.513055E+000
Pb-212 @	0.561	6.654604E-001	5.470802E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.9305E-001	2.93E-001	6.2437E-002
	1332.49	100.00	3.1026E-001		2.8972E-001
Nb-94	702.63	100.00	3.1768E-001	3.18E-001	-2.2691E-002
	871.10	100.00	3.3526E-001		-2.2629E-001
Ag-108m	79.20	7.10	2.1944E+001	3.68E-001	-1.1435E+001
	433.93	89.90	3.6814E-001		-7.4599E-002
	614.37	90.40	3.7955E-001		-4.4240E-001
	722.95	90.50	3.8276E-001		3.0888E-001
Sb-125	176.33	6.89	6.3102E+000	1.14E+000	-1.7066E-001
	427.89	29.33	1.1385E+000		8.6333E-001
	463.38	10.35	3.3147E+000		9.0016E-001
	600.56	17.80	1.7619E+000		-2.0786E+000
	606.64	5.02	7.4843E+000		5.5127E+000
	635.90	11.32	2.8650E+000		2.8220E-001
Cs-134	563.23	8.38	3.3931E+000	3.57E-001	-3.5525E+000
	569.32	15.43	2.0932E+000		-2.5499E-001
	604.70	97.60	3.7577E-001		1.0402E-001
	795.84	85.40	3.5695E-001		7.6240E-002
	801.93	8.73	3.7188E+000		8.4846E-001
Cs-137	661.65	85.12	3.8980E-001	3.90E-001	-5.3832E-003
Eu-152	121.78	28.40	2.3522E+000	1.01E+000	-1.6073E+000
	244.69	7.49	5.0995E+000		1.1767E+000
	344.27	26.50	1.2451E+000		-6.0860E-001
	778.89	12.74	2.3326E+000		-8.5727E-001
	867.32	4.16	8.2225E+000		-3.1291E+000
	964.01	14.40	2.4157E+000		1.1081E+000
	1085.78	10.00	3.0057E+000		1.3006E+000
	1112.02	13.30	2.2176E+000		-9.4677E-001
	1407.95	20.70	1.0139E+000		-6.7783E-001
Eu-154	123.07	40.50	1.6573E+000	8.08E-001	1.4145E+000
	247.94	6.60	5.5533E+000		-4.3741E+000
	591.81	4.83	6.5855E+000		-4.3931E+000
	723.30	19.70	1.7586E+000		1.5989E+000
	756.87	4.33	7.3985E+000		1.0065E-001
	873.19	11.50	3.0398E+000		2.3988E+000
	996.32	10.30	2.7170E+000		-2.9996E+000
	1004.76	17.90	1.7159E+000		-4.7654E-001
	1274.45	35.50	8.0765E-001		-1.5728E-001
Eu-155	86.54	30.90	4.1253E+000	4.13E+000	2.5242E+000
	105.31	20.70	4.3403E+000		-1.0493E+000
Am-241	59.54	35.90	7.7454E+000	7.75E+000	2.8610E+000
Cm-243	228.19	10.56	3.4931E+000	2.49E+000	-2.9302E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4936E+000	2.49E+000	4.0359E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/14/2006 11:56:27 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: OOL-09-03-109-F-
Sample Title: OOL-09-03-109-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 11:46:24 AM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: YEL7810
Log Number: OOL-09-03-109-F-
Title: OOL-09-03-109-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	3634-	3647	3641.17	910.39	0.76	4.07E+001	18.49	1.73E+001
2	5830-	5852	5840.56	1460.29	2.00	2.80E+002	35.85	1.42E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.990	1460.81*	10.67	2.05470E+001	3.11458E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.990	2.054704E+001	3.114576E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	910.39	6.7787E-002	45.45

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.7918E-001	2.79E-001	5.9570E-002
	1332.49	100.00	2.9318E-001		2.6575E-001
Nb-94	702.63	100.00	3.3772E-001	3.05E-001	2.7679E-001
	871.10	100.00	3.0494E-001		-1.0252E-001
Ag-108m	79.20	7.10	2.0760E+001	3.25E-001	-4.7585E+001
	433.93	89.90	3.2535E-001		-1.6743E-001
	614.37	90.40	3.5550E-001		-8.1889E-001
	722.95	90.50	3.6243E-001		-2.0371E-002
Sb-125	176.33	6.89	5.9305E+000	1.06E+000	4.2656E+000
	427.89	29.33	1.0614E+000		5.5693E-001
	463.38	10.35	3.1469E+000		1.4330E+000
	600.56	17.80	1.6595E+000		-1.3269E+000
	606.64	5.02	7.1188E+000		8.6084E+000
	635.90	11.32	2.9206E+000		9.6333E-001
Cs-134	563.23	8.38	3.7253E+000	3.48E-001	1.7771E+000
	569.32	15.43	1.9757E+000		7.5618E-002
	604.70	97.60	3.5651E-001		4.5587E-004
	795.84	85.40	3.4788E-001		-3.3505E-001
	801.93	8.73	3.4270E+000		3.2371E-001
Cs-137	661.65	85.12	3.5505E-001	3.55E-001	1.1585E-001
Eu-152	121.78	28.40	2.1910E+000	1.05E+000	-1.0719E+000
	244.69	7.49	4.7200E+000		-3.7013E+000
	344.27	26.50	1.1920E+000		-7.9507E-001
	778.89	12.74	2.4282E+000		1.2734E+000
	867.32	4.16	7.0491E+000		-3.3844E+000
	964.01	14.40	2.2473E+000		2.3154E+000
	1085.78	10.00	2.4882E+000		-3.9229E-001
	1112.02	13.30	1.9635E+000		-1.0245E+000
	1407.95	20.70	1.0460E+000		8.6579E-002
Eu-154	123.07	40.50	1.5316E+000	6.75E-001	9.5523E-001
	247.94	6.60	5.2386E+000		3.2924E-001
	591.81	4.83	6.5087E+000		2.1221E+000
	723.30	19.70	1.6789E+000		6.8873E-001
	756.87	4.33	7.2663E+000		-2.8991E+000
	873.19	11.50	2.5969E+000		-1.2940E-001
	996.32	10.30	2.8061E+000		-1.2573E-001
	1004.76	17.90	1.5348E+000		-7.1408E-001
	1274.45	35.50	6.7457E-001		-5.6724E-001
Eu-155	86.54	30.90	3.8936E+000	3.89E+000	4.9967E+000
	105.31	20.70	4.0005E+000		-1.1646E+000
Am-241	59.54	35.90	7.5146E+000	7.51E+000	3.5549E+000
Cm-243	228.19	10.56	3.5151E+000	2.28E+000	6.0418E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2796E+000	2.28E+000	9.5523E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/14/2006 10:04:08 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-03-110-F-
Sample Title: OOL-09-03-110-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 9:54:05 AM
Live Time: 600.0 seconds
Real Time: 600.7 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-03-110-F-
Title: OOL-09-03-110-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2327-	2337	2331.95	582.97	0.95	3.62E+001	21.45	3.48E+001
2	5830-	5860	5845.23	1461.55	1.10	2.98E+002	56.39	1.08E+002

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.981	1460.81*	10.67	1.58691E+001	3.26923E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.94511E-001	1.17934E-001
		860.37	12.46		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.981	1.586908E+001	3.269227E+000
TL-208	0.472	1.945109E-001	1.179337E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.5511E-001	2.44E-001	-1.0408E-001
	1332.49	100.00	2.4425E-001		2.8484E-001
Nb-94	702.63	100.00	2.5377E-001	2.29E-001	-1.5050E-002
	871.10	100.00	2.2876E-001		-2.3515E-001
Ag-108m	79.20	7.10	1.4333E+001	2.81E-001	-5.6179E+000
	433.93	89.90	2.8119E-001		-1.8972E-001
	614.37	90.40	2.8769E-001		-3.6680E-001
	722.95	90.50	3.0035E-001		2.4584E-001
Sb-125	176.33	6.89	4.9023E+000	8.67E-001	2.2704E+000
	427.89	29.33	8.6673E-001		-2.5492E-001
	463.38	10.35	2.6559E+000		4.0524E+000
	600.56	17.80	1.5224E+000		2.7359E-001
	606.64	5.02	6.2613E+000		6.3843E+000
	635.90	11.32	2.2179E+000		4.2334E-001
Cs-134	563.23	8.38	2.9577E+000	3.03E-001	-1.4527E+000
	569.32	15.43	1.4990E+000		-5.2852E-001
	604.70	97.60	3.0283E-001		-5.9937E-002
	795.84	85.40	3.1060E-001		1.0160E-001
	801.93	8.73	2.8267E+000		-2.8309E-001
Cs-137	661.65	85.12	3.0823E-001	3.08E-001	7.2219E-002
Eu-152	121.78	28.40	1.7963E+000	8.02E-001	1.0264E+000
	244.69	7.49	4.1039E+000		-2.6932E-001
	344.27	26.50	9.7310E-001		-5.6565E-001
	778.89	12.74	1.9678E+000		4.3429E-001
	867.32	4.16	5.7523E+000		1.1456E+000
	964.01	14.40	1.8940E+000		-3.1207E-001
	1085.78	10.00	2.5510E+000		1.7971E+000
	1112.02	13.30	1.7741E+000		8.9536E-001
	1407.95	20.70	8.0240E-001		-7.6186E-001
Eu-154	123.07	40.50	1.2365E+000	6.73E-001	-3.7203E-001
	247.94	6.60	4.1652E+000		-5.6803E+000
	591.81	4.83	5.3508E+000		-1.6904E+000
	723.30	19.70	1.3557E+000		6.1215E-002
	756.87	4.33	5.6086E+000		-8.1778E+000
	873.19	11.50	1.9471E+000		-7.8254E-001
	996.32	10.30	2.2360E+000		1.0059E+000
	1004.76	17.90	1.2827E+000		-8.2839E-001
	1274.45	35.50	6.7284E-001		-2.2507E-002
Eu-155	86.54	30.90	2.8204E+000	2.82E+000	2.0256E+000
	105.31	20.70	3.2056E+000		-1.4527E+000
Am-241	59.54	35.90	3.9422E+000	3.94E+000	-1.9807E-001
Cm-243	228.19	10.56	2.8664E+000	2.05E+000	6.1391E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0493E+000	2.05E+000	-1.3638E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/14/2006 1:22:44 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: OOL-09-03-111-F-
Sample Title: OOL-09-03-111-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 1:12:42 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: YEL7810
Log Number: OOL-09-03-111-F-
Title: OOL-09-03-111-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2428-	2445	2434.83	608.78	1.91	8.32E+001	26.99	3.28E+001
2	2902-	2912	2906.12	726.61	0.94	1.68E+001	18.02	2.82E+001
3	3170-	3183	3177.16	794.38	0.32	2.46E+001	15.06	1.24E+001
4	5830-	5854	5841.46	1460.52	1.57	3.85E+002	41.66	1.59E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.997	1460.81*	10.67	2.82866E+001	3.82179E+000
Bi-212	0.989	727.17*	11.80	8.89702E-001	9.59010E-001
Bi-214	0.404	609.31*	46.30	1.06440E+000	3.69744E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.997	2.828661E+001	3.821787E+000
Bi-212	0.989	8.897022E-001	9.590100E-001
Bi-214	0.404	1.064400E+000	3.697439E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	794.38	4.1059E-002	61.13

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.7508E-001	2.58E-001	-1.6635E-002
	1332.49	100.00	2.5787E-001		1.1463E-001
Nb-94	702.63	100.00	3.2585E-001	3.02E-001	1.8824E-001
	871.10	100.00	3.0173E-001		1.7838E-001
Ag-108m	79.20	7.10	2.0689E+001	3.29E-001	-3.9826E+001
	433.93	89.90	3.2885E-001		1.0189E-001
	614.37	90.40	3.4424E-001		1.3157E-001
	722.95	90.50	3.6689E-001		-2.0586E-001
Sb-125	176.33	6.89	6.3102E+000	1.02E+000	-3.0534E+000
	427.89	29.33	1.0241E+000		4.2011E-001
	463.38	10.35	3.0889E+000		2.0112E+000
	600.56	17.80	1.6520E+000		-1.1677E-001
	606.64	5.02	7.5468E+000		7.4110E+000
	635.90	11.32	2.9206E+000		1.3159E+000
Cs-134	563.23	8.38	3.6672E+000	3.37E-001	-3.3378E+000
	569.32	15.43	2.0703E+000		9.6408E-001
	604.70	97.60	3.7577E-001		-2.4033E-002
	795.84	85.40	3.3664E-001		-9.4461E-002
	801.93	8.73	3.3360E+000		2.5667E+000
Cs-137	661.65	85.12	3.4148E-001	3.41E-001	2.2527E-001
Eu-152	121.78	28.40	2.2056E+000	1.14E+000	-7.5948E-001
	244.69	7.49	5.0212E+000		-1.1313E+001
	344.27	26.50	1.2420E+000		-4.9549E-001
	778.89	12.74	2.2069E+000		-1.4059E+000
	867.32	4.16	7.7324E+000		5.7470E+000
	964.01	14.40	2.3540E+000		7.1983E-001
	1085.78	10.00	2.7993E+000		-2.2959E+000
	1112.02	13.30	2.1021E+000		1.1677E-001
	1407.95	20.70	1.1363E+000		8.2817E-001
Eu-154	123.07	40.50	1.5188E+000	6.82E-001	-1.4399E+000
	247.94	6.60	5.6178E+000		2.6545E-001
	591.81	4.83	6.1916E+000		-2.4581E+000
	723.30	19.70	1.6991E+000		-8.9034E-003
	756.87	4.33	6.9241E+000		1.9566E+000
	873.19	11.50	2.5827E+000		-5.0971E-001
	996.32	10.30	2.5285E+000		-1.2220E+000
	1004.76	17.90	1.5976E+000		6.4856E-001
	1274.45	35.50	6.8190E-001		-1.8345E-001
Eu-155	86.54	30.90	3.7884E+000	3.79E+000	2.4383E+000
	105.31	20.70	3.8440E+000		-1.4024E+000
Am-241	59.54	35.90	7.3367E+000	7.34E+000	5.9608E+000
Cm-243	228.19	10.56	3.6387E+000	2.50E+000	1.6095E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.5033E+000	2.50E+000	-2.0758E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/14/2006 1:42:33 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: OOL-09-03-112-F-
Sample Title: OOL-09-03-112-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 1:32:30 PM
Live Time: 600.0 seconds
Real Time: 600.7 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: YEL7810
Log Number: OOL-09-03-112-F-
Title: OOL-09-03-112-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	310	302.09	75.54	0.94	1.12E+002	96.60	8.03E+002
2	1396-	1414	1407.66	351.96	0.95	7.65E+001	38.68	9.25E+001
3	2035-	2053	2041.86	510.53	0.74	8.43E+001	33.62	6.18E+001
4	2321-	2338	2331.08	582.84	1.40	8.40E+001	31.59	5.40E+001
5	2426-	2444	2435.80	609.02	0.59	7.53E+001	29.05	4.27E+001
6	3866-	3877	3871.02	967.86	0.25	2.86E+001	19.70	2.74E+001
7	5829-	5853	5841.23	1460.46	2.00	3.85E+002	41.02	1.26E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.992	511.00*	100.00	4.66618E-001	1.97376E-001
K-40	0.996	1460.81*	10.67	2.83035E+001	3.78529E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	2.16027E+000	9.30652E-001
		583.14*	84.20	5.80818E-001	2.31588E-001
		860.37	12.46		
Bi-214	0.409	609.31*	46.30	9.62472E-001	3.90363E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN	0.992	3.411612E-001	2.035750E-001
K-40	0.996	2.830346E+001	3.785287E+000
TL-208	0.750	5.808176E-001	2.308132E-001
Bi-214	0.409	9.624724E-001	3.903627E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	75.54	1.8672E-001	86.22
2	351.96	1.2742E-001	50.60
6	967.86	4.7619E-002	68.96

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	3.0624E-001	2.75E-001	1.9408E-001
	1332.49	100.00	2.7496E-001		1.4883E-001
Nb-94	702.63	100.00	3.5041E-001	2.89E-001	3.2823E-003
	871.10	100.00	2.8850E-001		6.1839E-002
Ag-108m	79.20	7.10	2.1055E+001	3.30E-001	-1.0921E+001
	433.93	89.90	3.3001E-001		-3.0318E-002
	614.37	90.40	3.6505E-001		-1.7344E-001
	722.95	90.50	3.7993E-001		1.7794E-001
Sb-125	176.33	6.89	6.1969E+000	9.71E-001	2.8118E+000
	427.89	29.33	9.7068E-001		5.8627E-001
	463.38	10.35	3.0397E+000		-1.7489E+000
	600.56	17.80	1.9241E+000		6.7667E-001
	606.64	5.02	7.6089E+000		6.5219E+000
	635.90	11.32	2.6544E+000		-1.9112E-001
Cs-134	563.23	8.38	3.5633E+000	3.37E-001	-7.5210E-001
	569.32	15.43	1.9595E+000		-1.4651E-001
	604.70	97.60	3.8124E-001		-1.3923E-001
	795.84	85.40	3.3664E-001		2.0097E-001
	801.93	8.73	3.2233E+000		-3.8008E+000
Cs-137	661.65	85.12	3.6325E-001	3.63E-001	-4.6655E-002
Eu-152	121.78	28.40	2.1873E+000	9.10E-001	1.1042E-001
	244.69	7.49	5.1305E+000		-5.8215E+000
	344.27	26.50	1.2328E+000		-1.6789E+000
	778.89	12.74	2.2069E+000		-2.4747E+000
	867.32	4.16	6.4645E+000		-7.5814E+000
	964.01	14.40	2.5534E+000		1.6712E+000
	1085.78	10.00	2.8380E+000		-5.3707E-002
	1112.02	13.30	2.1607E+000		3.2176E-001
	1407.95	20.70	9.1017E-001		-7.4210E-002
Eu-154	123.07	40.50	1.5110E+000	6.96E-001	-7.5887E-001
	247.94	6.60	5.6724E+000		8.8206E-001
	591.81	4.83	7.0040E+000		6.0173E+000
	723.30	19.70	1.7324E+000		9.3558E-001
	756.87	4.33	7.1992E+000		3.0834E+000
	873.19	11.50	2.4353E+000		-2.0237E+000
	996.32	10.30	2.7885E+000		1.5715E+000
	1004.76	17.90	1.5561E+000		7.1574E-002
	1274.45	35.50	6.9630E-001		-9.2461E-001
Eu-155	86.54	30.90	3.7393E+000	3.74E+000	1.9757E+000
	105.31	20.70	3.9317E+000		-1.5840E+000
Am-241	59.54	35.90	7.0373E+000	7.04E+000	-6.4291E+000
Cm-243	228.19	10.56	3.6911E+000	2.64E+000	-2.2742E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.6354E+000	2.64E+000	2.2226E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/14/2006 2:20:38 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: OOL-09-03-113-F-
Sample Title: OOL-09-03-113-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 2:10:34 PM
Live Time: 600.0 seconds
Real Time: 600.7 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: YEL7810
Log Number: OOL-09-03-113-F-
Title: OOL-09-03-113-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	3633-	3650	3641.60	910.50	1.76	5.45E+001	22.71	2.45E+001
2	5831-	5854	5841.83	1460.61	1.54	3.58E+002	43.35	3.27E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.999	1460.81*	10.67	2.63196E+001	3.83152E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.999	2.631962E+001	3.831516E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	910.50	9.0844E-002	41.66

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.6237E-001	2.62E-001	8.0659E-002
	1332.49	100.00	2.9755E-001		3.3304E-001
Nb-94	702.63	100.00	3.1491E-001	2.82E-001	2.3449E-001
	871.10	100.00	2.8165E-001		7.3873E-002
Ag-108m	79.20	7.10	1.9921E+001	3.28E-001	-1.9981E+001
	433.93	89.90	3.2885E-001		-9.2625E-002
	614.37	90.40	3.2809E-001		-6.6577E-001
	722.95	90.50	3.5488E-001		1.0130E-001
Sb-125	176.33	6.89	5.9372E+000	9.89E-001	-1.2394E+000
	427.89	29.33	9.8881E-001		3.2113E-001
	463.38	10.35	2.8867E+000		1.8465E+000
	600.56	17.80	1.5901E+000		-9.8828E-001
	606.64	5.02	7.0745E+000		1.0166E+001
	635.90	11.32	2.7851E+000		6.7788E-001
Cs-134	563.23	8.38	3.5933E+000	3.40E-001	1.8030E+000
	569.32	15.43	1.9998E+000		5.6855E-001
	604.70	97.60	3.3979E-001		-1.3675E-001
	795.84	85.40	3.6579E-001		-3.1501E-002
	801.93	8.73	3.4090E+000		2.0111E+000
Cs-137	661.65	85.12	3.5171E-001	3.52E-001	-1.2717E-001
Eu-152	121.78	28.40	2.1303E+000	8.53E-001	1.7117E+000
	244.69	7.49	4.9497E+000		-5.7013E+000
	344.27	26.50	1.2173E+000		-9.7139E-001
	778.89	12.74	2.2069E+000		-1.9254E+000
	867.32	4.16	6.5514E+000		-3.6960E+000
	964.01	14.40	2.2473E+000		1.2841E+000
	1085.78	10.00	2.7201E+000		-2.4264E-001
	1112.02	13.30	2.0263E+000		-4.7962E-001
	1407.95	20.70	8.5294E-001		-4.8969E-001
Eu-154	123.07	40.50	1.4655E+000	7.89E-001	-1.2255E-001
	247.94	6.60	5.3649E+000		6.5075E-001
	591.81	4.83	6.0542E+000		-1.1823E+000
	723.30	19.70	1.6514E+000		1.6084E+000
	756.87	4.33	6.8535E+000		3.1827E+000
	873.19	11.50	2.4655E+000		1.0935E+000
	996.32	10.30	2.6619E+000		1.0519E-001
	1004.76	17.90	1.3883E+000		1.5852E-001
	1274.45	35.50	7.8923E-001		4.2598E-001
Eu-155	86.54	30.90	3.6282E+000	3.63E+000	1.5396E+000
	105.31	20.70	3.9386E+000		1.1563E+000
Am-241	59.54	35.90	6.8429E+000	6.84E+000	-4.0628E+000
Cm-243	228.19	10.56	3.4876E+000	2.41E+000	2.3939E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4144E+000	2.41E+000	5.8867E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/14/2006 2:47:52 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: OOL-09-03-114-F-
Sample Title: OOL-09-03-114-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 2:37:48 PM
Live Time: 600.0 seconds
Real Time: 600.7 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: YEL7810
Log Number: OOL-09-03-114-F-
Title: OOL-09-03-114-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2326-	2337	2331.35	582.91	0.58	4.39E+001	21.88	3.21E+001
2	5829-	5853	5841.40	1460.50	1.53	3.37E+002	39.28	1.55E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.997	1460.81*	10.67	2.47857E+001	3.51404E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.03680E-001	1.56576E-001
		860.37	12.46		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.997	2.478572E+001	3.514040E+000
TL-208	0.470	3.036795E-001	1.565763E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.9878E-001	2.60E-001	3.4252E-002
	1332.49	100.00	2.6038E-001		1.1811E-001
Nb-94	702.63	100.00	2.7617E-001	2.76E-001	-6.9577E-002
	871.10	100.00	2.8165E-001		7.5757E-002
Ag-108m	79.20	7.10	1.9943E+001	3.46E-001	-1.8723E+001
	433.93	89.90	3.4689E-001		-5.4737E-002
	614.37	90.40	3.5962E-001		-4.3170E-001
	722.95	90.50	3.4558E-001		2.6832E-002
Sb-125	176.33	6.89	6.1330E+000	9.78E-001	1.4863E+000
	427.89	29.33	9.7798E-001		1.0495E-001
	463.38	10.35	2.8867E+000		1.2070E+000
	600.56	17.80	1.6968E+000		-5.8420E-001
	606.64	5.02	7.3361E+000		8.8088E+000
	635.90	11.32	2.4245E+000		-3.8546E+000
Cs-134	563.23	8.38	3.4560E+000	3.57E-001	-1.6577E+000
	569.32	15.43	1.9838E+000		-8.8080E-002
	604.70	97.60	3.5651E-001		6.9018E-002
	795.84	85.40	3.6754E-001		4.5099E-001
	801.93	8.73	3.2989E+000		-2.1237E+000
Cs-137	661.65	85.12	3.4833E-001	3.48E-001	-1.9017E-002
Eu-152	121.78	28.40	2.1553E+000	1.05E+000	1.0940E-002
	244.69	7.49	4.7702E+000		-8.1792E+000
	344.27	26.50	1.2958E+000		-9.0849E-001
	778.89	12.74	2.3448E+000		1.1701E+000
	867.32	4.16	7.3611E+000		1.3798E+000
	964.01	14.40	2.3851E+000		1.2327E+000
	1085.78	10.00	2.8762E+000		8.7668E-001
	1112.02	13.30	1.8478E+000		-5.9713E+000
	1407.95	20.70	1.0460E+000		8.7599E-001
Eu-154	123.07	40.50	1.5058E+000	6.96E-001	7.6327E-001
	247.94	6.60	5.4221E+000		-7.0671E-001
	591.81	4.83	5.9135E+000		-1.7033E+000
	723.30	19.70	1.5805E+000		-6.5687E-001
	756.87	4.33	7.3985E+000		6.6989E-002
	873.19	11.50	2.3736E+000		-1.0272E+000
	996.32	10.30	2.5088E+000		1.1968E+000
	1004.76	17.90	1.5455E+000		7.3429E-001
	1274.45	35.50	6.9630E-001		-3.8492E-001
Eu-155	86.54	30.90	3.6201E+000	3.62E+000	1.8169E+000
	105.31	20.70	3.8119E+000		4.8781E-001
Am-241	59.54	35.90	6.7320E+000	6.73E+000	-6.1656E+000
Cm-243	228.19	10.56	3.5586E+000	2.46E+000	-1.3866E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4642E+000	2.46E+000	4.6225E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/14/2006 3:19:48 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: OOL-09-03-115-F-
Sample Title: OOL-09-03-115-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 3:09:44 PM
Live Time: 600.0 seconds
Real Time: 600.7 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: YEL7810
Log Number: OOL-09-03-115-F-
Title: OOL-09-03-115-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	945-	962	954.03	238.55	0.69	1.07E+002	49.06	1.60E+002
2	1347-	1356	1351.60	337.95	0.30	1.95E+001	22.27	4.85E+001
3	2430-	2440	2435.94	609.06	1.23	3.64E+001	20.69	3.16E+001
4	5830-	5854	5841.93	1460.63	1.87	3.59E+002	40.41	1.58E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.999	1460.81*		10.67	2.63829E+001	3.65711E+000
Pb-212	0.400	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.06569E+000	5.15043E-001
Bi-214	0.409	609.31*		46.30	4.65744E-001	2.70884E-001
		1120.29		15.10		
		1764.49		15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40		0.999	2.638294E+001	3.657109E+000
Pb-212	@	0.400	1.065686E+000	5.150432E-001
Bi-214		0.409	4.657440E-001	2.708843E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	337.95	3.2574E-002	113.94

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.8521E-001	2.55E-001	2.8282E-002
	1332.49	100.00	2.5533E-001		-1.1826E-002
Nb-94	702.63	100.00	2.8868E-001	2.75E-001	6.5637E-002
	871.10	100.00	2.7460E-001		1.2842E-001
Ag-108m	79.20	7.10	1.9106E+001	3.16E-001	-2.0692E+001
	433.93	89.90	3.4689E-001		-1.6891E-001
	614.37	90.40	3.5550E-001		-3.9274E-001
	722.95	90.50	3.1594E-001		-4.8143E-001
Sb-125	176.33	6.89	5.7413E+000	1.10E+000	-3.0954E+000
	427.89	29.33	1.0975E+000		1.2445E+000
	463.38	10.35	3.0693E+000		1.0199E+000
	600.56	17.80	1.6595E+000		-4.6188E-001
	606.64	5.02	6.9850E+000		7.2573E+000
	635.90	11.32	2.6176E+000		-3.2006E-001
Cs-134	563.23	8.38	3.3931E+000	3.37E-001	9.3164E-001
	569.32	15.43	1.8503E+000		6.8710E-001
	604.70	97.60	3.4945E-001		-9.6803E-002
	795.84	85.40	3.3664E-001		-3.0265E-001
	801.93	8.73	3.2613E+000		-1.2256E+000
Cs-137	661.65	85.12	3.6968E-001	3.70E-001	1.9161E-001
Eu-152	121.78	28.40	2.0935E+000	1.09E+000	-8.0101E-001
	244.69	7.49	4.8198E+000		-3.1027E-001
	344.27	26.50	1.1630E+000		7.0384E-002
	778.89	12.74	2.1277E+000		2.8598E-002
	867.32	4.16	6.7217E+000		4.6896E-002
	964.01	14.40	2.3748E+000		1.1341E+000
	1085.78	10.00	2.7993E+000		-1.0568E+000
	1112.02	13.30	2.0872E+000		-1.2503E+000
	1407.95	20.70	1.0922E+000		-7.1821E-001
Eu-154	123.07	40.50	1.4805E+000	6.21E-001	5.2858E-002
	247.94	6.60	5.4126E+000		6.1039E-001
	591.81	4.83	6.1370E+000		1.6365E+000
	723.30	19.70	1.4436E+000		-1.8454E+000
	756.87	4.33	6.5631E+000		2.2559E+000
	873.19	11.50	2.3579E+000		-3.4284E-001
	996.32	10.30	2.8236E+000		1.3771E+000
	1004.76	17.90	1.6480E+000		8.1695E-001
	1274.45	35.50	6.2064E-001		7.3171E-002
Eu-155	86.54	30.90	3.5094E+000	3.51E+000	4.6520E+000
	105.31	20.70	3.6640E+000		2.6066E+000
Am-241	59.54	35.90	6.5878E+000	6.59E+000	3.0749E-001
Cm-243	228.19	10.56	3.4152E+000	2.38E+000	1.8804E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3840E+000	2.38E+000	4.9504E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/14/2006 3:33:22 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: OOL-09-03-116-F-
Sample Title: OOL-09-03-116-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 3:23:19 PM
Live Time: 600.0 seconds
Real Time: 600.7 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: YEL7810
Log Number: OOL-09-03-116-F-
Title: OOL-09-03-116-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	327-	345	336.69	84.20	0.99	1.37E+002	98.21	7.03E+002
2	948-	963	954.21	238.59	1.23	1.13E+002	47.39	1.56E+002
3	2324-	2340	2331.02	582.83	0.30	6.15E+001	27.37	4.25E+001
4	3634-	3652	3642.26	910.67	0.69	5.55E+001	21.27	1.85E+001
5	5829-	5854	5841.59	1460.55	1.88	3.89E+002	42.61	1.95E+001
6	7051-	7064	7057.32	1764.51	0.33	2.15E+001	11.05	3.52E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.998	1460.81*		10.67	2.86060E+001	3.89355E+000
TL-208	0.469	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	4.25329E-001	1.97500E-001
		860.37		12.46		
Pb-212	0.400	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.12227E+000	5.02509E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.998	2.860604E+001	3.893550E+000
TL-208	0.469	4.253292E-001	1.975002E-001
Pb-212 @	0.400	1.122265E+000	5.025092E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	84.20	2.2811E-001	71.76
4	910.67	9.2455E-002	38.34
6	1764.51	3.5800E-002	51.42

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.8719E-001	2.31E-001	-8.7556E-002
	1332.49	100.00	2.3107E-001		2.2975E-001
Nb-94	702.63	100.00	2.9769E-001	2.64E-001	1.1917E-001
	871.10	100.00	2.6366E-001		-2.7458E-001
Ag-108m	79.20	7.10	1.8881E+001	3.18E-001	-5.5844E+000
	433.93	89.90	3.1823E-001		2.2069E-002
	614.37	90.40	3.6235E-001		-1.9776E-001
	722.95	90.50	3.2946E-001		2.9159E-001
Sb-125	176.33	6.89	5.6303E+000	1.00E+000	-1.7977E+000
	427.89	29.33	1.0031E+000		1.3973E-001
	463.38	10.35	2.7906E+000		1.3190E+000
	600.56	17.80	1.4921E+000		-4.6622E-001
	606.64	5.02	7.1408E+000		3.5449E+000
	635.90	11.32	2.4111E+000		8.3738E-001
Cs-134	563.23	8.38	3.1108E+000	3.39E-001	-3.9118E+000
	569.32	15.43	1.8065E+000		9.2424E-001
	604.70	97.60	3.4345E-001		-9.7016E-002
	795.84	85.40	3.3854E-001		4.1636E-002
	801.93	8.73	3.1847E+000		-1.4042E+000
Cs-137	661.65	85.12	3.3270E-001	3.33E-001	2.0452E-002
Eu-152	121.78	28.40	2.0020E+000	7.91E-001	-5.9823E-001
	244.69	7.49	4.6265E+000		-3.4657E-001
	344.27	26.50	1.1564E+000		-1.2135E+000
	778.89	12.74	2.2454E+000		-1.4388E+000
	867.32	4.16	6.3763E+000		4.8062E-001
	964.01	14.40	2.2143E+000		1.1741E+000
	1085.78	10.00	2.8572E+000		2.1789E+000
	1112.02	13.30	1.9794E+000		-2.5772E+000
	1407.95	20.70	7.9098E-001		-6.2325E-001
Eu-154	123.07	40.50	1.3868E+000	7.03E-001	-5.3326E-001
	247.94	6.60	4.9344E+000		1.2257E+000
	591.81	4.83	5.3429E+000		1.5503E-001
	723.30	19.70	1.5137E+000		1.3438E+000
	756.87	4.33	6.4126E+000		7.4612E-002
	873.19	11.50	2.3892E+000		1.2979E-002
	996.32	10.30	2.6433E+000		-2.2168E+000
	1004.76	17.90	1.5348E+000		-2.3152E-001
	1274.45	35.50	7.0338E-001		1.5910E-001
Eu-155	86.54	30.90	3.4829E+000	3.48E+000	3.9955E-001
	105.31	20.70	3.5427E+000		-2.8122E-002
Am-241	59.54	35.90	6.1934E+000	6.19E+000	1.4521E+000
Cm-243	228.19	10.56	3.5041E+000	2.36E+000	1.3391E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3635E+000	2.36E+000	-9.3145E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/14/2006 3:48:01 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: OOL-09-03-117-F-
Sample Title: OOL-09-03-117-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 3:38:15 PM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: YEL7810
Log Number: OOL-09-03-117-F-
Title: OOL-09-03-117-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2429-	2444	2435.91	609.05	1.54	6.04E+001	25.36	3.56E+001
2	5830-	5854	5841.53	1460.54	1.85	3.37E+002	39.36	1.58E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.997	1460.81*	10.67	2.47650E+001	3.51825E+000
Bi-214	0.409	609.31*	46.30	7.72032E-001	3.38216E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.997	2.476496E+001	3.518253E+000
Bi-214	0.409	7.720321E-001	3.382159E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.5352E-001	2.54E-001	1.2438E-002
	1332.49	100.00	2.7019E-001		1.5950E-001
Nb-94	702.63	100.00	3.0064E-001	2.54E-001	2.0612E-002
	871.10	100.00	2.5416E-001		-1.7522E-001
Ag-108m	79.20	7.10	1.8943E+001	2.97E-001	-2.8409E+001
	433.93	89.90	2.9708E-001		-1.1427E-001
	614.37	90.40	3.3846E-001		-1.5462E-001
	722.95	90.50	3.4871E-001		3.4279E-001
Sb-125	176.33	6.89	5.6021E+000	9.45E-001	-2.4876E+000
	427.89	29.33	9.4468E-001		-1.4314E-001
	463.38	10.35	2.9795E+000		-2.1507E+000
	600.56	17.80	1.7619E+000		5.5604E-001
	606.64	5.02	7.2283E+000		1.0960E+001
	635.90	11.32	2.4512E+000		-1.8127E+000
Cs-134	563.23	8.38	3.3772E+000	3.23E-001	-1.3067E-001
	569.32	15.43	1.9349E+000		1.3983E+000
	604.70	97.60	3.5300E-001		-1.8467E-001
	795.84	85.40	3.2300E-001		2.8139E-001
	801.93	8.73	2.9840E+000		-9.8486E-001
Cs-137	661.65	85.12	3.3624E-001	3.36E-001	-6.1608E-002
Eu-152	121.78	28.40	2.0922E+000	1.08E+000	1.7537E-002
	244.69	7.49	4.6522E+000		-6.9183E+000
	344.27	26.50	1.2047E+000		-4.2370E-003
	778.89	12.74	2.1006E+000		-2.5602E+000
	867.32	4.16	6.1499E+000		5.1812E-001
	964.01	14.40	2.2143E+000		5.4412E-001
	1085.78	10.00	2.3037E+000		7.6074E-001
	1112.02	13.30	1.9312E+000		-1.1005E+000
	1407.95	20.70	1.0770E+000		-1.2535E+000
Eu-154	123.07	40.50	1.4646E+000	7.31E-001	2.9600E-001
	247.94	6.60	4.9553E+000		-4.4457E+000
	591.81	4.83	5.9984E+000		-6.6004E-001
	723.30	19.70	1.6021E+000		1.5731E+000
	756.87	4.33	6.1795E+000		-3.0693E+000
	873.19	11.50	2.1944E+000		-2.6123E-001
	996.32	10.30	2.8236E+000		-6.3627E-001
	1004.76	17.90	1.4002E+000		-1.0479E+000
	1274.45	35.50	7.3096E-001		2.2192E-001
Eu-155	86.54	30.90	3.4955E+000	3.50E+000	4.8175E+000
	105.31	20.70	3.7177E+000		4.2414E+000
Am-241	59.54	35.90	6.5443E+000	6.54E+000	-5.6033E-001
Cm-243	228.19	10.56	3.4320E+000	2.42E+000	-2.8498E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4244E+000	2.42E+000	2.1950E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 5:06:31 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-118-F-G
Sample ID: OOL-09-03-118-F
Sample Title: OOL-09-03-118-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 8:03:41 AM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-118-F-G
Log Number: OOL-09-03-118-F
Title: OOL-09-03-118-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	308	300.45	74.94	1.08	2.95E+002	103.82	9.02E+002
2	946-	960	955.67	238.80	1.09	1.14E+002	45.71	1.49E+002
3	2324-	2344	2333.63	583.39	0.33	7.91E+001	32.37	5.29E+001
4	3639-	3655	3646.18	911.63	0.67	6.04E+001	24.69	3.06E+001
5	3872-	3883	3877.35	969.44	1.11	2.74E+001	19.63	2.86E+001
6	5835-	5861	5848.42	1462.35	2.33	5.58E+002	49.96	2.06E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-118-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.920	1460.81*	10.67	2.97747E+001	3.59265E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.24774E-001	1.82586E-001
		860.37	12.46		
Pb-212	0.524	74.81* @	10.70	1.45750E+001	5.86760E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.30324E-001	4.01827E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	1.08796E+000	4.62015E-001
		969.11*	16.60	8.40051E-001	6.08524E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-118-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.920	2.977470E+001	3.592647E+000
TL-208		0.472	4.247736E-001	1.825862E-001
Pb-212	@	0.524	9.303243E-001	4.018272E-001
Ac-228		0.633	9.973113E-001	3.679740E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-118-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.4568E-001	2.16E-001	1.7878E-001
	1332.49	100.00	2.1608E-001		1.3958E-001
Nb-94	702.63	100.00	2.5377E-001	2.31E-001	-9.7473E-002
	871.10	100.00	2.3119E-001		-1.6396E-002
Ag-108m	79.20	7.10	1.2216E+001	2.65E-001	-1.0153E+001
	433.93	89.90	2.7501E-001		1.8491E-001
	614.37	90.40	3.1935E-001		-4.5250E-001
	722.95	90.50	2.6471E-001		1.7665E-001
Sb-125	176.33	6.89	4.8967E+000	8.37E-001	3.6671E-003
	427.89	29.33	8.3718E-001		-8.7721E-001
	463.38	10.35	2.4381E+000		2.1521E+000
	600.56	17.80	1.2891E+000		6.7126E-001
	606.64	5.02	5.7481E+000		7.4607E+000
	635.90	11.32	1.9528E+000		-2.5344E+000
Cs-134	563.23	8.38	2.7760E+000	2.65E-001	-1.4232E+000
	569.32	15.43	1.4795E+000		-4.5874E-001
	604.70	97.60	2.6536E-001		-2.8708E-001
	795.84	85.40	2.8466E-001		5.1217E-002
	801.93	8.73	2.4645E+000		-2.3444E+000
Cs-137	661.65	85.12	2.8629E-001	2.86E-001	1.1781E-001
Eu-152	121.78	28.40	1.7299E+000	8.76E-001	-1.1352E+000
	244.69	7.49	4.0111E+000		-1.8860E+000
	344.27	26.50	9.2797E-001		-7.7018E-001
	778.89	12.74	1.8826E+000		-4.0519E-001
	867.32	4.16	5.2842E+000		-5.0986E+000
	964.01	14.40	1.9961E+000		-1.1160E+000
	1085.78	10.00	2.0937E+000		-2.4783E+000
	1112.02	13.30	1.7741E+000		-6.5807E-001
	1407.95	20.70	8.7597E-001		1.4414E-001
Eu-154	123.07	40.50	1.2291E+000	6.39E-001	6.3680E-001
	247.94	6.60	4.2811E+000		-8.6280E-001
	591.81	4.83	5.0813E+000		3.6197E+000
	723.30	19.70	1.2379E+000		6.1205E-001
	756.87	4.33	5.2991E+000		4.4329E-001
	873.19	11.50	2.0218E+000		6.1878E-001
	996.32	10.30	2.1972E+000		5.5864E-001
	1004.76	17.90	1.1737E+000		7.0967E-001
	1274.45	35.50	6.3872E-001		2.4149E-001
Eu-155	86.54	30.90	2.5789E+000	2.58E+000	3.5665E+000
	105.31	20.70	2.8127E+000		-2.7669E+000
Am-241	59.54	35.90	3.3400E+000	3.34E+000	-1.4120E+000
Cm-243	228.19	10.56	3.0092E+000	2.25E+000	8.7686E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2502E+000	2.25E+000	1.5090E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 5:07:24 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-119-F-G
Sample ID: OOL-09-03-119-F
Sample Title: OOL-09-03-119-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 8:17:23 AM
Live Time: 600.0 seconds
Real Time: 600.7 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-119-F-G
Log Number: OOL-09-03-119-F
Title: OOL-09-03-119-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	291.84	72.79	1.15	1.77E+002	46.90	7.06E+002
m	2	286-	306	300.58	74.97	1.15	2.47E+002	52.52	9.39E+002
	3	947-	962	955.22	238.68	1.26	9.15E+001	49.21	1.80E+002
	4	2327-	2341	2333.65	583.39	1.84	8.64E+001	28.52	4.36E+001
	5	2432-	2444	2438.45	609.60	0.43	5.50E+001	25.12	4.10E+001
	6	5833-	5860	5847.74	1462.18	1.55	4.98E+002	47.65	2.08E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-119-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.936	1460.81*	10.67	2.65645E+001	3.32868E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.63889E-001	1.64937E-001
		860.37	12.46		
Pb-212	0.524	74.81* @	10.70	1.21967E+001	3.52545E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.49010E-001	4.19760E-001
Bi-214	0.397	609.31*	46.30	5.42975E-001	2.57136E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-119-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.936	2.656447E+001	3.328675E+000
TL-208		0.471	4.638886E-001	1.649374E-001
Pb-212	@	0.524	7.490101E-001	4.197600E-001
Bi-214		0.397	5.429754E-001	2.571365E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	2.9528E-001	26.47

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-119-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.1788E-001	2.04E-001	-6.2301E-002
	1332.49	100.00	2.0399E-001		-1.0917E-002
Nb-94	702.63	100.00	2.2264E-001	2.01E-001	4.5330E-002
	871.10	100.00	2.0131E-001		-2.1066E-002
Ag-108m	79.20	7.10	1.1906E+001	2.69E-001	-1.2392E+001
	433.93	89.90	2.7232E-001		-1.7004E-001
	614.37	90.40	3.0729E-001		-1.5211E-001
	722.95	90.50	2.6944E-001		1.2918E-002
Sb-125	176.33	6.89	4.9412E+000	8.82E-001	-5.4672E-001
	427.89	29.33	8.8241E-001		1.2477E-001
	463.38	10.35	2.3088E+000		-1.2208E-001
	600.56	17.80	1.4055E+000		6.0127E-001
	606.64	5.02	5.6991E+000		7.9960E+000
	635.90	11.32	1.9723E+000		9.2443E-001
Cs-134	563.23	8.38	2.8797E+000	2.56E-001	-2.8731E+000
	569.32	15.43	1.5684E+000		-2.1287E-001
	604.70	97.60	2.5582E-001		-3.7961E-001
	795.84	85.40	2.7409E-001		6.1397E-002
	801.93	8.73	2.6320E+000		4.5950E-001
Cs-137	661.65	85.12	2.9105E-001	2.91E-001	1.7362E-001
Eu-152	121.78	28.40	1.6349E+000	7.80E-001	-5.8869E-001
	244.69	7.49	3.8535E+000		-2.9733E+000
	344.27	26.50	9.8597E-001		-8.3188E-001
	778.89	12.74	1.6790E+000		-1.8456E-001
	867.32	4.16	4.9677E+000		-7.6106E+000
	964.01	14.40	1.7208E+000		-8.4708E-001
	1085.78	10.00	2.0147E+000		-4.4103E-001
	1112.02	13.30	1.8253E+000		-4.5820E-001
	1407.95	20.70	7.7998E-001		-1.7016E-001
Eu-154	123.07	40.50	1.1544E+000	5.74E-001	2.0585E-001
	247.94	6.60	4.1145E+000		-2.4225E+000
	591.81	4.83	5.1207E+000		6.0883E-001
	723.30	19.70	1.2433E+000		-1.8910E-001
	756.87	4.33	4.9691E+000		3.4571E+000
	873.19	11.50	1.7875E+000		7.3664E-001
	996.32	10.30	2.0055E+000		1.8700E-001
	1004.76	17.90	1.0974E+000		1.5751E-002
	1274.45	35.50	5.7377E-001		-3.7437E-002
Eu-155	86.54	30.90	2.4602E+000	2.46E+000	3.1850E+000
	105.31	20.70	2.7305E+000		-3.3797E-001
Am-241	59.54	35.90	3.2793E+000	3.28E+000	4.0852E-002
Cm-243	228.19	10.56	2.7969E+000	1.97E+000	-5.2991E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.9721E+000	1.97E+000	-3.0423E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 5:08:07 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-120-F-G
Sample ID: OOL-09-03-120-F
Sample Title: OOL-09-03-120-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 8:32:32 AM
Live Time: 600.0 seconds
Real Time: 600.7 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-120-F-G
Log Number: OOL-09-03-120-F
Title: OOL-09-03-120-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	297-	308	301.15	75.12	0.96	2.08E+002	94.79	8.40E+002
2	947-	964	955.30	238.70	1.50	1.43E+002	52.20	1.74E+002
3	1350-	1359	1354.90	338.63	1.02	2.27E+001	25.53	6.43E+001
4	2327-	2338	2333.45	583.35	1.52	5.76E+001	26.39	4.94E+001
5	2431-	2446	2437.43	609.35	1.12	6.79E+001	29.39	5.21E+001
6	4478-	4490	4484.44	1121.26	0.89	2.43E+001	19.32	2.77E+001
7	5833-	5861	5849.12	1462.53	1.95	5.87E+002	49.79	1.34E+001
8	7061-	7074	7067.64	1767.25	0.30	1.47E+001	14.23	1.33E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-120-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.902	1460.81*	10.67	3.12774E+001	3.66870E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.09136E-001	1.47410E-001
		860.37	12.46		
Pb-212	0.524	74.81* @	10.70	1.02170E+001	5.07662E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.17471E+000	4.65474E-001
Bi-214	0.694	609.31*	46.30	6.69972E-001	3.01922E-001
		1120.29*	15.10	8.59813E-001	6.89083E-001
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-120-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.902	3.127738E+001	3.668704E+000
TL-208	0.472	3.091357E-001	1.474101E-001
Pb-212 @	0.524	1.174709E+000	4.654743E-001
Bi-214	0.694	7.005473E-001	2.765419E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	338.63	3.7811E-002	112.51
8	1767.25	2.4464E-002	96.97

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-120-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.6163E-001	2.18E-001	3.2505E-001
	1332.49	100.00	2.1774E-001		-4.2260E-002
Nb-94	702.63	100.00	2.4972E-001	2.37E-001	-2.7542E-001
	871.10	100.00	2.3716E-001		1.2091E-001
Ag-108m	79.20	7.10	1.2108E+001	2.80E-001	-9.3208E+000
	433.93	89.90	2.8722E-001		5.9211E-002
	614.37	90.40	2.9766E-001		-1.2525E-001
	722.95	90.50	2.7976E-001		6.1924E-002
Sb-125	176.33	6.89	5.2471E+000	8.93E-001	3.5503E-001
	427.89	29.33	8.9270E-001		8.3458E-002
	463.38	10.35	2.6051E+000		1.1465E+000
	600.56	17.80	1.4213E+000		-1.3418E-001
	606.64	5.02	6.2315E+000		-1.4301E+000
	635.90	11.32	1.9132E+000		-3.6416E-001
Cs-134	563.23	8.38	2.9356E+000	2.78E-001	-2.0307E+000
	569.32	15.43	1.5622E+000		5.0448E-002
	604.70	97.60	2.9873E-001		-1.3709E-001
	795.84	85.40	2.7811E-001		-1.3243E-001
	801.93	8.73	2.8639E+000		1.4461E+000
Cs-137	661.65	85.12	3.0034E-001	3.00E-001	-9.1268E-002
Eu-152	121.78	28.40	1.6931E+000	8.13E-001	6.9769E-002
	244.69	7.49	4.0111E+000		-1.4856E-001
	344.27	26.50	1.0478E+000		-8.7501E-001
	778.89	12.74	2.0090E+000		-4.7134E-001
	867.32	4.16	5.6392E+000		6.1018E-001
	964.01	14.40	1.9530E+000		9.3952E-001
	1085.78	10.00	2.5131E+000		2.3247E+000
	1112.02	13.30	1.7531E+000		-7.0651E-001
	1407.95	20.70	8.1336E-001		-7.3284E-001
Eu-154	123.07	40.50	1.1631E+000	6.56E-001	-3.0638E-001
	247.94	6.60	4.4018E+000		-1.0681E+000
	591.81	4.83	5.0615E+000		-4.5171E+000
	723.30	19.70	1.2853E+000		4.3951E-001
	756.87	4.33	5.9483E+000		-2.2476E+000
	873.19	11.50	1.9579E+000		-9.2070E-001
	996.32	10.30	2.0622E+000		-1.1144E+000
	1004.76	17.90	1.2295E+000		4.4502E-001
	1274.45	35.50	6.5602E-001		2.9762E-001
Eu-155	86.54	30.90	2.5583E+000	2.56E+000	1.6420E+000
	105.31	20.70	2.9521E+000		2.3508E+000
Am-241	59.54	35.90	3.3543E+000	3.35E+000	7.9843E-001
Cm-243	228.19	10.56	2.8618E+000	2.00E+000	-5.3327E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0049E+000	2.00E+000	-4.6985E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 9:49:11 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-03-121-F-
Sample Title: OOL-09-03-121-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 9:39:09 AM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-03-121-F-
Title: OOL-09-03-121-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	948-	960	954.55	238.52	1.23	9.48E+001	42.25	1.40E+002
2	2325-	2343	2333.55	583.37	0.79	8.88E+001	31.97	5.23E+001
3	3637-	3649	3643.96	911.07	0.34	4.64E+001	23.02	3.46E+001
4	4478-	4489	4483.27	1120.96	0.53	1.66E+001	16.20	2.04E+001
5	5834-	5860	5847.59	1462.15	2.23	5.33E+002	50.10	2.73E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.940	1460.81*		10.67	2.84035E+001	3.52465E+000
TL-208	0.472	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	4.76395E-001	1.82823E-001
		860.37		12.46		
Pb-212	0.338	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.76203E-001	3.66763E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.940	2.840346E+001	3.524651E+000
TL-208	0.472	4.763947E-001	1.828232E-001
Pb-212 @	0.338	7.762031E-001	3.667632E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	911.07	7.7289E-002	49.63
4	1120.96	2.7635E-002	97.71

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.5379E-001	2.09E-001	4.0300E-002
	1332.49	100.00	2.0926E-001		-3.4058E-002
Nb-94	702.63	100.00	2.6167E-001	2.51E-001	2.0720E-001
	871.10	100.00	2.5088E-001		1.0304E-001
Ag-108m	79.20	7.10	1.2336E+001	2.80E-001	-2.1327E+001
	433.93	89.90	2.9562E-001		2.0963E-001
	614.37	90.40	3.1384E-001		-5.2955E-001
	722.95	90.50	2.7976E-001		3.3016E-002
Sb-125	176.33	6.89	4.8178E+000	8.69E-001	1.4749E+000
	427.89	29.33	8.6936E-001		-7.9031E-001
	463.38	10.35	2.5457E+000		8.6487E-001
	600.56	17.80	1.4978E+000		1.7097E-001
	606.64	5.02	6.5236E+000		7.1476E+000
	635.90	11.32	1.9430E+000		-9.0079E-001
Cs-134	563.23	8.38	2.7642E+000	2.81E-001	-8.2687E-002
	569.32	15.43	1.5622E+000		-5.5178E-001
	604.70	97.60	3.0928E-001		-4.0172E-001
	795.84	85.40	2.8075E-001		-2.9349E-001
	801.93	8.73	2.8391E+000		7.0433E-001
Cs-137	661.65	85.12	3.0711E-001	3.07E-001	1.9429E-001
Eu-152	121.78	28.40	1.7591E+000	7.45E-001	8.0853E-001
	244.69	7.49	4.1365E+000		2.1155E+000
	344.27	26.50	9.9614E-001		-1.2767E+000
	778.89	12.74	1.9844E+000		1.1311E+000
	867.32	4.16	6.0785E+000		-5.1047E+000
	964.01	14.40	2.1063E+000		7.9785E-001
	1085.78	10.00	2.4354E+000		9.2745E-001
	1112.02	13.30	1.8454E+000		-1.3984E+000
	1407.95	20.70	7.4494E-001		-9.1421E-001
Eu-154	123.07	40.50	1.2250E+000	6.56E-001	9.3997E-001
	247.94	6.60	4.3217E+000		-5.2886E-002
	591.81	4.83	5.1598E+000		-1.9949E+000
	723.30	19.70	1.3007E+000		6.0297E-001
	756.87	4.33	5.7078E+000		-2.8713E-001
	873.19	11.50	2.1826E+000		3.9544E-001
	996.32	10.30	2.3361E+000		-3.6735E-001
	1004.76	17.90	1.2450E+000		-2.1978E-001
	1274.45	35.50	6.5602E-001		1.6571E-001
Eu-155	86.54	30.90	2.4629E+000	2.46E+000	2.7809E-001
	105.31	20.70	2.8528E+000		-2.0312E+000
Am-241	59.54	35.90	3.1860E+000	3.19E+000	-3.4590E-001
Cm-243	228.19	10.56	2.9431E+000	2.02E+000	-1.4277E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0171E+000	2.02E+000	-1.3065E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 10:18:27 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-03-122-F-
Sample Title: OOL-09-03-122-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 10:08:25 AM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-03-122-F-
Title: OOL-09-03-122-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	308	300.48	74.95	0.86	2.13E+002	94.63	7.98E+002
2	947-	964	954.73	238.56	1.25	1.31E+002	52.09	1.73E+002
3	1401-	1415	1408.06	351.93	0.60	9.14E+001	31.71	5.86E+001
4	2325-	2341	2333.53	583.37	1.53	6.96E+001	30.35	5.44E+001
5	3639-	3655	3646.90	911.81	1.71	4.68E+001	24.79	3.62E+001
6	5835-	5861	5847.48	1462.12	2.01	5.06E+002	48.21	2.30E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.942	1460.81*	10.67	2.69790E+001	3.37307E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.73366E-001	1.70240E-001
		860.37	12.46		
Pb-212	0.524	74.81* @	10.70	1.05319E+001	5.10631E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.07292E+000	4.58548E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.942	2.697900E+001	3.373075E+000
TL-208	0.472	3.733662E-001	1.702403E-001
Pb-212 @	0.524	1.072922E+000	4.585478E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	351.93	1.5235E-001	34.69
5	911.81	7.8062E-002	52.93

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.4151E-001	1.99E-001	4.4008E-002
	1332.49	100.00	1.9856E-001		4.8796E-002
Nb-94	702.63	100.00	2.3056E-001	2.30E-001	-1.7368E-001
	871.10	100.00	2.2998E-001		3.3312E-002
Ag-108m	79.20	7.10	1.1326E+001	2.54E-001	-6.1037E+000
	433.93	89.90	2.6869E-001		6.5725E-002
	614.37	90.40	2.9172E-001		-2.4670E-001
	722.95	90.50	2.5373E-001		2.1147E-001
Sb-125	176.33	6.89	4.7085E+000	8.21E-001	-1.4311E+000
	427.89	29.33	8.2060E-001		1.1424E-001
	463.38	10.35	2.5382E+000		-2.0044E-002
	600.56	17.80	1.3679E+000		-3.5648E-001
	606.64	5.02	5.7155E+000		7.6030E+000
	635.90	11.32	2.1304E+000		8.6821E-001
Cs-134	563.23	8.38	2.7994E+000	2.43E-001	1.4492E+000
	569.32	15.43	1.4397E+000		5.4824E-002
	604.70	97.60	2.6908E-001		-2.5603E-001
	795.84	85.40	2.4252E-001		1.6478E-001
	801.93	8.73	2.3458E+000		-1.3814E+000
Cs-137	661.65	85.12	2.7899E-001	2.79E-001	2.9877E-002
Eu-152	121.78	28.40	1.6182E+000	7.91E-001	-5.6941E-001
	244.69	7.49	3.9841E+000		-7.5556E-001
	344.27	26.50	9.3610E-001		-5.3531E-001
	778.89	12.74	1.8651E+000		2.9737E-001
	867.32	4.16	5.8080E+000		-1.3850E+000
	964.01	14.40	1.8790E+000		-5.2393E-001
	1085.78	10.00	2.0147E+000		-2.7190E+000
	1112.02	13.30	1.6213E+000		5.5674E-001
	1407.95	20.70	7.9128E-001		2.8560E-001
Eu-154	123.07	40.50	1.1193E+000	6.21E-001	2.5274E-001
	247.94	6.60	4.4648E+000		5.9407E+000
	591.81	4.83	5.2179E+000		-3.7535E-001
	723.30	19.70	1.1484E+000		2.0382E-001
	756.87	4.33	5.2187E+000		7.3496E-001
	873.19	11.50	1.9251E+000		5.5239E-002
	996.32	10.30	2.1037E+000		-2.9614E+000
	1004.76	17.90	1.3550E+000		9.0201E-001
	1274.45	35.50	6.2091E-001		-2.4346E-001
Eu-155	86.54	30.90	2.4124E+000	2.41E+000	1.3058E+000
	105.31	20.70	2.8315E+000		2.7202E+000
Am-241	59.54	35.90	3.1997E+000	3.20E+000	-2.8290E-001
Cm-243	228.19	10.56	2.7495E+000	2.06E+000	4.9560E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0612E+000	2.06E+000	-2.2216E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 10:05:25 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-03-123-F-
Sample Title: OOL-09-03-123-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 9:55:23 AM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-03-123-F-
Title: OOL-09-03-123-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	306	300.28	74.90	0.59	1.29E+002	92.17	8.65E+002
2	948-	959	954.95	238.62	0.92	1.04E+002	39.55	1.21E+002
3	1400-	1415	1407.71	351.84	0.91	7.02E+001	35.16	8.38E+001
4	2325-	2340	2333.48	583.35	0.84	7.51E+001	31.29	5.99E+001
5	3637-	3656	3644.86	911.30	1.45	8.07E+001	28.93	3.93E+001
6	5834-	5861	5847.97	1462.24	2.31	5.53E+002	47.93	1.02E+001
7	7058-	7071	7064.20	1766.39	0.42	2.55E+001	11.64	3.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.931	1460.81*	10.67	2.94739E+001	3.49628E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.03180E-001	1.76194E-001
		860.37	12.46		
Pb-212	0.525	74.81* @	10.70	6.37132E+000	4.72143E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.48356E-001	3.50118E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.931	2.947394E+001	3.496280E+000
TL-208	0.472	4.031802E-001	1.761941E-001
Pb-212 @	0.525	8.483556E-001	3.501183E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	351.84	1.1693E-001	50.11
5	911.30	1.3456E-001	35.84
7	1766.39	4.2500E-002	45.65

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.4011E-001	1.99E-001	5.1313E-002
	1332.49	100.00	1.9856E-001		-6.5526E-002
Nb-94	702.63	100.00	2.4034E-001	2.23E-001	8.1180E-002
	871.10	100.00	2.2255E-001		-2.9331E-001
Ag-108m	79.20	7.10	1.2060E+001	2.71E-001	-1.3358E+001
	433.93	89.90	2.7142E-001		-1.8886E-001
	614.37	90.40	3.1844E-001		-4.6766E-002
	722.95	90.50	2.8533E-001		5.6075E-002
Sb-125	176.33	6.89	5.0777E+000	8.09E-001	-2.6306E+000
	427.89	29.33	8.0935E-001		6.5083E-002
	463.38	10.35	2.4460E+000		-2.9659E-002
	600.56	17.80	1.4828E+000		8.6402E-001
	606.64	5.02	6.1562E+000		7.4817E+000
	635.90	11.32	1.8727E+000		-6.3682E-001
Cs-134	563.23	8.38	3.0121E+000	2.86E-001	2.6840E-001
	569.32	15.43	1.6228E+000		4.7945E-001
	604.70	97.60	2.9624E-001		-3.8258E-001
	795.84	85.40	2.8595E-001		1.5405E-001
	801.93	8.73	2.6854E+000		3.9445E-001
Cs-137	661.65	85.12	3.0034E-001	3.00E-001	5.6594E-002
Eu-152	121.78	28.40	1.6971E+000	7.08E-001	-4.2478E-001
	244.69	7.49	4.1689E+000		1.2700E+000
	344.27	26.50	9.8084E-001		-8.5189E-001
	778.89	12.74	1.8294E+000		-1.5176E+000
	867.32	4.16	5.6960E+000		-6.9119E+000
	964.01	14.40	1.9238E+000		-1.3278E+000
	1085.78	10.00	2.2428E+000		-1.1603E+000
	1112.02	13.30	1.9140E+000		-6.6854E-002
	1407.95	20.70	7.0796E-001		-6.8152E-002
Eu-154	123.07	40.50	1.1709E+000	6.56E-001	-7.6356E-001
	247.94	6.60	4.4176E+000		-4.5684E-001
	591.81	4.83	5.1207E+000		-1.8668E+000
	723.30	19.70	1.3109E+000		-4.8621E-002
	756.87	4.33	5.3256E+000		-2.5955E-002
	873.19	11.50	2.0008E+000		5.7624E-001
	996.32	10.30	2.4318E+000		1.5414E+000
	1004.76	17.90	1.2975E+000		-5.8656E-001
	1274.45	35.50	6.5602E-001		9.3520E-002
Eu-155	86.54	30.90	2.5194E+000	2.52E+000	2.8749E+000
	105.31	20.70	2.8806E+000		-1.3390E+000
Am-241	59.54	35.90	3.2926E+000	3.29E+000	-2.8763E-001
Cm-243	228.19	10.56	2.8249E+000	2.09E+000	-9.5971E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0926E+000	2.09E+000	1.1976E-003

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 10:32:32 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-03-124-F-
Sample Title: OOL-09-03-124-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 10:22:30 AM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: BLUE6279
Log Number: OOL-09-03-124-F-
Title: OOL-09-03-124-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	307	292.40	72.93	1.07	1.27E+002	44.10	5.93E+002
m	2	288-	307	300.52	74.96	1.08	2.90E+002	52.94	8.34E+002
	3	331-	344	339.65	84.75	0.73	1.31E+002	86.19	6.54E+002
	4	945-	963	955.28	238.70	0.99	1.12E+002	55.94	2.06E+002
	5	1403-	1415	1408.95	352.15	1.16	4.86E+001	27.61	5.64E+001
	6	2327-	2341	2334.38	583.58	0.84	6.29E+001	28.82	5.31E+001
	7	2431-	2444	2438.46	609.61	0.71	4.42E+001	26.71	5.08E+001
	8	3871-	3884	3877.60	969.50	0.83	3.49E+001	17.81	1.71E+001
	9	5835-	5861	5848.27	1462.32	2.28	5.02E+002	45.20	6.75E+000
	10	7058-	7071	7064.42	1766.44	0.70	2.74E+001	11.03	1.59E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.924	1460.81*	10.67	2.67791E+001	3.24165E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.37545E-001	1.61013E-001
		860.37	12.46		
Pb-212	0.524	74.81* @	10.70	1.42917E+001	3.83021E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.14323E-001	4.80008E-001
Bi-214	0.670	609.31*	46.30	4.36610E-001	2.69337E-001
		1120.29	15.10		
		1764.49*	15.80	1.02759E+000	4.26251E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.924	2.677911E+001	3.241649E+000
TL-208	0.468	3.375452E-001	1.610128E-001
Pb-212 @	0.524	9.143230E-001	4.800084E-001
Bi-214	0.670	6.052402E-001	2.276910E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.93	2.1095E-001	34.84
3	84.75	2.1911E-001	65.56
5	352.15	8.1012E-002	56.81
8	969.50	5.8109E-002	51.10

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.3149E-001	2.09E-001	-1.1896E-002
	1332.49	100.00	2.0926E-001		5.3775E-003
Nb-94	702.63	100.00	2.7307E-001	1.84E-001	1.2983E-001
	871.10	100.00	1.8365E-001		6.3484E-003
Ag-108m	79.20	7.10	1.1593E+001	2.80E-001	-2.2582E+000
	433.93	89.90	2.9810E-001		8.4577E-002
	614.37	90.40	3.1105E-001		-1.4898E-001
	722.95	90.50	2.7976E-001		-3.5286E-003
Sb-125	176.33	6.89	4.8911E+000	9.20E-001	-9.6586E-001
	427.89	29.33	9.2038E-001		-2.9403E-001
	463.38	10.35	2.5231E+000		7.0402E-001
	600.56	17.80	1.2173E+000		-9.1118E-001
	606.64	5.02	5.7806E+000		6.0481E+000
	635.90	11.32	1.9132E+000		-6.9973E-001
Cs-134	563.23	8.38	2.6558E+000	2.60E-001	-1.0727E+000
	569.32	15.43	1.4795E+000		4.7527E-001
	604.70	97.60	2.5968E-001		4.7324E-003
	795.84	85.40	2.6308E-001		-1.4128E-001
	801.93	8.73	2.6320E+000		-1.1459E+000
Cs-137	661.65	85.12	2.9805E-001	2.98E-001	2.8512E-002
Eu-152	121.78	28.40	1.6474E+000	8.76E-001	-3.4268E-002
	244.69	7.49	4.0776E+000		6.0525E-002
	344.27	26.50	9.8597E-001		-1.0166E+000
	778.89	12.74	1.7465E+000		-6.8351E-001
	867.32	4.16	4.8349E+000		-5.4975E-001
	964.01	14.40	1.9164E+000		7.0764E-001
	1085.78	10.00	2.2428E+000		-1.2323E+000
	1112.02	13.30	1.6553E+000		-3.4676E-001
	1407.95	20.70	8.7597E-001		3.6223E-001
Eu-154	123.07	40.50	1.1341E+000	6.12E-001	4.0828E-001
	247.94	6.60	4.3379E+000		-3.0050E-001
	591.81	4.83	4.8999E+000		-1.3798E+000
	723.30	19.70	1.2750E+000		7.6266E-002
	756.87	4.33	5.7811E+000		1.8798E+000
	873.19	11.50	1.5705E+000		-1.2751E+000
	996.32	10.30	2.2231E+000		1.3264E+000
	1004.76	17.90	1.2753E+000		-2.6076E-002
	1274.45	35.50	6.1179E-001		-8.4023E-003
Eu-155	86.54	30.90	2.4477E+000	2.45E+000	2.7665E-002
	105.31	20.70	2.7964E+000		-2.1427E+000
Am-241	59.54	35.90	3.2106E+000	3.21E+000	-1.7059E-001
Cm-243	228.19	10.56	2.8618E+000	2.00E+000	-1.6645E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.9968E+000	2.00E+000	-2.9618E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/18/2006 7:14:16 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: YEL7810

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-125-F-G
Sample ID: OOL-09-03-125-F
Sample Title: OOL-09-03-125-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 10:09:08 AM
Live Time: 600.0 seconds
Real Time: 600.5 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-125-F-G
Log Number: OOL-09-03-125-F
Title: OOL-09-03-125-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	946-	965	955.75	238.98	1.41	1.04E+002	51.23	1.65E+002
2	3640-	3656	3648.71	912.28	0.31	4.11E+001	20.21	2.09E+001
3	5838-	5862	5850.05	1462.67	2.29	3.48E+002	37.80	5.96E+000
4	7061-	7074	7067.00	1766.93	1.00	2.19E+001	11.75	5.11E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-125-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.884	1460.81*		10.67	2.55832E+001	3.46551E+000
Pb-212	0.398	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.03176E+000	5.34111E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-125-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.884	2.558319E+001	3.465511E+000
Pb-212 @	0.398	1.031756E+000	5.341105E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	912.28	6.8508E-002	49.17
4	1766.93	3.6481E-002	53.66

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-125-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.3225E-001	2.32E-001	-1.5249E-001
	1332.49	100.00	2.3390E-001		8.0207E-002
Nb-94	702.63	100.00	2.6133E-001	2.42E-001	-2.1553E-001
	871.10	100.00	2.4222E-001		7.8556E-002
Ag-108m	79.20	7.10	1.6692E+001	3.13E-001	-1.7030E+001
	433.93	89.90	3.1339E-001		4.8909E-003
	614.37	90.40	3.7566E-001		1.9724E-001
	722.95	90.50	3.2278E-001		1.7329E-001
Sb-125	176.33	6.89	5.5169E+000	9.71E-001	-2.2532E+000
	427.89	29.33	9.7068E-001		-4.3765E-001
	463.38	10.35	2.7468E+000		1.5192E-002
	600.56	17.80	1.5419E+000		1.9249E-001
	606.64	5.02	6.8714E+000		3.1261E+000
	635.90	11.32	2.0759E+000		-2.6878E+000
Cs-134	563.23	8.38	3.3290E+000	3.05E-001	-1.0701E+000
	569.32	15.43	1.9676E+000		-4.9539E-001
	604.70	97.60	3.0482E-001		-6.2585E-001
	795.84	85.40	3.2100E-001		-1.2920E-001
	801.93	8.73	3.1260E+000		-1.3484E+000
Cs-137	661.65	85.12	3.2732E-001	3.27E-001	2.1522E-001
Eu-152	121.78	28.40	1.9736E+000	8.92E-001	-5.2652E-001
	244.69	7.49	4.6351E+000		-1.8941E+000
	344.27	26.50	1.1058E+000		-1.6971E+000
	778.89	12.74	2.1277E+000		-7.5329E-001
	867.32	4.16	5.9620E+000		2.2976E+000
	964.01	14.40	2.0160E+000		-9.3458E-001
	1085.78	10.00	2.5537E+000		7.3056E-001
	1112.02	13.30	1.8648E+000		-2.7017E-001
	1407.95	20.70	8.9155E-001		-4.9429E-001
Eu-154	123.07	40.50	1.3745E+000	7.17E-001	9.9925E-001
	247.94	6.60	4.8712E+000		-3.4431E-001
	591.81	4.83	5.7692E+000		2.6378E+000
	723.30	19.70	1.5061E+000		8.9838E-001
	756.87	4.33	5.8951E+000		-1.6638E+000
	873.19	11.50	2.1075E+000		6.8579E-001
	996.32	10.30	2.5088E+000		-9.4625E-001
	1004.76	17.90	1.3148E+000		-9.2423E-001
	1274.45	35.50	7.1731E-001		1.9652E-001
Eu-155	86.54	30.90	3.1474E+000	3.15E+000	2.9239E+000
	105.31	20.70	3.3929E+000		1.6220E+000
Am-241	59.54	35.90	6.0790E+000	6.08E+000	2.3450E+000
Cm-243	228.19	10.56	3.5151E+000	2.16E+000	-7.9780E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1587E+000	2.16E+000	1.0021E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/18/2006 7:14:44 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: YEL7810

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-126-F-G
Sample ID: OOL-09-03-126-F
Sample Title: OOL-09-03-126-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 10:21:30 AM
Live Time: 600.0 seconds
Real Time: 600.5 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-126-F-G
Log Number: OOL-09-03-126-F
Title: OOL-09-03-126-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	948-	961	954.57	238.68	1.09	9.47E+001	41.64	1.28E+002
2	1403-	1418	1409.74	352.48	0.63	6.06E+001	31.34	6.44E+001
3	2328-	2341	2334.25	583.63	0.72	5.70E+001	22.73	2.80E+001
4	5147-	5158	5152.63	1288.29	0.31	1.02E+001	8.30	2.85E+000
5	5840-	5861	5849.90	1462.63	2.05	3.41E+002	39.20	1.60E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-126-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.888	1460.81*		10.67	2.50670E+001	3.52448E+000
TL-208	0.465	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	3.94414E-001	1.65685E-001
		860.37		12.46		
Pb-212	0.400	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	9.40861E-001	4.39088E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-126-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.888	2.506703E+001	3.524480E+000
TL-208	0.465	3.944140E-001	1.656846E-001
Pb-212 @	0.400	9.408606E-001	4.390879E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	352.48	1.0099E-001	51.72
4	1288.29	1.6923E-002	81.75

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-126-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.8322E-001	2.25E-001	1.9403E-001
	1332.49	100.00	2.2529E-001		7.0794E-002
Nb-94	702.63	100.00	2.7617E-001	2.69E-001	-1.6497E-001
	871.10	100.00	2.6919E-001		2.8985E-002
Ag-108m	79.20	7.10	1.7604E+001	2.94E-001	-2.6194E+001
	433.93	89.90	3.1703E-001		2.0241E-001
	614.37	90.40	3.4566E-001		6.1428E-003
	722.95	90.50	2.9442E-001		4.6742E-002
Sb-125	176.33	6.89	5.5880E+000	9.37E-001	-2.4520E+000
	427.89	29.33	9.3711E-001		-7.3626E-001
	463.38	10.35	2.6797E+000		3.4417E-001
	600.56	17.80	1.5821E+000		2.0240E-001
	606.64	5.02	6.7325E+000		6.1901E+000
	635.90	11.32	2.3975E+000		8.2409E-001
Cs-134	563.23	8.38	3.4404E+000	3.07E-001	2.5370E+000
	569.32	15.43	1.8153E+000		1.2054E+000
	604.70	97.60	3.1161E-001		-5.0889E-001
	795.84	85.40	3.0662E-001		4.2321E-002
	801.93	8.73	3.2233E+000		8.1049E-001
Cs-137	661.65	85.12	3.3092E-001	3.31E-001	1.0804E-001
Eu-152	121.78	28.40	1.9655E+000	9.97E-001	3.3218E-001
	244.69	7.49	4.9176E+000		-1.7574E+000
	344.27	26.50	1.1058E+000		-6.8777E-001
	778.89	12.74	1.9143E+000		1.6584E-001
	867.32	4.16	6.5081E+000		-6.2276E+000
	964.01	14.40	1.9535E+000		-5.7387E-001
	1085.78	10.00	2.3276E+000		-8.5783E-002
	1112.02	13.30	2.0570E+000		2.9038E-001
	1407.95	20.70	9.9748E-001		-2.7382E-001
Eu-154	123.07	40.50	1.3602E+000	7.24E-001	-1.9262E-001
	247.94	6.60	5.1292E+000		-2.6983E+000
	591.81	4.83	5.6807E+000		-1.3851E+000
	723.30	19.70	1.3268E+000		9.0957E-002
	756.87	4.33	6.2972E+000		2.5484E+000
	873.19	11.50	2.3262E+000		5.4635E-001
	996.32	10.30	2.4284E+000		-2.1995E+000
	1004.76	17.90	1.3764E+000		-7.7563E-002
	1274.45	35.50	7.2417E-001		4.7238E-002
Eu-155	86.54	30.90	3.2104E+000	3.21E+000	2.0085E+000
	105.31	20.70	3.4981E+000		-1.1955E+000
Am-241	59.54	35.90	5.7715E+000	5.77E+000	-5.6700E-001
Cm-243	228.19	10.56	3.4599E+000	2.20E+000	6.8336E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2035E+000	2.20E+000	-9.5720E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/18/2006 6:30:01 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: YEL7810

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-127-F-G
Sample ID: OOL-09-03-127-F
Sample Title: OOL-09-03-127-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 8:48:57 AM
Live Time: 600.0 seconds
Real Time: 600.5 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-127-F-G
Log Number: OOL-09-03-127-F
Title: OOL-09-03-127-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	949-	963	956.07	239.06	1.01	7.25E+001	43.50	1.46E+002
2	1351-	1360	1355.13	338.83	0.43	2.33E+001	24.21	5.67E+001
3	1404-	1414	1409.87	352.52	0.67	3.45E+001	24.97	5.35E+001
4	2325-	2343	2335.28	583.89	0.44	6.76E+001	27.26	3.74E+001
5	2433-	2446	2438.99	609.82	0.83	5.15E+001	24.10	3.55E+001
6	3640-	3657	3649.08	912.37	0.60	7.00E+001	21.72	1.60E+001
7	5838-	5864	5851.97	1463.15	2.13	3.57E+002	37.03	0.00E+000
8	7064-	7077	7070.10	1767.71	0.77	1.44E+001	10.88	5.56E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-127-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
TL-208	0.457	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	4.68070E-001	1.98558E-001
		860.37		12.46		
Pb-212	0.397	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.20282E-001	4.46702E-001
Bi-214	0.405	609.31*		46.30	6.59284E-001	3.19098E-001
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.510	338.32*		11.40	9.90738E-001	1.04029E+000
		911.07*		27.70	1.66365E+000	5.50241E-001
		969.11		16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-127-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
TL-208		0.457	4.680698E-001	1.985580E-001
Pb-212	@	0.397	7.202821E-001	4.467022E-001
Bi-214		0.405	6.592844E-001	3.190980E-001
Ac-228		0.510	1.516547E+000	4.863925E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	352.52	5.7547E-002	72.31
7	1463.15	5.9500E-001	10.37
8	1767.71	2.4062E-002	75.36

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-127-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.7092E-001	2.55E-001	5.4772E-002
	1332.49	100.00	2.5533E-001		2.9541E-001
Nb-94	702.63	100.00	2.9917E-001	2.56E-001	7.0127E-002
	871.10	100.00	2.5609E-001		-8.8191E-002
Ag-108m	79.20	7.10	1.7215E+001	3.15E-001	-2.1441E+001
	433.93	89.90	3.1461E-001		6.3300E-002
	614.37	90.40	3.5825E-001		-2.1249E-001
	722.95	90.50	3.2446E-001		4.5430E-003
Sb-125	176.33	6.89	5.6232E+000	9.92E-001	-1.3409E+000
	427.89	29.33	9.9240E-001		1.0100E-001
	463.38	10.35	2.8123E+000		-9.7408E-001
	600.56	17.80	1.5255E+000		8.3823E-001
	606.64	5.02	6.6381E+000		-5.8015E+000
	635.90	11.32	2.4644E+000		-4.1461E-001
Cs-134	563.23	8.38	3.1796E+000	2.92E-001	4.6653E-001
	569.32	15.43	1.7796E+000		9.7829E-001
	604.70	97.60	2.9218E-001		-3.6099E-001
	795.84	85.40	3.0238E-001		3.1896E-002
	801.93	8.73	3.0047E+000		-8.7140E-002
Cs-137	661.65	85.12	3.7127E-001	3.71E-001	3.4842E-001
Eu-152	121.78	28.40	1.9490E+000	9.64E-001	-3.0698E-001
	244.69	7.49	4.6692E+000		-1.4919E+000
	344.27	26.50	1.0743E+000		-4.6549E-001
	778.89	12.74	2.2069E+000		1.7378E+000
	867.32	4.16	5.9620E+000		-3.9767E+000
	964.01	14.40	2.0160E+000		-2.8061E+000
	1085.78	10.00	2.6174E+000		-1.8233E+000
	1112.02	13.30	1.9312E+000		-1.7102E-001
	1407.95	20.70	9.6362E-001		-3.0983E-001
Eu-154	123.07	40.50	1.3707E+000	7.44E-001	-1.0172E-001
	247.94	6.60	5.3167E+000		-4.4373E-001
	591.81	4.83	5.4992E+000		-8.3953E+000
	723.30	19.70	1.5137E+000		6.6209E-001
	756.87	4.33	7.1315E+000		4.5489E+000
	873.19	11.50	2.3101E+000		1.8047E+000
	996.32	10.30	2.4488E+000		-9.0546E-001
	1004.76	17.90	1.3764E+000		1.3297E+000
	1274.45	35.50	7.4433E-001		1.6759E-001
Eu-155	86.54	30.90	3.1997E+000	3.20E+000	9.4538E-001
	105.31	20.70	3.4568E+000		-1.0034E+000
Am-241	59.54	35.90	5.9141E+000	5.91E+000	-7.0639E-001
Cm-243	228.19	10.56	3.3869E+000	2.35E+000	4.8959E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3480E+000	2.35E+000	2.5657E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 5:10:08 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: YEL7810

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-128-F-G
Sample ID: OOL-09-03-128-F
Sample Title: OOL-09-03-128-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 8:28:34 AM
Live Time: 600.0 seconds
Real Time: 600.4 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-128-F-G
Log Number: OOL-09-03-128-F
Title: OOL-09-03-128-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	334-	356	338.99	84.77	0.70	6.60E+001	31.64	3.34E+002
m	2	334-	356	351.73	87.96	0.70	4.42E+001	27.64	2.57E+002
	3	946-	965	955.96	239.03	0.74	1.14E+002	50.44	1.56E+002
	4	1403-	1413	1408.06	352.06	0.74	3.19E+001	23.70	4.81E+001
	5	5839-	5865	5851.37	1462.99	2.09	3.88E+002	38.61	0.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-128-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.843	1460.81*		10.67	2.85242E+001	3.65909E+000
Pb-212	0.546	74.81	@	10.70		
		77.11	@	18.00		
		87.30*	@	8.00	3.44066E+000	2.25622E+000
		238.63*		44.60	1.13158E+000	5.31637E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-128-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.843	2.852417E+001	3.659094E+000
Pb-212 @	0.546	1.131577E+000	5.316373E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	84.77	1.1003E-001	47.93
4	352.06	5.3240E-002	74.18

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-128-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.8322E-001	2.25E-001	2.9081E-002
	1332.49	100.00	2.2529E-001		1.2046E-001
Nb-94	702.63	100.00	2.6471E-001	2.56E-001	-1.8111E-001
	871.10	100.00	2.5609E-001		2.5229E-001
Ag-108m	79.20	7.10	1.7155E+001	3.02E-001	-1.3197E+001
	433.93	89.90	3.0220E-001		-4.7503E-001
	614.37	90.40	3.1736E-001		-3.7950E-001
	722.95	90.50	3.2614E-001		-3.6127E-001
Sb-125	176.33	6.89	5.5241E+000	1.01E+000	-5.1648E+000
	427.89	29.33	1.0066E+000		7.0096E-001
	463.38	10.35	2.8444E+000		-9.6285E-001
	600.56	17.80	1.5337E+000		5.8054E-001
	606.64	5.02	6.2205E+000		8.3379E+000
	635.90	11.32	2.6544E+000		9.0951E-001
Cs-134	563.23	8.38	3.0580E+000	2.88E-001	-1.8730E+000
	569.32	15.43	1.8589E+000		9.2516E-001
	604.70	97.60	2.8784E-001		-4.8125E-001
	795.84	85.40	3.5516E-001		1.4756E-001
	801.93	8.73	3.2233E+000		-1.9516E+000
Cs-137	661.65	85.12	3.3092E-001	3.31E-001	-1.4182E-001
Eu-152	121.78	28.40	1.9045E+000	1.05E+000	-1.4225E+000
	244.69	7.49	4.5134E+000		-1.3470E+000
	344.27	26.50	1.1531E+000		-4.5580E-001
	778.89	12.74	2.0592E+000		-4.4056E-001
	867.32	4.16	6.3763E+000		-3.0949E+000
	964.01	14.40	1.9788E+000		-2.1106E+000
	1085.78	10.00	2.5964E+000		1.6892E+000
	1112.02	13.30	1.8648E+000		-2.9452E+000
	1407.95	20.70	1.0460E+000		8.1539E-001
Eu-154	123.07	40.50	1.3389E+000	6.44E-001	3.0017E-001
	247.94	6.60	5.2189E+000		-2.4923E-001
	591.81	4.83	5.7398E+000		1.8209E+000
	723.30	19.70	1.5438E+000		-1.1928E-001
	756.87	4.33	5.9366E+000		-6.8045E-001
	873.19	11.50	2.1427E+000		-2.1628E+000
	996.32	10.30	2.6246E+000		6.2046E-001
	1004.76	17.90	1.4466E+000		3.7787E-002
	1274.45	35.50	6.4436E-001		-2.6202E-002
Eu-155	86.54	30.90	3.1614E+000	3.16E+000	2.9398E+000
	105.31	20.70	3.4449E+000		-2.6365E-001
Am-241	59.54	35.90	5.8075E+000	5.81E+000	-1.8071E+000
Cm-243	228.19	10.56	3.3411E+000	2.25E+000	2.5627E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2473E+000	2.25E+000	1.0438E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/18/2006 7:15:14 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: YEL7810

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-129-F-G
Sample ID: OOL-09-03-129-F
Sample Title: OOL-09-03-129-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 9:37:55 AM
Live Time: 600.0 seconds
Real Time: 600.5 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-129-F-G
Log Number: OOL-09-03-129-F
Title: OOL-09-03-129-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2433-	2450	2439.33	609.91	0.56	6.57E+001	27.31	3.93E+001
2	3641-	3653	3647.57	911.99	1.03	2.85E+001	17.50	1.95E+001
3	3875-	3887	3880.83	970.31	0.33	1.49E+001	16.97	2.11E+001
4	5514-	5525	5520.00	1380.14	1.27	1.20E+001	8.66	3.00E+000
5	5839-	5862	5850.56	1462.79	2.13	3.32E+002	36.41	3.16E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-129-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.869	1460.81*	10.67	2.43938E+001	3.32605E+000
Bi-214	0.403	609.31*	46.30	8.40217E-001	3.64748E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.600	338.32	11.40		
		911.07*	27.70	6.76967E-001	4.22865E-001
		969.11*	16.60	6.00158E-001	6.85587E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-129-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.869	2.439375E+001	3.326053E+000
Bi-214	0.403	8.402167E-001	3.647476E-001
Ac-228	0.600	6.557993E-001	3.599104E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
4	1380.14	2.0000E-002	72.13

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-129-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.5799E-001	2.13E-001	1.0572E-001
	1332.49	100.00	2.1321E-001		5.9135E-002
Nb-94	702.63	100.00	2.6638E-001	2.54E-001	-1.9163E-002
	871.10	100.00	2.5416E-001		-2.5744E-002
Ag-108m	79.20	7.10	1.6710E+001	3.15E-001	-3.7096E-001
	433.93	89.90	3.1461E-001		3.3216E-002
	614.37	90.40	3.7435E-001		-8.2635E-002
	722.95	90.50	3.1594E-001		1.2735E-001
Sb-125	176.33	6.89	5.6930E+000	8.53E-001	3.9209E+000
	427.89	29.33	8.5336E-001		-9.2492E-002
	463.38	10.35	2.7357E+000		2.1924E-001
	600.56	17.80	1.5419E+000		-9.2878E-001
	606.64	5.02	7.2716E+000		-8.2020E-001
	635.90	11.32	2.3702E+000		4.3354E-001
Cs-134	563.23	8.38	3.1454E+000	3.20E-001	6.4029E-001
	569.32	15.43	1.7152E+000		-4.2321E-001
	604.70	97.60	3.1956E-001		-1.1479E-001
	795.84	85.40	3.2100E-001		1.8991E-001
	801.93	8.73	2.9421E+000		-3.6535E+000
Cs-137	661.65	85.12	3.0670E-001	3.07E-001	-7.2213E-002
Eu-152	121.78	28.40	1.9017E+000	9.46E-001	7.1481E-001
	244.69	7.49	4.5398E+000		-8.0502E+000
	344.27	26.50	1.0527E+000		-2.6144E+000
	778.89	12.74	2.0169E+000		7.1483E-001
	867.32	4.16	6.4645E+000		4.7065E+000
	964.01	14.40	1.8490E+000		4.2713E-001
	1085.78	10.00	2.5964E+000		1.7506E+000
	1112.02	13.30	1.9474E+000		9.2117E-001
	1407.95	20.70	9.4618E-001		-3.3163E-001
Eu-154	123.07	40.50	1.3073E+000	6.29E-001	-1.8648E-001
	247.94	6.60	5.1192E+000		3.2763E+000
	591.81	4.83	5.9420E+000		3.3210E+000
	723.30	19.70	1.4356E+000		3.6933E-001
	756.87	4.33	6.1397E+000		-4.3601E+000
	873.19	11.50	2.2281E+000		1.5150E+000
	996.32	10.30	2.4488E+000		1.2382E-001
	1004.76	17.90	1.4351E+000		3.2697E-001
	1274.45	35.50	6.2865E-001		6.5294E-002
Eu-155	86.54	30.90	2.9882E+000	2.99E+000	1.8938E+000
	105.31	20.70	3.2926E+000		5.6772E-001
Am-241	59.54	35.90	5.4654E+000	5.47E+000	-2.7539E+000
Cm-243	228.19	10.56	3.1632E+000	2.20E+000	-2.8815E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1979E+000	2.20E+000	8.0798E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/18/2006 7:15:42 AM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: YEL7810

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-130-F-G
Sample ID: OOL-09-03-130-F
Sample Title: OOL-09-03-130-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 9:54:19 AM
Live Time: 600.0 seconds
Real Time: 600.5 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-130-F-G
Log Number: OOL-09-03-130-F
Title: OOL-09-03-130-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	305	301.41	75.38	0.99	7.64E+001	59.90	3.80E+002
2	948-	961	955.81	238.99	0.96	1.00E+002	40.25	1.17E+002
3	1347-	1362	1353.19	338.34	0.83	5.20E+001	27.51	4.80E+001
4	3640-	3657	3648.39	912.20	1.80	6.17E+001	21.70	1.83E+001
5	3873-	3886	3880.09	970.13	1.28	2.79E+001	18.47	2.11E+001
6	5838-	5862	5850.81	1462.86	1.91	3.75E+002	38.61	3.15E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-130-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.861	1460.81*	10.67	2.75559E+001	3.60991E+000
Pb-212	0.560	74.81* @	10.70	6.68487E+000	5.39902E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.94758E-001	4.29221E-001
Ac-228	0.967	338.32*	11.40	2.20850E+000	1.21871E+000
		911.07*	27.70	1.46476E+000	5.42210E-001
		969.11*	16.60	1.12157E+000	7.52333E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-130-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40		0.861	2.755586E+001	3.609907E+000
Pb-212	@	0.560	9.947585E-001	4.292210E-001
Ac-228		0.967	1.446688E+000	4.137496E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-130-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.7508E-001	2.16E-001	-4.0036E-003
	1332.49	100.00	2.1630E-001		1.2226E-003
Nb-94	702.63	100.00	2.8868E-001	2.62E-001	1.2842E-001
	871.10	100.00	2.6179E-001		-1.1006E-001
Ag-108m	79.20	7.10	1.6807E+001	3.26E-001	-2.2279E+001
	433.93	89.90	3.3001E-001		-1.1586E-001
	614.37	90.40	3.8975E-001		-2.6469E-001
	722.95	90.50	3.2614E-001		4.3551E-002
Sb-125	176.33	6.89	5.4810E+000	1.02E+000	-2.1031E+000
	427.89	29.33	1.0171E+000		7.4469E-001
	463.38	10.35	2.9489E+000		1.1888E+000
	600.56	17.80	1.4921E+000		-1.6833E-001
	606.64	5.02	6.6618E+000		7.2434E+000
	635.90	11.32	2.3975E+000		-2.1318E+000
Cs-134	563.23	8.38	3.4247E+000	2.91E-001	3.7295E-001
	569.32	15.43	1.7706E+000		3.5373E-001
	604.70	97.60	2.9074E-001		-2.6263E-001
	795.84	85.40	3.2499E-001		2.1915E-001
	801.93	8.73	3.0660E+000		7.1274E-001
Cs-137	661.65	85.12	3.2732E-001	3.27E-001	-1.5609E-001
Eu-152	121.78	28.40	1.9532E+000	8.53E-001	1.7310E+000
	244.69	7.49	4.7451E+000		-7.5145E+000
	344.27	26.50	1.1093E+000		1.3695E-002
	778.89	12.74	2.3081E+000		3.9042E-001
	867.32	4.16	6.3763E+000		-3.2244E+000
	964.01	14.40	2.1000E+000		5.1291E-001
	1085.78	10.00	2.9876E+000		1.7843E+000
	1112.02	13.30	1.7958E+000		-1.5417E+000
	1407.95	20.70	8.5294E-001		2.1336E-001
Eu-154	123.07	40.50	1.3408E+000	6.52E-001	1.3490E-001
	247.94	6.60	5.1991E+000		8.5742E-001
	591.81	4.83	5.8274E+000		-2.5054E+000
	723.30	19.70	1.4907E+000		1.7411E-001
	756.87	4.33	6.6370E+000		1.6352E+000
	873.19	11.50	2.3892E+000		2.0813E+000
	996.32	10.30	2.5674E+000		1.2073E+000
	1004.76	17.90	1.3883E+000		4.1582E-001
	1274.45	35.50	6.5205E-001		3.9992E-001
Eu-155	86.54	30.90	3.2104E+000	3.21E+000	4.1158E+000
	105.31	20.70	3.5253E+000		9.9306E-001
Am-241	59.54	35.90	5.7985E+000	5.80E+000	-7.6227E-001
Cm-243	228.19	10.56	3.3295E+000	2.32E+000	-9.8228E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3167E+000	2.32E+000	6.2851E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 5:11:06 PM

Y A N K E E R O W E P O R T A B L E I S O C S

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

Detector ID: YEL7810

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-131-F-G
Sample ID: OOL-09-03-131-F
Sample Title: OOL-09-03-131-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 8:15:10 AM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-131-F-G
Log Number: OOL-09-03-131-F
Title: OOL-09-03-131-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	198-	213	205.30	51.34	1.00	2.98E+002	103.06	8.20E+002
2	948-	962	955.28	238.86	1.06	8.89E+001	42.70	1.33E+002
3	2432-	2447	2439.20	609.87	1.88	8.32E+001	20.79	9.83E+000
4	5838-	5862	5849.97	1462.65	1.79	3.58E+002	39.11	9.51E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-131-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.886	1460.81*		10.67	2.63513E+001	3.58016E+000
Pb-212	0.399	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.82774E-001	4.46247E-001
Bi-214	0.404	609.31*		46.30	1.06415E+000	2.97150E-001
		1120.29		15.10		
		1764.49		15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-131-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.886	2.635126E+001	3.580162E+000
Pb-212 @	0.399	8.827740E-001	4.462466E-001
Bi-214	0.404	1.064145E+000	2.971499E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	51.34	4.9587E-001	34.64

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-131-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.4195E-001	2.04E-001	-2.7969E-002
	1332.49	100.00	2.0364E-001		-3.4798E-002
Nb-94	702.63	100.00	2.6133E-001	2.42E-001	-6.3368E-002
	871.10	100.00	2.4222E-001		-5.1601E-002
Ag-108m	79.20	7.10	2.0068E+001	3.06E-001	-1.5505E+001
	433.93	89.90	3.0598E-001		1.4992E-001
	614.37	90.40	3.6773E-001		-1.5698E-002
	722.95	90.50	3.3111E-001		1.2399E-001
Sb-125	176.33	6.89	5.4593E+000	9.26E-001	4.2946E-001
	427.89	29.33	9.2563E-001		-2.3739E-001
	463.38	10.35	2.9179E+000		2.4294E+000
	600.56	17.80	1.5742E+000		-6.4423E-001
	606.64	5.02	6.7325E+000		-1.4721E+000
	635.90	11.32	2.3975E+000		-9.7029E-001
Cs-134	563.23	8.38	3.3290E+000	2.85E-001	-1.8871E+000
	569.32	15.43	1.9099E+000		9.9576E-001
	604.70	97.60	2.9787E-001		-1.0588E-001
	795.84	85.40	2.8472E-001		-3.3625E-002
	801.93	8.73	2.5561E+000		-4.4442E+000
Cs-137	661.65	85.12	2.8659E-001	2.87E-001	5.0299E-002
Eu-152	121.78	28.40	1.9171E+000	9.81E-001	3.7236E-001
	244.69	7.49	4.5398E+000		-1.2834E+000
	344.27	26.50	1.0814E+000		-8.5781E-001
	778.89	12.74	1.9442E+000		-1.6648E+000
	867.32	4.16	6.3763E+000		3.1264E+000
	964.01	14.40	2.0404E+000		-1.0651E+000
	1085.78	10.00	2.3979E+000		6.5767E-001
	1112.02	13.30	1.8307E+000		2.2718E-001
	1407.95	20.70	9.8071E-001		9.6474E-001
Eu-154	123.07	40.50	1.3262E+000	5.87E-001	-8.8704E-002
	247.94	6.60	4.9239E+000		-5.8778E-002
	591.81	4.83	5.5604E+000		-4.2879E+000
	723.30	19.70	1.5213E+000		1.5828E-001
	756.87	4.33	5.2769E+000		-6.4184E+000
	873.19	11.50	2.0351E+000		3.6229E-001
	996.32	10.30	2.1444E+000		-3.4727E-001
	1004.76	17.90	1.4236E+000		9.9730E-001
	1274.45	35.50	5.8737E-001		1.1837E-001
Eu-155	86.54	30.90	3.3107E+000	3.31E+000	-5.6115E+000
	105.31	20.70	3.4508E+000		-1.3712E+000
Am-241	59.54	35.90	8.2250E+000	8.22E+000	1.0227E+000
Cm-243	228.19	10.56	3.2236E+000	2.33E+000	4.3183E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3324E+000	2.33E+000	-8.0297E-003

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 5:11:55 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: YEL7810

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-132-F-G
Sample ID: OOL-09-03-132-F
Sample Title: OOL-09-03-132-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 8:02:23 AM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-132-F-G
Log Number: OOL-09-03-132-F
Title: OOL-09-03-132-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	336-	354	340.33	85.11	0.51	3.96E+001	28.08	2.87E+002
m	2	336-	354	349.21	87.33	0.51	5.53E+001	29.91	2.63E+002
	3	950-	963	955.84	239.00	0.69	1.15E+002	43.60	1.35E+002
	4	1177-	1186	1181.66	295.46	0.55	2.35E+001	23.23	5.15E+001
	5	1404-	1417	1409.49	352.42	0.42	5.44E+001	29.48	5.96E+001
	6	2327-	2344	2334.02	583.57	2.00	7.49E+001	27.40	3.71E+001
	7	3640-	3655	3647.79	912.05	0.41	4.48E+001	20.19	2.02E+001
	8	5839-	5862	5849.75	1462.59	2.15	3.40E+002	40.01	1.85E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-132-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.893	1460.81*		10.67	2.50273E+001	3.57111E+000
TL-208	0.466	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	5.18019E-001	2.01560E-001
		860.37		12.46		
Pb-212	0.548	74.81	@	10.70		
		77.11	@	18.00		
		87.30*	@	8.00	4.39294E+000	2.52599E+000
		238.63*		44.60	1.14151E+000	4.68755E-001
PB-214	0.598	74.82	@	6.21		
		77.11	@	10.50		
		87.30*	@	4.67	7.52538E+000	4.36437E+000
		241.98		7.49		
		295.21*		19.20	5.72007E-001	5.73957E-001
		351.92*		37.20	7.16050E-001	4.05739E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-132-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40		0.893	2.502734E+001	3.571109E+000
TL-208		0.466	5.180194E-001	2.015597E-001
Pb-212	@	0.548	1.141512E+000	4.687547E-001
PB-214	@	0.598	6.680533E-001	3.313143E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	85.11	6.5939E-002	70.98
7	912.05	7.4705E-002	45.04

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-132-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.8121E-001	2.31E-001	3.6332E-002
	1332.49	100.00	2.3107E-001		-1.0740E-001
Nb-94	702.63	100.00	2.8868E-001	2.62E-001	2.8625E-002
	871.10	100.00	2.6179E-001		4.6817E-002
Ag-108m	79.20	7.10	1.8669E+001	3.02E-001	-3.2687E+001
	433.93	89.90	3.1461E-001		8.8898E-003
	614.37	90.40	3.5688E-001		-9.5152E-002
	722.95	90.50	3.0178E-001		-5.1677E-003
Sb-125	176.33	6.89	5.9372E+000	1.02E+000	3.0078E+000
	427.89	29.33	1.0206E+000		4.5280E-001
	463.38	10.35	2.5517E+000		1.4503E+000
	600.56	17.80	1.6520E+000		1.0340E+000
	606.64	5.02	6.8943E+000		4.4322E+000
	635.90	11.32	2.3702E+000		-4.1500E-001
Cs-134	563.23	8.38	3.3451E+000	3.16E-001	-5.5366E-001
	569.32	15.43	1.7706E+000		-2.0970E-001
	604.70	97.60	3.1561E-001		-6.0704E-001
	795.84	85.40	3.2100E-001		9.7967E-002
	801.93	8.73	3.1457E+000		5.4866E-001
Cs-137	661.65	85.12	2.9481E-001	2.95E-001	-3.5838E-001
Eu-152	121.78	28.40	2.0206E+000	1.06E+000	-1.3189E-002
	244.69	7.49	4.7950E+000		-1.2289E+000
	344.27	26.50	1.1331E+000		-2.6094E-001
	778.89	12.74	2.0169E+000		-3.1656E+000
	867.32	4.16	6.5514E+000		-2.4471E+000
	964.01	14.40	2.0764E+000		-1.0486E+000
	1085.78	10.00	2.7201E+000		3.6655E-001
	1112.02	13.30	1.9635E+000		1.6348E+000
	1407.95	20.70	1.0616E+000		3.8033E-001
Eu-154	123.07	40.50	1.3934E+000	6.52E-001	-6.3094E-001
	247.94	6.60	4.9448E+000		-6.8419E+000
	591.81	4.83	5.3429E+000		-5.9933E+000
	723.30	19.70	1.4031E+000		-1.3553E-002
	756.87	4.33	5.8111E+000		1.4395E+000
	873.19	11.50	2.1427E+000		-1.0457E+000
	996.32	10.30	2.3871E+000		2.3062E+000
	1004.76	17.90	1.3273E+000		3.4134E-001
	1274.45	35.50	6.5205E-001		-5.1533E-001
Eu-155	86.54	30.90	3.4464E+000	3.45E+000	3.9321E+000
	105.31	20.70	3.6001E+000		-2.5138E+000
Am-241	59.54	35.90	8.1840E+000	8.18E+000	-1.2782E+000
Cm-243	228.19	10.56	3.3755E+000	2.33E+000	1.1604E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3324E+000	2.33E+000	-4.1104E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/14/2006 3:01:24 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: OOL-09-03-133-F-
Sample Title: OOL-09-03-133-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 2:51:20 PM
Live Time: 600.0 seconds
Real Time: 600.7 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: YEL7810
Log Number: OOL-09-03-133-F-
Title: OOL-09-03-133-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5828-	5854	5841.01	1460.41	1.70	1.96E+002	28.44	3.39E+000
2	7049-	7062	7055.77	1764.12	0.43	1.28E+001	10.25	5.24E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.994	1460.81*	10.67	1.43663E+001	2.39086E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.994	1.436633E+001	2.390859E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	1764.12	2.1273E-002	80.28

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	3.0254E-001	2.80E-001	3.9609E-001
	1332.49	100.00	2.7963E-001		2.2589E-001
Nb-94	702.63	100.00	2.8406E-001	2.84E-001	1.8228E-001
	871.10	100.00	2.8681E-001		1.1680E-002
Ag-108m	79.20	7.10	1.9336E+001	2.93E-001	-2.3421E+001
	433.93	89.90	2.9318E-001		-6.3041E-002
	614.37	90.40	2.9967E-001		-3.9898E-001
	722.95	90.50	3.2614E-001		1.6926E-002
Sb-125	176.33	6.89	5.6232E+000	9.85E-001	1.7869E+000
	427.89	29.33	9.8521E-001		1.8577E-001
	463.38	10.35	2.7688E+000		1.9546E+000
	600.56	17.80	1.5089E+000		9.9779E-001
	606.64	5.02	6.2205E+000		3.8499E+000
	635.90	11.32	2.3839E+000		-2.1516E+000
Cs-134	563.23	8.38	3.2964E+000	3.16E-001	-6.3198E-001
	569.32	15.43	1.7339E+000		6.0785E-001
	604.70	97.60	3.1561E-001		1.3239E-001
	795.84	85.40	3.2892E-001		-4.2570E-002
	801.93	8.73	3.2423E+000		2.1887E+000
Cs-137	661.65	85.12	3.8526E-001	3.85E-001	1.4295E-001
Eu-152	121.78	28.40	1.9709E+000	9.10E-001	3.7769E-001
	244.69	7.49	4.2780E+000		-2.1724E+000
	344.27	26.50	1.1431E+000		-9.4768E-001
	778.89	12.74	2.2581E+000		-1.0359E-001
	867.32	4.16	6.7635E+000		-1.6177E+000
	964.01	14.40	2.1234E+000		1.0779E+000
	1085.78	10.00	2.2795E+000		2.3062E-001
	1112.02	13.30	1.7053E+000		-1.4164E+000
	1407.95	20.70	9.1017E-001		5.1441E-002
Eu-154	123.07	40.50	1.3399E+000	6.44E-001	-6.1347E-001
	247.94	6.60	4.7856E+000		1.1168E+000
	591.81	4.83	5.1156E+000		-4.8632E+000
	723.30	19.70	1.4830E+000		-3.4136E-001
	756.87	4.33	6.5631E+000		1.2630E+000
	873.19	11.50	2.5101E+000		1.6070E-001
	996.32	10.30	2.5674E+000		-4.0734E-001
	1004.76	17.90	1.5666E+000		2.9376E-001
	1274.45	35.50	6.4436E-001		1.2263E-001
Eu-155	86.54	30.90	3.4065E+000	3.41E+000	6.4381E-002
	105.31	20.70	3.5696E+000		-6.0021E-001
Am-241	59.54	35.90	7.0594E+000	7.06E+000	-4.9622E+000
Cm-243	228.19	10.56	3.2355E+000	2.21E+000	-1.1094E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2090E+000	2.21E+000	-8.8435E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/14/2006 1:03:23 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-03-134-F-
Sample Title: OOL-09-03-134-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 12:53:23 PM
Live Time: 600.0 seconds
Real Time: 600.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-03-134-F-
Title: OOL-09-03-134-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5828-	5858	5843.73	1461.18	1.89	3.97E+002	61.48	1.20E+002

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.995	1460.81*	10.67	2.11492E+001	3.69792E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.995	2.114917E+001	3.697919E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.2251E-001	2.13E-001	-1.8419E-001
	1332.49	100.00	2.1270E-001		5.6031E-002
Nb-94	702.63	100.00	2.4766E-001	2.48E-001	-3.2971E-003
	871.10	100.00	2.5088E-001		2.1128E-001
Ag-108m	79.20	7.10	1.1778E+001	2.79E-001	-1.4978E+001
	433.93	89.90	2.8722E-001		-4.3290E-002
	614.37	90.40	2.9864E-001		-1.7125E-001
	722.95	90.50	2.7864E-001		-1.2734E-001
Sb-125	176.33	6.89	4.9190E+000	8.51E-001	-1.1954E+000
	427.89	29.33	8.5075E-001		-1.9651E-001
	463.38	10.35	2.4848E+000		5.8240E-001
	600.56	17.80	1.3514E+000		-1.2369E+000
	606.64	5.02	6.1410E+000		2.6501E+000
	635.90	11.32	2.1482E+000		3.5691E-001
Cs-134	563.23	8.38	2.8226E+000	2.91E-001	1.3821E-001
	569.32	15.43	1.5622E+000		2.1077E-001
	604.70	97.60	2.9456E-001		-7.4503E-002
	795.84	85.40	2.9106E-001		1.1352E-001
	801.93	8.73	2.6854E+000		1.9317E-001
Cs-137	661.65	85.12	2.9689E-001	2.97E-001	1.7809E-001
Eu-152	121.78	28.40	1.6566E+000	7.80E-001	9.1365E-001
	244.69	7.49	4.0644E+000		-2.4534E+000
	344.27	26.50	1.0285E+000		-9.5599E-001
	778.89	12.74	1.7179E+000		-3.9573E-002
	867.32	4.16	6.2091E+000		5.1202E+000
	964.01	14.40	1.9961E+000		1.4435E+000
	1085.78	10.00	2.2856E+000		6.1303E-001
	1112.02	13.30	1.6553E+000		-1.5503E+000
	1407.95	20.70	7.7998E-001		-2.7942E-001
Eu-154	123.07	40.50	1.1501E+000	6.34E-001	1.3029E-001
	247.94	6.60	4.3619E+000		-2.8106E+000
	591.81	4.83	5.0015E+000		2.4585E+000
	723.30	19.70	1.2802E+000		-5.8598E-001
	756.87	4.33	5.1093E+000		-6.5442E-001
	873.19	11.50	2.1238E+000		-6.1533E-002
	996.32	10.30	2.3725E+000		-1.4711E+000
	1004.76	17.90	1.2975E+000		-1.3069E-001
	1274.45	35.50	6.3432E-001		-1.0224E-001
Eu-155	86.54	30.90	2.2984E+000	2.30E+000	4.0464E-001
	105.31	20.70	2.7910E+000		4.7880E-001
Am-241	59.54	35.90	2.9936E+000	2.99E+000	5.1715E-001
Cm-243	228.19	10.56	2.8937E+000	2.06E+000	-4.1748E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0612E+000	2.06E+000	-7.3157E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/14/2006 2:34:46 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: OOL-09-03-135-F-
Sample Title: OOL-09-03-135-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 2:24:42 PM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: YEL7810
Log Number: OOL-09-03-135-F-
Title: OOL-09-03-135-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	334-	345	337.13	84.31	0.74	9.50E+001	73.38	5.17E+002
2	2433-	2443	2437.36	609.41	0.53	2.12E+001	19.75	3.08E+001
3	3635-	3648	3642.19	910.65	1.01	2.33E+001	19.56	2.77E+001
4	3685-	3696	3690.10	922.63	0.80	9.40E+000	10.52	7.60E+000
5	5829-	5852	5841.29	1460.48	1.24	1.96E+002	28.29	3.04E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.996	1460.81*	10.67	1.43925E+001	2.38206E+000
Bi-214	0.410	609.31*	46.30	2.71015E-001	2.54855E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.996	1.439255E+001	2.382063E+000
Bi-214	0.410	2.710151E-001	2.548550E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	84.31	1.5836E-001	77.23
3	910.65	3.8807E-002	83.99
4	922.63	1.5662E-002	111.91

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.6237E-001	2.48E-001	3.9081E-002
	1332.49	100.00	2.4753E-001		-3.5440E-002
Nb-94	702.63	100.00	2.7617E-001	2.52E-001	9.5217E-003
	871.10	100.00	2.5221E-001		-3.4418E-002
Ag-108m	79.20	7.10	2.0156E+001	2.80E-001	-2.1235E+001
	433.93	89.90	2.7977E-001		-1.8909E-001
	614.37	90.40	3.1105E-001		-1.1625E-001
	722.95	90.50	3.1421E-001		9.5348E-002
Sb-125	176.33	6.89	5.1844E+000	8.82E-001	1.7323E+000
	427.89	29.33	8.8221E-001		6.7335E-003
	463.38	10.35	2.6454E+000		5.9335E-001
	600.56	17.80	1.5581E+000		-1.7934E+000
	606.64	5.02	6.4206E+000		3.9784E+000
	635.90	11.32	2.5294E+000		1.6656E+000
Cs-134	563.23	8.38	3.1281E+000	2.98E-001	-1.7129E-001
	569.32	15.43	1.6284E+000		4.1292E-003
	604.70	97.60	3.2602E-001		-1.3193E-001
	795.84	85.40	2.9807E-001		3.9658E-002
	801.93	8.73	2.8996E+000		8.0383E-001
Cs-137	661.65	85.12	4.1738E-001	4.17E-001	3.8446E-001
Eu-152	121.78	28.40	2.0246E+000	8.53E-001	2.3685E+000
	244.69	7.49	4.3610E+000		-3.0910E+000
	344.27	26.50	1.0563E+000		2.5795E-001
	778.89	12.74	2.0869E+000		-3.8134E-001
	867.32	4.16	6.1499E+000		-6.6473E+000
	964.01	14.40	1.9020E+000		-7.6272E-001
	1085.78	10.00	2.5103E+000		1.0533E+000
	1112.02	13.30	1.8648E+000		-1.4447E+000
	1407.95	20.70	8.5294E-001		2.1336E-001
Eu-154	123.07	40.50	1.3802E+000	6.67E-001	-1.4628E-001
	247.94	6.60	4.5868E+000		1.9194E-001
	591.81	4.83	6.4570E+000		1.2031E+000
	723.30	19.70	1.4275E+000		2.3104E-001
	756.87	4.33	6.0188E+000		2.1831E-001
	873.19	11.50	2.2777E+000		9.6997E-001
	996.32	10.30	2.3450E+000		-1.2082E+000
	1004.76	17.90	1.3273E+000		4.1717E-001
	1274.45	35.50	6.6716E-001		1.9102E-001
Eu-155	86.54	30.90	3.6523E+000	3.65E+000	2.9628E+000
	105.31	20.70	3.7687E+000		3.7557E+000
Am-241	59.54	35.90	7.3789E+000	7.38E+000	9.6672E-002
Cm-243	228.19	10.56	3.3004E+000	2.19E+000	2.0784E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1924E+000	2.19E+000	-1.1910E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/14/2006 10:36:06 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-03-136-F-
Sample Title: OOL-09-03-136-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 10:31:03 AM
Live Time: 300.0 seconds
Real Time: 300.3 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-03-136-F-
Title: OOL-09-03-136-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	307	300.30	74.91	0.84	1.37E+002	64.54	3.57E+002
2	950-	962	954.71	238.56	0.68	5.38E+001	30.16	6.83E+001
3	2433-	2443	2437.83	609.45	0.51	2.26E+001	16.25	1.84E+001
4	5833-	5858	5846.28	1461.82	1.66	2.90E+002	33.38	0.00E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.965	1460.81*	10.67	2.37183E+001	3.33761E+000
Pb-212	0.518	74.81* @	10.70	1.04541E+001	5.33050E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.10929E-001	4.14143E-001
Bi-214	0.385	609.31*	46.30	3.68947E-001	2.69282E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.965	2.371835E+001	3.337615E+000
Pb-212	@	0.518	7.109289E-001	4.141430E-001
Bi-214		0.385	3.689472E-001	2.692819E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.4910E-001	2.39E-001	6.4115E-005
	1332.49	100.00	2.3915E-001		1.8342E-002
Nb-94	702.63	100.00	2.5565E-001	2.56E-001	-2.0960E-001
	871.10	100.00	2.5879E-001		-5.8753E-003
Ag-108m	79.20	7.10	1.1956E+001	3.26E-001	-8.2302E+000
	433.93	89.90	3.2609E-001		-7.1935E-002
	614.37	90.40	3.4192E-001		-1.9908E-001
	722.95	90.50	3.3670E-001		2.8192E-001
Sb-125	176.33	6.89	5.2332E+000	9.36E-001	-5.0074E-001
	427.89	29.33	9.3640E-001		-3.0085E-001
	463.38	10.35	2.7693E+000		1.5970E+000
	600.56	17.80	1.4498E+000		-1.8388E+000
	606.64	5.02	7.0475E+000		8.2499E+000
	635.90	11.32	2.4496E+000		7.2692E-001
Cs-134	563.23	8.38	3.3425E+000	3.00E-001	9.1369E-001
	569.32	15.43	1.7447E+000		2.2163E-001
	604.70	97.60	3.2402E-001		-1.3765E-001
	795.84	85.40	3.0008E-001		1.2302E-001
	801.93	8.73	3.0347E+000		4.9670E-001
Cs-137	661.65	85.12	3.0163E-001	3.02E-001	-6.7102E-002
Eu-152	121.78	28.40	1.7766E+000	1.01E+000	7.1451E-001
	244.69	7.49	4.5324E+000		9.0397E-001
	344.27	26.50	1.1237E+000		4.4946E-001
	778.89	12.74	1.9383E+000		-9.5391E-001
	867.32	4.16	6.3553E+000		1.9211E+000
	964.01	14.40	2.0243E+000		5.7247E-001
	1085.78	10.00	2.4498E+000		5.6747E-002
	1112.02	13.30	1.7997E+000		7.9793E-001
	1407.95	20.70	1.0076E+000		8.8067E-001
Eu-154	123.07	40.50	1.2582E+000	6.37E-001	2.2860E-001
	247.94	6.60	5.0156E+000		-2.1338E+000
	591.81	4.83	5.6317E+000		-3.0527E+000
	723.30	19.70	1.5586E+000		1.7644E+000
	756.87	4.33	5.4759E+000		-5.4235E+000
	873.19	11.50	2.3006E+000		2.0416E-001
	996.32	10.30	2.2021E+000		-1.5864E+000
	1004.76	17.90	1.1216E+000		-1.1432E-001
	1274.45	35.50	6.3738E-001		-2.9449E-001
Eu-155	86.54	30.90	2.5662E+000	2.57E+000	1.8118E+000
	105.31	20.70	3.0107E+000		-3.5653E-001
Am-241	59.54	35.90	3.2292E+000	3.23E+000	-3.2926E-002
Cm-243	228.19	10.56	3.1783E+000	2.32E+000	-4.9158E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3157E+000	2.32E+000	8.9143E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/14/2006 11:35:27 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-03-137-F-
Sample Title: OOL-09-03-137-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 11:25:25 AM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-03-137-F-
Title: OOL-09-03-137-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	291.87	72.80	1.13	1.52E+002	44.88	6.69E+002
m	2	286-	306	300.47	74.95	1.13	2.72E+002	51.82	8.61E+002
M	3	753-	782	757.09	189.14	0.45	2.24E+001	15.73	7.14E+001
m	4	753-	782	777.14	194.15	0.46	2.54E+001	16.26	6.24E+001
	5	948-	961	954.16	238.42	1.09	8.81E+001	43.04	1.43E+002
	6	1402-	1413	1406.99	351.66	1.02	5.22E+001	28.74	6.38E+001
	7	2323-	2340	2331.22	582.79	1.45	6.12E+001	31.21	5.88E+001
	8	2427-	2442	2436.78	609.18	1.01	6.73E+001	28.01	4.57E+001
	9	3635-	3653	3643.35	910.92	1.49	8.00E+001	22.17	1.30E+001
	10	5830-	5856	5843.33	1461.08	1.98	5.25E+002	47.43	1.36E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.997	1460.81*	10.67	2.80066E+001	3.39620E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.28626E-001	1.73051E-001
		860.37	12.46		
Pb-212	0.524	74.81* @	10.70	1.34253E+001	3.66980E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.21689E-001	3.70142E-001
Bi-214	0.399	609.31*	46.30	6.64854E-001	2.88699E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.997	2.800658E+001	3.396200E+000
TL-208	0.470	3.286262E-001	1.730513E-001
Pb-212 @	0.524	7.216893E-001	3.701424E-001
Bi-214	0.399	6.648540E-001	2.886987E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.80	2.5399E-001	29.45
M 3	189.14	3.7253E-002	70.38
m 4	194.15	4.2384E-002	63.95
6	351.66	8.6997E-002	55.06
9	910.92	1.3337E-001	27.70

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.4977E-001	1.79E-001	1.8030E-001
	1332.49	100.00	1.7919E-001		3.3669E-002
Nb-94	702.63	100.00	2.4560E-001	2.41E-001	2.4864E-002
	871.10	100.00	2.4067E-001		1.3546E-001
Ag-108m	79.20	7.10	1.1428E+001	2.67E-001	-1.0276E+001
	433.93	89.90	2.7322E-001		8.6654E-002
	614.37	90.40	2.9172E-001		-1.1063E-001
	722.95	90.50	2.6708E-001		-5.2135E-002
Sb-125	176.33	6.89	5.0290E+000	8.85E-001	-5.2510E-001
	427.89	29.33	8.8499E-001		4.0890E-001
	463.38	10.35	2.4144E+000		2.9918E+000
	600.56	17.80	1.3234E+000		-4.2678E-001
	606.64	5.02	5.9086E+000		5.7092E+000
	635.90	11.32	2.1215E+000		5.1934E-001
Cs-134	563.23	8.38	2.9686E+000	2.70E-001	2.2389E+000
	569.32	15.43	1.6463E+000		-4.2913E-001
	604.70	97.60	3.0120E-001		4.1877E-002
	795.84	85.40	2.7002E-001		8.1869E-002
	801.93	8.73	2.3458E+000		-3.1363E+000
Cs-137	661.65	85.12	2.8868E-001	2.89E-001	4.0207E-002
Eu-152	121.78	28.40	1.6308E+000	8.35E-001	1.0175E-001
	244.69	7.49	3.9909E+000		1.9114E+000
	344.27	26.50	9.4949E-001		-1.1032E+000
	778.89	12.74	1.9595E+000		1.8740E+000
	867.32	4.16	5.3451E+000		-3.3817E+000
	964.01	14.40	1.9457E+000		2.3201E+000
	1085.78	10.00	2.4485E+000		-7.3953E-001
	1112.02	13.30	1.7425E+000		-1.2311E+000
	1407.95	20.70	8.3480E-001		6.0656E-001
Eu-154	123.07	40.50	1.1297E+000	6.56E-001	3.8849E-001
	247.94	6.60	4.6183E+000		-5.8597E-001
	591.81	4.83	5.1598E+000		4.3461E-001
	723.30	19.70	1.2539E+000		1.4354E-001
	756.87	4.33	5.3520E+000		-4.3832E+000
	873.19	11.50	2.1138E+000		2.2749E+000
	996.32	10.30	2.2866E+000		3.1355E-001
	1004.76	17.90	1.1899E+000		6.2832E-001
	1274.45	35.50	6.5602E-001		-1.0281E-001
Eu-155	86.54	30.90	2.3411E+000	2.34E+000	1.3515E+000
	105.31	20.70	2.7054E+000		-1.9749E+000
Am-241	59.54	35.90	2.9966E+000	3.00E+000	-4.0519E+000
Cm-243	228.19	10.56	2.7685E+000	2.18E+000	-1.0104E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1804E+000	2.18E+000	1.2593E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/14/2006 10:23:38 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-03-138-F-
Sample Title: OOL-09-03-138-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 10:13:34 AM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-03-138-F-
Title: OOL-09-03-138-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	291.72	72.76	0.99	1.78E+002	44.55	6.94E+002
m	2	284-	306	300.26	74.89	0.99	2.64E+002	50.57	7.38E+002
	3	949-	960	954.72	238.56	1.25	1.34E+002	39.79	1.10E+002
	4	1400-	1415	1407.80	351.86	0.89	7.10E+001	34.57	8.00E+001
	5	2036-	2048	2042.46	510.58	0.45	5.36E+001	30.84	7.24E+001
	6	2324-	2340	2332.95	583.22	1.16	8.39E+001	30.98	5.31E+001
	7	2430-	2445	2437.19	609.29	0.38	8.90E+001	26.72	3.20E+001
	8	3018-	3027	3022.62	755.69	0.50	1.46E+001	14.12	1.64E+001
	9	3636-	3653	3643.48	910.95	0.59	8.78E+001	24.31	2.02E+001
	10	3869-	3882	3876.55	969.24	1.43	4.10E+001	19.49	2.10E+001
	11	4474-	4485	4479.30	1119.97	0.27	1.58E+001	17.45	2.52E+001
	12	5833-	5859	5845.50	1461.62	2.02	5.60E+002	47.42	6.22E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.994	511.00*	100.00	2.34015E-001	1.38567E-001
K-40	0.977	1460.81*	10.67	2.98435E+001	3.49719E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	1.08340E+000	6.47587E-001
		583.14*	84.20	4.50397E-001	1.76621E-001
		860.37	12.46		
Pb-212	0.525	74.81* @	10.70	1.30648E+001	3.57759E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.09479E+000	3.68312E-001
Bi-214	0.700	609.31*	46.30	8.78764E-001	2.85630E-001
		1120.29*	15.10	5.56787E-001	6.19399E-001
		1764.49	15.80		
Ac-228	0.639	338.32	11.40		
		911.07*	27.70	1.58102E+000	4.74114E-001
		969.11*	16.60	1.25799E+000	6.12036E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.994	1.367294E-001	1.436880E-001
K-40	0.977	2.984347E+001	3.497189E+000
TL-208	0.752	4.503968E-001	1.760105E-001
Pb-212 @	0.525	1.094787E+000	3.683116E-001
Bi-214	0.700	8.223019E-001	2.593793E-001
Ac-228	0.639	1.459876E+000	3.748101E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.76	2.9709E-001	24.99
4	351.86	1.1833E-001	48.69
8	755.69	2.4368E-002	96.60

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.3727E-001	2.14E-001	1.7542E-001
	1332.49	100.00	2.1439E-001		1.7567E-001
Nb-94	702.63	100.00	2.5972E-001	2.29E-001	1.6878E-001
	871.10	100.00	2.2876E-001		1.4435E-001
Ag-108m	79.20	7.10	1.0987E+001	2.61E-001	-5.3968E+000
	433.93	89.90	2.9313E-001		1.8530E-001
	614.37	90.40	2.9766E-001		-4.0772E-003
	722.95	90.50	2.6111E-001		-2.2845E-001
Sb-125	176.33	6.89	4.7548E+000	8.23E-001	-1.2319E+000
	427.89	29.33	8.2339E-001		-4.8600E-001
	463.38	10.35	2.4771E+000		8.5912E-001
	600.56	17.80	1.2173E+000		1.2504E-001
	606.64	5.02	5.8768E+000		8.6991E+000
	635.90	11.32	2.0012E+000		1.9622E+000
Cs-134	563.23	8.38	2.5424E+000	2.79E-001	-2.3531E-001
	569.32	15.43	1.4598E+000		4.1139E-002
	604.70	97.60	2.7903E-001		-4.5745E-002
	795.84	85.40	2.9232E-001		8.3199E-002
	801.93	8.73	2.7762E+000		9.2841E-001
Cs-137	661.65	85.12	2.7651E-001	2.77E-001	9.3625E-002
Eu-152	121.78	28.40	1.6607E+000	7.33E-001	7.5535E-001
	244.69	7.49	4.1946E+000		2.3944E+000
	344.27	26.50	9.3879E-001		-7.5647E-001
	778.89	12.74	1.7179E+000		-6.5346E-001
	867.32	4.16	5.9449E+000		-1.1340E-001
	964.01	14.40	1.8790E+000		2.6332E-003
	1085.78	10.00	2.2714E+000		2.2499E+000
	1112.02	13.30	1.7948E+000		7.4880E-001
	1407.95	20.70	7.3284E-001		-1.4842E-001
Eu-154	123.07	40.50	1.1312E+000	5.79E-001	-7.3571E-001
	247.94	6.60	4.5728E+000		7.6249E-001
	591.81	4.83	4.9611E+000		1.1757E+000
	723.30	19.70	1.2162E+000		-5.9082E-002
	756.87	4.33	4.9405E+000		-3.5781E+000
	873.19	11.50	1.9795E+000		-5.9554E-001
	996.32	10.30	2.1443E+000		4.3933E-001
	1004.76	17.90	1.0886E+000		-1.5371E-001
	1274.45	35.50	5.7867E-001		-6.7327E-001
Eu-155	86.54	30.90	2.3701E+000	2.37E+000	3.8762E+000
	105.31	20.70	2.7319E+000		1.6334E-001
Am-241	59.54	35.90	3.0169E+000	3.02E+000	5.4228E-001
Cm-243	228.19	10.56	2.9118E+000	1.91E+000	2.7136E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.9131E+000	1.91E+000	6.8779E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/14/2006 2:05:59 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: OOL-09-03-139-F-
Sample Title: OOL-09-03-139-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 1:55:44 PM
Live Time: 600.0 seconds
Real Time: 600.7 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: YEL7810
Log Number: OOL-09-03-139-F-
Title: OOL-09-03-139-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2324-	2338	2331.96	583.06	0.48	3.60E+001	21.16	2.80E+001
2	5831-	5853	5841.73	1460.58	1.98	2.50E+002	34.19	1.42E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.998	1460.81*	10.67	1.83505E+001	2.91808E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.49011E-001	1.50035E-001
		860.37	12.46		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.998	1.835053E+001	2.918080E+000
TL-208	0.471	2.490112E-001	1.500349E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.5576E-001	2.16E-001	1.9228E-001
	1332.49	100.00	2.1630E-001		9.6760E-002
Nb-94	702.63	100.00	2.8250E-001	2.75E-001	7.1240E-003
	871.10	100.00	2.7460E-001		1.1522E-001
Ag-108m	79.20	7.10	1.9160E+001	3.02E-001	-2.6337E+001
	433.93	89.90	3.0220E-001		6.3352E-002
	614.37	90.40	3.2200E-001		-3.8985E-001
	722.95	90.50	3.3762E-001		8.7850E-002
Sb-125	176.33	6.89	5.2601E+000	9.29E-001	-1.8898E+000
	427.89	29.33	9.2948E-001		-1.1639E-001
	463.38	10.35	2.8337E+000		-3.7399E-001
	600.56	17.80	1.5172E+000		3.4242E-001
	606.64	5.02	6.1436E+000		3.2541E+000
	635.90	11.32	2.3839E+000		-4.4154E-001
Cs-134	563.23	8.38	3.0580E+000	3.12E-001	-1.1009E+000
	569.32	15.43	1.7523E+000		6.8266E-001
	604.70	97.60	3.1161E-001		3.7536E-001
	795.84	85.40	3.2892E-001		-5.6697E-003
	801.93	8.73	2.9421E+000		-9.9322E-002
Cs-137	661.65	85.12	3.7599E-001	3.76E-001	3.9852E-001
Eu-152	121.78	28.40	1.9614E+000	6.98E-001	1.9036E+000
	244.69	7.49	4.4334E+000		-3.5511E+000
	344.27	26.50	9.8502E-001		-1.0638E+000
	778.89	12.74	1.8684E+000		-2.6297E-001
	867.32	4.16	6.1959E+000		6.3085E-001
	964.01	14.40	2.0524E+000		1.6063E+000
	1085.78	10.00	2.5103E+000		1.0035E+000
	1112.02	13.30	1.6484E+000		-6.3973E-001
	1407.95	20.70	6.9846E-001		-3.7569E-001
Eu-154	123.07	40.50	1.3496E+000	6.60E-001	2.8760E-001
	247.94	6.60	4.8606E+000		5.9733E-001
	591.81	4.83	5.9702E+000		3.4257E+000
	723.30	19.70	1.5659E+000		8.1555E-001
	756.87	4.33	5.3236E+000		-1.3510E+000
	873.19	11.50	2.2940E+000		-6.0710E-001
	996.32	10.30	2.4690E+000		-2.7735E-001
	1004.76	17.90	1.3398E+000		-1.6180E-001
	1274.45	35.50	6.5965E-001		5.6737E-001
Eu-155	86.54	30.90	3.5768E+000	3.58E+000	4.3945E+000
	105.31	20.70	3.6416E+000		8.8324E-001
Am-241	59.54	35.90	7.0887E+000	7.09E+000	6.8497E-001
Cm-243	228.19	10.56	3.0513E+000	2.12E+000	3.8120E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1188E+000	2.12E+000	5.1096E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/18/2006 7:16:05 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: YEL7810

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-140-F-G
Sample ID: OOL-09-03-140-F
Sample Title: OOL-09-03-140-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 11:28:52 AM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-140-F-G
Log Number: OOL-09-03-140-F
Title: OOL-09-03-140-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	947-	964	956.91	239.27	1.16	7.81E+001	48.27	1.62E+002
2	1403-	1417	1408.95	352.29	1.49	5.18E+001	28.29	5.42E+001
3	2040-	2050	2045.74	511.50	0.49	2.87E+001	23.52	4.83E+001
4	2431-	2445	2439.96	610.06	1.09	4.73E+001	26.43	4.67E+001
5	3641-	3655	3648.11	912.13	0.76	3.33E+001	21.30	2.87E+001
6	5841-	5864	5852.24	1463.21	2.20	2.71E+002	35.40	1.43E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-140-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.991	511.00*		100.00	1.59094E-001	1.32268E-001
Pb-212	0.392	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.75841E-001	4.94940E-001
Bi-214	0.398	609.31*		46.30	6.04665E-001	3.46460E-001
		1120.29		15.10		
		1764.49		15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-140-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN	0.991	1.590943E-001	1.322685E-001
Pb-212 @	0.392	7.758412E-001	4.949398E-001
Bi-214	0.398	6.046653E-001	3.464604E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	352.29	8.6372E-002	54.60
5	912.13	5.5511E-002	63.95
6	1463.21	4.5123E-001	13.08

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-140-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.8719E-001	2.68E-001	-1.9619E-001
	1332.49	100.00	2.6778E-001		3.7004E-002
Nb-94	702.63	100.00	2.7935E-001	2.79E-001	-3.0955E-001
	871.10	100.00	3.1590E-001		1.8287E-002
Ag-108m	79.20	7.10	1.9160E+001	3.18E-001	-2.1087E+001
	433.93	89.90	3.3346E-001		1.8645E-001
	614.37	90.40	4.0089E-001		-3.3940E-001
	722.95	90.50	3.1767E-001		-9.3453E-002
Sb-125	176.33	6.89	5.8028E+000	1.03E+000	-1.7785E+000
	427.89	29.33	1.0275E+000		4.4176E-001
	463.38	10.35	2.9693E+000		5.9898E-001
	600.56	17.80	1.7760E+000		1.7729E+000
	606.64	5.02	7.3146E+000		9.2955E+000
	635.90	11.32	2.4379E+000		-1.5023E+000
Cs-134	563.23	8.38	3.7824E+000	3.35E-001	4.1380E+000
	569.32	15.43	1.9431E+000		1.2195E+000
	604.70	97.60	3.3485E-001		-3.1839E-001
	795.84	85.40	3.4788E-001		1.8986E-001
	801.93	8.73	3.4090E+000		-3.8065E+000
Cs-137	661.65	85.12	3.5002E-001	3.50E-001	-7.0568E-002
Eu-152	121.78	28.40	2.1303E+000	1.01E+000	3.9636E-001
	244.69	7.49	4.8608E+000		-8.5100E-001
	344.27	26.50	1.1824E+000		2.6876E-001
	778.89	12.74	2.2198E+000		-4.2924E-001
	867.32	4.16	7.6230E+000		2.2299E+000
	964.01	14.40	1.8624E+000		-1.5358E+000
	1085.78	10.00	2.7201E+000		-5.0108E-002
	1112.02	13.30	2.0417E+000		-1.3882E+000
	1407.95	20.70	1.0139E+000		6.0495E-001
Eu-154	123.07	40.50	1.4476E+000	7.38E-001	-3.0970E-002
	247.94	6.60	5.2875E+000		-9.4028E-002
	591.81	4.83	6.0542E+000		-6.0308E-001
	723.30	19.70	1.4436E+000		-8.7055E-001
	756.87	4.33	6.6001E+000		4.1245E+000
	873.19	11.50	2.7751E+000		1.6141E+000
	996.32	10.30	2.6804E+000		1.1814E+000
	1004.76	17.90	1.3521E+000		-1.2699E+000
	1274.45	35.50	7.3768E-001		3.9840E-001
Eu-155	86.54	30.90	3.6107E+000	3.61E+000	4.1503E+000
	105.31	20.70	3.7922E+000		1.0576E-001
Am-241	59.54	35.90	6.7282E+000	6.73E+000	-1.3455E+000
Cm-243	228.19	10.56	3.3640E+000	2.32E+000	-1.3098E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3219E+000	2.32E+000	1.6556E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/18/2006 7:16:31 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: YEL7810

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-141-F-G
Sample ID: OOL-09-03-141-F
Sample Title: OOL-09-03-141-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 12:58:26 PM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-141-F-G
Log Number: OOL-09-03-141-F
Title: OOL-09-03-141-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	309	301.15	75.31	1.16	2.06E+002	92.04	6.65E+002
2	948-	962	955.22	238.84	0.51	1.08E+002	43.88	1.35E+002
3	1405-	1414	1409.81	352.50	0.63	3.76E+001	24.17	5.04E+001
4	2327-	2342	2335.52	583.95	0.51	5.64E+001	24.62	3.36E+001
5	5839-	5862	5850.41	1462.76	1.16	2.74E+002	34.28	8.40E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-141-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.873	1460.81*	10.67	2.01118E+001	3.00022E+000
TL-208	0.455	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.90458E-001	1.78044E-001
		860.37	12.46		
Pb-212	0.562	74.81* @	10.70	1.80543E+001	8.80872E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.06825E+000	4.67017E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-141-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.873	2.011183E+001	3.000216E+000
TL-208	0.455	3.904581E-001	1.780438E-001
Pb-212 @	0.562	1.068247E+000	4.670174E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	352.50	6.2746E-002	64.20

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-141-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.6668E-001	2.16E-001	-3.7492E-002
	1332.49	100.00	2.1630E-001		3.7726E-002
Nb-94	702.63	100.00	2.6303E-001	2.63E-001	1.1339E-001
	871.10	100.00	2.7638E-001		-8.5848E-002
Ag-108m	79.20	7.10	1.9075E+001	3.02E-001	-1.6991E+001
	433.93	89.90	3.2418E-001		6.8655E-002
	614.37	90.40	3.6099E-001		1.0496E-001
	722.95	90.50	3.0178E-001		-1.2522E-001
Sb-125	176.33	6.89	6.1842E+000	1.01E+000	-2.4558E+000
	427.89	29.33	1.0136E+000		6.2643E-001
	463.38	10.35	2.8971E+000		5.7828E-001
	600.56	17.80	1.5901E+000		5.5474E-001
	606.64	5.02	6.4696E+000		3.9748E+000
	635.90	11.32	2.3286E+000		-8.6907E-001
Cs-134	563.23	8.38	3.1281E+000	2.92E-001	2.3593E+000
	569.32	15.43	1.7246E+000		4.9455E-001
	604.70	97.60	2.9218E-001		-4.3057E-001
	795.84	85.40	3.2300E-001		2.4173E-001
	801.93	8.73	3.0457E+000		-9.0660E-001
Cs-137	661.65	85.12	3.2367E-001	3.24E-001	-8.0208E-003
Eu-152	121.78	28.40	2.2177E+000	9.10E-001	-1.1456E-001
	244.69	7.49	4.9176E+000		-1.1812E+000
	344.27	26.50	1.0418E+000		-1.4695E+000
	778.89	12.74	2.0869E+000		-1.0129E+000
	867.32	4.16	7.1678E+000		-2.2084E-001
	964.01	14.40	1.7943E+000		-1.1631E+000
	1085.78	10.00	2.6174E+000		1.4346E+000
	1112.02	13.30	1.9312E+000		-5.0953E-001
	1407.95	20.70	9.1017E-001		3.2467E-001
Eu-154	123.07	40.50	1.5222E+000	6.21E-001	-1.0748E+000
	247.94	6.60	5.2189E+000		-6.0966E+000
	591.81	4.83	5.4683E+000		4.5364E-001
	723.30	19.70	1.4113E+000		6.2082E-001
	756.87	4.33	6.0188E+000		-3.0563E+000
	873.19	11.50	2.3579E+000		4.7330E-002
	996.32	10.30	2.4284E+000		-2.4463E+000
	1004.76	17.90	1.4351E+000		-3.5811E-001
	1274.45	35.50	6.2064E-001		-2.0441E-001
Eu-155	86.54	30.90	3.5741E+000	3.57E+000	1.5959E+000
	105.31	20.70	4.0022E+000		2.0702E+000
Am-241	59.54	35.90	6.9146E+000	6.91E+000	2.4113E+000
Cm-243	228.19	10.56	3.6281E+000	2.47E+000	-1.3042E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4691E+000	2.47E+000	-4.7002E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/18/2006 7:16:57 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: YEL7810

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-142-F-G
Sample ID: OOL-09-03-142-F
Sample Title: OOL-09-03-142-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 1:14:19 PM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-142-F-G
Log Number: OOL-09-03-142-F
Title: OOL-09-03-142-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	308	301.06	75.29	0.76	1.04E+002	78.73	5.72E+002
2	946-	960	955.17	238.83	1.40	8.08E+001	41.18	1.25E+002
3	2431-	2444	2438.10	609.60	0.40	3.70E+001	20.93	2.80E+001
4	5839-	5860	5849.30	1462.48	2.01	2.84E+002	34.62	7.68E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-142-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.905	1460.81*	10.67	2.08978E+001	3.05568E+000
Pb-212	0.562	74.81* @	10.70	9.08849E+000	7.13203E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.02359E-001	4.27971E-001
Bi-214	0.409	609.31*	46.30	4.73331E-001	2.74130E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-142-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40		0.905	2.089782E+001	3.055675E+000
Pb-212	@	0.562	8.023594E-001	4.279713E-001
Bi-214		0.409	4.733312E-001	2.741298E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-142-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.6454E-001	2.28E-001	1.7465E-001
	1332.49	100.00	2.2820E-001		1.7067E-001
Nb-94	702.63	100.00	2.5791E-001	2.58E-001	4.3364E-002
	871.10	100.00	2.7990E-001		1.8226E-001
Ag-108m	79.20	7.10	1.8959E+001	2.98E-001	-6.5556E+000
	433.93	89.90	2.9837E-001		-9.9141E-003
	614.37	90.40	3.4991E-001		-2.0371E-001
	722.95	90.50	3.0359E-001		3.4756E-002
Sb-125	176.33	6.89	6.0163E+000	8.94E-001	-3.8505E+000
	427.89	29.33	8.9427E-001		-3.6828E-001
	463.38	10.35	2.8337E+000		1.2364E+000
	600.56	17.80	1.6136E+000		3.9604E-001
	606.64	5.02	6.2205E+000		-1.2371E+000
	635.90	11.32	2.3839E+000		-1.0361E+000
Cs-134	563.23	8.38	3.0580E+000	2.89E-001	-7.7106E-001
	569.32	15.43	1.6185E+000		-2.5249E+000
	604.70	97.60	3.0619E-001		3.3361E-002
	795.84	85.40	2.8925E-001		-4.9767E-002
	801.93	8.73	2.9209E+000		5.3437E-001
Cs-137	661.65	85.12	3.1056E-001	3.11E-001	-6.0065E-002
Eu-152	121.78	28.40	2.1503E+000	8.53E-001	-2.4347E-001
	244.69	7.49	4.9577E+000		-3.7545E+000
	344.27	26.50	1.1364E+000		-1.3645E+000
	778.89	12.74	1.8839E+000		-8.1394E-001
	867.32	4.16	6.5944E+000		-1.6023E+000
	964.01	14.40	1.8757E+000		-1.0282E+000
	1085.78	10.00	2.2302E+000		-1.4562E+000
	1112.02	13.30	1.8133E+000		1.1677E+000
	1407.95	20.70	8.5294E-001		2.1336E-001
Eu-154	123.07	40.50	1.4841E+000	6.04E-001	-8.0663E-001
	247.94	6.60	5.5348E+000		3.4808E+000
	591.81	4.83	5.6509E+000		1.7409E+000
	723.30	19.70	1.3948E+000		6.6539E-001
	756.87	4.33	6.6736E+000		3.7565E+000
	873.19	11.50	2.4504E+000		-4.7357E-001
	996.32	10.30	2.1208E+000		-2.9203E+000
	1004.76	17.90	1.2631E+000		2.7793E-001
	1274.45	35.50	6.0425E-001		6.7746E-001
Eu-155	86.54	30.90	3.5191E+000	3.52E+000	7.5951E-001
	105.31	20.70	3.8030E+000		7.7329E-001
Am-241	59.54	35.90	6.6739E+000	6.67E+000	9.0636E-001
Cm-243	228.19	10.56	3.4544E+000	2.17E+000	3.1571E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1700E+000	2.17E+000	-1.5691E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/18/2006 7:18:23 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: YEL7810

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-143-F-G
Sample ID: OOL-09-03-143-F
Sample Title: OOL-09-03-143-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 1:37:16 PM
Live Time: 600.0 seconds
Real Time: 600.5 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-143-F-G
Log Number: OOL-09-03-143-F
Title: OOL-09-03-143-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	297-	308	302.13	75.55	0.34	9.48E+001	70.52	4.76E+002
2	947-	962	956.69	239.21	0.67	6.52E+001	42.09	1.32E+002
3	1403-	1414	1407.93	352.03	0.52	3.36E+001	22.62	3.94E+001
4	2326-	2340	2334.02	583.58	1.10	6.08E+001	22.89	2.62E+001
5	2434-	2446	2439.40	609.92	0.47	3.60E+001	18.19	1.90E+001
6	5837-	5862	5849.73	1462.59	2.22	2.92E+002	33.49	0.00E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-143-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.893	1460.81*	10.67	2.14634E+001	3.01337E+000
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.20406E-001	1.67839E-001
		860.37	12.46		
Pb-212	0.555	74.81* @	10.70	8.23454E+000	6.33746E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.47642E-001	4.30458E-001
Bi-214	0.402	609.31*	46.30	4.60806E-001	2.39667E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-143-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.893	2.146335E+001	3.013367E+000
TL-208	0.466	4.204062E-001	1.678395E-001
Pb-212 @	0.555	6.476422E-001	4.304581E-001
Bi-214	0.402	4.608057E-001	2.396671E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	352.03	5.6045E-002	67.27

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-143-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.6454E-001	2.42E-001	5.1368E-002
	1332.49	100.00	2.4218E-001		1.6063E-001
Nb-94	702.63	100.00	2.6804E-001	2.42E-001	-1.9155E-002
	871.10	100.00	2.4222E-001		2.0357E-002
Ag-108m	79.20	7.10	1.7837E+001	3.01E-001	-7.5596E+000
	433.93	89.90	3.0093E-001		2.2625E-001
	614.37	90.40	3.3700E-001		1.1264E-001
	722.95	90.50	3.2614E-001		-2.9130E-001
Sb-125	176.33	6.89	5.6999E+000	9.06E-001	2.9915E+000
	427.89	29.33	9.0617E-001		-2.3129E-001
	463.38	10.35	2.5873E+000		-9.8012E-001
	600.56	17.80	1.5089E+000		-8.8442E-001
	606.64	5.02	6.1694E+000		-2.2606E+000
	635.90	11.32	2.3286E+000		5.6541E-001
Cs-134	563.23	8.38	3.0580E+000	2.86E-001	-2.5469E+000
	569.32	15.43	1.7706E+000		-5.5733E-001
	604.70	97.60	2.8638E-001		-5.8557E-002
	795.84	85.40	3.2300E-001		1.4744E-001
	801.93	8.73	3.0253E+000		-7.4904E-001
Cs-137	661.65	85.12	3.1437E-001	3.14E-001	-2.0647E-001
Eu-152	121.78	28.40	1.9199E+000	9.10E-001	-1.2186E+000
	244.69	7.49	4.7785E+000		1.4742E+000
	344.27	26.50	1.0849E+000		-4.5505E-002
	778.89	12.74	2.1277E+000		3.2366E-001
	867.32	4.16	5.8169E+000		4.2632E-002
	964.01	14.40	1.8355E+000		-6.9756E-001
	1085.78	10.00	2.3276E+000		-1.2574E+000
	1112.02	13.30	1.9148E+000		-4.8149E-001
	1407.95	20.70	9.1017E-001		-1.6697E-001
Eu-154	123.07	40.50	1.3262E+000	6.75E-001	-1.5566E+000
	247.94	6.60	5.3263E+000		6.4761E+000
	591.81	4.83	6.3522E+000		1.8668E-001
	723.30	19.70	1.5213E+000		-3.8846E-001
	756.87	4.33	5.9366E+000		-3.9665E+000
	873.19	11.50	2.1944E+000		1.0853E+000
	996.32	10.30	2.2802E+000		-9.4489E-002
	1004.76	17.90	1.4351E+000		3.5389E-001
	1274.45	35.50	6.7457E-001		3.5437E-002
Eu-155	86.54	30.90	3.2706E+000	3.27E+000	-6.7777E-001
	105.31	20.70	3.5350E+000		-2.6982E-001
Am-241	59.54	35.90	6.0188E+000	6.02E+000	2.5480E+000
Cm-243	228.19	10.56	3.3468E+000	2.21E+000	3.8144E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2090E+000	2.21E+000	-8.4538E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/18/2006 7:18:50 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: YEL7810

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-144-F-G
Sample ID: OOL-09-03-144-F
Sample Title: OOL-09-03-144-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 1:55:23 PM
Live Time: 600.0 seconds
Real Time: 600.5 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-144-F-G
Log Number: OOL-09-03-144-F
Title: OOL-09-03-144-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	946-	961	956.64	239.20	1.04	9.46E+001	37.03	8.74E+001
2	2037-	2047	2042.70	510.74	0.66	2.17E+001	23.56	4.93E+001
3	2500-	2511	2505.76	626.51	0.51	1.52E+001	13.28	1.18E+001
4	3642-	3654	3648.11	912.13	0.51	3.76E+001	18.45	1.94E+001
5	4857-	4868	4862.29	1215.70	0.83	1.18E+001	11.69	9.17E+000
6	5838-	5861	5849.11	1462.43	1.69	3.24E+002	36.57	6.00E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-144-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.998	511.00*		100.00	1.20325E-001	1.31599E-001
K-40	0.910	1460.81*		10.67	2.38141E+001	3.30770E+000
Pb-212	0.394	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	9.40561E-001	3.96438E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-144-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN	0.998	1.203249E-001	1.315987E-001
K-40	0.910	2.381412E+001	3.307698E+000
Pb-212 @	0.394	9.405607E-001	3.964383E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	626.51	2.5309E-002	87.47
4	912.13	6.2683E-002	49.04
5	1215.70	1.9722E-002	98.82

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-144-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.6237E-001	2.28E-001	7.9067E-002
	1332.49	100.00	2.2820E-001		-1.0712E-001
Nb-94	702.63	100.00	2.8093E-001	2.66E-001	-3.7169E-002
	871.10	100.00	2.6552E-001		9.1009E-002
Ag-108m	79.20	7.10	1.6407E+001	2.85E-001	-2.6006E+001
	433.93	89.90	3.0220E-001		-8.6063E-002
	614.37	90.40	3.2353E-001		1.5318E-001
	722.95	90.50	2.8494E-001		6.1263E-002
Sb-125	176.33	6.89	5.4230E+000	8.86E-001	-2.4456E-001
	427.89	29.33	8.8625E-001		1.8847E-001
	463.38	10.35	2.5873E+000		1.9034E+000
	600.56	17.80	1.5089E+000		1.7906E-001
	606.64	5.02	5.9069E+000		2.6889E+000
	635.90	11.32	2.3702E+000		6.5244E-001
Cs-134	563.23	8.38	3.1966E+000	2.65E-001	1.1833E+000
	569.32	15.43	1.6868E+000		-2.1069E-002
	604.70	97.60	2.6499E-001		-4.5246E-001
	795.84	85.40	2.8699E-001		6.2663E-002
	801.93	8.73	2.8345E+000		-4.3588E-001
Cs-137	661.65	85.12	2.9683E-001	2.97E-001	2.6474E-001
Eu-152	121.78	28.40	1.8889E+000	9.97E-001	-8.0306E-001
	244.69	7.49	4.2123E+000		-4.1517E+000
	344.27	26.50	1.0707E+000		-1.1296E+000
	778.89	12.74	1.8372E+000		-1.5152E+000
	867.32	4.16	6.3317E+000		-5.6606E-001
	964.01	14.40	2.0160E+000		-1.5336E-002
	1085.78	10.00	2.5103E+000		1.8872E+000
	1112.02	13.30	1.8648E+000		4.8310E-001
	1407.95	20.70	9.9748E-001		5.1020E-001
Eu-154	123.07	40.50	1.3428E+000	6.82E-001	9.6877E-001
	247.94	6.60	4.5070E+000		-8.6357E-001
	591.81	4.83	5.7692E+000		-3.9156E+000
	723.30	19.70	1.3091E+000		9.2905E-003
	756.87	4.33	5.8111E+000		-1.3497E+000
	873.19	11.50	2.2281E+000		-1.1373E+000
	996.32	10.30	2.3871E+000		9.2347E-003
	1004.76	17.90	1.3521E+000		1.2308E+000
	1274.45	35.50	6.8190E-001		-1.9156E-001
Eu-155	86.54	30.90	3.0609E+000	3.06E+000	2.5807E+000
	105.31	20.70	3.1848E+000		-1.3028E+000
Am-241	59.54	35.90	5.7850E+000	5.79E+000	-2.1817E-001
Cm-243	228.19	10.56	3.1140E+000	2.19E+000	-6.5820E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1868E+000	2.19E+000	6.4936E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/18/2006 7:19:25 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: YEL7810

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-145-F-G
Sample ID: OOL-09-03-145-F
Sample Title: OOL-09-03-145-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/17/2006 2:31:38 PM
Live Time: 600.0 seconds
Real Time: 600.4 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 4/26/2006
Calibration Efficiency: 7810Soil2m90170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-145-F-G
Log Number: OOL-09-03-145-F
Title: OOL-09-03-145-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1404-	1415	1409.79	352.50	0.36	2.41E+001	20.50	3.39E+001
2	5838-	5861	5849.60	1462.55	1.89	2.87E+002	35.27	9.12E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-145-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.897	1460.81*	10.67	2.10871E+001	3.10398E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-145-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.897	2.108706E+001	3.103977E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	352.50	4.0223E-002	84.94

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-145-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.2209E-001	2.13E-001	8.8074E-002
	1332.49	100.00	2.1321E-001		2.3101E-001
Nb-94	702.63	100.00	2.6471E-001	2.52E-001	4.8721E-002
	871.10	100.00	2.5221E-001		4.2962E-002
Ag-108m	79.20	7.10	1.6289E+001	2.93E-001	-1.7803E+001
	433.93	89.90	2.9318E-001		3.5114E-003
	614.37	90.40	3.4991E-001		-5.4632E-002
	722.95	90.50	2.9255E-001		3.2799E-003
Sb-125	176.33	6.89	5.4084E+000	9.10E-001	4.9147E+000
	427.89	29.33	9.1010E-001		4.7955E-001
	463.38	10.35	2.5277E+000		3.4820E-001
	600.56	17.80	1.3776E+000		-9.3284E-001
	606.64	5.02	6.5664E+000		7.4527E+000
	635.90	11.32	2.1687E+000		3.3130E-002
Cs-134	563.23	8.38	3.0933E+000	2.75E-001	2.6258E+000
	569.32	15.43	1.5364E+000		-1.0991E+000
	604.70	97.60	2.9928E-001		-1.5566E-001
	795.84	85.40	2.7544E-001		2.4642E-002
	801.93	8.73	2.7677E+000		-7.8064E-001
Cs-137	661.65	85.12	3.2732E-001	3.27E-001	2.6832E-001
Eu-152	121.78	28.40	1.7563E+000	8.12E-001	-8.2901E-001
	244.69	7.49	4.2966E+000		-5.8166E+000
	344.27	26.50	1.0381E+000		-2.5682E-001
	778.89	12.74	1.8529E+000		-6.0205E-001
	867.32	4.16	5.7179E+000		-7.3285E+000
	964.01	14.40	1.9151E+000		-1.2743E+000
	1085.78	10.00	1.9346E+000		-1.8266E+000
	1112.02	13.30	1.9952E+000		2.0757E+000
	1407.95	20.70	8.1223E-001		-3.7378E-001
Eu-154	123.07	40.50	1.2096E+000	5.33E-001	-4.8975E-001
	247.94	6.60	4.5300E+000		-1.7349E+000
	591.81	4.83	5.5907E+000		4.4171E+000
	723.30	19.70	1.3527E+000		3.3261E-002
	756.87	4.33	5.4613E+000		7.1016E-001
	873.19	11.50	2.1601E+000		-3.3688E-002
	996.32	10.30	2.3661E+000		2.5940E+000
	1004.76	17.90	1.2631E+000		6.8841E-001
	1274.45	35.50	5.3314E-001		7.1030E-002
Eu-155	86.54	30.90	3.0561E+000	3.06E+000	2.3094E+000
	105.31	20.70	3.1240E+000		-2.9526E-001
Am-241	59.54	35.90	5.6851E+000	5.69E+000	-1.1301E+000
Cm-243	228.19	10.56	3.1571E+000	2.15E+000	1.6589E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1474E+000	2.15E+000	4.8503E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 6:57:04 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-146-F-G
Sample ID: OOL-09-03-146-F
Sample Title: OOL-09-03-146-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 2:27:38 PM
Live Time: 600.0 seconds
Real Time: 600.7 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-146-F-G
Log Number: OOL-09-03-146-F
Title: OOL-09-03-146-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	307	291.71	72.76	1.29	1.98E+002	53.59	1.06E+003
m	2	284-	307	299.94	74.81	1.29	3.92E+002	60.83	1.35E+003
	3	949-	962	953.79	238.33	0.64	9.89E+001	44.56	1.50E+002
	4	1398-	1415	1405.89	351.39	0.96	7.72E+001	34.21	6.98E+001
	5	2327-	2337	2331.25	582.80	1.14	3.83E+001	23.48	4.37E+001
	6	2426-	2445	2434.62	608.65	0.55	1.00E+002	31.91	4.59E+001
	7	5320-	5336	5328.07	1332.23	0.37	4.55E+001	16.64	8.50E+000
	8	5832-	5855	5842.49	1460.87	1.89	3.73E+002	39.30	7.91E+000
	9	7052-	7065	7058.91	1765.07	0.43	2.53E+001	13.19	6.75E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-146-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	1.98885E+001	2.64244E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.05708E-001	1.28891E-001
		860.37	12.46		
Pb-212	0.523	74.81* @	10.70	1.94042E+001	4.85004E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.09393E-001	3.86264E-001
Bi-214	0.687	609.31*	46.30	9.87643E-001	3.38207E-001
		1120.29	15.10		
		1764.49*	15.80	9.46623E-001	5.03319E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-146-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	1.000	1.988854E+001	2.642443E+000
TL-208	0.470	2.057080E-001	1.288911E-001
Pb-212 @	0.523	8.093934E-001	3.862644E-001
Bi-214	0.687	9.748829E-001	2.807182E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.76	3.3057E-001	27.02
4	351.39	1.2861E-001	44.33
7	1332.23	7.5833E-002	36.57

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-146-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.2854E-001	2.29E-001	-9.3451E-002
	1332.49	100.00	2.2906E-001		6.2492E-002
Nb-94	702.63	100.00	2.6264E-001	2.46E-001	-1.1226E-001
	871.10	100.00	2.4639E-001		1.6151E-001
Ag-108m	79.20	7.10	1.2837E+001	2.62E-001	-7.5340E+000
	433.93	89.90	2.9061E-001		1.9810E-001
	614.37	90.40	2.9570E-001		1.3543E-002
	722.95	90.50	2.6231E-001		-2.5167E-001
Sb-125	176.33	6.89	5.1313E+000	9.30E-001	-1.5610E+000
	427.89	29.33	9.3024E-001		2.3314E-001
	463.38	10.35	2.4065E+000		-1.1044E+000
	600.56	17.80	1.4266E+000		4.1045E-001
	606.64	5.02	6.2165E+000		1.1968E+000
	635.90	11.32	2.3019E+000		-7.7911E-001
Cs-134	563.23	8.38	2.8110E+000	3.13E-001	-9.0034E-002
	569.32	15.43	1.4329E+000		9.3427E-001
	604.70	97.60	3.1637E-001		-3.5364E-002
	795.84	85.40	3.1295E-001		1.8097E-001
	801.93	8.73	2.5216E+000		-1.7694E+000
Cs-137	661.65	85.12	2.9689E-001	2.97E-001	-1.9483E-001
Eu-152	121.78	28.40	1.8160E+000	8.96E-001	3.0778E-001
	244.69	7.49	4.0178E+000		2.6680E+000
	344.27	26.50	9.9866E-001		1.0267E+000
	778.89	12.74	1.8739E+000		1.8144E-001
	867.32	4.16	5.6105E+000		-4.4153E+000
	964.01	14.40	1.9603E+000		1.6246E+000
	1085.78	10.00	2.1697E+000		-1.3730E-001
	1112.02	13.30	1.7319E+000		-5.9909E-001
	1407.95	20.70	8.9578E-001		7.7045E-001
Eu-154	123.07	40.50	1.2351E+000	5.79E-001	-9.2608E-003
	247.94	6.60	4.5345E+000		2.6556E+000
	591.81	4.83	5.3695E+000		-2.2453E-002
	723.30	19.70	1.1940E+000		-1.0462E+000
	756.87	4.33	5.0537E+000		-4.8432E+000
	873.19	11.50	2.1038E+000		-8.1359E-001
	996.32	10.30	2.3115E+000		6.7094E-001
	1004.76	17.90	1.2753E+000		2.4907E-001
	1274.45	35.50	5.7867E-001		-4.8299E-001
Eu-155	86.54	30.90	2.6889E+000	2.69E+000	3.8411E+000
	105.31	20.70	3.0244E+000		1.1152E+000
Am-241	59.54	35.90	3.7345E+000	3.73E+000	1.0402E+000
Cm-243	228.19	10.56	2.9431E+000	2.07E+000	6.2555E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0651E+000	2.07E+000	-1.1774E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 6:57:34 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-147-F-G
Sample ID: OOL-09-03-147-F
Sample Title: OOL-09-03-147-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 2:11:43 PM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-147-F-G
Log Number: OOL-09-03-147-F
Title: OOL-09-03-147-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	291.68	72.75	1.06	1.93E+002	48.65	8.90E+002
m	2	284-	306	300.31	74.91	1.06	3.56E+002	56.82	9.34E+002
	3	945-	962	953.46	238.24	1.03	7.27E+001	51.43	1.88E+002
	4	2035-	2045	2039.93	509.94	0.61	3.76E+001	28.71	7.34E+001
	5	2326-	2338	2330.79	582.68	1.45	5.43E+001	23.95	3.58E+001
	6	5830-	5855	5841.92	1460.73	1.78	3.80E+002	40.18	9.51E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-147-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	2.02826E+001	2.69901E+000
TL-208	0.743	277.35	6.80		
		510.84*	21.60	7.59646E-001	5.92897E-001
		583.14*	84.20	2.91114E-001	1.34171E-001
		860.37	12.46		
Pb-212	0.522	74.81* @	10.70	1.75792E+001	4.44401E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.95428E-001	4.31212E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-147-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
X	ANN		0.962		
	K-40		1.000	2.028257E+001	2.699013E+000
	TL-208		0.743	3.139392E-001	1.308625E-001
	Pb-212	@	0.522	5.954277E-001	4.312123E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.75	3.2123E-001	25.24

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-147-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.2251E-001	2.23E-001	-7.7119E-002
	1332.49	100.00	2.2589E-001		6.1344E-002
Nb-94	702.63	100.00	2.4034E-001	2.25E-001	7.9126E-002
	871.10	100.00	2.2505E-001		-3.1832E-002
Ag-108m	79.20	7.10	1.2151E+001	2.82E-001	-1.2450E+001
	433.93	89.90	2.8206E-001		-1.9745E-001
	614.37	90.40	2.8871E-001		-5.7262E-001
	722.95	90.50	2.8312E-001		1.3488E-001
Sb-125	176.33	6.89	4.6025E+000	8.43E-001	-5.8571E+000
	427.89	29.33	8.4264E-001		2.4186E-001
	463.38	10.35	2.4616E+000		4.3600E-001
	600.56	17.80	1.3458E+000		-8.3760E-001
	606.64	5.02	5.5828E+000		4.6421E+000
	635.90	11.32	2.0761E+000		-5.1728E-001
Cs-134	563.23	8.38	2.9245E+000	2.70E-001	1.4280E+000
	569.32	15.43	1.6522E+000		1.4008E+000
	604.70	97.60	2.7092E-001		-2.0322E-001
	795.84	85.40	2.7002E-001		8.3409E-002
	801.93	8.73	2.7505E+000		2.0830E+000
Cs-137	661.65	85.12	2.9223E-001	2.92E-001	5.5509E-002
Eu-152	121.78	28.40	1.6432E+000	6.12E-001	9.0083E-002
	244.69	7.49	3.9841E+000		2.1886E+000
	344.27	26.50	8.9750E-001		-2.8801E-001
	778.89	12.74	1.8384E+000		4.7489E-001
	867.32	4.16	5.3753E+000		-4.5754E+000
	964.01	14.40	1.9675E+000		1.1292E+000
	1085.78	10.00	2.1992E+000		-7.0199E-001
	1112.02	13.30	1.6213E+000		-1.7254E-001
	1407.95	20.70	6.1190E-001		-6.8152E-002
Eu-154	123.07	40.50	1.1414E+000	6.56E-001	4.9141E-001
	247.94	6.60	4.1736E+000		-2.0234E+000
	591.81	4.83	5.2371E+000		2.6929E+000
	723.30	19.70	1.2956E+000		-9.6957E-002
	756.87	4.33	5.5583E+000		9.4918E-001
	873.19	11.50	2.0008E+000		5.2101E-002
	996.32	10.30	2.0341E+000		6.8847E-003
	1004.76	17.90	1.2526E+000		2.4598E-001
	1274.45	35.50	6.5602E-001		2.8747E-001
Eu-155	86.54	30.90	2.5549E+000	2.55E+000	1.2151E+000
	105.31	20.70	2.9495E+000		1.6851E+000
Am-241	59.54	35.90	3.5954E+000	3.60E+000	-3.7338E+000
Cm-243	228.19	10.56	2.6964E+000	2.01E+000	-4.3220E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0131E+000	2.01E+000	-2.7141E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 6:58:02 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-148-F-G
Sample ID: OOL-09-03-148-F
Sample Title: OOL-09-03-148-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 1:57:16 PM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-148-F-G
Log Number: OOL-09-03-148-F
Title: OOL-09-03-148-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	308	290.87	72.55	1.27	2.05E+002	48.18	6.65E+002
m	2	286-	308	300.45	74.94	1.27	3.74E+002	54.57	1.01E+003
	3	944-	959	954.08	238.40	0.68	1.10E+002	44.90	1.38E+002
	4	2323-	2337	2331.33	582.81	0.53	6.50E+001	27.33	4.50E+001
	5	2429-	2442	2436.65	609.15	0.55	4.80E+001	23.54	3.50E+001
	6	3639-	3651	3644.13	911.11	0.42	3.52E+001	19.35	2.28E+001
	7	4475-	4487	4480.67	1120.31	0.92	2.21E+001	16.05	1.69E+001
	8	5324-	5336	5329.53	1332.59	0.89	1.55E+001	15.12	1.55E+001
	9	5831-	5854	5842.61	1460.90	1.39	3.98E+002	40.80	8.89E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-148-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	2.12220E+001	2.77192E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.48822E-001	1.53755E-001
		860.37	12.46		
Pb-212	0.524	74.81* @	10.70	1.84781E+001	4.51363E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.99902E-001	3.93796E-001
Bi-214	0.700	609.31*	46.30	4.73913E-001	2.39795E-001
		1120.29*	15.10	7.81588E-001	5.73129E-001
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-148-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		1.000	2.122200E+001	2.771915E+000
TL-208		0.471	3.488215E-001	1.537553E-001
Pb-212	@	0.524	8.999015E-001	3.937959E-001
Bi-214		0.700	5.197489E-001	2.212129E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.55	3.4140E-001	23.52
6	911.11	5.8678E-002	54.97
8	1332.59	2.5860E-002	97.43

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-148-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.4151E-001	2.02E-001	1.9392E-001
	1332.49	100.00	2.0220E-001		9.7110E-002
Nb-94	702.63	100.00	2.3820E-001	2.38E-001	-9.1518E-002
	871.10	100.00	2.4067E-001		2.7962E-002
Ag-108m	79.20	7.10	1.1607E+001	2.41E-001	-2.9846E+000
	433.93	89.90	2.6500E-001		8.3769E-002
	614.37	90.40	2.7203E-001		-1.9990E-001
	722.95	90.50	2.4092E-001		6.0910E-002
Sb-125	176.33	6.89	4.4200E+000	8.12E-001	6.0956E-001
	427.89	29.33	8.1217E-001		-3.7098E-001
	463.38	10.35	2.1977E+000		-1.0593E+000
	600.56	17.80	1.3403E+000		-4.7300E-001
	606.64	5.02	5.4469E+000		3.8146E+000
	635.90	11.32	1.9626E+000		3.9722E-001
Cs-134	563.23	8.38	2.9686E+000	2.47E-001	2.4985E+000
	569.32	15.43	1.5055E+000		-3.4926E-001
	604.70	97.60	2.8168E-001		-1.7365E-002
	795.84	85.40	2.4708E-001		-2.0148E-001
	801.93	8.73	2.4354E+000		1.2094E+000
Cs-137	661.65	85.12	2.9574E-001	2.96E-001	5.8045E-002
Eu-152	121.78	28.40	1.6607E+000	7.33E-001	7.9195E-001
	244.69	7.49	3.6523E+000		9.7150E-001
	344.27	26.50	8.9184E-001		2.0793E-001
	778.89	12.74	1.6289E+000		-5.6823E-001
	867.32	4.16	5.4351E+000		-2.1122E-001
	964.01	14.40	1.9530E+000		2.2263E+000
	1085.78	10.00	2.1396E+000		-1.0785E-001
	1112.02	13.30	1.6098E+000		-9.1386E-001
	1407.95	20.70	7.3284E-001		-2.8220E-001
Eu-154	123.07	40.50	1.1465E+000	5.64E-001	1.9013E-001
	247.94	6.60	3.9936E+000		-8.4360E-001
	591.81	4.83	4.7110E+000		2.1193E+000
	723.30	19.70	1.0885E+000		9.7136E-002
	756.87	4.33	5.0816E+000		-2.8453E+000
	873.19	11.50	2.0938E+000		-6.5300E-001
	996.32	10.30	1.9619E+000		9.2897E-002
	1004.76	17.90	1.1405E+000		-4.0523E-001
	1274.45	35.50	5.6383E-001		-1.0220E-001
Eu-155	86.54	30.90	2.4005E+000	2.40E+000	2.6165E+000
	105.31	20.70	2.6856E+000		-1.6924E+000
Am-241	59.54	35.90	3.4226E+000	3.42E+000	9.4323E-001
Cm-243	228.19	10.56	2.5766E+000	1.88E+000	-3.0470E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.8785E+000	1.88E+000	-4.8725E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 6:58:38 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-149-F-G
Sample ID: OOL-09-03-149-F
Sample Title: OOL-09-03-149-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 1:40:17 PM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-149-F-G
Log Number: OOL-09-03-149-F
Title: OOL-09-03-149-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	307	291.76	72.77	1.16	1.79E+002	46.57	6.30E+002
m	2	287-	307	300.55	74.97	1.16	2.91E+002	52.64	9.22E+002
	3	333-	347	340.01	84.83	0.47	8.24E+001	91.41	7.27E+002
	4	946-	961	954.50	238.50	0.75	1.07E+002	44.31	1.34E+002
	5	1932-	1942	1937.28	484.27	0.25	1.58E+001	16.86	2.42E+001
	6	2324-	2341	2331.93	582.97	0.50	5.41E+001	28.62	4.89E+001
	7	2430-	2447	2436.93	609.22	1.11	6.83E+001	26.61	3.57E+001
	8	3637-	3653	3644.56	911.22	1.28	5.66E+001	21.96	2.04E+001
	9	3870-	3882	3875.37	968.94	0.88	2.38E+001	19.69	2.93E+001
	10	4476-	4488	4481.62	1120.55	1.21	3.26E+001	15.18	1.04E+001
	11	5831-	5855	5843.45	1461.11	2.08	4.02E+002	41.79	1.26E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-149-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.997	1460.81*	10.67	2.14539E+001	2.82470E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.90201E-001	1.58328E-001
		860.37	12.46		
Pb-212	0.524	74.81* @	10.70	1.43416E+001	3.82741E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.73627E-001	3.87778E-001
Bi-214	0.700	609.31*	46.30	6.74767E-001	2.75808E-001
		1120.29*	15.10	1.15135E+000	5.50298E-001
		1764.49	15.80		
Ac-228	0.639	338.32	11.40		
		911.07*	27.70	1.01970E+000	4.12616E-001
		969.11*	16.60	7.28215E-001	6.08411E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-149-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.997	2.145395E+001	2.824697E+000
TL-208	0.472	2.902006E-001	1.583280E-001
Pb-212 @	0.524	8.736273E-001	3.877782E-001
Bi-214	0.700	7.704481E-001	2.465721E-001
Ac-228	0.639	9.278705E-001	3.414909E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.77	2.9805E-001	26.04
3	84.83	1.3732E-001	110.94
5	484.27	2.6292E-002	106.85

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-149-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.2854E-001	1.93E-001	4.4393E-002
	1332.49	100.00	1.9298E-001		1.1032E-001
Nb-94	702.63	100.00	2.1679E-001	2.15E-001	-5.0591E-002
	871.10	100.00	2.1485E-001		4.0523E-002
Ag-108m	79.20	7.10	1.1410E+001	2.38E-001	-5.7664E+000
	433.93	89.90	2.6220E-001		1.4192E-001
	614.37	90.40	2.7840E-001		-4.2104E-002
	722.95	90.50	2.3827E-001		-4.9819E-002
Sb-125	176.33	6.89	4.6676E+000	7.92E-001	2.5392E+000
	427.89	29.33	7.9215E-001		3.0327E-002
	463.38	10.35	2.2239E+000		2.2954E+000
	600.56	17.80	1.3403E+000		-2.7662E-002
	606.64	5.02	5.6661E+000		-1.8669E+000
	635.90	11.32	1.8829E+000		-2.0665E+000
Cs-134	563.23	8.38	2.6186E+000	2.76E-001	-1.8704E-001
	569.32	15.43	1.4598E+000		-8.5705E-001
	604.70	97.60	2.7636E-001		-5.3534E-002
	795.84	85.40	2.7677E-001		1.3770E-001
	801.93	8.73	2.7634E+000		1.6136E+000
Cs-137	661.65	85.12	2.9223E-001	2.92E-001	1.8534E-001
Eu-152	121.78	28.40	1.5896E+000	8.13E-001	-1.0309E+000
	244.69	7.49	3.8745E+000		2.6482E+000
	344.27	26.50	9.6006E-001		-9.1995E-002
	778.89	12.74	1.7653E+000		-8.6734E-001
	867.32	4.16	5.3147E+000		-7.8938E+000
	964.01	14.40	1.7698E+000		-5.9061E-001
	1085.78	10.00	2.0782E+000		1.5881E+000
	1112.02	13.30	1.7636E+000		8.3791E-001
	1407.95	20.70	8.1336E-001		7.7233E-001
Eu-154	123.07	40.50	1.0975E+000	5.33E-001	3.5658E-003
	247.94	6.60	4.0975E+000		-3.4200E+000
	591.81	4.83	5.1792E+000		1.4075E+000
	723.30	19.70	1.1249E+000		3.9795E-001
	756.87	4.33	5.1916E+000		3.7402E+000
	873.19	11.50	1.7756E+000		-1.5779E+000
	996.32	10.30	2.2360E+000		2.2571E+000
	1004.76	17.90	1.2138E+000		1.5855E-001
	1274.45	35.50	5.3280E-001		-1.0885E-001
Eu-155	86.54	30.90	2.4014E+000	2.40E+000	5.7724E-001
	105.31	20.70	2.7011E+000		1.6235E+000
Am-241	59.54	35.90	3.3282E+000	3.33E+000	-6.8830E-001
Cm-243	228.19	10.56	2.6915E+000	1.99E+000	1.5772E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.9886E+000	1.99E+000	1.5678E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/17/2006 6:59:20 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-150-F-G
Sample ID: OOL-09-03-150-F
Sample Title: OOL-09-03-150-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/14/2006 1:15:26 PM
Live Time: 600.0 seconds
Real Time: 600.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 8/3/2005
Calibration Efficiency: BLUE_SOIL_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-150-F-G
Log Number: OOL-09-03-150-F
Title: OOL-09-03-150-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	306	291.42	72.68	1.09	1.55E+002	42.48	6.71E+002
m	2	283-	306	300.15	74.87	1.10	2.61E+002	49.41	7.69E+002
	3	1400-	1414	1407.80	351.86	0.56	6.25E+001	30.26	6.05E+001
	4	2324-	2338	2331.41	582.84	1.05	6.49E+001	26.52	4.11E+001
	5	2426-	2445	2435.65	608.90	1.15	7.66E+001	28.23	3.74E+001
	6	3635-	3652	3642.70	910.76	0.37	5.24E+001	22.55	2.46E+001
	7	5832-	5856	5843.34	1461.08	2.06	4.66E+002	43.80	8.53E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-150-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.997	1460.81*	10.67	2.48670E+001	3.08320E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.48116E-001	1.49610E-001
		860.37	12.46		
Bi-214	0.395	609.31*	46.30	7.56515E-001	2.94171E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-150-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.997	2.486699E+001	3.083204E+000
TL-208	0.471	3.481161E-001	1.496097E-001
Bi-214	0.395	7.565153E-001	2.941709E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.68	2.5797E-001	27.45
m	2	74.87	4.3500E-001	18.93
	3	351.86	1.0418E-001	48.42
	6	910.76	8.7294E-002	43.05

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-03-150-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.3149E-001	1.83E-001	1.3968E-001
	1332.49	100.00	1.8325E-001		1.9804E-001
Nb-94	702.63	100.00	2.2493E-001	2.07E-001	1.4184E-002
	871.10	100.00	2.0684E-001		-2.2660E-002
Ag-108m	79.20	7.10	1.0832E+001	2.60E-001	-6.7618E+000
	433.93	89.90	2.6032E-001		-2.1733E-002
	614.37	90.40	2.6215E-001		4.5612E-002
	722.95	90.50	2.6111E-001		5.3841E-002
Sb-125	176.33	6.89	4.5061E+000	8.56E-001	-1.5693E+000
	427.89	29.33	8.5611E-001		1.1589E+000
	463.38	10.35	2.4303E+000		1.2333E+000
	600.56	17.80	1.1472E+000		3.9159E-002
	606.64	5.02	5.3600E+000		6.1716E+000
	635.90	11.32	1.8829E+000		-4.2917E-001
Cs-134	563.23	8.38	2.7524E+000	2.44E-001	1.1866E+000
	569.32	15.43	1.4861E+000		1.3534E+000
	604.70	97.60	2.6723E-001		-6.0771E-002
	795.84	85.40	2.4405E-001		6.9998E-003
	801.93	8.73	2.4789E+000		4.4587E-001
Cs-137	661.65	85.12	2.5977E-001	2.60E-001	-1.1701E-001
Eu-152	121.78	28.40	1.5296E+000	7.08E-001	-7.0532E-001
	244.69	7.49	3.8395E+000		-1.2392E+000
	344.27	26.50	8.6297E-001		-6.8580E-001
	778.89	12.74	1.6187E+000		1.0392E+000
	867.32	4.16	5.1914E+000		-3.2459E+000
	964.01	14.40	1.7779E+000		1.5438E+000
	1085.78	10.00	1.9657E+000		6.1035E-001
	1112.02	13.30	1.4769E+000		-1.3680E+000
	1407.95	20.70	7.0796E-001		3.4022E-001
Eu-154	123.07	40.50	1.0807E+000	5.79E-001	4.2540E-001
	247.94	6.60	4.1736E+000		2.5733E+000
	591.81	4.83	4.3771E+000		-1.3688E+000
	723.30	19.70	1.2052E+000		8.2265E-001
	756.87	4.33	5.2187E+000		1.3207E+000
	873.19	11.50	1.7875E+000		-1.2445E+000
	996.32	10.30	2.0055E+000		1.4087E+000
	1004.76	17.90	1.0245E+000		-5.9964E-001
	1274.45	35.50	5.7867E-001		2.1559E-002
Eu-155	86.54	30.90	2.2539E+000	2.25E+000	1.5368E+000
	105.31	20.70	2.6429E+000		-5.7241E-001
Am-241	59.54	35.90	3.0270E+000	3.03E+000	-2.7401E+000
Cm-243	228.19	10.56	2.7255E+000	1.99E+000	-1.2733E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.9927E+000	1.99E+000	1.3539E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/19/2006 1:19:28 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-04-001-F-
Sample Title: OOL-09-04-001-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/19/2006 1:09:25 PM
Live Time: 600.0 seconds
Real Time: 600.8 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780_2M90Soil170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-04-001-F-
Title: OOL-09-04-001-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2319-	2336	2327.36	581.80	1.48	7.09E+001	29.34	4.71E+001
2	2424-	2440	2431.91	607.94	0.31	6.53E+001	24.19	2.77E+001
3	5822-	5847	5833.62	1458.37	1.95	3.96E+002	42.19	1.60E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
TL-208	0.433	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.74024E-001	2.06098E-001
		860.37	12.46		
Bi-214	0.370	609.31*	46.30	8.05472E-001	3.14881E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
TL-208	0.433	4.740236E-001	2.060983E-001
Bi-214	0.370	8.054719E-001	3.148809E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	1458.37	6.6006E-001	10.65

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.9957E-001	2.20E-001	1.9880E-001
	1332.49	100.00	2.2020E-001		1.2874E-001
Nb-94	702.63	100.00	2.6482E-001	2.34E-001	1.3349E-001
	871.10	100.00	2.3449E-001		4.5315E-002
Ag-108m	79.20	7.10	2.0604E+001	2.99E-001	-5.1875E+001
	433.93	89.90	3.0125E-001		-2.0346E-001
	614.37	90.40	2.9860E-001		-3.3156E-001
	722.95	90.50	3.2189E-001		2.1163E-001
Sb-125	176.33	6.89	6.2504E+000	9.92E-001	1.2006E+000
	427.89	29.33	9.9180E-001		-1.3058E-001
	463.38	10.35	2.5144E+000		-1.5377E-002
	600.56	17.80	1.5590E+000		1.3562E-001
	606.64	5.02	6.6352E+000		5.7908E+000
	635.90	11.32	2.2289E+000		6.9668E-001
Cs-134	563.23	8.38	3.3817E+000	3.10E-001	-1.1545E+000
	569.32	15.43	1.8592E+000		-1.5532E+000
	604.70	97.60	3.4319E-001		-6.3322E-002
	795.84	85.40	3.1035E-001		1.3221E-001
	801.93	8.73	2.8290E+000		1.3656E+000
Cs-137	661.65	85.12	3.4272E-001	3.43E-001	7.6737E-003
Eu-152	121.78	28.40	2.1521E+000	9.15E-001	8.1580E-001
	244.69	7.49	4.6709E+000		-2.7167E+000
	344.27	26.50	1.1194E+000		-6.8658E-001
	778.89	12.74	2.1458E+000		3.6118E-002
	867.32	4.16	5.3972E+000		-4.1551E+000
	964.01	14.40	2.1024E+000		1.8906E+000
	1085.78	10.00	2.3130E+000		-6.4962E-002
	1112.02	13.30	1.9315E+000		-1.4846E+000
	1407.95	20.70	9.1463E-001		-1.0648E-001
Eu-154	123.07	40.50	1.4861E+000	5.73E-001	-9.8095E-001
	247.94	6.60	4.9956E+000		-6.3481E-001
	591.81	4.83	6.1427E+000		5.4219E+000
	723.30	19.70	1.4789E+000		9.2588E-001
	756.87	4.33	5.5990E+000		-4.4281E-001
	873.19	11.50	2.0892E+000		2.4578E-001
	996.32	10.30	2.2842E+000		-2.7257E-001
	1004.76	17.90	1.3720E+000		3.5643E-001
	1274.45	35.50	5.7290E-001		1.2481E-001
Eu-155	86.54	30.90	3.8462E+000	3.75E+000	5.3799E+000
	105.31	20.70	3.7508E+000		-6.3350E-001
Am-241	59.54	35.90	9.1479E+000	9.15E+000	3.4086E+000
Cm-243	228.19	10.56	3.4861E+000	2.21E+000	-2.5488E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2108E+000	2.21E+000	-1.8490E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/19/2006 1:39:31 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-04-002-F-
Sample Title: OOL-09-04-002-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/19/2006 1:29:29 PM
Live Time: 600.0 seconds
Real Time: 600.7 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780_2M90Soil170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-04-002-F-
Title: OOL-09-04-002-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	943-	959	952.79	238.15	1.05	7.81E+001	48.47	1.70E+002
2	2425-	2441	2432.58	608.10	0.36	8.08E+001	24.27	2.32E+001
3	3629-	3644	3637.31	909.29	0.93	5.11E+001	21.79	2.39E+001
4	4469-	4481	4474.92	1118.69	0.39	2.32E+001	15.51	1.48E+001
5	5822-	5847	5833.90	1458.44	2.29	3.94E+002	43.93	2.56E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.833	1460.81*		10.67	2.70365E+001	3.72318E+000
Pb-212	0.423	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.88615E-001	5.04621E-001
Bi-214	0.669	609.31*		46.30	9.96565E-001	3.24259E-001
		1120.29*		15.10	1.00529E+000	6.79922E-001
		1764.49		15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.833	2.703650E+001	3.723179E+000
Pb-212	@	0.423	7.886153E-001	5.046213E-001
Bi-214		0.669	9.981813E-001	2.926796E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	909.29	8.5133E-002	42.66

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.4992E-001	1.95E-001	1.5923E-001
	1332.49	100.00	1.9544E-001		-2.1665E-002
Nb-94	702.63	100.00	2.7088E-001	2.71E-001	1.0691E-001
	871.10	100.00	2.7308E-001		4.4267E-002
Ag-108m	79.20	7.10	2.0966E+001	3.14E-001	1.3225E+000
	433.93	89.90	3.1450E-001		-2.3735E-001
	614.37	90.40	3.1947E-001		-3.4529E-001
	722.95	90.50	3.3256E-001		-4.9506E-003
Sb-125	176.33	6.89	6.5139E+000	9.31E-001	2.4774E+000
	427.89	29.33	9.3078E-001		-8.8624E-002
	463.38	10.35	2.9223E+000		7.7556E-001
	600.56	17.80	1.5814E+000		-2.3015E+000
	606.64	5.02	6.9588E+000		9.3707E+000
	635.90	11.32	2.5445E+000		1.6532E+000
Cs-134	563.23	8.38	2.9999E+000	3.21E-001	-3.4001E+000
	569.32	15.43	1.9304E+000		1.0243E+000
	604.70	97.60	3.6292E-001		-1.9824E-001
	795.84	85.40	3.2148E-001		1.6126E-002
	801.93	8.73	2.6424E+000		-3.9155E+000
Cs-137	661.65	85.12	3.3304E-001	3.33E-001	2.7028E-001
Eu-152	121.78	28.40	2.2294E+000	8.66E-001	4.9724E-001
	244.69	7.49	5.0496E+000		-3.2077E+000
	344.27	26.50	1.2258E+000		3.6869E-001
	778.89	12.74	2.2175E+000		1.0640E-001
	867.32	4.16	6.4804E+000		1.4079E+000
	964.01	14.40	2.0597E+000		2.0260E+000
	1085.78	10.00	2.4376E+000		1.5109E+000
	1112.02	13.30	1.8875E+000		-1.1879E+000
	1407.95	20.70	8.6582E-001		-1.9033E-001
Eu-154	123.07	40.50	1.5443E+000	6.45E-001	2.2806E-001
	247.94	6.60	5.5680E+000		-5.5463E+000
	591.81	4.83	5.8546E+000		1.0135E+000
	723.30	19.70	1.5210E+000		3.1988E-001
	756.87	4.33	5.8730E+000		-2.9206E+000
	873.19	11.50	2.3040E+000		2.3827E-001
	996.32	10.30	2.3801E+000		-3.1820E-001
	1004.76	17.90	1.4353E+000		-3.6128E-001
	1274.45	35.50	6.4458E-001		-2.9282E-001
Eu-155	86.54	30.90	3.5676E+000	3.57E+000	-1.3560E+000
	105.31	20.70	3.8476E+000		-1.2791E+000
Am-241	59.54	35.90	8.0871E+000	8.09E+000	-9.6694E+000
Cm-243	228.19	10.56	3.6485E+000	2.48E+000	-1.4991E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4849E+000	2.48E+000	1.2301E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/19/2006 1:54:25 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-04-003-F-
Sample Title: OOL-09-04-003-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/19/2006 1:44:23 PM
Live Time: 600.0 seconds
Real Time: 600.8 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780_2M90Soil170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-04-003-F-
Title: OOL-09-04-003-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	208-	225	216.92	54.18	1.11	1.54E+002	95.03	6.75E+002
2	2424-	2442	2432.94	608.20	1.48	7.10E+001	26.00	3.10E+001
3	5820-	5847	5834.40	1458.57	2.37	4.66E+002	44.36	1.04E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.848	1460.81*	10.67	3.19178E+001	3.99104E+000
Bi-214	0.382	609.31*	46.30	8.76568E-001	3.38933E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.848	3.191777E+001	3.991038E+000
Bi-214	0.382	8.765679E-001	3.389332E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	54.18	2.5667E-001	61.71

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.7318E-001	2.20E-001	2.2237E-001
	1332.49	100.00	2.2020E-001		-1.5599E-002
Nb-94	702.63	100.00	2.7534E-001	2.58E-001	5.6803E-002
	871.10	100.00	2.5804E-001		-2.4056E-001
Ag-108m	79.20	7.10	2.2160E+001	3.01E-001	-4.1142E+001
	433.93	89.90	3.2605E-001		3.4534E-002
	614.37	90.40	3.1658E-001		-1.6169E-001
	722.95	90.50	3.0101E-001		-1.1047E-002
Sb-125	176.33	6.89	7.1115E+000	1.00E+000	-3.3155E+000
	427.89	29.33	1.0022E+000		-7.8534E-002
	463.38	10.35	2.8106E+000		-4.8399E-001
	600.56	17.80	1.5515E+000		6.3230E-001
	606.64	5.02	6.9377E+000		5.5540E+000
	635.90	11.32	2.5796E+000		-1.0479E+000
Cs-134	563.23	8.38	3.3966E+000	3.18E-001	1.9523E+000
	569.32	15.43	1.8832E+000		-2.7190E-002
	604.70	97.60	3.6398E-001		3.4521E-002
	795.84	85.40	3.1782E-001		7.0410E-002
	801.93	8.73	3.0033E+000		1.9905E+000
Cs-137	661.65	85.12	3.6275E-001	3.63E-001	2.1590E-001
Eu-152	121.78	28.40	2.3284E+000	9.61E-001	-9.9856E-001
	244.69	7.49	5.4982E+000		-2.8335E-001
	344.27	26.50	1.2888E+000		-1.0359E+000
	778.89	12.74	2.1458E+000		1.1670E+000
	867.32	4.16	6.2388E+000		1.1757E+000
	964.01	14.40	2.2936E+000		1.1750E+000
	1085.78	10.00	2.4777E+000		-2.2031E+000
	1112.02	13.30	1.9886E+000		-1.7913E+000
	1407.95	20.70	9.6070E-001		2.6312E-001
Eu-154	123.07	40.50	1.6111E+000	6.90E-001	6.0951E-002
	247.94	6.60	5.8911E+000		2.1699E+000
	591.81	4.83	5.5505E+000		-3.8417E+000
	723.30	19.70	1.3829E+000		4.5587E-001
	756.87	4.33	6.1703E+000		2.9114E+000
	873.19	11.50	2.3757E+000		3.2862E+000
	996.32	10.30	2.5428E+000		9.2523E-001
	1004.76	17.90	1.2105E+000		-9.9135E-001
	1274.45	35.50	6.8998E-001		3.4441E-001
Eu-155	86.54	30.90	3.9711E+000	3.97E+000	2.7007E+000
	105.31	20.70	4.0002E+000		7.1225E-001
Am-241	59.54	35.90	8.7361E+000	8.74E+000	-8.6688E+000
Cm-243	228.19	10.56	3.9274E+000	2.55E+000	2.1017E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.5487E+000	2.55E+000	-4.4747E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/19/2006 2:13:10 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-04-004-F-
Sample Title: OOL-09-04-004-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/19/2006 2:03:08 PM
Live Time: 600.0 seconds
Real Time: 600.7 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780_2M90Soil170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-04-004-F-
Title: OOL-09-04-004-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	3632-	3643	3637.18	909.26	0.61	3.30E+001	18.86	2.30E+001
2	5823-	5846	5834.24	1458.53	2.11	4.45E+002	45.01	2.07E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.843	1460.81*	10.67	3.05290E+001	3.95365E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.843	3.052905E+001	3.953650E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	909.26	5.5052E-002	57.10

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.8405E-001	2.10E-001	5.0556E-002
	1332.49	100.00	2.0959E-001		1.9253E-001
Nb-94	702.63	100.00	2.6635E-001	2.27E-001	-1.4264E-001
	871.10	100.00	2.2671E-001		-2.9881E-001
Ag-108m	79.20	7.10	2.1912E+001	3.28E-001	-8.7275E-001
	433.93	89.90	3.2943E-001		-1.1203E-001
	614.37	90.40	3.2799E-001		-7.2429E-001
	722.95	90.50	3.2955E-001		1.0047E-001
Sb-125	176.33	6.89	6.9444E+000	9.23E-001	4.1405E+000
	427.89	29.33	9.2333E-001		-1.1961E+000
	463.38	10.35	2.7477E+000		-1.0372E+000
	600.56	17.80	1.6747E+000		-1.3230E+000
	606.64	5.02	6.5685E+000		5.0973E+000
	635.90	11.32	2.2016E+000		-8.0383E-001
Cs-134	563.23	8.38	3.2127E+000	3.14E-001	1.8519E-001
	569.32	15.43	1.7679E+000		-9.5369E-001
	604.70	97.60	3.4319E-001		1.7976E-001
	795.84	85.40	3.1411E-001		6.0596E-002
	801.93	8.73	2.9464E+000		-2.1761E+000
Cs-137	661.65	85.12	3.1794E-001	3.18E-001	1.7088E-001
Eu-152	121.78	28.40	2.4086E+000	1.00E+000	-3.1338E-001
	244.69	7.49	5.2010E+000		-5.1054E+000
	344.27	26.50	1.1560E+000		-1.0198E+000
	778.89	12.74	2.0074E+000		-2.0802E-001
	867.32	4.16	5.3002E+000		-4.5193E+000
	964.01	14.40	2.1234E+000		8.5738E-001
	1085.78	10.00	2.6126E+000		-7.4706E-001
	1112.02	13.30	2.0577E+000		-3.7417E+000
	1407.95	20.70	1.0044E+000		6.2614E-001
Eu-154	123.07	40.50	1.6829E+000	7.02E-001	1.3809E-001
	247.94	6.60	5.8822E+000		4.2802E-001
	591.81	4.83	6.3683E+000		1.9749E+000
	723.30	19.70	1.5416E+000		1.2603E+000
	756.87	4.33	6.3836E+000		5.9559E+000
	873.19	11.50	2.1372E+000		-7.0010E-001
	996.32	10.30	2.6286E+000		-1.1557E+000
	1004.76	17.90	1.4659E+000		1.3129E+000
	1274.45	35.50	7.0237E-001		3.5124E-001
Eu-155	86.54	30.90	3.9383E+000	3.94E+000	8.0811E-001
	105.31	20.70	4.2026E+000		1.6465E+000
Am-241	59.54	35.90	8.3148E+000	8.31E+000	-3.0933E+000
Cm-243	228.19	10.56	3.8454E+000	2.55E+000	2.0022E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.5487E+000	2.55E+000	-4.8996E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/19/2006 2:31:14 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-04-005-F-
Sample Title: OOL-09-04-005-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/19/2006 2:21:12 PM
Live Time: 600.0 seconds
Real Time: 600.8 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780_2M90Soil170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-04-005-F-
Title: OOL-09-04-005-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5828-	5857	5841.78	1460.41	2.37	4.83E+002	43.80	3.50E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.995	1460.81*	10.67	3.31722E+001	4.03009E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.995	3.317221E+001	4.030088E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.6945E-001	2.47E-001	1.3448E-001
	1332.49	100.00	2.4685E-001		1.1706E-001
Nb-94	702.63	100.00	2.7238E-001	2.58E-001	-4.9818E-002
	871.10	100.00	2.5804E-001		1.3082E-002
Ag-108m	79.20	7.10	2.0946E+001	2.99E-001	-2.7667E+001
	433.93	89.90	3.3609E-001		1.4259E-002
	614.37	90.40	3.8328E-001		-7.6482E-002
	722.95	90.50	2.9934E-001		-2.8053E-001
Sb-125	176.33	6.89	7.0641E+000	1.04E+000	1.5663E+000
	427.89	29.33	1.0392E+000		-3.6379E-001
	463.38	10.35	3.0201E+000		6.2435E-001
	600.56	17.80	1.5439E+000		-6.9816E-001
	606.64	5.02	7.2472E+000		4.4795E+000
	635.90	11.32	2.3859E+000		-2.6758E+000
Cs-134	563.23	8.38	3.3817E+000	3.27E-001	-7.0534E-001
	569.32	15.43	1.9840E+000		4.5317E-002
	604.70	97.60	3.5971E-001		2.0073E-001
	795.84	85.40	3.2689E-001		1.1050E-001
	801.93	8.73	2.9272E+000		-2.4905E+000
Cs-137	661.65	85.12	3.5671E-001	3.57E-001	-1.2676E-001
Eu-152	121.78	28.40	2.3826E+000	1.00E+000	1.9332E+000
	244.69	7.49	5.5351E+000		-8.3165E+000
	344.27	26.50	1.3234E+000		-4.3590E-002
	778.89	12.74	2.0966E+000		2.2768E-001
	867.32	4.16	6.1560E+000		1.9756E+000
	964.01	14.40	2.4693E+000		3.3542E+000
	1085.78	10.00	2.5170E+000		-1.2440E+000
	1112.02	13.30	2.0441E+000		-2.3987E-001
	1407.95	20.70	1.0044E+000		3.7173E-001
Eu-154	123.07	40.50	1.6386E+000	7.08E-001	-5.3650E-001
	247.94	6.60	6.0852E+000		1.0401E+000
	591.81	4.83	6.2189E+000		2.5405E+000
	723.30	19.70	1.4132E+000		-1.5163E-001
	756.87	4.33	6.7562E+000		8.5966E+000
	873.19	11.50	2.2598E+000		-8.2607E-001
	996.32	10.30	2.5602E+000		1.1144E+000
	1004.76	17.90	1.5250E+000		1.5867E-001
	1274.45	35.50	7.0848E-001		6.5463E-001
Eu-155	86.54	30.90	4.0936E+000	4.09E+000	7.4161E+000
	105.31	20.70	4.2554E+000		1.9029E+000
Am-241	59.54	35.90	8.2867E+000	8.29E+000	-1.0417E+001
Cm-243	228.19	10.56	4.1396E+000	2.47E+000	-8.5085E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4750E+000	2.47E+000	7.3884E-003

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/19/2006 2:59:55 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-04-006-F-
Sample Title: OOL-09-04-006-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/19/2006 2:49:54 PM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780_2M90Soil170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-04-006-F-
Title: OOL-09-04-006-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5827-	5856	5842.01	1460.47	2.40	4.28E+002	42.17	7.45E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.996	1460.81*	10.67	2.93345E+001	3.74312E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.996	2.933450E+001	3.743124E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.5988E-001	2.15E-001	-6.3660E-002
	1332.49	100.00	2.1497E-001		-7.8040E-002
Nb-94	702.63	100.00	2.6173E-001	2.27E-001	6.7541E-002
	871.10	100.00	2.2671E-001		-3.0779E-001
Ag-108m	79.20	7.10	1.9697E+001	2.67E-001	-8.4059E+000
	433.93	89.90	3.1567E-001		-1.5222E-001
	614.37	90.40	3.3216E-001		-2.2277E-002
	722.95	90.50	2.6737E-001		-2.5748E-001
Sb-125	176.33	6.89	5.7887E+000	9.92E-001	-3.9730E+000
	427.89	29.33	9.9180E-001		-3.9343E-001
	463.38	10.35	2.7157E+000		-4.2658E-001
	600.56	17.80	1.5210E+000		-4.3752E-001
	606.64	5.02	6.5236E+000		9.0052E-001
	635.90	11.32	2.3732E+000		-3.3585E-001
Cs-134	563.23	8.38	3.3060E+000	3.36E-001	8.6611E-001
	569.32	15.43	1.7594E+000		6.6434E-002
	604.70	97.60	3.3865E-001		4.5806E-001
	795.84	85.40	3.3571E-001		2.2797E-002
	801.93	8.73	3.1673E+000		6.5229E-001
Cs-137	661.65	85.12	3.1966E-001	3.20E-001	-1.0195E-001
Eu-152	121.78	28.40	1.8597E+000	1.05E+000	-4.4091E-001
	244.69	7.49	4.8261E+000		-1.9409E+000
	344.27	26.50	1.0989E+000		-1.0407E+000
	778.89	12.74	1.9943E+000		-1.0330E+000
	867.32	4.16	5.5393E+000		-9.3036E-001
	964.01	14.40	2.1024E+000		-2.2686E-002
	1085.78	10.00	2.2916E+000		-1.0003E+000
	1112.02	13.30	1.9170E+000		-3.2232E+000
	1407.95	20.70	1.0462E+000		4.8299E-001
Eu-154	123.07	40.50	1.2957E+000	6.77E-001	-5.4139E-001
	247.94	6.60	4.9421E+000		-4.3120E+000
	591.81	4.83	5.6352E+000		-2.6662E-001
	723.30	19.70	1.2456E+000		-1.3344E+000
	756.87	4.33	6.1703E+000		-6.3644E+000
	873.19	11.50	2.1213E+000		1.3615E+000
	996.32	10.30	2.2246E+000		-2.4181E+000
	1004.76	17.90	1.4659E+000		3.9231E-001
	1274.45	35.50	6.7734E-001		-1.2834E-001
Eu-155	86.54	30.90	3.5170E+000	3.49E+000	-1.4020E-001
	105.31	20.70	3.4924E+000		-2.1018E+000
Am-241	59.54	35.90	8.4153E+000	8.42E+000	-2.9158E+000
Cm-243	228.19	10.56	3.2851E+000	2.32E+000	-1.5012E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3202E+000	2.32E+000	-2.5493E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/19/2006 3:15:31 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-04-007-F-
Sample Title: OOL-09-04-007-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/19/2006 3:05:29 PM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780_2M90Soil170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-04-007-F-
Title: OOL-09-04-007-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	3634-	3648	3641.86	910.43	0.51	4.83E+001	20.93	2.27E+001
2	5829-	5855	5841.76	1460.41	2.74	3.68E+002	41.25	1.70E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.995	1460.81*	10.67	2.52472E+001	3.49126E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.995	2.524716E+001	3.491256E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	910.43	8.0581E-002	43.29

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.7318E-001	1.98E-001	-2.4389E-002
	1332.49	100.00	1.9836E-001		1.3306E-001
Nb-94	702.63	100.00	2.3890E-001	2.39E-001	-1.1821E-001
	871.10	100.00	2.4199E-001		7.4374E-002
Ag-108m	79.20	7.10	1.9004E+001	2.92E-001	-1.9059E+001
	433.93	89.90	2.9250E-001		-1.6926E-001
	614.37	90.40	3.2234E-001		-4.2808E-001
	722.95	90.50	2.9934E-001		1.3062E-001
Sb-125	176.33	6.89	5.5658E+000	9.49E-001	-4.4828E-001
	427.89	29.33	9.4916E-001		2.1454E-001
	463.38	10.35	2.7689E+000		1.1106E+000
	600.56	17.80	1.3917E+000		-2.0276E+000
	606.64	5.02	6.8741E+000		1.2557E+001
	635.90	11.32	2.3348E+000		3.2000E-001
Cs-134	563.23	8.38	3.1326E+000	3.03E-001	1.7135E+000
	569.32	15.43	1.6162E+000		2.2871E-001
	604.70	97.60	3.4206E-001		3.2619E-001
	795.84	85.40	3.0269E-001		2.0237E-001
	801.93	8.73	2.6639E+000		-1.4679E+000
Cs-137	661.65	85.12	3.1794E-001	3.18E-001	1.7538E-001
Eu-152	121.78	28.40	2.0400E+000	9.61E-001	4.5754E-001
	244.69	7.49	4.5193E+000		-4.3826E+000
	344.27	26.50	1.1658E+000		-2.1798E-001
	778.89	12.74	2.0841E+000		-4.6853E-001
	867.32	4.16	5.8122E+000		-1.8857E+000
	964.01	14.40	2.3506E+000		2.5207E+000
	1085.78	10.00	2.5170E+000		-1.0719E+000
	1112.02	13.30	1.7959E+000		-2.6586E+000
	1407.95	20.70	9.6070E-001		-4.7582E-001
Eu-154	123.07	40.50	1.4020E+000	6.10E-001	4.8681E-001
	247.94	6.60	4.8988E+000		2.0055E+000
	591.81	4.83	5.5220E+000		6.0922E+000
	723.30	19.70	1.3676E+000		-3.1030E-001
	756.87	4.33	5.2240E+000		-3.6594E+000
	873.19	11.50	2.0892E+000		-1.7259E+000
	996.32	10.30	2.2447E+000		8.5125E-001
	1004.76	17.90	1.2940E+000		-6.1426E-001
	1274.45	35.50	6.0989E-001		-3.7849E-001
Eu-155	86.54	30.90	3.3677E+000	3.37E+000	1.4881E+000
	105.31	20.70	3.6096E+000		3.7503E+000
Am-241	59.54	35.90	7.8229E+000	7.82E+000	-5.3192E-001
Cm-243	228.19	10.56	3.3034E+000	2.57E+000	2.3907E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.5728E+000	2.57E+000	1.5337E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/20/2006 6:31:47 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-04-008-F-G
Sample ID: OOL-09-04-008-F
Sample Title: OOL-09-04-008-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/19/2006 3:20:35 PM
Live Time: 600.0 seconds
Real Time: 600.5 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780_2M90Soil170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-04-008-F-G
Log Number: OOL-09-04-008-F
Title: OOL-09-04-008-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5828-	5855	5841.51	1460.35	2.50	3.84E+002	42.25	1.77E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-04-008-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.993	1460.81*	10.67	2.63680E+001	3.60006E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-04-008-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.993	2.636802E+001	3.600056E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-04-008-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.4163E-001	1.86E-001	-5.3719E-002
	1332.49	100.00	1.8637E-001		-4.8722E-002
Nb-94	702.63	100.00	2.5860E-001	2.29E-001	-2.4715E-001
	871.10	100.00	2.2868E-001		-8.3297E-002
Ag-108m	79.20	7.10	1.9068E+001	2.96E-001	-2.7469E+000
	433.93	89.90	2.9753E-001		-1.4780E-001
	614.37	90.40	3.0922E-001		-6.5324E-001
	722.95	90.50	2.9597E-001		7.8002E-002
Sb-125	176.33	6.89	5.9396E+000	9.23E-001	5.8301E-001
	427.89	29.33	9.2333E-001		-1.9270E-001
	463.38	10.35	2.7157E+000		-7.2605E-001
	600.56	17.80	1.4659E+000		5.0463E-002
	606.64	5.02	6.4557E+000		7.3691E+000
	635.90	11.32	2.3985E+000		-1.3483E-001
Cs-134	563.23	8.38	2.9311E+000	3.20E-001	1.6806E+000
	569.32	15.43	1.5491E+000		-1.3730E+000
	604.70	97.60	3.1978E-001		3.4311E-001
	795.84	85.40	3.2329E-001		4.3415E-001
	801.93	8.73	2.9655E+000		3.2458E-001
Cs-137	661.65	85.12	3.2306E-001	3.23E-001	1.9089E-001
Eu-152	121.78	28.40	1.8501E+000	9.15E-001	-1.4279E+000
	244.69	7.49	4.3244E+000		-8.1828E+000
	344.27	26.50	1.1494E+000		9.7054E-002
	778.89	12.74	1.9679E+000		7.5050E-001
	867.32	4.16	5.6775E+000		-3.5861E+000
	964.01	14.40	2.0705E+000		2.1984E+000
	1085.78	10.00	2.5557E+000		1.5381E+000
	1112.02	13.30	1.7801E+000		-1.8284E+000
	1407.95	20.70	9.1463E-001		-3.3274E-003
Eu-154	123.07	40.50	1.3068E+000	6.51E-001	1.0322E-001
	247.94	6.60	4.9205E+000		-1.4574E+000
	591.81	4.83	5.9081E+000		5.8213E+000
	723.30	19.70	1.3829E+000		1.3393E+000
	756.87	4.33	5.8730E+000		-8.7493E-001
	873.19	11.50	2.0565E+000		-1.7524E-001
	996.32	10.30	2.1632E+000		-8.4480E-002
	1004.76	17.90	1.3828E+000		-8.2530E-001
	1274.45	35.50	6.5127E-001		-1.9202E-001
Eu-155	86.54	30.90	3.1212E+000	3.10E+000	5.9234E-001
	105.31	20.70	3.0984E+000		5.4251E-001
Am-241	59.54	35.90	8.3986E+000	8.40E+000	-4.9884E+000
Cm-243	228.19	10.56	3.2607E+000	2.22E+000	2.3474E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2220E+000	2.22E+000	-7.9732E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/20/2006 6:32:36 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-04-009-F-G
Sample ID: OOL-09-04-009-F
Sample Title: OOL-09-04-009-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/19/2006 3:36:52 PM
Live Time: 600.0 seconds
Real Time: 600.6 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780_2M90Soil170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-04-009-F-G
Log Number: OOL-09-04-009-F
Title: OOL-09-04-009-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2320-	2339	2329.08	582.23	1.76	9.80E+001	28.82	3.30E+001
2	5828-	5856	5840.72	1460.15	2.70	4.17E+002	43.78	1.78E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-04-009-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.986	1460.81*	10.67	2.86201E+001	3.79333E+000
TL-208	0.454	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	6.55861E-001	2.11500E-001
		860.37	12.46		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-04-009-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.986	2.862007E+001	3.793334E+000
TL-208	0.454	6.558614E-001	2.115003E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-04-009-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.6567E-001	1.92E-001	-1.6133E-002
	1332.49	100.00	1.9247E-001		-1.3124E-001
Nb-94	702.63	100.00	2.6938E-001	2.58E-001	-2.0720E-002
	871.10	100.00	2.5804E-001		1.6851E-001
Ag-108m	79.20	7.10	1.7719E+001	3.10E-001	-2.5365E+001
	433.93	89.90	3.0975E-001		-1.1692E-001
	614.37	90.40	3.4833E-001		-1.4022E-001
	722.95	90.50	3.1083E-001		1.2405E-001
Sb-125	176.33	6.89	5.8250E+000	9.81E-001	1.4271E+000
	427.89	29.33	9.8132E-001		1.7410E-001
	463.38	10.35	2.7898E+000		1.7077E+000
	600.56	17.80	1.6179E+000		-1.1128E+000
	606.64	5.02	7.1661E+000		8.1863E+000
	635.90	11.32	2.3605E+000		-7.7005E-001
Cs-134	563.23	8.38	3.1488E+000	3.25E-001	5.9076E-001
	569.32	15.43	1.8100E+000		-3.4441E-001
	604.70	97.60	3.6820E-001		2.6918E-001
	795.84	85.40	3.2510E-001		-1.0301E-001
	801.93	8.73	2.9655E+000		-2.1998E+000
Cs-137	661.65	85.12	3.2475E-001	3.25E-001	2.4629E-002
Eu-152	121.78	28.40	1.8371E+000	1.03E+000	-2.1912E-001
	244.69	7.49	5.0658E+000		-5.8965E+000
	344.27	26.50	1.0989E+000		-1.4145E+000
	778.89	12.74	1.9811E+000		-3.2426E-001
	867.32	4.16	6.3204E+000		-4.4030E+000
	964.01	14.40	2.2351E+000		2.2107E+000
	1085.78	10.00	2.4577E+000		-1.7072E+000
	1112.02	13.30	1.8270E+000		-5.8938E-001
	1407.95	20.70	1.0325E+000		2.5750E-001
Eu-154	123.07	40.50	1.2923E+000	7.08E-001	7.5239E-001
	247.94	6.60	5.3546E+000		-3.9768E+000
	591.81	4.83	5.9874E+000		1.6602E+000
	723.30	19.70	1.4281E+000		6.6643E-001
	756.87	4.33	6.5558E+000		9.7872E-001
	873.19	11.50	2.3040E+000		1.2066E+000
	996.32	10.30	2.2842E+000		-2.1823E+000
	1004.76	17.90	1.3828E+000		3.3904E-002
	1274.45	35.50	7.0848E-001		3.5603E-001
Eu-155	86.54	30.90	3.1331E+000	3.13E+000	1.8222E+000
	105.31	20.70	3.2869E+000		2.0627E+000
Am-241	59.54	35.90	8.1676E+000	8.17E+000	5.3869E+000
Cm-243	228.19	10.56	3.5654E+000	2.55E+000	1.5451E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.5535E+000	2.55E+000	-8.3778E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/20/2006 6:33:19 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-04-010-F-G
Sample ID: OOL-09-04-010-F
Sample Title: OOL-09-04-010-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/19/2006 3:54:48 PM
Live Time: 600.0 seconds
Real Time: 600.7 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780_2M90Soil170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-04-010-F-G
Log Number: OOL-09-04-010-F
Title: OOL-09-04-010-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2323-	2338	2330.74	582.64	0.89	5.37E+001	24.14	3.23E+001
2	2427-	2444	2435.46	608.83	1.12	7.47E+001	23.27	2.03E+001
3	3637-	3651	3642.85	910.68	0.89	3.88E+001	22.66	3.22E+001
4	4551-	4562	4556.98	1139.21	1.44	2.03E+001	12.42	7.70E+000
5	5828-	5853	5841.23	1460.28	1.98	3.85E+002	41.13	1.30E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-04-010-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.991	1460.81*	10.67	2.64128E+001	3.54020E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.59481E-001	1.68453E-001
		860.37	12.46		
Bi-214	0.402	609.31*	46.30	9.21881E-001	3.09397E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-04-010-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.991	2.641283E+001	3.540204E+000
TL-208	0.467	3.594806E-001	1.684530E-001
Bi-214	0.402	9.218805E-001	3.093970E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	910.68	6.4695E-002	58.37
4	1139.21	3.3839E-002	61.17

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-04-010-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.6183E-001	1.73E-001	6.5350E-002
	1332.49	100.00	1.7346E-001		-4.6043E-002
Nb-94	702.63	100.00	2.5221E-001	2.52E-001	1.2371E-001
	871.10	100.00	2.6315E-001		9.9059E-002
Ag-108m	79.20	7.10	1.9047E+001	3.07E-001	-1.1303E+001
	433.93	89.90	3.0735E-001		7.8696E-002
	614.37	90.40	3.3216E-001		1.8494E-002
	722.95	90.50	3.2498E-001		3.0677E-001
Sb-125	176.33	6.89	6.0171E+000	9.53E-001	3.0609E+000
	427.89	29.33	9.5279E-001		-4.1558E-001
	463.38	10.35	2.8721E+000		6.1586E-001
	600.56	17.80	1.4416E+000		5.8084E-001
	606.64	5.02	6.4557E+000		7.6764E+000
	635.90	11.32	2.1878E+000		1.1914E+000
Cs-134	563.23	8.38	3.1968E+000	3.01E-001	-1.2284E+000
	569.32	15.43	1.6805E+000		-1.3982E+000
	604.70	97.60	3.3519E-001		-3.2869E-002
	795.84	85.40	3.0074E-001		9.4459E-002
	801.93	8.73	2.7683E+000		-1.2832E+000
Cs-137	661.65	85.12	3.1622E-001	3.16E-001	-2.2212E-002
Eu-152	121.78	28.40	1.8868E+000	9.76E-001	1.1624E-001
	244.69	7.49	4.7492E+000		-4.8688E+000
	344.27	26.50	1.1058E+000		-3.8832E-001
	778.89	12.74	1.8861E+000		-1.7890E+000
	867.32	4.16	6.2797E+000		-2.2329E-001
	964.01	14.40	2.0489E+000		3.2099E-001
	1085.78	10.00	2.2034E+000		-3.8977E-001
	1112.02	13.30	1.6481E+000		-2.9859E+000
	1407.95	20.70	9.7553E-001		-4.7178E-001
Eu-154	123.07	40.50	1.3277E+000	7.02E-001	6.9109E-001
	247.94	6.60	5.1216E+000		-1.0337E+000
	591.81	4.83	5.5789E+000		2.9231E+000
	723.30	19.70	1.4931E+000		1.2742E+000
	756.87	4.33	5.5990E+000		-8.0585E-001
	873.19	11.50	2.2746E+000		-3.9204E-001
	996.32	10.30	2.4356E+000		1.8093E+000
	1004.76	17.90	1.2707E+000		1.0607E+000
	1274.45	35.50	7.0237E-001		-5.9969E-001
Eu-155	86.54	30.90	3.2782E+000	3.18E+000	9.6417E-001
	105.31	20.70	3.1827E+000		-6.0673E-001
Am-241	59.54	35.90	7.6231E+000	7.62E+000	-4.8400E+000
Cm-243	228.19	10.56	3.4341E+000	2.45E+000	-8.8339E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4499E+000	2.45E+000	-6.3770E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 1:46:19 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-101-F-
Sample Title: OOL-09-05-101-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 1:43:19 PM
Live Time: 176.5 seconds
Real Time: 177.0 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-101-F-
Title: OOL-09-05-101-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	288-	301	297.36	74.29	0.42	7.53E+001	74.27	4.90E+002
2	2431-	2442	2436.01	608.96	0.61	2.21E+001	19.06	2.79E+001
3	3635-	3646	3640.59	910.11	0.57	2.76E+001	16.17	1.54E+001
4	5824-	5849	5836.43	1459.08	2.85	2.51E+002	32.58	6.19E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.906	1460.81*	10.67	1.87063E+001	2.86333E+000
Bi-214	0.401	609.31*	46.30	3.02399E-001	2.63258E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.906	1.870626E+001	2.863329E+000
Bi-214	0.401	3.023987E-001	2.632575E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	74.29	4.2652E-001	98.65
3	910.11	1.5614E-001	58.68

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.4656E-001	2.18E-001	-1.0892E-002
	1332.49	100.00	2.1795E-001		1.1316E-001
Nb-94	702.63	100.00	2.4680E-001	2.25E-001	-3.7965E-002
	871.10	100.00	2.2500E-001		-1.3181E-001
Ag-108m	79.20	7.10	2.4339E+001	2.65E-001	-3.3202E+001
	433.93	89.90	3.1032E-001		-1.3882E-001
	614.37	90.40	3.2022E-001		-2.2646E-001
	722.95	90.50	2.6491E-001		-9.5195E-002
Sb-125	176.33	6.89	6.5394E+000	9.51E-001	-8.2750E-001
	427.89	29.33	9.5128E-001		-4.1671E-001
	463.38	10.35	2.5648E+000		7.4569E-001
	600.56	17.80	1.4738E+000		1.5322E-001
	606.64	5.02	6.7055E+000		6.9934E+000
	635.90	11.32	2.1630E+000		-1.8915E+000
Cs-134	563.23	8.38	2.9399E+000	2.38E-001	-4.4408E-001
	569.32	15.43	1.7470E+000		1.0517E+000
	604.70	97.60	3.4035E-001		-8.8526E-002
	795.84	85.40	2.3833E-001		-1.2292E-001
	801.93	8.73	2.1771E+000		1.4480E-001
Cs-137	661.65	85.12	3.1382E-001	3.14E-001	8.9325E-003
Eu-152	121.78	28.40	2.3125E+000	7.83E-001	5.4942E-001
	244.69	7.49	5.0231E+000		-1.5002E+000
	344.27	26.50	1.1324E+000		-1.3424E+000
	778.89	12.74	1.7668E+000		1.4414E-001
	867.32	4.16	4.9721E+000		-2.7654E+000
	964.01	14.40	1.7638E+000		-2.7200E-001
	1085.78	10.00	2.0013E+000		-1.5860E+000
	1112.02	13.30	1.7111E+000		-4.8060E-001
	1407.95	20.70	7.8322E-001		5.6684E-001
Eu-154	123.07	40.50	1.6161E+000	7.04E-001	1.8334E+000
	247.94	6.60	5.3993E+000		-3.3838E+000
	591.81	4.83	5.0693E+000		-3.7651E+000
	723.30	19.70	1.2062E+000		-8.5517E-001
	756.87	4.33	5.3819E+000		-6.8269E-001
	873.19	11.50	2.1405E+000		1.5786E+000
	996.32	10.30	2.1775E+000		-2.5708E+000
	1004.76	17.90	1.3543E+000		8.3653E-001
	1274.45	35.50	7.0372E-001		4.8654E-001
Eu-155	86.54	30.90	4.3867E+000	4.25E+000	1.5741E+000
	105.31	20.70	4.2517E+000		2.3046E+000
Am-241	59.54	35.90	1.1246E+001	1.12E+001	1.1046E+000
Cm-243	228.19	10.56	3.7112E+000	2.32E+000	2.6511E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3160E+000	2.32E+000	-1.3624E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 2:11:44 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-102-F-
Sample Title: OOL-09-05-102-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 2:01:47 PM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-102-F-
Title: OOL-09-05-102-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1344-	1359	1348.31	337.03	0.67	9.63E+001	46.29	1.53E+002
2	2318-	2339	2330.67	582.63	1.79	1.49E+002	43.28	9.04E+001
3	2847-	2858	2852.33	713.05	0.78	1.70E+001	19.55	3.20E+001
4	5823-	5852	5836.67	1459.14	2.69	8.31E+002	59.70	2.12E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.912	1460.81*	10.67	1.82278E+001	1.97312E+000
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.23823E-001	1.03327E-001
		860.37	12.46		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.912	1.822776E+001	1.973122E+000
TL-208	0.466	3.238235E-001	1.033272E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	337.03	1.6042E-001	48.10
3	713.05	2.8316E-002	115.08

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2002E-001	9.45E-002	4.9195E-002
	1332.49	100.00	9.4531E-002		-2.3529E-002
Nb-94	702.63	100.00	1.2087E-001	1.17E-001	-1.7079E-002
	871.10	100.00	1.1713E-001		-4.6413E-002
Ag-108m	79.20	7.10	1.1374E+001	1.39E-001	-2.3129E+001
	433.93	89.90	1.5493E-001		2.6866E-002
	614.37	90.40	1.4847E-001		-1.9087E-001
	722.95	90.50	1.3924E-001		-3.6454E-002
Sb-125	176.33	6.89	3.1572E+000	4.61E-001	2.7597E+000
	427.89	29.33	4.6122E-001		-1.4595E-001
	463.38	10.35	1.3233E+000		2.8588E-001
	600.56	17.80	7.5330E-001		-2.7330E-001
	606.64	5.02	3.2218E+000		4.5600E+000
	635.90	11.32	1.0661E+000		-3.7844E-001
Cs-134	563.23	8.38	1.6133E+000	1.43E-001	4.8675E-001
	569.32	15.43	8.9515E-001		5.2531E-001
	604.70	97.60	1.6431E-001		1.5536E-001
	795.84	85.40	1.4276E-001		1.9235E-001
	801.93	8.73	1.3299E+000		-6.0360E-001
Cs-137	661.65	85.12	1.6154E-001	1.62E-001	2.4386E-001
Eu-152	121.78	28.40	1.0988E+000	3.69E-001	8.9742E-001
	244.69	7.49	2.3149E+000		-5.0085E+000
	344.27	26.50	5.4062E-001		-5.2156E-001
	778.89	12.74	9.3875E-001		3.4836E-002
	867.32	4.16	2.8601E+000		-1.5640E+000
	964.01	14.40	1.0441E+000		1.4890E+000
	1085.78	10.00	1.0539E+000		0.0000E+000
	1112.02	13.30	8.8426E-001		-3.4583E-001
	1407.95	20.70	3.6924E-001		-7.4518E-002
Eu-154	123.07	40.50	7.5865E-001	3.10E-001	1.6540E-002
	247.94	6.60	2.5112E+000		-2.4182E+000
	591.81	4.83	2.6476E+000		9.5479E-001
	723.30	19.70	6.5163E-001		1.3817E-001
	756.87	4.33	2.8874E+000		4.1688E-001
	873.19	11.50	1.0052E+000		-1.7993E-001
	996.32	10.30	1.1407E+000		1.2118E+000
	1004.76	17.90	6.0402E-001		-1.1161E-001
	1274.45	35.50	3.0972E-001		-4.9857E-002
Eu-155	86.54	30.90	2.0593E+000	2.01E+000	3.1265E+000
	105.31	20.70	2.0062E+000		-7.4778E-001
Am-241	59.54	35.90	5.2257E+000	5.23E+000	-3.9033E-001
Cm-243	228.19	10.56	1.7220E+000	1.13E+000	-1.1565E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1336E+000	1.13E+000	2.5472E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 3:28:28 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-103-F-
Sample Title: OOL-09-05-103-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 3:18:24 PM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-103-F-
Title: OOL-09-05-103-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	299-	310	303.47	75.82	0.77	1.36E+002	109.81	1.17E+003
2	945-	960	950.24	237.52	0.82	1.62E+002	69.07	3.60E+002
3	5822-	5851	5835.81	1458.92	2.93	9.07E+002	60.16	7.50E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.890	1460.81*	10.67	1.98873E+001	2.08197E+000
Pb-212	0.573	74.81* @	10.70	5.28886E+000	4.39937E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.24554E-001	2.37895E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.890	1.988728E+001	2.081970E+000
Pb-212 @	0.573	5.245540E-001	2.378952E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1958E-001	9.70E-002	1.6660E-002
	1332.49	100.00	9.6956E-002		4.4610E-002
Nb-94	702.63	100.00	1.2534E-001	1.17E-001	7.4619E-003
	871.10	100.00	1.1674E-001		1.3911E-002
Ag-108m	79.20	7.10	1.2043E+001	1.44E-001	-1.2549E+001
	433.93	89.90	1.5715E-001		-1.3432E-002
	614.37	90.40	1.6322E-001		-1.9917E-001
	722.95	90.50	1.4402E-001		4.9074E-002
Sb-125	176.33	6.89	3.1358E+000	4.79E-001	-7.3747E-001
	427.89	29.33	4.7949E-001		-9.7963E-002
	463.38	10.35	1.3324E+000		3.6727E-001
	600.56	17.80	7.3361E-001		-1.5561E+000
	606.64	5.02	3.3109E+000		4.1933E+000
	635.90	11.32	1.0392E+000		-1.7267E-001
Cs-134	563.23	8.38	1.6198E+000	1.57E-001	3.2760E-001
	569.32	15.43	8.7033E-001		2.6091E-003
	604.70	97.60	1.6651E-001		2.5115E-001
	795.84	85.40	1.5733E-001		1.0809E-001
	801.93	8.73	1.4397E+000		7.2163E-002
Cs-137	661.65	85.12	1.4908E-001	1.49E-001	1.3153E-001
Eu-152	121.78	28.40	1.0827E+000	3.53E-001	4.7818E-001
	244.69	7.49	2.3838E+000		-4.1846E+000
	344.27	26.50	6.1404E-001		-3.7139E-001
	778.89	12.74	9.4451E-001		-1.3118E+000
	867.32	4.16	2.6274E+000		-2.0727E+000
	964.01	14.40	1.0375E+000		1.6847E+000
	1085.78	10.00	1.1517E+000		2.7469E-001
	1112.02	13.30	8.2951E-001		-7.2353E-001
	1407.95	20.70	3.5308E-001		-2.9351E-001
Eu-154	123.07	40.50	7.4692E-001	3.26E-001	-3.5809E-002
	247.94	6.60	2.6307E+000		1.8316E+000
	591.81	4.83	2.9130E+000		3.3847E+000
	723.30	19.70	6.7322E-001		4.8274E-001
	756.87	4.33	2.5991E+000		-2.0530E+000
	873.19	11.50	1.0190E+000		-5.0527E-001
	996.32	10.30	1.1367E+000		-8.1196E-002
	1004.76	17.90	5.9370E-001		-1.0974E-001
	1274.45	35.50	3.2647E-001		1.9271E-001
Eu-155	86.54	30.90	2.1463E+000	2.02E+000	4.1482E+000
	105.31	20.70	2.0175E+000		-3.9559E-001
Am-241	59.54	35.90	5.5159E+000	5.52E+000	-5.0312E-001
Cm-243	228.19	10.56	1.7615E+000	1.22E+000	-3.2651E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2162E+000	1.22E+000	1.9190E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 4:27:43 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-104-F-
Sample Title: OOL-09-05-104-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 4:17:42 PM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-104-F-
Title: OOL-09-05-104-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1396-	1413	1406.19	351.50	0.66	1.04E+002	51.71	1.82E+002
2	3629-	3649	3638.49	909.58	0.44	9.90E+001	35.47	6.30E+001
3	5822-	5852	5836.56	1459.11	2.56	8.28E+002	61.69	3.39E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.910	1460.81*	10.67	1.81682E+001	1.99882E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.910	1.816816E+001	1.998824E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	351.50	1.7299E-001	49.82
2	909.58	1.6500E-001	35.83

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2564E-001	1.08E-001	4.9427E-002
	1332.49	100.00	1.0822E-001		1.5947E-001
Nb-94	702.63	100.00	1.1910E-001	1.16E-001	3.7931E-002
	871.10	100.00	1.1555E-001		-5.7071E-003
Ag-108m	79.20	7.10	1.1573E+001	1.50E-001	-2.4455E+001
	433.93	89.90	1.4989E-001		-4.3886E-004
	614.37	90.40	1.5755E-001		-2.9290E-001
	722.95	90.50	1.5142E-001		1.6356E-001
Sb-125	176.33	6.89	3.2194E+000	4.58E-001	2.6790E+000
	427.89	29.33	4.5810E-001		-2.3235E-001
	463.38	10.35	1.3550E+000		5.2146E-001
	600.56	17.80	7.5492E-001		-3.1444E-001
	606.64	5.02	3.2596E+000		4.8295E+000
	635.90	11.32	1.1429E+000		3.3924E-001
Cs-134	563.23	8.38	1.6647E+000	1.39E-001	-9.2906E-002
	569.32	15.43	8.5764E-001		2.2277E-002
	604.70	97.60	1.6821E-001		2.1172E-001
	795.84	85.40	1.3930E-001		8.0624E-002
	801.93	8.73	1.3474E+000		-8.9690E-001
Cs-137	661.65	85.12	1.5762E-001	1.58E-001	8.0987E-002
Eu-152	121.78	28.40	1.0754E+000	4.27E-001	-1.1098E+000
	244.69	7.49	2.3943E+000		-1.7324E+000
	344.27	26.50	5.5555E-001		-3.0295E-001
	778.89	12.74	9.3294E-001		-4.6051E-001
	867.32	4.16	2.7367E+000		-3.1592E-001
	964.01	14.40	1.0173E+000		1.1176E+000
	1085.78	10.00	1.1246E+000		-1.0503E-001
	1112.02	13.30	8.6416E-001		-1.8173E+000
	1407.95	20.70	4.2736E-001		-5.8691E-002
Eu-154	123.07	40.50	7.5321E-001	3.04E-001	-3.5835E-001
	247.94	6.60	2.5048E+000		-2.7037E+000
	591.81	4.83	2.5656E+000		-2.5493E+000
	723.30	19.70	6.9410E-001		8.0561E-001
	756.87	4.33	2.8794E+000		-2.1007E+000
	873.19	11.50	1.0052E+000		-4.2037E-001
	996.32	10.30	1.0695E+000		1.0799E+000
	1004.76	17.90	6.2164E-001		-3.6740E-002
	1274.45	35.50	3.0392E-001		-3.7950E-002
Eu-155	86.54	30.90	2.0589E+000	2.04E+000	2.2052E+000
	105.31	20.70	2.0437E+000		1.3608E+000
Am-241	59.54	35.90	5.2718E+000	5.27E+000	4.3908E+000
Cm-243	228.19	10.56	1.7465E+000	1.14E+000	9.5030E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1447E+000	1.14E+000	-6.2129E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 7:20:14 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-105-F-
Sample Title: OOL-09-05-105-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 7:10:11 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-105-F-
Title: OOL-09-05-105-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	308	291.65	72.74	1.13	4.70E+002	79.83	2.29E+003
m	2	285-	308	300.42	74.93	1.13	9.12E+002	91.85	2.82E+003
	3	334-	347	339.98	84.83	1.72	4.55E+002	153.62	2.06E+003
	4	948-	963	954.52	238.51	1.33	3.09E+002	79.03	4.36E+002
	5	1175-	1191	1181.22	295.20	0.72	1.03E+002	59.30	2.59E+002
	6	1345-	1358	1353.63	338.32	0.75	6.46E+001	47.99	1.94E+002
	7	1400-	1417	1407.14	351.70	1.15	1.36E+002	55.63	2.06E+002
	8	2033-	2053	2042.29	510.53	0.83	1.24E+002	50.61	1.50E+002
	9	2322-	2340	2332.90	583.21	1.49	1.54E+002	49.98	1.47E+002
	10	2425-	2445	2436.90	609.22	1.53	1.90E+002	43.59	8.39E+001
	11	3633-	3656	3644.67	911.25	2.15	2.06E+002	41.57	6.05E+001
	12	3867-	3886	3876.12	969.13	1.45	9.90E+001	32.49	5.00E+001
	13	4476-	4490	4481.99	1120.64	0.86	3.68E+001	24.27	4.02E+001
	14	5832-	5858	5845.63	1461.66	2.00	1.14E+003	70.00	3.04E+001
	15	7054-	7069	7061.38	1765.69	0.61	5.21E+001	17.08	7.90E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.992	511.00*		100.00	1.69717E-001	7.27497E-002
K-40	0.975	1460.81*		10.67	1.91671E+001	1.94594E+000
TL-208	0.751	277.35		6.80		
		510.84*		21.60	7.85726E-001	3.42862E-001
		583.14*		84.20	2.61124E-001	9.11691E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	1.30501E+001	2.87547E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.51577E-001	2.25372E-001
Bi-214	0.989	609.31*		46.30	5.93519E-001	1.54497E-001
		1120.29*		15.10	4.10189E-001	2.74039E-001
		1764.49*		15.80	6.12181E-001	2.09797E-001
PB-214	0.582	74.82*	@	6.21	2.24857E+001	5.21647E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	6.19323E-001	3.70809E-001
		351.92*		37.20	4.43746E-001	1.95743E-001
Ac-228	0.999	338.32*		11.40	6.79244E-001	5.15479E-001
		911.07*		27.70	1.17623E+000	2.73717E-001
		969.11*		16.60	9.62566E-001	3.31575E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.992	1.133142E-001	7.534544E-002
K-40		0.975	1.916705E+001	1.945944E+000
TL-208		0.751	2.611236E-001	9.077110E-002
Pb-212	@	0.520	7.515773E-001	2.253720E-001
Bi-214		0.989	5.676335E-001	1.132783E-001
PB-214	@	0.582	4.820097E-001	1.731049E-001
Ac-228		0.999	1.030703E+000	1.953420E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.74	7.8341E-001	16.98
3	84.83	7.5863E-001	33.75

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0151E-001	8.70E-002	7.0556E-002
	1332.49	100.00	8.6962E-002		3.4290E-002
Nb-94	702.63	100.00	1.0521E-001	9.69E-002	-1.3932E-002
	871.10	100.00	9.6887E-002		4.0807E-002
Ag-108m	79.20	7.10	5.8618E+000	1.28E-001	-4.6812E+000
	433.93	89.90	1.2954E-001		5.5617E-002
	614.37	90.40	1.3119E-001		-1.6038E-002
	722.95	90.50	1.2843E-001		1.0737E-001
Sb-125	176.33	6.89	2.5048E+000	3.93E-001	2.2517E-001
	427.89	29.33	3.9305E-001		1.1765E-002
	463.38	10.35	1.1163E+000		-6.5837E-001
	600.56	17.80	6.0820E-001		-2.6340E-001
	606.64	5.02	2.7204E+000		4.1793E+000
	635.90	11.32	8.8532E-001		3.9929E-001
Cs-134	563.23	8.38	1.3139E+000	1.27E-001	7.8183E-001
	569.32	15.43	7.3044E-001		5.9458E-001
	604.70	97.60	1.3409E-001		-1.4670E-002
	795.84	85.40	1.2744E-001		5.6515E-002
	801.93	8.73	1.1516E+000		-3.5880E-001
Cs-137	661.65	85.12	1.2870E-001	1.29E-001	2.1032E-001
Eu-152	121.78	28.40	8.6206E-001	3.19E-001	-6.2380E-001
	244.69	7.49	1.9109E+000		-1.6301E+000
	344.27	26.50	4.6320E-001		-1.1042E-001
	778.89	12.74	7.6555E-001		-1.1297E+000
	867.32	4.16	2.3270E+000		-2.4013E+000
	964.01	14.40	8.6177E-001		1.0072E-001
	1085.78	10.00	9.4022E-001		-1.0608E+000
	1112.02	13.30	7.5625E-001		1.3721E-001
	1407.95	20.70	3.1943E-001		-2.4812E-001
Eu-154	123.07	40.50	5.9910E-001	2.75E-001	-1.4072E-001
	247.94	6.60	2.1740E+000		-4.1108E-001
	591.81	4.83	2.2613E+000		-1.5274E+000
	723.30	19.70	5.9227E-001		5.0556E-001
	756.87	4.33	2.3675E+000		1.0116E+000
	873.19	11.50	8.2774E-001		-4.5051E-001
	996.32	10.30	9.1855E-001		-6.7379E-001
	1004.76	17.90	5.3866E-001		-1.0043E-001
	1274.45	35.50	2.7522E-001		9.4714E-002
Eu-155	86.54	30.90	1.2215E+000	1.22E+000	-2.2282E-001
	105.31	20.70	1.4323E+000		-4.7963E-001
Am-241	59.54	35.90	1.5975E+000	1.60E+000	-1.7260E-001
Cm-243	228.19	10.56	1.4346E+000	1.02E+000	5.3292E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0245E+000	1.02E+000	-1.5455E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 8:35:07 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-106-F-
Sample Title: OOL-09-05-106-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 8:25:04 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-106-F-
Title: OOL-09-05-106-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	291.67	72.75	1.14	4.92E+002	79.63	2.39E+003
m	2	284-	308	300.31	74.91	1.15	1.11E+003	95.12	2.73E+003
	3	947-	959	954.20	238.43	1.21	2.92E+002	67.10	3.35E+002
	4	1173-	1189	1180.03	294.90	0.91	9.07E+001	59.80	2.68E+002
	5	1344-	1362	1352.13	337.94	0.61	9.01E+001	61.28	2.62E+002
	6	1400-	1414	1406.65	351.58	1.72	1.63E+002	50.06	1.68E+002
	7	2305-	2342	2331.64	582.89	1.68	2.17E+002	75.38	2.10E+002
	8	2426-	2446	2436.10	609.01	1.50	1.89E+002	48.08	1.13E+002
	9	3635-	3652	3643.52	910.96	1.62	1.53E+002	35.46	5.36E+001
	10	3866-	3883	3875.99	969.10	0.83	8.42E+001	32.90	6.08E+001
	11	4472-	4486	4479.11	1119.92	1.13	4.49E+001	27.77	5.31E+001
	12	5830-	5858	5843.74	1461.18	1.96	1.18E+003	70.96	2.80E+001
	13	7054-	7069	7060.76	1765.53	0.62	4.10E+001	17.28	1.20E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.995	1460.81*	10.67	1.98595E+001	2.00043E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.67533E-001	1.36230E-001
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.59427E+001	3.40836E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.10393E-001	1.97490E-001
Bi-214	0.990	609.31*	46.30	5.89691E-001	1.66772E-001
		1120.29*	15.10	5.00180E-001	3.14055E-001
		1764.49*	15.80	4.81746E-001	2.08627E-001
PB-214	0.580	74.82* @	6.21	2.74698E+001	6.20202E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.44196E-001	3.70304E-001
		351.92*	37.20	5.30120E-001	1.85536E-001
Ac-228	0.999	338.32*	11.40	9.46488E-001	6.60646E-001
		911.07*	27.70	8.77945E-001	2.26718E-001
		969.11*	16.60	8.19045E-001	3.31198E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.995	1.985945E+001	2.000427E+000
TL-208		0.470	3.675329E-001	1.362301E-001
Pb-212	@	0.520	7.103930E-001	1.974901E-001
Bi-214		0.990	5.406442E-001	1.203260E-001
PB-214	@	0.580	5.329441E-001	1.658794E-001
Ac-228		0.999	8.656351E-001	1.800049E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.75	8.2060E-001	16.17

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.9204E-002	8.19E-002	-1.2830E-001
	1332.49	100.00	8.1925E-002		-2.4138E-002
Nb-94	702.63	100.00	1.0831E-001	1.00E-001	-3.5593E-002
	871.10	100.00	1.0000E-001		3.0723E-002
Ag-108m	79.20	7.10	5.8402E+000	1.29E-001	-5.7206E+000
	433.93	89.90	1.2865E-001		-4.3122E-003
	614.37	90.40	1.3866E-001		-3.8545E-002
	722.95	90.50	1.2964E-001		8.8292E-002
Sb-125	176.33	6.89	2.5466E+000	3.95E-001	4.9216E-001
	427.89	29.33	3.9469E-001		-1.4365E-001
	463.38	10.35	1.1340E+000		-6.5923E-001
	600.56	17.80	6.1181E-001		5.0126E-001
	606.64	5.02	2.7807E+000		-2.1916E-001
	635.90	11.32	9.3109E-001		-1.4310E-001
Cs-134	563.23	8.38	1.2871E+000	1.26E-001	-5.0511E-001
	569.32	15.43	7.0420E-001		-2.7463E-001
	604.70	97.60	1.3445E-001		-1.5486E-002
	795.84	85.40	1.2570E-001		1.3993E-001
	801.93	8.73	1.1729E+000		-4.9455E-001
Cs-137	661.65	85.12	1.2436E-001	1.24E-001	-1.4187E-001
Eu-152	121.78	28.40	8.6942E-001	3.19E-001	-4.6812E-002
	244.69	7.49	1.9583E+000		1.9268E+000
	344.27	26.50	4.5972E-001		-5.3937E-003
	778.89	12.74	8.6960E-001		-9.0606E-002
	867.32	4.16	2.4284E+000		-3.3950E+000
	964.01	14.40	8.6502E-001		2.0347E-002
	1085.78	10.00	1.0391E+000		3.7227E-001
	1112.02	13.30	7.7745E-001		-5.3461E-001
	1407.95	20.70	3.1943E-001		1.1627E-002
Eu-154	123.07	40.50	6.0102E-001	2.50E-001	-1.1695E-001
	247.94	6.60	2.1472E+000		7.1646E-001
	591.81	4.83	2.0697E+000		-1.1979E+000
	723.30	19.70	5.9672E-001		4.1316E-001
	756.87	4.33	2.3852E+000		9.3046E-001
	873.19	11.50	8.4540E-001		-8.8589E-002
	996.32	10.30	9.3080E-001		2.7086E-001
	1004.76	17.90	5.5586E-001		-1.4502E-001
	1274.45	35.50	2.5021E-001		-2.9560E-001
Eu-155	86.54	30.90	1.2086E+000	1.21E+000	1.3102E+000
	105.31	20.70	1.4145E+000		-6.4869E-002
Am-241	59.54	35.90	1.5610E+000	1.56E+000	-1.8108E-001
Cm-243	228.19	10.56	1.4058E+000	9.41E-001	8.4288E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.4124E-001	9.41E-001	-3.4133E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 9:45:49 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-107-F-
Sample Title: OOL-09-05-107-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 9:36:13 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-107-F-
Title: OOL-09-05-107-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	288-	305	296.69	74.13	0.73	5.43E+002	152.70	1.70E+003
2	2320-	2340	2328.46	582.08	0.61	1.17E+002	50.02	1.47E+002
3	2428-	2445	2434.99	608.71	0.80	6.95E+001	40.07	1.06E+002
4	3633-	3653	3643.40	910.81	0.92	1.09E+002	37.85	7.28E+001
5	5827-	5857	5842.12	1460.50	2.77	8.87E+002	61.98	2.33E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.997	1460.81*	10.67	1.94641E+001	2.08192E+000
TL-208	0.447	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.54741E-001	1.13944E-001
		860.37	12.46		
Bi-214	0.396	609.31*	46.30	2.79519E-001	1.64754E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.997	1.946412E+001	2.081925E+000
TL-208	0.447	2.547414E-001	1.139440E-001
Bi-214	0.396	2.795189E-001	1.647541E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	74.13	9.0499E-001	28.12
4	910.81	1.8201E-001	34.66

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2897E-001	1.11E-001	2.0191E-002
	1332.49	100.00	1.1136E-001		2.2738E-002
Nb-94	702.63	100.00	1.2701E-001	1.21E-001	-1.1421E-001
	871.10	100.00	1.2137E-001		2.3394E-002
Ag-108m	79.20	7.10	1.2221E+001	1.49E-001	-2.8660E+001
	433.93	89.90	1.6054E-001		4.1835E-002
	614.37	90.40	1.5996E-001		6.2725E-002
	722.95	90.50	1.4865E-001		-7.9169E-002
Sb-125	176.33	6.89	3.4408E+000	4.99E-001	7.1105E-002
	427.89	29.33	4.9850E-001		-4.2492E-002
	463.38	10.35	1.4162E+000		2.6730E-001
	600.56	17.80	7.8343E-001		-4.8981E-001
	606.64	5.02	3.2123E+000		3.2526E+000
	635.90	11.32	1.1673E+000		1.8997E-002
Cs-134	563.23	8.38	1.7176E+000	1.46E-001	6.2453E-001
	569.32	15.43	8.9689E-001		2.7258E-001
	604.70	97.60	1.6651E-001		-9.2138E-003
	795.84	85.40	1.4571E-001		6.2482E-002
	801.93	8.73	1.4397E+000		-4.6879E-001
Cs-137	661.65	85.12	1.5977E-001	1.60E-001	5.6886E-002
Eu-152	121.78	28.40	1.1910E+000	4.50E-001	-4.2392E-001
	244.69	7.49	2.7035E+000		-1.4352E+000
	344.27	26.50	5.9932E-001		-7.8419E-001
	778.89	12.74	9.8939E-001		-5.3856E-001
	867.32	4.16	2.9960E+000		-2.9793E+000
	964.01	14.40	1.0638E+000		1.5825E+000
	1085.78	10.00	1.1062E+000		2.2450E-001
	1112.02	13.30	9.1034E-001		-6.2463E-001
	1407.95	20.70	4.5027E-001		2.1551E-001
Eu-154	123.07	40.50	8.2528E-001	3.13E-001	1.8612E-002
	247.94	6.60	2.8637E+000		-2.7037E+000
	591.81	4.83	2.8216E+000		-2.4252E+000
	723.30	19.70	6.7971E-001		-2.7097E-001
	756.87	4.33	3.0055E+000		2.7613E+000
	873.19	11.50	1.0657E+000		1.8096E-001
	996.32	10.30	1.0387E+000		-1.4866E+000
	1004.76	17.90	5.8053E-001		-3.1578E-001
	1274.45	35.50	3.1258E-001		4.9258E-002
Eu-155	86.54	30.90	2.2076E+000	2.17E+000	4.4855E+000
	105.31	20.70	2.1746E+000		6.1246E-001
Am-241	59.54	35.90	5.4613E+000	5.46E+000	-2.1934E+000
Cm-243	228.19	10.56	1.8760E+000	1.28E+000	-3.4872E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2837E+000	1.28E+000	7.1335E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 9:31:31 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-108-F-
Sample Title: OOL-09-05-108-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 9:21:28 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-108-F-
Title: OOL-09-05-108-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	330-	343	337.50	84.33	0.68	1.03E+002	115.99	1.22E+003
2	1398-	1410	1404.23	351.02	0.52	3.82E+001	45.97	1.93E+002
3	2426-	2446	2433.83	608.42	1.79	1.23E+002	43.36	1.00E+002
4	3634-	3652	3641.82	910.42	0.94	8.66E+001	35.50	7.14E+001
5	5827-	5856	5841.26	1460.28	3.05	8.67E+002	63.82	4.08E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.991	1460.81*	10.67	1.90334E+001	2.08250E+000
Bi-214	0.387	609.31*	46.30	4.93864E-001	1.84630E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.991	1.903338E+001	2.082501E+000
Bi-214	0.387	4.938643E-001	1.846297E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	84.33	1.7238E-001	112.15
2	351.02	6.3683E-002	120.32
4	910.42	1.4437E-001	40.98

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2091E-001	1.03E-001	2.2851E-002
	1332.49	100.00	1.0331E-001		7.7154E-002
Nb-94	702.63	100.00	1.2534E-001	1.25E-001	8.4173E-002
	871.10	100.00	1.2547E-001		-1.2250E-001
Ag-108m	79.20	7.10	1.2130E+001	1.58E-001	-1.1024E+001
	433.93	89.90	1.6291E-001		-4.6663E-002
	614.37	90.40	1.6698E-001		-1.3371E-001
	722.95	90.50	1.5846E-001		9.1547E-002
Sb-125	176.33	6.89	3.3085E+000	4.96E-001	2.3334E-001
	427.89	29.33	4.9635E-001		3.3254E-001
	463.38	10.35	1.3727E+000		2.2451E-001
	600.56	17.80	7.7562E-001		3.3269E-001
	606.64	5.02	3.3063E+000		4.7861E+000
	635.90	11.32	1.1511E+000		9.3582E-002
Cs-134	563.23	8.38	1.6836E+000	1.50E-001	1.3454E-001
	569.32	15.43	9.2266E-001		-2.0607E-001
	604.70	97.60	1.6578E-001		1.9648E-004
	795.84	85.40	1.5023E-001		-6.3037E-002
	801.93	8.73	1.4110E+000		-1.0515E+000
Cs-137	661.65	85.12	1.5977E-001	1.60E-001	6.7478E-003
Eu-152	121.78	28.40	1.1533E+000	4.44E-001	1.4271E-001
	244.69	7.49	2.5374E+000		-5.1881E+000
	344.27	26.50	6.1467E-001		-2.0358E-001
	778.89	12.74	9.5310E-001		-8.7394E-001
	867.32	4.16	3.1510E+000		-3.2838E-001
	964.01	14.40	1.0352E+000		1.5352E-001
	1085.78	10.00	1.2123E+000		-3.9909E-001
	1112.02	13.30	8.9086E-001		-3.8920E-001
	1407.95	20.70	4.4386E-001		-2.7939E-001
Eu-154	123.07	40.50	8.0438E-001	2.90E-001	9.5591E-001
	247.94	6.60	2.7429E+000		-2.4320E+000
	591.81	4.83	2.8041E+000		1.0907E+000
	723.30	19.70	7.3552E-001		4.8091E-001
	756.87	4.33	3.0665E+000		9.4697E-001
	873.19	11.50	1.0755E+000		7.8116E-001
	996.32	10.30	1.2152E+000		8.8969E-001
	1004.76	17.90	6.9407E-001		4.1302E-001
	1274.45	35.50	2.9042E-001		-3.0536E-001
Eu-155	86.54	30.90	2.1366E+000	2.10E+000	1.5802E-001
	105.31	20.70	2.0951E+000		-4.2980E-001
Am-241	59.54	35.90	5.3968E+000	5.40E+000	1.1627E+000
Cm-243	228.19	10.56	1.8878E+000	1.29E+000	3.8424E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2867E+000	1.29E+000	-7.7393E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 8:44:28 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-109-F-
Sample Title: OOL-09-05-109-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 8:34:22 AM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-109-F-
Title: OOL-09-05-109-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	941-	961	951.36	237.80	0.71	1.15E+002	85.72	4.96E+002
2	2038-	2050	2042.14	510.49	0.89	5.30E+001	37.71	1.19E+002
3	2321-	2340	2327.82	581.92	0.69	1.13E+002	45.24	1.20E+002
4	5825-	5855	5840.33	1460.05	3.51	8.26E+002	63.05	4.27E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.981	1460.81*		10.67	1.81348E+001	2.01750E+000
TL-208	0.719	277.35		6.80		
		510.84*		21.60	4.31008E-001	3.14372E-001
		583.14*		84.20	2.47249E-001	1.03700E-001
		860.37		12.46		
Pb-212	0.441	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	3.73203E-001	2.83216E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
X	ANN		0.992		
	K-40		0.981	1.813479E+001	2.017503E+000
	TL-208		0.719	2.652814E-001	9.848019E-002
	Pb-212	@	0.441	3.732029E-001	2.832164E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.3181E-001	9.64E-002	1.0527E-001
	1332.49	100.00	9.6356E-002		-7.8429E-002
Nb-94	702.63	100.00	1.2601E-001	1.21E-001	1.0442E-002
	871.10	100.00	1.2099E-001		4.7213E-002
Ag-108m	79.20	7.10	1.1833E+001	1.51E-001	-1.3954E+001
	433.93	89.90	1.5142E-001		-1.3616E-001
	614.37	90.40	1.6175E-001		-1.2023E-001
	722.95	90.50	1.5347E-001		1.9185E-001
Sb-125	176.33	6.89	3.1519E+000	4.81E-001	6.6780E-001
	427.89	29.33	4.8098E-001		-4.9134E-002
	463.38	10.35	1.4054E+000		5.2663E-001
	600.56	17.80	7.7719E-001		-1.0893E-001
	606.64	5.02	3.3432E+000		3.6409E+000
	635.90	11.32	1.0720E+000		-4.3889E-001
Cs-134	563.23	8.38	1.5602E+000	1.53E-001	-9.8575E-001
	569.32	15.43	8.6491E-001		-4.0296E-001
	604.70	97.60	1.6651E-001		1.1468E-001
	795.84	85.40	1.5303E-001		1.0455E-001
	801.93	8.73	1.4477E+000		-8.9155E-002
Cs-137	661.65	85.12	1.5397E-001	1.54E-001	-6.9901E-002
Eu-152	121.78	28.40	1.0979E+000	3.99E-001	-7.2284E-001
	244.69	7.49	2.4475E+000		-2.6999E+000
	344.27	26.50	5.5973E-001		-6.5642E-001
	778.89	12.74	1.0217E+000		3.2733E-001
	867.32	4.16	2.8970E+000		-2.4110E-002
	964.01	14.40	9.2705E-001		9.3986E-001
	1085.78	10.00	1.1109E+000		2.4731E-001
	1112.02	13.30	8.4702E-001		-3.5709E-001
	1407.95	20.70	3.9945E-001		-3.7381E-002
Eu-154	123.07	40.50	7.6583E-001	2.90E-001	2.6755E-001
	247.94	6.60	2.7014E+000		-6.5071E-001
	591.81	4.83	2.8332E+000		8.3868E-001
	723.30	19.70	6.9726E-001		4.6995E-001
	756.87	4.33	3.0055E+000		-4.5310E-002
	873.19	11.50	1.0625E+000		-8.1907E-001
	996.32	10.30	1.1326E+000		-7.0773E-001
	1004.76	17.90	6.6006E-001		-3.7424E-001
	1274.45	35.50	2.9042E-001		-3.8303E-002
Eu-155	86.54	30.90	2.0237E+000	1.94E+000	-1.2433E-001
	105.31	20.70	1.9362E+000		-1.2426E-001
Am-241	59.54	35.90	5.1921E+000	5.19E+000	-6.5268E+000
Cm-243	228.19	10.56	1.7546E+000	1.26E+000	6.6668E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2600E+000	1.26E+000	7.9387E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 9:17:15 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-110-F-
Sample Title: OOL-09-05-110-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 9:07:11 PM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-110-F-
Title: OOL-09-05-110-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2322-	2341	2329.63	582.37	1.18	1.18E+002	43.23	1.04E+002
2	3634-	3651	3641.24	910.27	1.03	8.58E+001	31.77	5.42E+001
3	3866-	3878	3872.56	968.10	0.25	2.58E+001	24.64	5.02E+001
4	5827-	5856	5841.44	1460.33	2.48	8.59E+002	61.42	2.60E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.992	1460.81*	10.67	1.88533E+001	2.03648E+000
TL-208	0.459	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.58073E-001	1.00032E-001
		860.37	12.46		
Ac-228	0.616	338.32	11.40		
		911.07*	27.70	6.29663E-001	2.44110E-001
		969.11*	16.60	3.20229E-001	3.08071E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.992	1.885328E+001	2.036476E+000
TL-208	0.459	2.580735E-001	1.000320E-001
Ac-228	0.616	5.103138E-001	1.913270E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1869E-001	8.68E-002	-1.3341E-002
	1332.49	100.00	8.6823E-002		-2.5116E-003
Nb-94	702.63	100.00	1.1803E-001	1.10E-001	-5.2372E-005
	871.10	100.00	1.0981E-001		5.2371E-002
Ag-108m	79.20	7.10	1.2023E+001	1.33E-001	-1.9969E+001
	433.93	89.90	1.5040E-001		-6.6592E-003
	614.37	90.40	1.6526E-001		-2.1352E-001
	722.95	90.50	1.3349E-001		3.6917E-002
Sb-125	176.33	6.89	3.0010E+000	4.60E-001	-1.2153E+000
	427.89	29.33	4.5966E-001		-3.6020E-001
	463.38	10.35	1.2813E+000		-8.1107E-001
	600.56	17.80	6.7457E-001		-7.1601E-001
	606.64	5.02	3.1738E+000		3.9413E+000
	635.90	11.32	1.0270E+000		-8.9669E-001
Cs-134	563.23	8.38	1.6263E+000	1.39E-001	6.3627E-001
	569.32	15.43	8.2976E-001		9.4969E-003
	604.70	97.60	1.5854E-001		8.1937E-002
	795.84	85.40	1.3930E-001		1.0726E-001
	801.93	8.73	1.3032E+000		-1.9359E+000
Cs-137	661.65	85.12	1.4908E-001	1.49E-001	6.7345E-002
Eu-152	121.78	28.40	1.0945E+000	4.17E-001	4.0027E-002
	244.69	7.49	2.3856E+000		-3.6511E+000
	344.27	26.50	5.3556E-001		-3.9693E-001
	778.89	12.74	8.8506E-001		9.3460E-001
	867.32	4.16	2.6876E+000		-7.3724E-001
	964.01	14.40	9.8739E-001		1.6511E+000
	1085.78	10.00	1.0342E+000		-1.1664E+000
	1112.02	13.30	8.2951E-001		-2.2722E-001
	1407.95	20.70	4.1713E-001		-9.0320E-003
Eu-154	123.07	40.50	7.5442E-001	3.05E-001	-2.4144E-001
	247.94	6.60	2.5069E+000		-8.3542E-001
	591.81	4.83	2.7330E+000		8.5103E-001
	723.30	19.70	6.2223E-001		1.8956E-001
	756.87	4.33	2.6612E+000		-1.3085E-001
	873.19	11.50	9.2931E-001		6.9340E-001
	996.32	10.30	1.0114E+000		-1.6792E-001
	1004.76	17.90	5.5599E-001		-5.5411E-001
	1274.45	35.50	3.0538E-001		9.8267E-002
Eu-155	86.54	30.90	2.0813E+000	2.05E+000	5.2291E-001
	105.31	20.70	2.0463E+000		-5.5225E-001
Am-241	59.54	35.90	5.6414E+000	5.64E+000	-1.7084E+000
Cm-243	228.19	10.56	1.7627E+000	1.18E+000	1.5437E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1773E+000	1.18E+000	3.8506E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 9:02:40 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-111-F-
Sample Title: OOL-09-05-111-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 8:52:35 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-111-F-
Title: OOL-09-05-111-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	293-	306	297.37	74.30	0.96	4.28E+002	132.61	1.51E+003
2	1397-	1415	1405.14	351.24	0.86	1.08E+002	63.20	2.75E+002
3	3632-	3654	3641.55	910.35	1.06	1.40E+002	38.64	6.36E+001
4	5825-	5856	5840.95	1460.21	2.87	1.04E+003	65.17	1.20E+001
5	7050-	7063	7056.34	1764.06	0.71	3.02E+001	17.56	1.78E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.988	1460.81*	10.67	2.29344E+001	2.34379E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.988	2.293445E+001	2.343790E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	74.30	7.1335E-001	30.98
2	351.24	1.7935E-001	58.73
3	910.35	2.3402E-001	27.52
5	1764.06	5.0330E-002	58.14

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2522E-001	1.15E-001	-9.5541E-003
	1332.49	100.00	1.1541E-001		9.2434E-002
Nb-94	702.63	100.00	1.3349E-001	1.23E-001	5.5987E-002
	871.10	100.00	1.2251E-001		5.3268E-002
Ag-108m	79.20	7.10	1.2829E+001	1.56E-001	-2.1498E+001
	433.93	89.90	1.6315E-001		-6.0306E-002
	614.37	90.40	1.7885E-001		-3.9136E-001
	722.95	90.50	1.5649E-001		1.9098E-002
Sb-125	176.33	6.89	3.4285E+000	5.13E-001	2.1234E+000
	427.89	29.33	5.1264E-001		4.5399E-001
	463.38	10.35	1.4971E+000		-2.7606E-002
	600.56	17.80	8.0185E-001		6.4928E-002
	606.64	5.02	3.5301E+000		4.0125E+000
	635.90	11.32	1.2223E+000		-3.0174E-001
Cs-134	563.23	8.38	1.6456E+000	1.55E-001	-9.5931E-001
	569.32	15.43	9.3444E-001		-4.4923E-002
	604.70	97.60	1.7801E-001		7.4703E-002
	795.84	85.40	1.5461E-001		7.0378E-002
	801.93	8.73	1.4835E+000		-6.9290E-001
Cs-137	661.65	85.12	1.8231E-001	1.82E-001	2.2127E-001
Eu-152	121.78	28.40	1.1644E+000	4.34E-001	-5.1466E-001
	244.69	7.49	2.6178E+000		-2.7542E+000
	344.27	26.50	6.3333E-001		-1.0826E+000
	778.89	12.74	9.7002E-001		-2.6484E-001
	867.32	4.16	3.0745E+000		-2.0052E+000
	964.01	14.40	1.1765E+000		2.1023E+000
	1085.78	10.00	1.2207E+000		2.5215E-001
	1112.02	13.30	9.5419E-001		-6.8716E-001
	1407.95	20.70	4.3404E-001		-5.2151E-001
Eu-154	123.07	40.50	8.0910E-001	3.35E-001	-7.2965E-001
	247.94	6.60	2.7876E+000		-3.0156E+000
	591.81	4.83	2.9017E+000		-2.0209E-001
	723.30	19.70	7.2350E-001		4.5307E-001
	756.87	4.33	2.9035E+000		-3.2322E+000
	873.19	11.50	1.0493E+000		-1.0087E+000
	996.32	10.30	1.1161E+000		-7.6664E-001
	1004.76	17.90	6.6931E-001		-1.8659E-001
	1274.45	35.50	3.3451E-001		2.7006E-002
Eu-155	86.54	30.90	2.1802E+000	2.13E+000	1.6140E+000
	105.31	20.70	2.1306E+000		-8.8002E-001
Am-241	59.54	35.90	5.6517E+000	5.65E+000	1.5974E-001
Cm-243	228.19	10.56	1.9070E+000	1.25E+000	4.1024E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2530E+000	1.25E+000	-1.9354E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 8:47:28 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-112-F-
Sample Title: OOL-09-05-112-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 8:37:11 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-112-F-
Title: OOL-09-05-112-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	3632-	3654	3640.82	910.17	1.28	1.31E+002	37.60	6.06E+001
2	5827-	5857	5841.57	1460.36	2.75	9.58E+002	66.55	4.09E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.993	1460.81*	10.67	2.10290E+001	2.24323E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.993	2.102899E+001	2.243226E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	910.17	2.1901E-001	28.61

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.3498E-001	1.03E-001	4.0914E-002
	1332.49	100.00	1.0331E-001		-9.1178E-003
Nb-94	702.63	100.00	1.3784E-001	1.27E-001	3.9233E-002
	871.10	100.00	1.2692E-001		6.4396E-002
Ag-108m	79.20	7.10	1.2444E+001	1.57E-001	-3.2554E+001
	433.93	89.90	1.6432E-001		3.3869E-002
	614.37	90.40	1.7010E-001		-2.2210E-001
	722.95	90.50	1.5682E-001		7.5030E-002
Sb-125	176.33	6.89	3.3250E+000	5.11E-001	-3.0677E-002
	427.89	29.33	5.1054E-001		2.3536E-001
	463.38	10.35	1.4747E+000		-1.5390E-001
	600.56	17.80	7.6295E-001		-2.9439E-001
	606.64	5.02	3.3796E+000		5.7884E+000
	635.90	11.32	1.1619E+000		-5.1250E-001
Cs-134	563.23	8.38	1.6898E+000	1.62E-001	-6.0285E-001
	569.32	15.43	9.1757E-001		2.4971E-002
	604.70	97.60	1.6529E-001		-5.7970E-002
	795.84	85.40	1.6226E-001		1.6004E-001
	801.93	8.73	1.4356E+000		-5.9090E-001
Cs-137	661.65	85.12	1.4363E-001	1.44E-001	-7.8784E-002
Eu-152	121.78	28.40	1.1850E+000	4.27E-001	1.1528E+000
	244.69	7.49	2.6115E+000		-3.4854E+000
	344.27	26.50	5.8819E-001		-7.9373E-001
	778.89	12.74	9.7837E-001		-4.4909E-001
	867.32	4.16	2.9514E+000		-1.2869E+000
	964.01	14.40	1.0681E+000		1.5195E+000
	1085.78	10.00	1.0922E+000		-8.8498E-001
	1112.02	13.30	9.0066E-001		-9.6992E-001
	1407.95	20.70	4.2736E-001		-1.2784E-001
Eu-154	123.07	40.50	8.2307E-001	3.24E-001	6.9122E-001
	247.94	6.60	2.8011E+000		-3.7168E+000
	591.81	4.83	2.8274E+000		-1.2324E+000
	723.30	19.70	7.2047E-001		4.5646E-001
	756.87	4.33	3.2138E+000		2.7598E+000
	873.19	11.50	1.1260E+000		7.0596E-001
	996.32	10.30	1.0651E+000		1.6324E-001
	1004.76	17.90	6.4115E-001		-1.3134E-001
	1274.45	35.50	3.2374E-001		-2.0040E-001
Eu-155	86.54	30.90	2.2323E+000	2.09E+000	4.5565E+000
	105.31	20.70	2.0887E+000		-4.6780E-002
Am-241	59.54	35.90	5.9517E+000	5.95E+000	-4.7746E-001
Cm-243	228.19	10.56	1.8974E+000	1.33E+000	4.9394E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3262E+000	1.33E+000	4.3423E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 2:32:30 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-113-F-
Sample Title: OOL-09-05-113-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 2:22:25 PM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-113-F-
Title: OOL-09-05-113-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	308	300.19	75.00	1.35	3.05E+002	126.90	1.46E+003
2	943-	960	952.75	238.15	1.17	2.29E+002	86.98	5.35E+002
3	2321-	2340	2329.53	582.34	1.85	1.50E+002	45.53	1.11E+002
4	2425-	2443	2432.86	608.18	1.17	1.27E+002	40.71	8.87E+001
5	3629-	3648	3638.99	909.71	1.86	1.47E+002	34.29	4.52E+001
6	3863-	3880	3869.14	967.25	0.83	7.43E+001	30.03	4.87E+001
7	5822-	5851	5836.65	1459.13	2.11	9.42E+002	62.78	1.81E+001
8	7045-	7058	7051.57	1762.86	0.41	3.30E+001	14.18	7.00E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.912	1460.81*	10.67	2.06651E+001	2.16716E+000
TL-208	0.458	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.26297E-001	1.07946E-001
		860.37	12.46		
Pb-212	0.595	74.81* @	10.70	1.23491E+001	5.67893E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.40519E-001	3.04285E-001
Bi-214	0.652	609.31*	46.30	5.11841E-001	1.75386E-001
		1120.29	15.10		
		1764.49*	15.80	5.35573E-001	2.36207E-001
Ac-228	0.574	338.32	11.40		
		911.07*	27.70	1.07707E+000	2.80536E-001
		969.11*	16.60	9.23509E-001	3.85464E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.912	2.066505E+001	2.167158E+000
TL-208		0.458	3.262975E-001	1.079457E-001
Pb-212	@	0.595	7.405186E-001	3.042846E-001
Bi-214		0.652	5.202749E-001	1.408133E-001
Ac-228		0.574	1.023898E+000	2.268238E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2564E-001	8.68E-002	-3.7149E-002
	1332.49	100.00	8.6823E-002		2.6404E-002
Nb-94	702.63	100.00	1.2734E-001	1.11E-001	-3.4731E-002
	871.10	100.00	1.1148E-001		-1.1328E-001
Ag-108m	79.20	7.10	1.2833E+001	1.47E-001	-6.1481E+000
	433.93	89.90	1.6338E-001		-7.3759E-002
	614.37	90.40	1.6526E-001		6.0390E-002
	722.95	90.50	1.4689E-001		1.1921E-001
Sb-125	176.33	6.89	3.7035E+000	5.01E-001	8.1966E-001
	427.89	29.33	5.0065E-001		2.4929E-002
	463.38	10.35	1.4374E+000		1.3196E+000
	600.56	17.80	7.7405E-001		-5.8066E-001
	606.64	5.02	3.3477E+000		5.4056E+000
	635.90	11.32	1.1235E+000		-2.3829E-001
Cs-134	563.23	8.38	1.5466E+000	1.42E-001	-1.4715E+000
	569.32	15.43	8.7033E-001		-3.5742E-001
	604.70	97.60	1.7107E-001		-7.6926E-002
	795.84	85.40	1.4233E-001		-1.2755E-002
	801.93	8.73	1.3430E+000		2.5500E-003
Cs-137	661.65	85.12	1.6294E-001	1.63E-001	1.6501E-001
Eu-152	121.78	28.40	1.2773E+000	3.96E-001	4.0358E-001
	244.69	7.49	2.8057E+000		-1.2525E+000
	344.27	26.50	5.9607E-001		-2.9723E-001
	778.89	12.74	9.3585E-001		-1.5101E-001
	867.32	4.16	2.8508E+000		1.3358E+000
	964.01	14.40	1.0852E+000		2.0089E+000
	1085.78	10.00	1.0875E+000		-6.3804E-001
	1112.02	13.30	9.1034E-001		-3.0440E-001
	1407.95	20.70	3.9581E-001		-2.2877E-001
Eu-154	123.07	40.50	8.8926E-001	3.10E-001	2.7342E-001
	247.94	6.60	3.0753E+000		3.4720E-001
	591.81	4.83	2.8847E+000		1.0549E-001
	723.30	19.70	6.6830E-001		5.7862E-001
	756.87	4.33	3.0132E+000		2.1985E+000
	873.19	11.50	1.0052E+000		-3.7008E-001
	996.32	10.30	1.0297E+000		-2.7178E-001
	1004.76	17.90	6.6239E-001		-2.9681E-001
	1274.45	35.50	3.0972E-001		8.0759E-002
Eu-155	86.54	30.90	2.3337E+000	2.27E+000	3.7822E+000
	105.31	20.70	2.2683E+000		-1.6370E+000
Am-241	59.54	35.90	5.8201E+000	5.82E+000	-2.7878E+000
Cm-243	228.19	10.56	2.0742E+000	1.35E+000	-8.3635E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3459E+000	1.35E+000	5.5224E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 3:03:44 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-114-F-
Sample Title: OOL-09-05-114-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 2:53:40 PM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-114-F-
Title: OOL-09-05-114-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1893-	1902	1897.28	474.28	0.30	2.37E+001	23.76	5.33E+001
2	2422-	2442	2429.69	607.38	0.88	1.30E+002	40.91	8.42E+001
3	5821-	5851	5835.97	1458.96	1.87	8.92E+002	63.29	3.09E+001
4	7043-	7057	7050.41	1762.58	0.59	3.85E+001	16.69	1.15E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.894	1460.81*	10.67	1.95712E+001	2.10677E+000
Bi-214	0.601	609.31*	46.30	5.21732E-001	1.76529E-001
		1120.29	15.10		
		1764.49*	15.80	6.24624E-001	2.77992E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.894	1.957120E+001	2.106767E+000
Bi-214	0.601	5.512993E-001	1.490216E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	474.28	3.9470E-002	100.33

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2265E-001	9.99E-002	5.1554E-002
	1332.49	100.00	9.9898E-002		5.8261E-002
Nb-94	702.63	100.00	1.2191E-001	1.08E-001	-1.2024E-001
	871.10	100.00	1.0769E-001		-1.0377E-001
Ag-108m	79.20	7.10	1.1683E+001	1.44E-001	-2.0555E+001
	433.93	89.90	1.4963E-001		-3.1627E-002
	614.37	90.40	1.4353E-001		-5.8120E-002
	722.95	90.50	1.5039E-001		1.8496E-001
Sb-125	176.33	6.89	3.2049E+000	4.53E-001	2.8195E-001
	427.89	29.33	4.5338E-001		-2.8464E-002
	463.38	10.35	1.3815E+000		6.9228E-002
	600.56	17.80	7.0474E-001		-3.7060E-001
	606.64	5.02	3.1496E+000		6.0544E+000
	635.90	11.32	1.0661E+000		-7.8061E-001
Cs-134	563.23	8.38	1.5466E+000	1.50E-001	-2.8388E-001
	569.32	15.43	8.5946E-001		9.8761E-001
	604.70	97.60	1.6283E-001		-3.7931E-002
	795.84	85.40	1.5023E-001		1.4237E-001
	801.93	8.73	1.4437E+000		-3.4040E-001
Cs-137	661.65	85.12	1.5798E-001	1.58E-001	3.6509E-002
Eu-152	121.78	28.40	1.1059E+000	4.14E-001	6.3797E-001
	244.69	7.49	2.5520E+000		-3.1662E+000
	344.27	26.50	5.7211E-001		-8.3686E-001
	778.89	12.74	9.5594E-001		-2.6373E-001
	867.32	4.16	2.6876E+000		-1.0514E+000
	964.01	14.40	1.0485E+000		1.1449E+000
	1085.78	10.00	1.0922E+000		4.4765E-001
	1112.02	13.30	9.4188E-001		-2.2402E+000
	1407.95	20.70	4.1366E-001		-2.2622E-001
Eu-154	123.07	40.50	7.6304E-001	3.04E-001	4.6930E-002
	247.94	6.60	2.6994E+000		1.3044E-001
	591.81	4.83	2.6907E+000		1.5691E-001
	723.30	19.70	6.8454E-001		5.7298E-001
	756.87	4.33	2.8469E+000		-2.5149E+000
	873.19	11.50	9.5531E-001		5.6124E-001
	996.32	10.30	1.0824E+000		-1.8503E-001
	1004.76	17.90	6.3633E-001		1.3895E-001
	1274.45	35.50	3.0392E-001		9.6090E-002
Eu-155	86.54	30.90	2.0968E+000	2.05E+000	2.2570E+000
	105.31	20.70	2.0529E+000		1.0848E+000
Am-241	59.54	35.90	5.3253E+000	5.33E+000	3.6361E+000
Cm-243	228.19	10.56	1.8046E+000	1.22E+000	1.0855E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2162E+000	1.22E+000	2.8796E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 3:45:07 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-115-F-
Sample Title: OOL-09-05-115-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 3:35:04 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-115-F-
Title: OOL-09-05-115-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	301	297.30	74.28	0.62	9.90E+001	85.13	8.87E+002
2	1397-	1407	1402.61	350.61	0.45	3.91E+001	38.56	1.45E+002
3	3627-	3649	3640.05	909.98	0.65	1.12E+002	38.73	7.16E+001
4	5821-	5850	5835.38	1458.82	2.88	8.70E+002	61.82	2.63E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.878	1460.81*	10.67	1.90800E+001	2.05556E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.878	1.907997E+001	2.055563E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	74.28	1.6508E-001	85.95
2	350.61	6.5125E-002	98.68
3	909.98	1.8729E-001	34.46

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2938E-001	1.00E-001	4.1896E-002
	1332.49	100.00	1.0048E-001		8.2343E-002
Nb-94	702.63	100.00	1.2635E-001	1.17E-001	-2.1427E-002
	871.10	100.00	1.1713E-001		3.1022E-002
Ag-108m	79.20	7.10	1.2162E+001	1.35E-001	-1.4218E+001
	433.93	89.90	1.5788E-001		-1.4804E-001
	614.37	90.40	1.5633E-001		-1.7867E-001
	722.95	90.50	1.3543E-001		5.8850E-002
Sb-125	176.33	6.89	3.1997E+000	4.93E-001	-1.5090E+000
	427.89	29.33	4.9273E-001		-2.8113E-001
	463.38	10.35	1.4247E+000		-5.4293E-001
	600.56	17.80	7.2860E-001		-9.3395E-001
	606.64	5.02	3.1738E+000		4.0838E+000
	635.90	11.32	1.0923E+000		-5.9578E-001
Cs-134	563.23	8.38	1.5155E+000	1.52E-001	-1.2769E+000
	569.32	15.43	8.3916E-001		3.5246E-001
	604.70	97.60	1.6208E-001		2.0443E-001
	795.84	85.40	1.5224E-001		1.0627E-001
	801.93	8.73	1.4356E+000		-2.2248E-002
Cs-137	661.65	85.12	1.5248E-001	1.52E-001	-8.0591E-002
Eu-152	121.78	28.40	1.1205E+000	3.85E-001	-5.2483E-001
	244.69	7.49	2.4744E+000		-3.9394E+000
	344.27	26.50	5.8554E-001		-5.0652E-001
	778.89	12.74	9.9485E-001		-9.2079E-001
	867.32	4.16	2.7657E+000		-1.3787E+000
	964.01	14.40	1.0681E+000		1.7700E+000
	1085.78	10.00	1.1472E+000		2.2010E-001
	1112.02	13.30	8.4006E-001		-6.1425E-001
	1407.95	20.70	3.8467E-001		2.7466E-001
Eu-154	123.07	40.50	7.8078E-001	2.98E-001	1.3684E-001
	247.94	6.60	2.8030E+000		7.6264E-001
	591.81	4.83	2.6476E+000		-5.9351E-001
	723.30	19.70	6.1510E-001		-2.3699E-001
	756.87	4.33	2.6786E+000		-8.0378E-001
	873.19	11.50	1.0258E+000		3.9038E-001
	996.32	10.30	1.0994E+000		9.2334E-002
	1004.76	17.90	5.8053E-001		-1.2999E-001
	1274.45	35.50	2.9800E-001		5.2841E-002
Eu-155	86.54	30.90	2.0701E+000	2.04E+000	1.4430E+000
	105.31	20.70	2.0397E+000		1.4493E-001
Am-241	59.54	35.90	5.5686E+000	5.57E+000	-3.7840E+000
Cm-243	228.19	10.56	1.7979E+000	1.21E+000	-4.9938E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2090E+000	1.21E+000	-5.5936E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 5:04:24 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-116-F-
Sample Title: OOL-09-05-116-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 4:54:22 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-116-F-
Title: OOL-09-05-116-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	308	291.71	72.76	1.24	5.55E+002	77.21	2.22E+003
m	2	283-	308	300.26	74.89	1.25	1.09E+003	91.86	2.62E+003
	3	331-	345	339.32	84.66	0.54	2.71E+002	153.79	2.04E+003
	4	945-	960	954.56	238.52	1.46	3.07E+002	79.47	4.45E+002
	5	1175-	1190	1180.40	295.00	1.28	1.13E+002	56.91	2.42E+002
	6	1346-	1363	1353.46	338.27	1.30	9.66E+001	57.71	2.36E+002
	7	1400-	1417	1407.22	351.72	1.15	1.34E+002	56.03	2.09E+002
	8	2035-	2054	2043.03	510.72	0.75	1.32E+002	49.20	1.42E+002
	9	2321-	2341	2333.05	583.25	1.76	2.04E+002	47.70	1.07E+002
	10	2429-	2446	2437.50	609.37	0.88	1.79E+002	45.39	1.10E+002
	11	3634-	3657	3646.14	911.62	1.26	1.47E+002	36.63	5.06E+001
	12	3870-	3884	3877.60	969.50	0.93	7.63E+001	30.51	5.77E+001
	13	4476-	4492	4483.13	1120.93	1.59	6.52E+001	26.55	3.78E+001
	14	5833-	5860	5846.02	1461.75	2.08	1.24E+003	72.39	2.75E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.997	511.00*		100.00	1.80298E-001	7.14130E-002
K-40	0.969	1460.81*		10.67	2.08257E+001	2.07782E+000
TL-208	0.751	277.35		6.80		
		510.84*		21.60	8.34714E-001	3.37570E-001
		583.14*		84.20	3.45236E-001	9.24052E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	1.56549E+001	3.33821E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.46028E-001	2.25826E-001
Bi-214	0.697	609.31*		46.30	5.59150E-001	1.57597E-001
		1120.29*		15.10	7.27107E-001	3.05940E-001
		1764.49		15.80		
PB-214	0.581	74.82*	@	6.21	2.69738E+001	6.07598E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	6.79220E-001	3.60121E-001
		351.92*		37.20	4.34926E-001	1.96397E-001
Ac-228	0.993	338.32*		11.40	1.01486E+000	6.26937E-001
		911.07*		27.70	8.43780E-001	2.31049E-001
		969.11*		16.60	7.41888E-001	3.06686E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.997	1.057273E-001	7.410996E-002
K-40		0.969	2.082572E+001	2.077817E+000
TL-208		0.751	3.452357E-001	9.171770E-002
Pb-212	@	0.520	7.460276E-001	2.258256E-001
Bi-214		0.697	5.943712E-001	1.401014E-001
PB-214	@	0.581	4.909284E-001	1.724228E-001
Ac-228		0.993	8.234708E-001	1.770303E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.76	9.2528E-001	13.91
3	84.66	4.5110E-001	56.82

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0471E-001	9.17E-002	3.2055E-002
	1332.49	100.00	9.1709E-002		2.9447E-002
Nb-94	702.63	100.00	1.1335E-001	9.83E-002	5.4418E-002
	871.10	100.00	9.8315E-002		6.0369E-002
Ag-108m	79.20	7.10	5.5603E+000	1.24E-001	-2.4192E+000
	433.93	89.90	1.2409E-001		-1.2585E-001
	614.37	90.40	1.4294E-001		-2.1988E-002
	722.95	90.50	1.2720E-001		1.2297E-003
Sb-125	176.33	6.89	2.4183E+000	3.93E-001	-6.3227E-001
	427.89	29.33	3.9305E-001		-3.7162E-001
	463.38	10.35	1.1547E+000		-5.0071E-001
	600.56	17.80	6.2133E-001		3.7983E-001
	606.64	5.02	2.7874E+000		-7.3689E-001
	635.90	11.32	9.8233E-001		-2.1912E-001
Cs-134	563.23	8.38	1.2470E+000	1.29E-001	-1.2104E-001
	569.32	15.43	6.8521E-001		-6.9280E-002
	604.70	97.60	1.3189E-001		-5.5062E-002
	795.84	85.40	1.2887E-001		1.4044E-001
	801.93	8.73	1.1268E+000		-4.4729E-001
Cs-137	661.65	85.12	1.3743E-001	1.37E-001	7.3348E-002
Eu-152	121.78	28.40	8.1820E-001	3.38E-001	-6.0824E-001
	244.69	7.49	1.9666E+000		1.2524E-001
	344.27	26.50	4.6518E-001		-2.0940E-001
	778.89	12.74	8.1529E-001		-3.6958E-001
	867.32	4.16	2.4481E+000		1.7302E-001
	964.01	14.40	8.9690E-001		6.6977E-002
	1085.78	10.00	1.0052E+000		3.5706E-003
	1112.02	13.30	7.5385E-001		1.2292E-002
	1407.95	20.70	3.3771E-001		2.2945E-001
Eu-154	123.07	40.50	5.7022E-001	2.56E-001	-1.1149E-001
	247.94	6.60	2.1358E+000		-7.2257E-002
	591.81	4.83	2.1768E+000		-2.2789E+000
	723.30	19.70	5.8100E-001		1.1038E-001
	756.87	4.33	2.3852E+000		-1.0889E-001
	873.19	11.50	8.2518E-001		-1.9857E-002
	996.32	10.30	9.6949E-001		9.8751E-002
	1004.76	17.90	5.3866E-001		-5.0843E-001
	1274.45	35.50	2.5563E-001		-1.9307E-001
Eu-155	86.54	30.90	1.1577E+000	1.16E+000	3.1055E-001
	105.31	20.70	1.3803E+000		8.0585E-001
Am-241	59.54	35.90	1.4773E+000	1.48E+000	-8.0856E-001
Cm-243	228.19	10.56	1.4211E+000	9.73E-001	4.3158E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.7303E-001	9.73E-001	5.7690E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 7:04:31 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-117-F-
Sample Title: OOL-09-05-117-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 6:54:27 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-117-F-
Title: OOL-09-05-117-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	308	291.92	72.81	1.10	4.42E+002	77.73	2.05E+003
m	2	286-	308	300.70	75.00	1.11	9.04E+002	90.29	2.53E+003
	3	331-	345	339.10	84.61	0.87	3.16E+002	162.27	2.27E+003
	4	945-	962	954.94	238.61	0.98	2.73E+002	87.00	5.21E+002
	5	1348-	1360	1352.19	337.96	0.95	7.38E+001	46.24	1.83E+002
	6	1401-	1414	1407.65	351.83	0.89	1.52E+002	50.52	1.85E+002
	7	2039-	2051	2044.16	511.00	0.68	7.39E+001	41.27	1.38E+002
	8	2325-	2340	2332.57	583.13	1.12	1.48E+002	45.63	1.29E+002
	9	2428-	2445	2437.31	609.32	1.38	1.42E+002	46.35	1.28E+002
	10	3637-	3655	3645.44	911.44	0.84	1.54E+002	41.03	8.45E+001
	11	3867-	3886	3876.02	969.11	0.91	1.09E+002	34.97	5.99E+001
	12	5830-	5858	5846.10	1461.77	2.06	1.23E+003	71.57	2.18E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.968	1460.81*	10.67	2.06704E+001	2.05961E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	4.66420E-001	2.70850E-001
		583.14*	84.20	2.49820E-001	8.37939E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.29204E+001	2.84190E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.64851E-001	2.35795E-001
Bi-214	0.398	609.31*	46.30	4.42862E-001	1.54683E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.997	338.32*	11.40	7.75661E-001	5.00806E-001
		911.07*	27.70	8.78811E-001	2.55688E-001
		969.11*	16.60	1.06111E+000	3.57698E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
X	ANN		1.000		
	K-40		0.968	2.067040E+001	2.059615E+000
	TL-208		0.752	2.687404E-001	8.005054E-002
	Pb-212	@	0.520	6.648507E-001	2.357950E-001
	Bi-214		0.398	4.428616E-001	1.546832E-001
	Ac-228		0.997	9.162122E-001	1.920985E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.81	7.3616E-001	17.60
	3	84.61	5.2639E-001	51.38
	6	351.83	2.5370E-001	33.19

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.6844E-002	8.82E-002	-4.0688E-002
	1332.49	100.00	8.8174E-002		2.5749E-002
Nb-94	702.63	100.00	1.1017E-001	9.60E-002	3.0024E-002
	871.10	100.00	9.6020E-002		6.2599E-002
Ag-108m	79.20	7.10	5.7203E+000	1.30E-001	-6.0575E+000
	433.93	89.90	1.2972E-001		5.2381E-004
	614.37	90.40	1.3948E-001		8.7765E-003
	722.95	90.50	1.2964E-001		5.1641E-002
Sb-125	176.33	6.89	2.5330E+000	3.95E-001	-5.0699E-001
	427.89	29.33	3.9523E-001		3.0338E-002
	463.38	10.35	1.1031E+000		4.5630E-001
	600.56	17.80	6.4334E-001		-7.7494E-002
	606.64	5.02	2.7541E+000		4.0395E+000
	635.90	11.32	9.6296E-001		2.0735E-001
Cs-134	563.23	8.38	1.2722E+000	1.29E-001	-1.3937E-001
	569.32	15.43	6.8658E-001		3.5262E-003
	604.70	97.60	1.3281E-001		-3.7673E-002
	795.84	85.40	1.2915E-001		1.2972E-001
	801.93	8.73	1.1237E+000		-6.0026E-001
Cs-137	661.65	85.12	1.4183E-001	1.42E-001	1.0307E-001
Eu-152	121.78	28.40	8.5042E-001	3.83E-001	2.0915E-001
	244.69	7.49	1.8874E+000		1.0512E+000
	344.27	26.50	4.6468E-001		-1.3397E-001
	778.89	12.74	8.2328E-001		-5.8518E-001
	867.32	4.16	2.3270E+000		-2.5342E+000
	964.01	14.40	8.7632E-001		9.7587E-002
	1085.78	10.00	9.1979E-001		-8.3405E-003
	1112.02	13.30	7.7977E-001		-5.6253E-001
	1407.95	20.70	3.8268E-001		2.2750E-001
Eu-154	123.07	40.50	5.8871E-001	2.58E-001	9.1376E-002
	247.94	6.60	2.0167E+000		3.9403E-001
	591.81	4.83	2.2959E+000		-1.3471E+000
	723.30	19.70	5.9893E-001		2.5276E-001
	756.87	4.33	2.3675E+000		2.2324E+000
	873.19	11.50	8.4540E-001		-1.8316E-001
	996.32	10.30	9.8395E-001		2.3193E-001
	1004.76	17.90	5.3162E-001		-1.4807E-001
	1274.45	35.50	2.5777E-001		7.2228E-002
Eu-155	86.54	30.90	1.2131E+000	1.21E+000	1.8180E-001
	105.31	20.70	1.4019E+000		5.4534E-002
Am-241	59.54	35.90	1.5086E+000	1.51E+000	4.7602E-002
Cm-243	228.19	10.56	1.4058E+000	9.85E-001	7.0430E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.8486E-001	9.85E-001	-7.8041E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 8:48:51 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-118-F-
Sample Title: OOL-09-05-118-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 8:38:47 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-118-F-
Title: OOL-09-05-118-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	306	291.74	72.76	1.09	5.12E+002	78.74	2.48E+003
m	2	283-	306	300.24	74.89	1.10	8.35E+002	91.09	2.70E+003
	3	945-	961	954.51	238.51	1.22	2.57E+002	83.10	4.93E+002
	4	1401-	1415	1407.32	351.74	0.88	1.91E+002	50.19	1.61E+002
	5	2036-	2048	2042.91	510.69	0.45	1.15E+002	43.44	1.43E+002
	6	2278-	2288	2283.45	570.84	0.98	1.90E+001	23.92	5.40E+001
	7	2323-	2343	2331.84	582.94	1.29	2.00E+002	51.56	1.35E+002
	8	2428-	2445	2436.00	608.99	0.88	1.55E+002	44.98	1.14E+002
	9	2902-	2915	2908.89	727.25	0.62	4.21E+001	29.58	6.69E+001
	10	3635-	3653	3643.38	910.93	1.25	1.69E+002	40.79	7.70E+001
	11	3868-	3883	3874.88	968.82	1.12	7.15E+001	32.11	6.55E+001
	12	5829-	5856	5843.49	1461.12	1.98	1.28E+003	72.24	1.76E+001
	13	7051-	7068	7058.52	1764.97	0.88	5.65E+001	17.26	6.55E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.997	511.00*	100.00	1.56673E-001	6.29307E-002
K-40	0.997	1460.81*	10.67	2.14420E+001	2.11701E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	7.25336E-001	2.97307E-001
		583.14*	84.20	3.37852E-001	9.77133E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	5.40108E-001	3.84784E-001
Pb-212	0.520	74.81* @	10.70	1.19461E+001	2.68001E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.24817E-001	2.24503E-001
Bi-214	0.695	609.31*	46.30	4.83289E-001	1.52532E-001
		1120.29	15.10		
		1764.49*	15.80	6.63270E-001	2.13302E-001
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	9.67215E-001	2.58626E-001
		969.11*	16.60	6.94785E-001	3.20514E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.997	8.369663E-002	6.633315E-002
K-40	0.997	2.144199E+001	2.117008E+000
TL-208	0.751	3.378517E-001	9.709098E-002
Bi-212	1.000	5.401084E-001	3.847839E-001
Pb-212 @	0.520	6.248175E-001	2.245032E-001
Bi-214	0.695	5.441845E-001	1.240728E-001
Ac-228	0.632	8.597837E-001	2.012727E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.76	8.5290E-001	15.39
4	351.74	3.1781E-001	26.32
6	570.84	3.1621E-002	126.08

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0280E-001	8.66E-002	7.1747E-002
	1332.49	100.00	8.6554E-002		1.8077E-002
Nb-94	702.63	100.00	1.0878E-001	9.80E-002	-2.0454E-002
	871.10	100.00	9.8031E-002		1.0105E-002
Ag-108m	79.20	7.10	5.7522E+000	1.25E-001	-6.8061E+000
	433.93	89.90	1.2501E-001		-2.7147E-002
	614.37	90.40	1.3250E-001		-1.0954E-001
	722.95	90.50	1.2596E-001		-6.6002E-002
Sb-125	176.33	6.89	2.4754E+000	3.88E-001	3.0699E-001
	427.89	29.33	3.8755E-001		7.0170E-002
	463.38	10.35	1.1324E+000		6.1698E-001
	600.56	17.80	5.9724E-001		-3.4934E-001
	606.64	5.02	2.7641E+000		5.1696E+000
	635.90	11.32	9.4716E-001		3.7873E-001
Cs-134	563.23	8.38	1.3472E+000	1.25E-001	1.3969E+000
	569.32	15.43	6.9477E-001		-2.2327E-001
	604.70	97.60	1.3749E-001		-1.4526E-002
	795.84	85.40	1.2453E-001		1.6239E-001
	801.93	8.73	1.1237E+000		-8.4858E-001
Cs-137	661.65	85.12	1.2628E-001	1.26E-001	4.3367E-002
Eu-152	121.78	28.40	8.3463E-001	3.50E-001	-5.4508E-001
	244.69	7.49	1.9619E+000		-2.8217E-001
	344.27	26.50	4.4654E-001		-3.4501E-001
	778.89	12.74	7.8667E-001		-4.5140E-001
	867.32	4.16	2.4151E+000		-1.3969E+000
	964.01	14.40	8.8111E-001		7.1039E-002
	1085.78	10.00	1.0421E+000		-5.2361E-001
	1112.02	13.30	7.2196E-001		1.1998E-001
	1407.95	20.70	3.5015E-001		5.4227E-002
Eu-154	123.07	40.50	5.8513E-001	2.70E-001	2.6339E-001
	247.94	6.60	2.1186E+000		3.8378E-001
	591.81	4.83	2.1631E+000		-6.8186E-001
	723.30	19.70	5.7986E-001		-3.4659E-002
	756.87	4.33	2.5331E+000		8.3949E-001
	873.19	11.50	8.4039E-001		1.8835E-002
	996.32	10.30	9.4886E-001		-3.1644E-002
	1004.76	17.90	5.4561E-001		-1.8679E-001
	1274.45	35.50	2.7021E-001		-2.6084E-001
Eu-155	86.54	30.90	1.2080E+000	1.21E+000	2.1853E+000
	105.31	20.70	1.3984E+000		-1.4273E+000
Am-241	59.54	35.90	1.5420E+000	1.54E+000	-1.7533E-001
Cm-243	228.19	10.56	1.4171E+000	9.62E-001	3.1048E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.6180E-001	9.62E-001	5.0860E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 10:45:28 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-119-F-
Sample Title: OOL-09-05-119-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 10:35:26 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-119-F-
Title: OOL-09-05-119-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	308	291.35	72.67	1.22	5.50E+002	81.35	2.53E+003
m	2	283-	308	300.19	74.88	1.22	8.96E+002	91.19	2.90E+003
	3	331-	345	339.79	84.78	1.41	3.57E+002	158.85	2.14E+003
	4	948-	961	954.06	238.39	0.88	2.40E+002	71.90	3.98E+002
	5	1401-	1415	1406.52	351.54	1.30	1.11E+002	50.42	1.90E+002
	6	2031-	2053	2042.59	510.61	1.52	2.22E+002	55.21	1.47E+002
	7	2321-	2337	2331.04	582.74	1.19	1.79E+002	43.20	9.78E+001
	8	2425-	2442	2435.01	608.74	1.44	1.80E+002	44.67	1.04E+002
	9	2902-	2913	2906.78	726.72	0.40	2.93E+001	27.64	6.67E+001
	10	3632-	3651	3643.05	910.84	0.85	1.35E+002	38.73	7.27E+001
	11	3867-	3881	3874.15	968.64	0.50	5.73E+001	27.60	4.77E+001
	12	4470-	4488	4477.78	1119.59	1.88	7.01E+001	29.62	4.69E+001
	13	5827-	5855	5841.20	1460.55	1.89	1.17E+003	72.01	3.92E+001
	14	7051-	7067	7057.11	1764.62	0.39	5.74E+001	19.55	1.36E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.995	511.00*	100.00	3.02999E-001	8.57700E-002
K-40	0.998	1460.81*	10.67	1.96195E+001	1.99542E+000
TL-208	0.748	277.35	6.80		
		510.84*	21.60	1.40277E+000	4.13278E-001
		583.14*	84.20	3.03295E-001	8.30895E-002
		860.37	12.46		
Bi-212	0.993	727.17*	11.80	3.76034E-001	3.57352E-001
Pb-212	0.520	74.81* @	10.70	1.28250E+001	2.83257E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.84199E-001	1.97304E-001
Bi-214	0.990	609.31*	46.30	5.60755E-001	1.55619E-001
		1120.29*	15.10	7.81536E-001	3.40378E-001
		1764.49*	15.80	6.73856E-001	2.39320E-001
Ac-228	0.630	338.32	11.40		
		911.07*	27.70	7.74553E-001	2.38881E-001
		969.11*	16.60	5.57202E-001	2.74627E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.995	2.374874E-001	8.760161E-002
K-40	0.998	1.961946E+001	1.995420E+000
TL-208	0.748	3.032949E-001	8.249955E-002
Bi-212	0.993	3.760339E-001	3.573520E-001
Pb-212 @	0.520	5.841994E-001	1.973040E-001
Bi-214	0.990	6.183405E-001	1.218207E-001
Ac-228	0.630	6.809348E-001	1.802367E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.67	9.1718E-001	14.78
3	84.78	5.9504E-001	44.49
5	351.54	1.8446E-001	45.56

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0596E-001	8.86E-002	3.9327E-002
	1332.49	100.00	8.8574E-002		6.3390E-002
Nb-94	702.63	100.00	1.0473E-001	1.01E-001	-1.9602E-002
	871.10	100.00	1.0083E-001		6.4118E-002
Ag-108m	79.20	7.10	5.8268E+000	1.23E-001	-7.7688E+000
	433.93	89.90	1.2278E-001		8.3815E-002
	614.37	90.40	1.2718E-001		-8.6436E-002
	722.95	90.50	1.2916E-001		-3.4267E-002
Sb-125	176.33	6.89	2.4230E+000	3.90E-001	-7.1714E-001
	427.89	29.33	3.9031E-001		1.3886E-002
	463.38	10.35	1.0747E+000		9.8719E-001
	600.56	17.80	6.0457E-001		1.6989E-001
	606.64	5.02	2.8104E+000		6.4586E+000
	635.90	11.32	9.2702E-001		7.9001E-001
Cs-134	563.23	8.38	1.2920E+000	1.31E-001	-2.3098E-002
	569.32	15.43	6.8796E-001		-1.5021E-001
	604.70	97.60	1.3943E-001		-7.3303E-002
	795.84	85.40	1.3056E-001		4.1051E-002
	801.93	8.73	1.2142E+000		9.7801E-002
Cs-137	661.65	85.12	1.3892E-001	1.39E-001	1.4325E-001
Eu-152	121.78	28.40	8.4960E-001	3.48E-001	-8.4492E-002
	244.69	7.49	1.8911E+000		-4.6507E-001
	344.27	26.50	4.4551E-001		-1.3988E-001
	778.89	12.74	7.4379E-001		-9.8075E-001
	867.32	4.16	2.4217E+000		-8.9737E-001
	964.01	14.40	8.5686E-001		3.0824E-001
	1085.78	10.00	9.9886E-001		5.4407E-002
	1112.02	13.30	7.4904E-001		7.9839E-002
	1407.95	20.70	3.4770E-001		4.3863E-002
Eu-154	123.07	40.50	5.9513E-001	2.65E-001	2.0674E-001
	247.94	6.60	2.0212E+000		-1.5425E+000
	591.81	4.83	2.2394E+000		1.0292E-001
	723.30	19.70	5.9783E-001		3.5097E-001
	756.87	4.33	2.4489E+000		-7.4032E-001
	873.19	11.50	8.4789E-001		-1.6085E-001
	996.32	10.30	8.9985E-001		-4.6869E-001
	1004.76	17.90	5.2268E-001		4.0831E-001
	1274.45	35.50	2.6510E-001		-6.1215E-002
Eu-155	86.54	30.90	1.1957E+000	1.20E+000	-5.1069E-002
	105.31	20.70	1.4319E+000		5.0503E-001
Am-241	59.54	35.90	1.5519E+000	1.55E+000	-2.4997E-001
Cm-243	228.19	10.56	1.3863E+000	9.80E-001	-4.7638E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.8044E-001	9.80E-001	2.5539E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 9:58:33 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-120-F-
Sample Title: OOL-09-05-120-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 9:48:35 PM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-120-F-
Title: OOL-09-05-120-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	290-	306	297.43	74.31	0.64	2.44E+002	143.54	1.64E+003
2	944-	956	951.82	237.91	0.42	8.26E+001	63.43	3.61E+002
3	2032-	2045	2040.51	510.09	0.79	6.22E+001	39.92	1.28E+002
4	2322-	2340	2329.89	582.43	1.04	1.28E+002	43.93	1.11E+002
5	5826-	5857	5842.08	1460.49	3.36	8.92E+002	62.28	2.37E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.997	1460.81*	10.67	1.95861E+001	2.09371E+000
TL-208	0.738	277.35	6.80		
		510.84*	21.60	5.06133E-001	3.34532E-001
		583.14*	84.20	2.79254E-001	1.02428E-001
		860.37	12.46		
Pb-212	0.589	74.81* @	10.70	1.01913E+001	6.32888E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.67141E-001	2.09310E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
X	ANN		0.973		
	K-40		0.997	1.958612E+001	2.093709E+000
	TL-208		0.738	2.987000E-001	9.793998E-002
	Pb-212	@	0.589	2.671414E-001	2.093100E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.3141E-001	9.39E-002	9.4661E-002
	1332.49	100.00	9.3915E-002		-6.5655E-002
Nb-94	702.63	100.00	1.3126E-001	1.21E-001	8.7462E-002
	871.10	100.00	1.2099E-001		1.3278E-002
Ag-108m	79.20	7.10	1.2039E+001	1.43E-001	-1.2178E+001
	433.93	89.90	1.5344E-001		5.4697E-002
	614.37	90.40	1.6410E-001		1.7079E-002
	722.95	90.50	1.4330E-001		4.9966E-002
Sb-125	176.33	6.89	3.1033E+000	4.68E-001	-1.2348E+000
	427.89	29.33	4.6816E-001		8.1044E-002
	463.38	10.35	1.3279E+000		5.4313E-001
	600.56	17.80	7.1336E-001		-4.9462E-001
	606.64	5.02	3.1787E+000		2.8088E+000
	635.90	11.32	1.0894E+000		4.9462E-001
Cs-134	563.23	8.38	1.6002E+000	1.47E-001	1.2931E+000
	569.32	15.43	8.6672E-001		2.9458E-001
	604.70	97.60	1.5956E-001		1.3112E-001
	795.84	85.40	1.4737E-001		-6.6451E-004
	801.93	8.73	1.2667E+000		-5.3912E-001
Cs-137	661.65	85.12	1.5690E-001	1.57E-001	1.1350E-001
Eu-152	121.78	28.40	1.1261E+000	3.96E-001	-7.3801E-002
	244.69	7.49	2.4862E+000		-3.5251E+000
	344.27	26.50	5.6182E-001		-6.4215E-001
	778.89	12.74	9.4738E-001		-1.0087E+000
	867.32	4.16	2.8133E+000		-2.9181E+000
	964.01	14.40	1.0308E+000		1.2805E+000
	1085.78	10.00	1.0922E+000		4.2808E-001
	1112.02	13.30	8.3656E-001		-1.8129E+000
	1407.95	20.70	3.9581E-001		-7.7814E-002
Eu-154	123.07	40.50	7.7727E-001	3.01E-001	-2.1550E-001
	247.94	6.60	2.6914E+000		2.7764E-001
	591.81	4.83	2.6600E+000		8.4751E-001
	723.30	19.70	6.6002E-001		5.8824E-001
	756.87	4.33	2.7976E+000		-6.8162E-001
	873.19	11.50	1.0851E+000		1.0112E+000
	996.32	10.30	1.0608E+000		9.3379E-003
	1004.76	17.90	6.2164E-001		-2.5406E-003
	1274.45	35.50	3.0097E-001		1.7151E-001
Eu-155	86.54	30.90	2.1322E+000	2.09E+000	3.2524E+000
	105.31	20.70	2.0917E+000		4.2281E-001
Am-241	59.54	35.90	5.5850E+000	5.58E+000	-3.6099E+000
Cm-243	228.19	10.56	1.7911E+000	1.22E+000	-1.7966E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2245E+000	1.22E+000	2.3817E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 8:58:22 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-121-F-
Sample Title: OOL-09-05-121-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 8:48:17 AM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-121-F-
Title: OOL-09-05-121-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	946-	955	950.42	237.56	0.32	7.54E+001	52.72	2.80E+002
2	5825-	5855	5840.30	1460.04	2.88	9.22E+002	63.64	2.72E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.981	1460.81*		10.67	2.02313E+001	2.15266E+000
Pb-212	0.434	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.43844E-001	1.74640E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.981	2.023130E+001	2.152658E+000
Pb-212	@	0.434	2.438435E-001	1.746402E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2265E-001	9.51E-002	6.3422E-002
	1332.49	100.00	9.5144E-002		-1.9055E-002
Nb-94	702.63	100.00	1.2052E-001	1.06E-001	-4.9962E-002
	871.10	100.00	1.0639E-001		-4.9141E-002
Ag-108m	79.20	7.10	1.1877E+001	1.48E-001	-2.4851E+001
	433.93	89.90	1.4756E-001		5.9070E-002
	614.37	90.40	1.6381E-001		-2.2491E-001
	722.95	90.50	1.5073E-001		1.9671E-002
Sb-125	176.33	6.89	3.1492E+000	4.50E-001	-1.7812E-001
	427.89	29.33	4.5021E-001		-2.4008E-001
	463.38	10.35	1.2598E+000		-6.3097E-001
	600.56	17.80	7.3195E-001		1.9104E-001
	606.64	5.02	3.2027E+000		2.1487E+000
	635.90	11.32	1.0572E+000		4.0696E-001
Cs-134	563.23	8.38	1.5397E+000	1.40E-001	7.8115E-001
	569.32	15.43	8.2597E-001		-4.4804E-001
	604.70	97.60	1.6258E-001		-7.5906E-002
	795.84	85.40	1.3974E-001		7.2549E-002
	801.93	8.73	1.3122E+000		2.7302E-001
Cs-137	661.65	85.12	1.5211E-001	1.52E-001	1.4423E-001
Eu-152	121.78	28.40	1.1059E+000	3.92E-001	-3.7233E-001
	244.69	7.49	2.3891E+000		-8.1906E-001
	344.27	26.50	5.6527E-001		-5.6583E-001
	778.89	12.74	9.7002E-001		2.0650E-001
	867.32	4.16	2.6577E+000		-6.8999E-001
	964.01	14.40	1.0330E+000		1.1609E+000
	1085.78	10.00	1.1246E+000		-4.9305E-001
	1112.02	13.30	8.7091E-001		-1.2338E+000
	1407.95	20.70	3.9213E-001		-1.2824E-001
Eu-154	123.07	40.50	7.5905E-001	2.98E-001	-1.7313E-001
	247.94	6.60	2.5262E+000		-6.5148E-001
	591.81	4.83	2.4808E+000		-4.3681E+000
	723.30	19.70	7.0664E-001		7.0794E-001
	756.87	4.33	2.6873E+000		1.3608E+000
	873.19	11.50	9.4055E-001		-4.3808E-002
	996.32	10.30	1.0297E+000		-2.7631E-001
	1004.76	17.90	5.9630E-001		-2.4752E-001
	1274.45	35.50	2.9800E-001		-2.8078E-001
Eu-155	86.54	30.90	2.0887E+000	2.05E+000	2.4807E+000
	105.31	20.70	2.0512E+000		1.2278E+000
Am-241	59.54	35.90	5.2400E+000	5.24E+000	-5.3294E+000
Cm-243	228.19	10.56	1.7569E+000	1.13E+000	4.9446E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1347E+000	1.13E+000	-6.5732E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 8:32:53 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-122-F-
Sample Title: OOL-09-05-122-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 8:22:18 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-122-F-
Title: OOL-09-05-122-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2427-	2443	2435.23	608.77	0.80	9.55E+001	39.52	9.95E+001
2	3865-	3884	3874.80	968.67	0.35	6.82E+001	32.65	5.88E+001
3	5827-	5856	5841.51	1460.35	3.21	9.22E+002	61.77	1.50E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.993	1460.81*	10.67	2.02368E+001	2.12664E+000
Bi-214	0.397	609.31*	46.30	3.84075E-001	1.65823E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.993	2.023684E+001	2.126644E+000
Bi-214	0.397	3.840748E-001	1.658227E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	968.67	1.1360E-001	47.89

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2522E-001	1.04E-001	-3.8891E-002
	1332.49	100.00	1.0442E-001		4.4640E-002
Nb-94	702.63	100.00	1.3030E-001	1.24E-001	3.1994E-002
	871.10	100.00	1.2363E-001		-2.3975E-003
Ag-108m	79.20	7.10	1.2677E+001	1.54E-001	-2.1659E+001
	433.93	89.90	1.5885E-001		-7.4427E-002
	614.37	90.40	1.6926E-001		-1.5167E-001
	722.95	90.50	1.5448E-001		9.4137E-002
Sb-125	176.33	6.89	3.4001E+000	5.14E-001	-6.8080E-001
	427.89	29.33	5.1403E-001		7.1672E-002
	463.38	10.35	1.5525E+000		1.8305E+000
	600.56	17.80	7.7247E-001		-8.1409E-001
	606.64	5.02	3.2970E+000		2.3676E+000
	635.90	11.32	1.1151E+000		-4.9084E-001
Cs-134	563.23	8.38	1.6616E+000	1.49E-001	-2.5187E-001
	569.32	15.43	9.1587E-001		-8.1949E-002
	604.70	97.60	1.6603E-001		-9.6050E-002
	795.84	85.40	1.4860E-001		3.4389E-002
	801.93	8.73	1.2942E+000		-1.0052E+000
Cs-137	661.65	85.12	1.5581E-001	1.56E-001	6.5782E-003
Eu-152	121.78	28.40	1.1876E+000	4.07E-001	-1.9309E-001
	244.69	7.49	2.6273E+000		-2.6566E+000
	344.27	26.50	6.0448E-001		-9.6388E-001
	778.89	12.74	1.0581E+000		-5.8023E-001
	867.32	4.16	2.9960E+000		-4.8385E+000
	964.01	14.40	1.0681E+000		4.8540E-001
	1085.78	10.00	1.1649E+000		8.9509E-001
	1112.02	13.30	8.9740E-001		-8.7201E-001
	1407.95	20.70	4.0662E-001		1.8536E-001
Eu-154	123.07	40.50	8.2620E-001	3.40E-001	-1.5100E-002
	247.94	6.60	2.8693E+000		5.7371E-001
	591.81	4.83	3.0015E+000		1.5659E+000
	723.30	19.70	7.0973E-001		5.0867E-001
	756.87	4.33	2.9822E+000		1.1922E+000
	873.19	11.50	1.0883E+000		5.6117E-002
	996.32	10.30	1.1883E+000		6.3020E-001
	1004.76	17.90	6.1164E-001		-8.9536E-001
	1274.45	35.50	3.3976E-001		4.1213E-002
Eu-155	86.54	30.90	2.2673E+000	2.20E+000	1.9679E+000
	105.31	20.70	2.1973E+000		4.5900E-001
Am-241	59.54	35.90	5.8487E+000	5.85E+000	-2.5698E+000
Cm-243	228.19	10.56	1.9059E+000	1.30E+000	2.5624E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3022E+000	1.30E+000	6.6814E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 2:34:00 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-123-F-
Sample Title: OOL-09-05-123-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 2:23:59 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-123-F-
Title: OOL-09-05-123-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	943-	963	953.81	238.41	1.48	2.63E+002	96.99	6.03E+002
2	2031-	2047	2040.08	509.98	1.07	6.92E+001	45.46	1.49E+002
3	2321-	2339	2329.69	582.38	1.18	1.43E+002	42.88	9.94E+001
4	2422-	2444	2434.50	608.58	1.54	1.37E+002	47.77	1.18E+002
5	3628-	3651	3640.49	910.09	1.08	1.43E+002	38.34	5.98E+001
6	3864-	3880	3871.52	967.84	0.73	6.88E+001	30.15	5.32E+001
7	5500-	5513	5506.16	1376.51	0.50	1.89E+001	15.78	1.61E+001
8	5825-	5853	5838.21	1459.52	2.11	9.07E+002	62.10	2.13E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.947	1460.81*		10.67	1.98966E+001	2.10984E+000
TL-208	0.736	277.35		6.80		
		510.84*		21.60	5.62558E-001	3.80360E-001
		583.14*		84.20	3.10683E-001	1.01832E-001
		860.37		12.46		
Pb-212	0.453	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.51014E-001	3.40935E-001
Bi-214	0.393	609.31*		46.30	5.52454E-001	2.03779E-001
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.605	338.32		11.40		
		911.07*		27.70	1.05061E+000	3.06235E-001
		969.11*		16.60	8.55389E-001	3.85228E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
X	ANN		0.966		
	K-40		0.947	1.989657E+001	2.109839E+000
	TL-208		0.736	3.275290E-001	9.836758E-002
	Pb-212	@	0.453	8.510144E-001	3.409355E-001
	Bi-214		0.393	5.524537E-001	2.037790E-001
	Ac-228		0.605	9.750169E-001	2.397192E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
7	1376.51	3.1548E-002	83.35

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2134E-001	9.01E-002	6.8382E-002
	1332.49	100.00	9.0121E-002		-3.9214E-002
Nb-94	702.63	100.00	1.2932E-001	1.09E-001	-7.0415E-003
	871.10	100.00	1.0854E-001		3.3210E-002
Ag-108m	79.20	7.10	1.2673E+001	1.50E-001	-3.8530E+001
	433.93	89.90	1.5040E-001		-1.7294E-001
	614.37	90.40	1.6670E-001		2.6380E-002
	722.95	90.50	1.5108E-001		7.8198E-002
Sb-125	176.33	6.89	3.7922E+000	4.92E-001	-1.7166E+000
	427.89	29.33	4.9201E-001		6.5704E-002
	463.38	10.35	1.3505E+000		4.0639E-001
	600.56	17.80	7.4516E-001		-1.1190E-001
	606.64	5.02	3.4156E+000		7.8021E+000
	635.90	11.32	1.1938E+000		-1.0010E-001
Cs-134	563.23	8.38	1.6867E+000	1.38E-001	1.2529E-001
	569.32	15.43	8.6491E-001		7.0594E-001
	604.70	97.60	1.7130E-001		2.3899E-002
	795.84	85.40	1.3798E-001		4.2385E-002
	801.93	8.73	1.2433E+000		-1.0357E+000
Cs-137	661.65	85.12	1.5617E-001	1.56E-001	-2.0618E-001
Eu-152	121.78	28.40	1.2606E+000	4.17E-001	1.2609E+000
	244.69	7.49	2.7279E+000		-9.4632E-001
	344.27	26.50	6.1593E-001		-9.0923E-002
	778.89	12.74	9.3002E-001		2.8327E-001
	867.32	4.16	2.6876E+000		-4.5527E+000
	964.01	14.40	1.0702E+000		1.4275E+000
	1085.78	10.00	1.0875E+000		-1.0272E-001
	1112.02	13.30	9.1355E-001		9.8638E-002
	1407.95	20.70	4.1713E-001		-3.3617E-001
Eu-154	123.07	40.50	8.6922E-001	2.98E-001	-3.9501E-001
	247.94	6.60	2.9396E+000		-3.3498E+000
	591.81	4.83	2.9074E+000		1.3590E+000
	723.30	19.70	6.9093E-001		3.7996E-001
	756.87	4.33	2.9431E+000		-1.4791E+000
	873.19	11.50	9.4055E-001		-2.4438E-001
	996.32	10.30	1.1285E+000		-5.4111E-001
	1004.76	17.90	5.9630E-001		-3.9521E-001
	1274.45	35.50	2.9800E-001		1.9902E-001
Eu-155	86.54	30.90	2.2785E+000	2.28E+000	4.1814E+000
	105.31	20.70	2.2798E+000		4.3432E-002
Am-241	59.54	35.90	5.5611E+000	5.56E+000	-5.0758E-001
Cm-243	228.19	10.56	2.0160E+000	1.34E+000	-1.7196E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3422E+000	1.34E+000	2.9792E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 4:09:19 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-124-F-
Sample Title: OOL-09-05-124-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 3:59:21 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-124-F-
Title: OOL-09-05-124-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	946-	961	951.14	237.74	1.13	2.35E+002	72.92	3.82E+002
2	1395-	1416	1405.03	351.22	0.47	1.41E+002	66.34	2.68E+002
3	2422-	2441	2430.78	607.66	1.42	1.28E+002	46.22	1.22E+002
4	3629-	3650	3638.20	909.51	1.82	1.29E+002	40.70	8.01E+001
5	3862-	3883	3869.84	967.42	1.74	8.31E+001	32.18	4.99E+001
6	5821-	5851	5835.95	1458.96	2.55	9.13E+002	62.84	2.35E+001
7	7046-	7059	7052.57	1763.11	0.56	2.96E+001	16.41	1.44E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.894	1460.81*		10.67	2.00202E+001	2.12782E+000
Pb-212	0.440	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.58136E-001	2.64002E-001
Bi-214	0.630	609.31*		46.30	5.12559E-001	1.96215E-001
		1120.29		15.10		
		1764.49*		15.80	4.80647E-001	2.70594E-001
Ac-228	0.571	338.32		11.40		
		911.07*		27.70	9.45431E-001	3.17850E-001
		969.11*		16.60	1.03270E+000	4.14324E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.894	2.002017E+001	2.127824E+000
Pb-212	@	0.440	7.581358E-001	2.640023E-001
Bi-214		0.630	5.015614E-001	1.588479E-001
Ac-228		0.571	9.777626E-001	2.521888E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	351.22	2.3550E-001	46.95

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.3181E-001	9.08E-002	2.0058E-003
	1332.49	100.00	9.0765E-002		-6.5731E-002
Nb-94	702.63	100.00	1.2157E-001	1.14E-001	-3.6535E-002
	871.10	100.00	1.1434E-001		-5.6261E-002
Ag-108m	79.20	7.10	1.1937E+001	1.52E-001	-1.5327E+001
	433.93	89.90	1.6572E-001		2.5819E-002
	614.37	90.40	1.5198E-001		-1.2366E-001
	722.95	90.50	1.5649E-001		1.9602E-002
Sb-125	176.33	6.89	3.3628E+000	5.06E-001	3.2434E-001
	427.89	29.33	5.0633E-001		5.1244E-001
	463.38	10.35	1.4054E+000		-9.1924E-001
	600.56	17.80	7.4516E-001		-2.4314E-002
	606.64	5.02	3.4335E+000		5.8476E+000
	635.90	11.32	1.1009E+000		-9.5131E-001
Cs-134	563.23	8.38	1.6679E+000	1.34E-001	-4.3357E-001
	569.32	15.43	9.2773E-001		2.2145E-001
	604.70	97.60	1.7457E-001		-6.0452E-002
	795.84	85.40	1.3394E-001		-5.2654E-002
	801.93	8.73	1.3517E+000		-8.8600E-001
Cs-137	661.65	85.12	1.6048E-001	1.60E-001	9.7686E-003
Eu-152	121.78	28.40	1.1544E+000	4.31E-001	5.5828E-001
	244.69	7.49	2.5226E+000		-3.5391E+000
	344.27	26.50	6.2717E-001		-1.3761E-001
	778.89	12.74	1.0375E+000		-2.8158E-001
	867.32	4.16	2.6476E+000		-8.2595E-001
	964.01	14.40	1.0375E+000		3.5588E-002
	1085.78	10.00	1.0732E+000		-4.5254E-001
	1112.02	13.30	9.6028E-001		-9.5286E-001
	1407.95	20.70	4.3072E-001		2.7166E-001
Eu-154	123.07	40.50	7.9869E-001	2.95E-001	-2.9600E-001
	247.94	6.60	2.7857E+000		-1.7448E+000
	591.81	4.83	2.7028E+000		1.3186E+000
	723.30	19.70	7.1894E-001		4.3962E-001
	756.87	4.33	3.0589E+000		2.0821E-001
	873.19	11.50	9.8414E-001		-2.6763E-001
	996.32	10.30	1.1528E+000		-2.0174E-001
	1004.76	17.90	6.2411E-001		-3.8372E-001
	1274.45	35.50	2.9499E-001		-2.0576E-001
Eu-155	86.54	30.90	2.1140E+000	2.06E+000	9.1513E-001
	105.31	20.70	2.0582E+000		8.1374E-001
Am-241	59.54	35.90	5.3534E+000	5.35E+000	-1.6397E+000
Cm-243	228.19	10.56	1.9888E+000	1.33E+000	1.7799E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3271E+000	1.33E+000	1.9902E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 2:10:44 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-125-F-
Sample Title: OOL-09-05-125-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 2:00:43 PM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-125-F-
Title: OOL-09-05-125-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	943-	961	951.68	237.88	1.03	1.91E+002	79.48	4.30E+002
2	2321-	2337	2329.25	582.27	0.84	1.18E+002	37.83	8.10E+001
3	5824-	5853	5837.85	1459.43	2.42	9.35E+002	62.34	1.55E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.940	1460.81*		10.67	2.05265E+001	2.15236E+000
TL-208	0.455	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.57103E-001	8.89868E-002
		860.37		12.46		
Pb-212	0.444	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.17598E-001	2.74606E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.940	2.052648E+001	2.152359E+000
TL-208	0.455	2.571030E-001	8.898681E-002
Pb-212 @	0.444	6.175981E-001	2.746062E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2091E-001	8.68E-002	-2.5070E-003
	1332.49	100.00	8.6823E-002		2.5321E-002
Nb-94	702.63	100.00	1.2932E-001	1.10E-001	7.5520E-002
	871.10	100.00	1.1023E-001		-1.6769E-001
Ag-108m	79.20	7.10	1.1202E+001	1.49E-001	-2.7509E+001
	433.93	89.90	1.5369E-001		-1.0582E-003
	614.37	90.40	1.6116E-001		-2.1357E-001
	722.95	90.50	1.4900E-001		1.3858E-001
Sb-125	176.33	6.89	3.1223E+000	4.56E-001	2.3259E-001
	427.89	29.33	4.5575E-001		1.8838E-001
	463.38	10.35	1.2931E+000		3.4646E-001
	600.56	17.80	7.2187E-001		3.0528E-001
	606.64	5.02	3.1883E+000		3.3253E+000
	635.90	11.32	1.0452E+000		-7.1443E-001
Cs-134	563.23	8.38	1.5936E+000	1.45E-001	8.7768E-001
	569.32	15.43	8.7571E-001		9.3419E-001
	604.70	97.60	1.6183E-001		1.4217E-001
	795.84	85.40	1.4487E-001		4.3939E-002
	801.93	8.73	1.3343E+000		-2.7262E-002
Cs-137	661.65	85.12	1.5323E-001	1.53E-001	-9.8813E-003
Eu-152	121.78	28.40	1.0907E+000	4.07E-001	1.5423E-001
	244.69	7.49	2.3434E+000		-4.8993E+000
	344.27	26.50	5.4350E-001		-9.5614E-001
	778.89	12.74	9.5310E-001		-4.2829E-001
	867.32	4.16	2.8039E+000		-2.0006E+000
	964.01	14.40	1.0397E+000		1.0983E+000
	1085.78	10.00	1.1016E+000		6.0358E-001
	1112.02	13.30	8.8095E-001		-1.5083E+000
	1407.95	20.70	4.0662E-001		-1.1840E-001
Eu-154	123.07	40.50	7.5260E-001	2.81E-001	-3.8900E-001
	247.94	6.60	2.5112E+000		-2.4784E+000
	591.81	4.83	2.5911E+000		-2.4825E-001
	723.30	19.70	6.8775E-001		8.1656E-001
	756.87	4.33	2.9352E+000		1.9296E+000
	873.19	11.50	9.7702E-001		-8.0785E-001
	996.32	10.30	1.0431E+000		3.7744E-002
	1004.76	17.90	6.4594E-001		2.3476E-001
	1274.45	35.50	2.8104E-001		-2.0086E-003
Eu-155	86.54	30.90	1.9813E+000	1.96E+000	2.0943E+000
	105.31	20.70	1.9616E+000		4.7966E-001
Am-241	59.54	35.90	5.3937E+000	5.39E+000	-1.5037E+000
Cm-243	228.19	10.56	1.7407E+000	1.17E+000	-4.5902E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1719E+000	1.17E+000	3.3329E-003

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 5:18:58 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-126-F-
Sample Title: OOL-09-05-126-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 5:08:56 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-126-F-
Title: OOL-09-05-126-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	291.96	72.82	1.25	5.46E+002	79.63	2.29E+003
m	2	284-	308	300.39	74.93	1.26	9.60E+002	91.19	2.84E+003
	3	334-	345	339.50	84.71	0.89	2.55E+002	132.67	1.72E+003
	4	945-	961	954.69	238.55	1.15	2.26E+002	81.06	4.73E+002
	5	1174-	1184	1180.70	295.07	0.69	4.52E+001	43.67	1.90E+002
	6	1399-	1414	1407.63	351.82	0.84	1.21E+002	51.50	1.90E+002
	7	2036-	2054	2043.21	510.76	0.79	1.05E+002	49.49	1.57E+002
	8	2323-	2343	2331.75	582.92	0.87	1.77E+002	49.86	1.29E+002
	9	2429-	2445	2436.45	609.10	1.36	1.98E+002	41.12	7.69E+001
	10	3637-	3655	3645.51	911.46	1.27	1.41E+002	36.92	6.31E+001
	11	3868-	3883	3876.44	969.21	0.60	4.90E+001	29.72	6.00E+001
	12	4476-	4490	4482.14	1120.68	0.37	4.31E+001	25.11	4.19E+001
	13	5831-	5859	5845.62	1461.65	2.24	1.15E+003	70.32	2.90E+001
	14	6519-	6532	6525.17	1631.59	1.00	1.40E+001	7.33	0.00E+000
	15	7052-	7069	7061.59	1765.74	0.68	6.00E+001	18.54	9.00E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.998	511.00*		100.00	1.43404E-001	7.02464E-002
K-40	0.975	1460.81*		10.67	1.93407E+001	1.96041E+000
TL-208	0.751	277.35		6.80		
		510.84*		21.60	6.63910E-001	3.29703E-001
		583.14*		84.20	2.99431E-001	9.29447E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	1.37271E+001	2.99009E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.49140E-001	2.15048E-001
Bi-214	0.987	609.31*		46.30	6.18427E-001	1.49297E-001
		1120.29*		15.10	4.80550E-001	2.84555E-001
		1764.49*		15.80	7.05011E-001	2.28976E-001
PB-214	0.582	74.82*	@	6.21	2.36522E+001	5.43057E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.71047E-001	2.65957E-001
		351.92*		37.20	3.95292E-001	1.80265E-001
Ac-228	0.631	338.32		11.40		
		911.07*		27.70	8.06317E-001	2.30788E-001
		969.11*		16.60	4.76433E-001	2.93212E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.998	7.872742E-002	7.302848E-002
K-40		0.975	1.934071E+001	1.960414E+000
TL-208		0.751	2.994309E-001	9.243103E-002
Pb-212	@	0.520	5.491405E-001	2.150475E-001
Bi-214		0.987	6.177536E-001	1.144917E-001
PB-214	@	0.582	3.561808E-001	1.492187E-001
Ac-228		0.631	6.801239E-001	1.813504E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.82	9.0963E-001	14.59
3	84.71	4.2446E-001	52.09
14	1631.59	2.3333E-002	52.38

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.7863E-002	7.97E-002	6.3468E-002
	1332.49	100.00	7.9726E-002		1.5037E-002
Nb-94	702.63	100.00	1.0545E-001	9.63E-002	-3.0546E-002
	871.10	100.00	9.6310E-002		5.8327E-002
Ag-108m	79.20	7.10	5.5375E+000	1.32E-001	-6.0609E+000
	433.93	89.90	1.3323E-001		2.2793E-002
	614.37	90.40	1.3678E-001		-1.6381E-002
	722.95	90.50	1.3156E-001		1.4219E-001
Sb-125	176.33	6.89	2.4892E+000	4.04E-001	8.5210E-001
	427.89	29.33	4.0382E-001		-1.7530E-001
	463.38	10.35	1.1372E+000		1.8035E+000
	600.56	17.80	6.0092E-001		2.2274E-001
	606.64	5.02	2.7807E+000		5.3656E+000
	635.90	11.32	9.1884E-001		2.5659E-001
Cs-134	563.23	8.38	1.2672E+000	1.17E-001	1.0741E+000
	569.32	15.43	6.9341E-001		2.6487E-001
	604.70	97.60	1.3244E-001		-2.9739E-002
	795.84	85.40	1.1723E-001		-3.0710E-002
	801.93	8.73	1.0554E+000		-7.4777E-001
Cs-137	661.65	85.12	1.3768E-001	1.38E-001	2.3165E-002
Eu-152	121.78	28.40	8.0814E-001	2.91E-001	-1.9664E-002
	244.69	7.49	1.9535E+000		-1.8226E-001
	344.27	26.50	4.4859E-001		-1.6153E-001
	778.89	12.74	7.5257E-001		-2.4958E-001
	867.32	4.16	2.2922E+000		-2.6955E+000
	964.01	14.40	8.6665E-001		4.2236E-002
	1085.78	10.00	9.3346E-001		1.5242E-001
	1112.02	13.30	7.7045E-001		-1.8733E-001
	1407.95	20.70	2.9115E-001		-1.0515E-001
Eu-154	123.07	40.50	5.6195E-001	2.75E-001	-3.4264E-001
	247.94	6.60	2.1070E+000		-2.7524E-001
	591.81	4.83	2.1994E+000		-9.1550E-001
	723.30	19.70	6.0769E-001		5.7326E-001
	756.87	4.33	2.4144E+000		1.2375E+000
	873.19	11.50	8.3028E-001		-9.1362E-002
	996.32	10.30	9.1855E-001		-8.8898E-001
	1004.76	17.90	5.5076E-001		2.9125E-001
	1274.45	35.50	2.7522E-001		6.1738E-002
Eu-155	86.54	30.90	1.1819E+000	1.18E+000	4.1033E-001
	105.31	20.70	1.3713E+000		7.4825E-001
Am-241	59.54	35.90	1.5086E+000	1.51E+000	3.7895E-001
Cm-243	228.19	10.56	1.3797E+000	9.83E-001	7.1410E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.8339E-001	9.83E-001	7.1523E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 6:50:43 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-127-F-
Sample Title: OOL-09-05-127-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 6:40:39 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-127-F-
Title: OOL-09-05-127-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	305	291.92	72.81	1.16	5.10E+002	80.62	2.58E+003
m	2	283-	305	300.45	74.94	1.16	7.21E+002	88.96	2.55E+003
	3	332-	347	339.90	84.81	1.24	3.18E+002	168.77	2.36E+003
	4	949-	960	954.77	238.57	1.28	2.80E+002	68.23	3.71E+002
	5	1399-	1414	1407.60	351.81	1.20	1.82E+002	52.64	1.80E+002
	6	2032-	2051	2042.67	510.63	0.95	1.20E+002	54.65	1.88E+002
	7	2321-	2343	2332.54	583.12	1.56	2.17E+002	51.18	1.19E+002
	8	2426-	2448	2437.25	609.30	1.50	2.20E+002	47.81	9.69E+001
	9	3635-	3655	3645.02	911.34	1.70	1.69E+002	44.28	9.42E+001
M	10	3853-	3887	3858.61	964.75	1.44	3.34E+001	16.15	4.26E+001
m	11	3853-	3887	3877.07	969.37	1.44	8.70E+001	22.02	5.81E+001
	12	4474-	4490	4482.46	1120.76	1.42	6.35E+001	29.87	5.35E+001
	13	4686-	4704	4695.31	1173.99	1.22	6.59E+001	35.66	7.81E+001
	14	5321-	5342	5332.16	1333.25	1.34	1.14E+002	31.73	3.89E+001
	15	5832-	5860	5846.13	1461.78	2.16	1.20E+003	72.65	3.85E+001
	16	7056-	7072	7063.91	1766.32	0.55	6.33E+001	19.96	1.28E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.995	511.00*	100.00	1.64264E-001	7.77898E-002
K-40	0.968	1460.81*	10.67	2.01205E+001	2.03444E+000
Co-60	0.980	1173.22*	100.00	1.12380E-001	6.14723E-002
		1332.49*	100.00	2.00639E-001	5.79609E-002
TL-208	0.751	277.35	6.80		
		510.84*	21.60	7.60483E-001	3.65454E-001
		583.14*	84.20	3.67882E-001	9.89714E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.03099E+001	2.38787E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.79512E-001	1.97140E-001
Bi-214	0.975	609.31*	46.30	6.87250E-001	1.71623E-001
		1120.29*	15.10	7.08184E-001	3.41361E-001
		1764.49*	15.80	7.43246E-001	2.45980E-001
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	9.65898E-001	2.76730E-001
		969.11*	16.60	8.45510E-001	2.31661E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.995	8.480195E-002	8.063222E-002
K-40		0.968	2.012046E+001	2.034441E+000
Co-60		0.980	1.591022E-001	4.217128E-002
TL-208		0.751	3.678817E-001	9.824261E-002
Pb-212	@	0.520	6.795118E-001	1.971398E-001
Bi-214		0.975	7.059618E-001	1.301231E-001
Ac-228		0.632	8.951147E-001	1.776343E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	8.4952E-001	15.82
3	84.81	5.2975E-001	53.10
5	351.81	3.0391E-001	28.87
M 10	964.75	5.5606E-002	48.42

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
+	Co-60	1173.22*	100.00	9.6012E-002	7.51E-002	1.1238E-001
		1332.49*	100.00	7.5114E-002		2.0064E-001
	Nb-94	702.63	100.00	1.1491E-001	1.06E-001	2.1291E-002
		871.10	100.00	1.0568E-001		3.0774E-002
	Ag-108m	79.20	7.10	5.7870E+000	1.26E-001	-1.5180E+001
		433.93	89.90	1.3184E-001		2.9741E-002
		614.37	90.40	1.3928E-001		-5.3497E-002
		722.95	90.50	1.2621E-001		6.9074E-002
	Sb-125	176.33	6.89	2.5663E+000	4.01E-001	2.5051E-001
		427.89	29.33	4.0062E-001		-8.3746E-002
		463.38	10.35	1.1531E+000		4.4836E-001
		600.56	17.80	6.0941E-001		4.8414E-001
		606.64	5.02	2.8430E+000		6.4054E-001
		635.90	11.32	9.4517E-001		-1.9214E-001
	Cs-134	563.23	8.38	1.2722E+000	1.28E-001	-8.5948E-002
		569.32	15.43	7.0420E-001		1.2963E-001
		604.70	97.60	1.3409E-001		-1.4117E-002
		795.84	85.40	1.2773E-001		8.8297E-002
		801.93	8.73	1.1668E+000		-2.3975E+000
	Cs-137	661.65	85.12	1.4014E-001	1.40E-001	1.7401E-001
	Eu-152	121.78	28.40	8.7181E-001	3.53E-001	3.7562E-001
		244.69	7.49	2.0103E+000		-4.4281E-001
		344.27	26.50	4.4551E-001		-9.5311E-002
		778.89	12.74	7.7195E-001		-7.2003E-003
		867.32	4.16	2.4742E+000		-3.7858E+000
		964.01	14.40	8.6014E-001		-3.1644E-001
		1085.78	10.00	9.9886E-001		-3.5315E-001
		1112.02	13.30	7.6810E-001		-2.8772E-001
		1407.95	20.70	3.5258E-001		7.5867E-002
	Eu-154	123.07	40.50	6.0260E-001	2.69E-001	2.5428E-001
		247.94	6.60	2.2046E+000		-8.8637E-001
		591.81	4.83	2.1402E+000		-1.7800E+000
		723.30	19.70	5.7181E-001		-1.8494E-001
		756.87	4.33	2.4317E+000		-5.6693E-001
		873.19	11.50	9.2393E-001		1.0027E+000
		996.32	10.30	9.0299E-001		-5.8867E-001
		1004.76	17.90	5.6425E-001		2.9710E-001
		1274.45	35.50	2.6920E-001		-5.5655E-002
	Eu-155	86.54	30.90	1.2082E+000	1.21E+000	4.1517E-001
		105.31	20.70	1.4127E+000		-5.8499E-001
	Am-241	59.54	35.90	1.5219E+000	1.52E+000	4.2929E-001
	Cm-243	228.19	10.56	1.4203E+000	9.86E-001	-8.0493E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.8633E-001	9.86E-001	-1.2753E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 9:03:28 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-128-F-
Sample Title: OOL-09-05-128-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 8:53:25 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-128-F-
Title: OOL-09-05-128-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	274-	308	292.06	72.84	1.28	6.06E+002	84.05	2.95E+003
m	2	274-	308	300.39	74.93	1.29	1.14E+003	96.94	3.19E+003
	3	332-	345	339.83	84.79	1.05	2.87E+002	159.08	2.28E+003
M	4	945-	972	954.45	238.49	1.05	3.22E+002	45.80	3.74E+002
m	5	945-	972	966.96	241.62	1.06	6.96E+001	32.28	3.77E+002
	6	1172-	1187	1180.92	295.13	0.39	7.52E+001	60.26	2.90E+002
	7	1348-	1358	1353.11	338.19	0.99	6.88E+001	42.27	1.66E+002
	8	1401-	1417	1407.04	351.67	1.19	1.50E+002	59.99	2.48E+002
	9	2031-	2054	2043.15	510.75	1.39	2.54E+002	50.49	1.02E+002
	10	2323-	2339	2332.20	583.03	1.49	1.99E+002	44.29	9.94E+001
	11	2429-	2445	2436.13	609.02	1.33	1.41E+002	43.90	1.15E+002
	12	3066-	3078	3071.88	768.01	0.98	2.69E+001	24.58	4.91E+001
	13	3634-	3656	3643.40	910.93	1.51	1.75E+002	40.76	6.57E+001
	14	3869-	3883	3875.45	968.96	0.39	6.07E+001	29.09	5.53E+001
	15	4475-	4489	4481.16	1120.44	0.74	5.39E+001	25.53	4.01E+001
	16	4942-	4954	4948.36	1237.27	0.79	3.13E+001	22.62	3.87E+001
	17	5829-	5858	5843.54	1461.13	2.00	1.28E+003	73.18	2.30E+001
	18	7052-	7067	7059.60	1765.24	1.29	4.04E+001	16.17	8.56E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.998	511.00*		100.00	3.46417E-001	8.33431E-002
K-40	0.996	1460.81*		10.67	2.15207E+001	2.13131E+000
TL-208	0.751	277.35		6.80		
		510.84*		21.60	1.60378E+000	4.07471E-001
		583.14*		84.20	3.36052E-001	8.67812E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	1.63000E+001	3.48275E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.83464E-001	1.65788E-001
Bi-214	0.994	609.31*		46.30	4.38981E-001	1.47353E-001
		1120.29*		15.10	6.01350E-001	2.91740E-001
		1764.49*		15.80	4.75137E-001	1.95795E-001
PB-214	0.731	74.82*	@	6.21	2.80853E+001	6.33776E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98*		7.49	1.01145E+000	4.98179E-001
		295.21*		19.20	4.51314E-001	3.69494E-001
		351.92*		37.20	4.89516E-001	2.11795E-001
Ac-228	0.999	338.32*		11.40	7.22520E-001	4.58342E-001
		911.07*		27.70	1.00302E+000	2.60244E-001
		969.11*		16.60	5.90050E-001	2.89509E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.998	2.738299E-001	8.539227E-002
K-40		0.996	2.152067E+001	2.131307E+000
TL-208		0.751	3.360523E-001	8.608744E-002
Pb-212	@	0.520	7.834644E-001	1.657876E-001
Bi-214		0.994	4.729640E-001	1.091802E-001
PB-214	@	0.731	5.437025E-001	1.723959E-001
Ac-228		0.999	8.039400E-001	1.782979E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.84	1.0097E+000	13.87
3	84.79	4.7827E-001	55.43
12	768.01	4.4825E-002	91.41
16	1237.27	5.2095E-002	72.35

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0471E-001	7.93E-002	5.4678E-002
	1332.49	100.00	7.9278E-002		4.3951E-004
Nb-94	702.63	100.00	1.0641E-001	9.49E-002	8.8091E-002
	871.10	100.00	9.4851E-002		5.0625E-002
Ag-108m	79.20	7.10	5.9548E+000	1.27E-001	-4.7492E+000
	433.93	89.90	1.3340E-001		1.1315E-001
	614.37	90.40	1.3294E-001		2.0796E-002
	722.95	90.50	1.2745E-001		1.4063E-001
Sb-125	176.33	6.89	2.6686E+000	3.88E-001	-1.4429E+000
	427.89	29.33	3.8811E-001		9.9156E-003
	463.38	10.35	1.1499E+000		9.0203E-001
	600.56	17.80	6.6240E-001		3.1137E-001
	606.64	5.02	2.7940E+000		3.5227E+000
	635.90	11.32	9.8233E-001		-7.6592E-001
Cs-134	563.23	8.38	1.3091E+000	1.19E-001	-7.0422E-001
	569.32	15.43	7.0286E-001		-2.5115E-002
	604.70	97.60	1.3908E-001		-7.6110E-002
	795.84	85.40	1.1879E-001		7.1605E-004
	801.93	8.73	1.0950E+000		4.7359E-001
Cs-137	661.65	85.12	1.3818E-001	1.38E-001	-9.8576E-003
Eu-152	121.78	28.40	8.9655E-001	3.57E-001	-6.0370E-002
	244.69	7.49	2.0826E+000		-7.0319E-001
	344.27	26.50	4.7926E-001		2.1846E-001
	778.89	12.74	8.1328E-001		-1.2401E+000
	867.32	4.16	2.2710E+000		-2.4557E+000
	964.01	14.40	8.7951E-001		-1.0445E-001
	1085.78	10.00	9.7000E-001		2.8223E-001
	1112.02	13.30	7.6810E-001		-2.7444E-001
	1407.95	20.70	3.5738E-001		1.4807E-001
Eu-154	123.07	40.50	6.2187E-001	2.75E-001	4.9678E-002
	247.94	6.60	2.2443E+000		-5.2825E-001
	591.81	4.83	2.2916E+000		1.5900E-001
	723.30	19.70	5.8891E-001		6.7613E-001
	756.87	4.33	2.4144E+000		1.2932E+000
	873.19	11.50	8.2518E-001		2.6311E-001
	996.32	10.30	8.9034E-001		7.6012E-002
	1004.76	17.90	5.1357E-001		-7.1643E-002
	1274.45	35.50	2.7522E-001		6.5580E-002
Eu-155	86.54	30.90	1.2550E+000	1.25E+000	3.9172E-002
	105.31	20.70	1.4950E+000		-9.9391E-001
Am-241	59.54	35.90	1.5487E+000	1.55E+000	-4.2878E-001
Cm-243	228.19	10.56	1.4828E+000	1.03E+000	-4.7861E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0336E+000	1.03E+000	3.6281E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 10:32:23 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-129-F-
Sample Title: OOL-09-05-129-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 10:22:21 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-129-F-
Title: OOL-09-05-129-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	308	291.47	72.70	1.32	4.75E+002	82.83	2.43E+003
m	2	285-	308	300.29	74.90	1.32	1.02E+003	95.61	3.45E+003
	3	332-	346	339.53	84.72	1.13	2.64E+002	165.78	2.39E+003
	4	944-	960	954.37	238.47	1.04	2.84E+002	87.03	5.40E+002
	5	1400-	1414	1406.34	351.50	0.50	9.80E+001	52.49	2.15E+002
	6	2030-	2052	2041.63	510.37	1.42	1.65E+002	55.36	1.61E+002
	7	2323-	2338	2330.98	582.73	1.59	1.81E+002	41.33	8.78E+001
	8	2426-	2444	2434.74	608.68	1.10	1.73E+002	43.02	9.08E+001
	9	2901-	2915	2908.44	727.13	0.63	5.40E+001	29.90	6.20E+001
	10	3633-	3651	3642.60	910.73	1.57	1.48E+002	37.37	6.38E+001
	11	3865-	3882	3873.32	968.43	1.71	8.78E+001	34.90	7.02E+001
	12	4471-	4486	4479.00	1119.90	1.25	5.49E+001	26.40	4.21E+001
	13	5826-	5855	5841.54	1460.63	2.28	1.27E+003	73.73	3.04E+001
	14	7051-	7064	7057.35	1764.68	0.46	3.62E+001	14.52	6.78E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.986	511.00*	100.00	2.24545E-001	8.13987E-002
K-40	0.999	1460.81*	10.67	2.12765E+001	2.12051E+000
TL-208	0.746	277.35	6.80		
		510.84*	21.60	1.03956E+000	3.86291E-001
		583.14*	84.20	3.06606E-001	8.05323E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	6.93174E-001	3.92187E-001
Pb-212	0.520	74.81* @	10.70	1.46229E+001	3.17600E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.91493E-001	2.37706E-001
Bi-214	0.990	609.31*	46.30	5.40815E-001	1.49923E-001
		1120.29*	15.10	6.12376E-001	3.01342E-001
		1764.49*	15.80	4.25553E-001	1.75832E-001
Ac-228	0.627	338.32	11.40		
		911.07*	27.70	8.47931E-001	2.35055E-001
		969.11*	16.60	8.53528E-001	3.50863E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.986	1.583177E-001	8.320868E-002
K-40		0.999	2.127646E+001	2.120512E+000
TL-208		0.746	3.066057E-001	7.990997E-002
Bi-212		1.000	6.931742E-001	3.921871E-001
Pb-212	@	0.520	6.914930E-001	2.377063E-001
Bi-214		0.990	5.073471E-001	1.066931E-001
Ac-228		0.627	8.496646E-001	1.952824E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.70	7.9209E-001	17.43
3	84.72	4.3973E-001	62.84
5	351.50	1.6341E-001	53.54

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0216E-001	8.57E-002	2.3938E-002
	1332.49	100.00	8.5732E-002		1.4710E-002
Nb-94	702.63	100.00	1.0924E-001	9.34E-002	1.2053E-001
	871.10	100.00	9.3368E-002		-5.6302E-002
Ag-108m	79.20	7.10	5.8996E+000	1.27E-001	-4.9641E+000
	433.93	89.90	1.2721E-001		6.1912E-002
	614.37	90.40	1.2673E-001		-5.6607E-003
	722.95	90.50	1.3156E-001		8.5726E-003
Sb-125	176.33	6.89	2.5591E+000	3.97E-001	-3.2673E+000
	427.89	29.33	3.9740E-001		3.5137E-001
	463.38	10.35	1.1211E+000		-1.4702E-001
	600.56	17.80	5.7722E-001		-1.6034E-001
	606.64	5.02	2.6587E+000		3.9699E+000
	635.90	11.32	9.3311E-001		-1.1237E-001
Cs-134	563.23	8.38	1.2822E+000	1.22E-001	-4.5452E-001
	569.32	15.43	7.0554E-001		2.2010E-001
	604.70	97.60	1.3409E-001		1.4099E-002
	795.84	85.40	1.2245E-001		7.9902E-002
	801.93	8.73	1.1237E+000		3.8272E-001
Cs-137	661.65	85.12	1.3518E-001	1.35E-001	1.1095E-001
Eu-152	121.78	28.40	8.6990E-001	3.53E-001	-2.0228E-001
	244.69	7.49	2.0701E+000		5.0961E-001
	344.27	26.50	4.7203E-001		5.7768E-002
	778.89	12.74	7.9083E-001		-1.1119E+000
	867.32	4.16	2.2852E+000		-3.3798E+000
	964.01	14.40	9.2612E-001		1.7928E-001
	1085.78	10.00	9.6018E-001		-2.9105E-001
	1112.02	13.30	7.2945E-001		-4.1224E-001
	1407.95	20.70	3.5258E-001		-6.2802E-002
Eu-154	123.07	40.50	6.0294E-001	2.59E-001	-3.3100E-001
	247.94	6.60	2.2211E+000		7.3245E-001
	591.81	4.83	2.1631E+000		-1.1817E-001
	723.30	19.70	6.0551E-001		1.0433E-001
	756.87	4.33	2.4432E+000		1.2776E+000
	873.19	11.50	7.8581E-001		-9.9085E-001
	996.32	10.30	9.4588E-001		-1.3032E-001
	1004.76	17.90	5.6757E-001		6.4147E-001
	1274.45	35.50	2.5883E-001		4.9511E-002
Eu-155	86.54	30.90	1.2416E+000	1.24E+000	9.6111E-002
	105.31	20.70	1.4390E+000		-5.5051E-001
Am-241	59.54	35.90	1.5617E+000	1.56E+000	-4.1663E-001
Cm-243	228.19	10.56	1.4774E+000	1.02E+000	-1.6626E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0174E+000	1.02E+000	9.0603E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 10:15:03 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-130-F-
Sample Title: OOL-09-05-130-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 10:04:59 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-130-F-
Title: OOL-09-05-130-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	288-	306	297.59	74.35	1.23	7.08E+002	161.28	1.79E+003
2	2320-	2332	2327.98	581.95	0.43	3.33E+001	35.50	1.07E+002
3	3633-	3654	3642.70	910.64	1.17	1.12E+002	36.12	6.05E+001
4	3866-	3885	3876.25	969.03	1.37	8.18E+001	30.85	4.72E+001
5	5827-	5858	5842.63	1460.63	2.90	8.58E+002	60.64	1.99E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.999	1460.81*	10.67	1.88360E+001	2.02426E+000
TL-208	0.441	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	7.24692E-002	7.79298E-002
		860.37	12.46		
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	8.18177E-001	2.81282E-001
		969.11*	16.60	1.01613E+000	3.97968E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.999	1.883598E+001	2.024255E+000
TL-208	0.441	7.246918E-002	7.792978E-002
Ac-228	0.633	8.841217E-001	2.296995E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	74.35	1.1800E+000	22.78

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2437E-001	1.11E-001	7.1300E-002
	1332.49	100.00	1.1136E-001		1.0532E-001
Nb-94	702.63	100.00	1.2398E-001	1.14E-001	-4.4116E-002
	871.10	100.00	1.1394E-001		-7.1138E-003
Ag-108m	79.20	7.10	1.2612E+001	1.42E-001	-2.5326E+001
	433.93	89.90	1.4911E-001		-8.9598E-002
	614.37	90.40	1.6293E-001		-2.9265E-001
	722.95	90.50	1.4183E-001		6.3361E-002
Sb-125	176.33	6.89	3.5278E+000	4.68E-001	3.3942E+000
	427.89	29.33	4.6816E-001		-6.4025E-002
	463.38	10.35	1.3210E+000		6.1445E-001
	600.56	17.80	7.7719E-001		2.4754E-001
	606.64	5.02	3.2027E+000		4.3688E+000
	635.90	11.32	1.0836E+000		1.0378E-001
Cs-134	563.23	8.38	1.5770E+000	1.40E-001	2.6955E-001
	569.32	15.43	8.2787E-001		-1.8660E-001
	604.70	97.60	1.6133E-001		1.9864E-001
	795.84	85.40	1.3974E-001		1.2978E-002
	801.93	8.73	1.2851E+000		-5.7329E-001
Cs-137	661.65	85.12	1.5654E-001	1.57E-001	1.8624E-001
Eu-152	121.78	28.40	1.2181E+000	4.50E-001	8.6421E-002
	244.69	7.49	2.6943E+000		-3.5471E+000
	344.27	26.50	5.9149E-001		-4.9384E-001
	778.89	12.74	8.8506E-001		-8.6824E-001
	867.32	4.16	2.8415E+000		-1.2822E+000
	964.01	14.40	1.0330E+000		-8.6915E-002
	1085.78	10.00	1.1016E+000		6.4519E-002
	1112.02	13.30	8.0797E-001		-9.4567E-001
	1407.95	20.70	4.5027E-001		4.3101E-001
Eu-154	123.07	40.50	8.4259E-001	3.10E-001	-3.1072E-001
	247.94	6.60	2.8731E+000		-4.2029E+000
	591.81	4.83	2.8099E+000		1.2139E+000
	723.30	19.70	6.6830E-001		5.9982E-001
	756.87	4.33	2.7892E+000		1.3760E+000
	873.19	11.50	1.0052E+000		6.7928E-001
	996.32	10.30	1.1161E+000		6.5647E-001
	1004.76	17.90	6.2164E-001		1.2930E-001
	1274.45	35.50	3.0972E-001		1.6488E-001
Eu-155	86.54	30.90	2.2212E+000	2.18E+000	3.0856E+000
	105.31	20.70	2.1837E+000		-2.9962E-001
Am-241	59.54	35.90	5.7843E+000	5.78E+000	-3.3274E+000
Cm-243	228.19	10.56	1.9333E+000	1.29E+000	4.6536E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2906E+000	1.29E+000	2.0335E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 7:05:29 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-131-F-
Sample Title: OOL-09-05-131-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 6:55:28 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-131-F-
Title: OOL-09-05-131-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	946-	963	954.31	238.53	0.51	2.51E+002	87.19	5.27E+002
2	1384-	1396	1389.63	347.37	0.65	3.63E+001	40.51	1.48E+002
3	2319-	2342	2330.85	582.67	1.65	2.03E+002	47.99	9.91E+001
4	2426-	2446	2434.06	608.48	1.47	1.04E+002	46.57	1.26E+002
5	3630-	3655	3642.24	910.52	0.80	1.49E+002	40.48	6.51E+001
6	5827-	5857	5841.81	1460.42	2.68	9.66E+002	62.67	1.15E+001
7	7053-	7066	7059.65	1764.88	0.34	2.70E+001	15.20	1.20E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.995	1460.81*		10.67	2.12136E+001	2.20042E+000
TL-208	0.467	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	4.42363E-001	1.19416E-001
		860.37		12.46		
Pb-212	0.454	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.11805E-001	3.09449E-001
Bi-214	0.680	609.31*		46.30	4.16239E-001	1.94116E-001
		1120.29		15.10		
		1764.49*		15.80	4.38334E-001	2.50630E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.995	2.121364E+001	2.200419E+000
TL-208	0.467	4.423634E-001	1.194159E-001
Pb-212 @	0.454	8.118053E-001	3.094494E-001
Bi-214	0.680	4.245234E-001	1.534685E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	347.37	6.0539E-002	111.54
5	910.52	2.4824E-001	27.18

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.3060E-001	1.07E-001	6.4485E-002
	1332.49	100.00	1.0715E-001		5.6581E-002
Nb-94	702.63	100.00	1.2834E-001	1.21E-001	-7.2554E-003
	871.10	100.00	1.2137E-001		4.8546E-002
Ag-108m	79.20	7.10	1.2692E+001	1.60E-001	-2.3187E+001
	433.93	89.90	1.5982E-001		-6.8139E-002
	614.37	90.40	1.7912E-001		-4.3715E-003
	722.95	90.50	1.6298E-001		9.8751E-002
Sb-125	176.33	6.89	3.4432E+000	4.96E-001	1.6586E+000
	427.89	29.33	4.9563E-001		1.7524E-001
	463.38	10.35	1.3968E+000		1.0022E+000
	600.56	17.80	7.8653E-001		6.7685E-001
	606.64	5.02	3.4112E+000		3.7996E+000
	635.90	11.32	1.1511E+000		-3.3336E-001
Cs-134	563.23	8.38	1.6898E+000	1.59E-001	2.2634E+000
	569.32	15.43	9.3444E-001		9.2131E-001
	604.70	97.60	1.7083E-001		2.2621E-002
	795.84	85.40	1.5925E-001		1.3914E-001
	801.93	8.73	1.4518E+000		-2.6608E-001
Cs-137	661.65	85.12	1.6707E-001	1.67E-001	9.0075E-002
Eu-152	121.78	28.40	1.2096E+000	3.92E-001	-7.1768E-001
	244.69	7.49	2.7490E+000		-4.0222E-002
	344.27	26.50	6.4063E-001		-4.3530E-001
	778.89	12.74	9.9757E-001		1.6868E-001
	867.32	4.16	2.9153E+000		-4.7100E+000
	964.01	14.40	1.0724E+000		1.9560E+000
	1085.78	10.00	1.1780E+000		4.1143E-001
	1112.02	13.30	9.1992E-001		-1.3411E+000
	1407.95	20.70	3.9213E-001		-8.8931E-002
Eu-154	123.07	40.50	8.4241E-001	3.20E-001	3.2137E-002
	247.94	6.60	2.9760E+000		-2.4895E+000
	591.81	4.83	2.8216E+000		8.7825E-001
	723.30	19.70	7.5025E-001		6.1422E-001
	756.87	4.33	2.9431E+000		3.8178E-001
	873.19	11.50	1.0559E+000		7.4912E-001
	996.32	10.30	1.1999E+000		8.2036E-001
	1004.76	17.90	6.7388E-001		4.4025E-001
	1274.45	35.50	3.1960E-001		-3.0436E-001
Eu-155	86.54	30.90	2.2478E+000	2.22E+000	3.0347E+000
	105.31	20.70	2.2238E+000		9.5093E-001
Am-241	59.54	35.90	5.6340E+000	5.63E+000	5.1383E-001
Cm-243	228.19	10.56	1.9633E+000	1.34E+000	-1.9422E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3366E+000	1.34E+000	3.2939E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 6:47:48 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-132-F-
Sample Title: OOL-09-05-132-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 6:37:47 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-132-F-
Title: OOL-09-05-132-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	941-	962	951.95	237.95	1.75	2.85E+002	91.38	5.04E+002
2	2034-	2051	2041.55	510.35	0.47	1.08E+002	47.76	1.49E+002
3	2321-	2342	2329.76	582.40	2.01	1.66E+002	49.77	1.27E+002
4	2903-	2914	2908.65	727.13	0.30	3.32E+001	22.49	3.88E+001
5	5827-	5857	5841.75	1460.41	2.70	9.24E+002	62.51	1.93E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.986	511.00*		100.00	1.89158E-001	8.77777E-002
K-40	0.995	1460.81*		10.67	2.02755E+001	2.13948E+000
TL-208	0.739	277.35		6.80		
		510.84*		21.60	8.75729E-001	4.12623E-001
		583.14*		84.20	3.62039E-001	1.18272E-001
		860.37		12.46		
Bi-212	1.000	727.17*		11.80	5.47085E-001	3.76636E-001
Pb-212	0.445	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	9.22953E-001	3.28976E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.986	1.109570E-001	9.138415E-002
K-40	0.995	2.027546E+001	2.139482E+000
TL-208	0.739	3.620392E-001	1.176824E-001
Bi-212	1.000	5.470854E-001	3.766358E-001
Pb-212 @	0.445	9.229532E-001	3.289760E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2308E-001	9.99E-002	4.6536E-002
	1332.49	100.00	9.9898E-002		7.4660E-002
Nb-94	702.63	100.00	1.3784E-001	1.18E-001	2.7390E-002
	871.10	100.00	1.1791E-001		8.6550E-003
Ag-108m	79.20	7.10	1.2416E+001	1.48E-001	-1.5824E+001
	433.93	89.90	1.6479E-001		-2.1091E-001
	614.37	90.40	1.8071E-001		-2.6658E-001
	722.95	90.50	1.4830E-001		-8.4434E-002
Sb-125	176.33	6.89	3.3578E+000	4.99E-001	-1.7575E-001
	427.89	29.33	4.9850E-001		-6.4492E-001
	463.38	10.35	1.3881E+000		5.9569E-001
	600.56	17.80	7.5975E-001		2.7681E-001
	606.64	5.02	3.4601E+000		4.7419E+000
	635.90	11.32	1.1726E+000		-2.3356E-001
Cs-134	563.23	8.38	1.7298E+000	1.54E-001	1.3329E+000
	569.32	15.43	9.0901E-001		-1.6186E-001
	604.70	97.60	1.7154E-001		1.3282E-001
	795.84	85.40	1.5383E-001		9.4919E-002
	801.93	8.73	1.4717E+000		3.3892E-001
Cs-137	661.65	85.12	1.6048E-001	1.60E-001	-2.7656E-002
Eu-152	121.78	28.40	1.1523E+000	4.10E-001	4.6274E-001
	244.69	7.49	2.6225E+000		-3.9381E+000
	344.27	26.50	6.0384E-001		-5.0192E-001
	778.89	12.74	1.0003E+000		1.0308E+000
	867.32	4.16	2.7657E+000		-1.5499E+000
	964.01	14.40	1.0082E+000		8.6386E-001
	1085.78	10.00	1.0684E+000		-7.8615E-001
	1112.02	13.30	8.7427E-001		-9.9693E-001
	1407.95	20.70	4.1016E-001		3.6097E-001
Eu-154	123.07	40.50	7.9983E-001	3.28E-001	-4.3866E-002
	247.94	6.60	2.8600E+000		-2.3739E+000
	591.81	4.83	2.8619E+000		-4.5196E-001
	723.30	19.70	6.8294E-001		4.9243E-001
	756.87	4.33	2.9745E+000		1.4748E+000
	873.19	11.50	1.0393E+000		3.5920E-001
	996.32	10.30	1.0781E+000		-3.1860E-002
	1004.76	17.90	6.3148E-001		-3.2553E-001
	1274.45	35.50	3.2782E-001		1.1685E-001
Eu-155	86.54	30.90	2.1823E+000	2.06E+000	1.0431E+000
	105.31	20.70	2.0586E+000		-1.5598E+000
Am-241	59.54	35.90	5.4383E+000	5.44E+000	-1.2935E+000
Cm-243	228.19	10.56	1.9122E+000	1.32E+000	-6.6794E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3186E+000	1.32E+000	9.9830E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 2:22:25 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-133-F-
Sample Title: OOL-09-05-133-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 2:12:23 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-133-F-
Title: OOL-09-05-133-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	291.93	72.81	1.21	5.72E+002	83.71	2.65E+003
m	2	284-	308	300.35	74.92	1.21	1.06E+003	96.19	3.07E+003
M	3	331-	353	339.55	84.72	1.28	4.53E+002	79.73	2.53E+003
m	4	331-	353	350.06	87.35	1.28	2.11E+002	70.81	2.18E+003
	5	949-	961	954.89	238.60	1.10	2.63E+002	76.62	4.81E+002
	6	1173-	1190	1182.34	295.48	0.56	1.32E+002	63.51	2.82E+002
	7	1345-	1360	1353.42	338.26	1.44	6.87E+001	55.56	2.44E+002
	8	1402-	1414	1407.91	351.89	1.13	1.32E+002	47.12	1.67E+002
	9	2034-	2052	2044.51	511.09	1.04	1.34E+002	50.90	1.60E+002
	10	2322-	2345	2334.15	583.52	1.54	2.48E+002	50.64	1.03E+002
	11	2427-	2448	2438.43	609.60	1.01	1.63E+002	44.90	9.64E+001
	12	2905-	2918	2911.16	727.82	0.61	3.73E+001	26.95	5.47E+001
	13	3174-	3186	3180.54	795.18	0.39	4.19E+001	22.47	3.41E+001
	14	3636-	3655	3646.72	911.76	1.42	1.98E+002	38.75	5.51E+001
M	15	3853-	3888	3860.83	965.30	1.85	5.93E+001	17.10	2.75E+001
m	16	3853-	3888	3878.06	969.62	1.85	1.27E+002	23.47	4.83E+001
	17	5833-	5861	5847.88	1462.22	2.34	1.24E+003	71.85	2.18E+001
	18	7056-	7071	7064.08	1766.36	1.08	6.01E+001	15.90	1.93E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	1.000	511.00*	100.00	1.82977E-001	7.37314E-002
K-40	0.933	1460.81*	10.67	2.08561E+001	2.07463E+000
Eu-155	0.320	86.54*	30.90	8.47757E-001	3.29075E-001
		105.31	20.70		
TL-208	0.748	277.35	6.80		
		510.84*	21.60	8.47115E-001	3.48289E-001
		583.14*	84.20	4.19806E-001	1.01647E-001
		860.37	12.46		
Bi-212	0.986	727.17*	11.80	4.79258E-001	3.50413E-001
Pb-212	0.677	74.81* @	10.70	1.51218E+001	3.26783E+000
		77.11 @	18.00		
		87.30* @	8.00	3.27446E+000	1.27105E+000
		238.63*	44.60	6.39871E-001	2.11568E-001
Bi-214	0.672	609.31*	46.30	5.07945E-001	1.53533E-001
		1120.29	15.10		
		1764.49*	15.80	7.05864E-001	1.99708E-001
PB-214	0.669	74.82* @	6.21	2.60553E+001	5.93976E+000
		77.11 @	10.50		
		87.30* @	4.67	5.60935E+000	2.21825E+000
		241.98	7.49		
		295.21*	19.20	7.94353E-001	4.04007E-001
		351.92*	37.20	4.28793E-001	1.69372E-001
Ac-228	0.989	338.32*	11.40	7.21635E-001	5.94664E-001
		911.07*	27.70	1.13312E+000	2.57232E-001
		969.11*	16.60	1.23059E+000	2.62044E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		1.000	9.229856E-002	7.687423E-002
K-40		0.933	2.085615E+001	2.074627E+000
Eu-155		0.320	6.090814E-001	3.344200E-001
TL-208		0.748	4.198065E-001	1.007225E-001
Bi-212		0.986	4.792579E-001	3.504129E-001
Pb-212	@	0.677	6.398706E-001	2.115676E-001
Bi-214		0.672	5.814676E-001	1.217203E-001
PB-214	@	0.669	4.831059E-001	1.545928E-001
Ac-228		0.989	1.140992E+000	1.754014E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	9.5348E-001	14.63
M 3	84.72	7.5437E-001	17.62
13	795.18	6.9890E-002	53.57
M 15	965.30	9.8753E-002	28.86

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0280E-001	8.74E-002	2.8266E-002
		1332.49	100.00	8.7368E-002		2.3669E-002
	Nb-94	702.63	100.00	1.0521E-001	9.63E-002	8.1514E-003
		871.10	100.00	9.6310E-002		-1.8070E-002
	Ag-108m	79.20	7.10	6.0174E+000	1.24E-001	-4.7078E+000
		433.93	89.90	1.3061E-001		3.4656E-002
		614.37	90.40	1.4112E-001		-2.2908E-002
		722.95	90.50	1.2370E-001		3.3419E-002
	Sb-125	176.33	6.89	2.7860E+000	4.03E-001	4.1190E-001
		427.89	29.33	4.0276E-001		-1.1816E-001
		463.38	10.35	1.0982E+000		1.1361E-001
		600.56	17.80	6.2014E-001		7.8044E-003
		606.64	5.02	2.6308E+000		8.0864E-001
		635.90	11.32	9.0224E-001		-9.0103E-001
	Cs-134	563.23	8.38	1.2797E+000	1.12E-001	-2.0351E-001
		569.32	15.43	6.5709E-001		2.1687E-001
		604.70	97.60	1.2368E-001		2.2377E-002
		795.84	85.40	1.1209E-001		-1.7852E-002
		801.93	8.73	1.0108E+000		-1.0062E+000
	Cs-137	661.65	85.12	1.2409E-001	1.24E-001	3.3507E-002
	Eu-152	121.78	28.40	9.2197E-001	3.62E-001	-6.3890E-002
		244.69	7.49	2.1944E+000		-1.4619E+000
		344.27	26.50	4.7252E-001		-1.8550E-001
		778.89	12.74	7.2816E-001		-1.0562E+000
		867.32	4.16	2.3339E+000		-2.9449E+000
		964.01	14.40	8.6665E-001		-2.6143E-002
		1085.78	10.00	9.7649E-001		2.3996E-001
		1112.02	13.30	7.9807E-001		-5.3475E-001
		1407.95	20.70	3.6212E-001		2.7606E-001
	Eu-154	123.07	40.50	6.4160E-001	2.69E-001	1.9878E-001
		247.94	6.60	2.3582E+000		8.7886E-001
		591.81	4.83	2.1355E+000		-1.7671E+000
		723.30	19.70	5.7412E-001		2.7238E-001
		756.87	4.33	2.1760E+000		3.3858E-001
		873.19	11.50	8.2518E-001		-3.9340E-001
		996.32	10.30	1.0038E+000		3.6317E-001
		1004.76	17.90	5.2268E-001		1.0949E-001
		1274.45	35.50	2.6920E-001		3.2145E-002
+	Eu-155	86.54*	30.90	8.8169E-001	8.82E-001	8.4776E-001
		105.31	20.70	1.5176E+000		-1.4497E-001
	Am-241	59.54	35.90	1.5947E+000	1.59E+000	9.8015E-001
	Cm-243	228.19	10.56	1.5674E+000	1.07E+000	2.3429E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0700E+000	1.07E+000	-2.6894E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 3:29:07 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-134-F-
Sample Title: OOL-09-05-134-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 3:19:06 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-134-F-
Title: OOL-09-05-134-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	308	291.99	72.83	1.18	5.06E+002	78.21	2.02E+003
m	2	286-	308	300.40	74.93	1.18	9.80E+002	90.08	2.62E+003
	3	332-	346	339.91	84.81	1.27	3.42E+002	153.34	2.00E+003
	4	950-	961	955.01	238.63	1.36	3.15E+002	68.61	3.59E+002
	5	1345-	1361	1354.15	338.45	0.90	1.08E+002	55.65	2.23E+002
	6	1401-	1416	1408.32	351.99	1.25	1.84E+002	55.48	2.05E+002
	7	2032-	2055	2043.80	510.91	1.52	2.19E+002	61.17	1.89E+002
	8	2325-	2343	2333.81	583.44	1.69	1.96E+002	44.30	9.33E+001
	9	2429-	2446	2438.31	609.57	1.33	1.62E+002	45.68	1.17E+002
	10	2641-	2652	2647.75	661.94	0.55	2.71E+001	28.20	7.19E+001
	11	3636-	3659	3646.56	911.72	1.73	2.17E+002	42.43	6.28E+001
M	12	3855-	3888	3861.05	965.36	1.72	4.15E+001	16.96	4.46E+001
m	13	3855-	3888	3878.68	969.77	1.72	7.44E+001	19.89	5.81E+001
	14	4474-	4493	4484.25	1121.21	0.68	6.50E+001	30.37	5.00E+001
	15	4913-	4924	4918.77	1229.87	0.68	1.49E+001	18.13	2.81E+001
	16	5833-	5861	5847.93	1462.23	1.97	1.25E+003	72.12	2.18E+001
	17	6351-	6364	6357.45	1589.65	0.36	2.92E+001	14.33	8.76E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	1.000	511.00*	100.00	2.99178E-001	9.27602E-002
K-40	0.932	1460.81*	10.67	2.10239E+001	2.08829E+000
Cs-137	0.997	661.65*	85.12	4.72316E-002	4.95393E-002
TL-208	0.750	277.35	6.80		
		510.84*	21.60	1.38508E+000	4.44093E-001
		583.14*	84.20	3.31179E-001	8.64862E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.40156E+001	3.03427E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.66980E-001	2.05625E-001
Bi-214	0.692	609.31*	46.30	5.05567E-001	1.55649E-001
		1120.29*	15.10	7.24778E-001	3.47237E-001
		1764.49	15.80		
Ac-228	0.988	338.32*	11.40	1.13204E+000	6.11253E-001
		911.07*	27.70	1.24334E+000	2.81814E-001
		969.11*	16.60	7.23295E-001	2.07708E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		1.000	2.276430E-001	9.459388E-002
K-40		0.932	2.102394E+001	2.088292E+000
Cs-137		0.997	4.723157E-002	4.953926E-002
TL-208		0.750	3.311795E-001	8.581015E-002
Pb-212	@	0.520	7.669799E-001	2.056253E-001
Bi-214		0.692	5.422437E-001	1.420328E-001
Ac-228		0.988	9.220653E-001	1.612760E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.83	8.4368E-001	15.45
3	84.81	5.7065E-001	44.78
6	351.99	3.0681E-001	30.14
M 12	965.36	6.9167E-002	40.87
15	1229.87	2.4835E-002	121.65
17	1589.65	4.8739E-002	48.99

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0811E-001	8.11E-002	1.0336E-002
		1332.49	100.00	8.1053E-002		1.5989E-002
	Nb-94	702.63	100.00	1.1710E-001	9.43E-002	1.4908E-001
		871.10	100.00	9.4261E-002		5.4354E-003
	Ag-108m	79.20	7.10	5.5059E+000	1.33E-001	-4.2472E+000
		433.93	89.90	1.3563E-001		2.5132E-002
		614.37	90.40	1.4749E-001		9.5782E-003
		722.95	90.50	1.3251E-001		7.1832E-002
	Sb-125	176.33	6.89	2.5537E+000	3.98E-001	-5.7228E-001
		427.89	29.33	3.9794E-001		-8.9026E-003
		463.38	10.35	1.2278E+000		-2.4242E-001
		600.56	17.80	6.3648E-001		6.8544E-001
		606.64	5.02	2.8137E+000		-8.6860E-001
		635.90	11.32	9.3513E-001		8.8999E-001
	Cs-134	563.23	8.38	1.3283E+000	1.25E-001	-3.0945E-001
		569.32	15.43	7.2527E-001		8.2460E-002
		604.70	97.60	1.3244E-001		5.5494E-002
		795.84	85.40	1.2541E-001		-5.6468E-002
		801.93	8.73	1.0950E+000		-1.6993E+000
+	Cs-137	661.65*	85.12	8.1764E-002	8.18E-002	4.7232E-002
	Eu-152	121.78	28.40	8.2360E-001	3.64E-001	4.5178E-002
		244.69	7.49	2.0994E+000		4.0132E-001
		344.27	26.50	4.6862E-001		-2.9124E-001
		778.89	12.74	7.9083E-001		-1.0282E-001
		867.32	4.16	2.3749E+000		6.7683E-001
		964.01	14.40	8.4197E-001		-1.3346E-002
		1085.78	10.00	1.0238E+000		-5.5165E-001
		1112.02	13.30	7.8208E-001		-8.8678E-001
		1407.95	20.70	3.6447E-001		3.8372E-001
	Eu-154	123.07	40.50	5.7081E-001	2.64E-001	-1.7483E-001
		247.94	6.60	2.2362E+000		1.6863E-001
		591.81	4.83	2.3967E+000		2.1690E+000
		723.30	19.70	6.1418E-001		4.7471E-001
		756.87	4.33	2.3852E+000		2.0332E-002
		873.19	11.50	7.8311E-001		-9.2723E-001
		996.32	10.30	9.7820E-001		-7.7445E-002
		1004.76	17.90	5.2268E-001		-1.7408E-001
		1274.45	35.50	2.6407E-001		-1.8449E-001
	Eu-155	86.54	30.90	1.1709E+000	1.17E+000	1.8479E-001
		105.31	20.70	1.3926E+000		1.1308E+000
	Am-241	59.54	35.90	1.4599E+000	1.46E+000	1.0677E-001
	Cm-243	228.19	10.56	1.4949E+000	1.03E+000	1.2831E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0266E+000	1.03E+000	-6.1782E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 3:46:10 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-135-F-
Sample Title: OOL-09-05-135-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 3:36:08 PM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-135-F-
Title: OOL-09-05-135-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	308	291.69	72.75	1.16	3.88E+002	73.10	2.18E+003
m	2	283-	308	300.68	75.00	1.17	8.44E+002	86.88	2.42E+003
	3	332-	345	339.70	84.76	1.37	2.37E+002	138.64	1.73E+003
	4	948-	964	954.87	238.60	1.26	3.20E+002	79.86	4.25E+002
	5	1400-	1416	1408.65	352.08	1.70	1.90E+002	51.82	1.63E+002
	6	2031-	2054	2043.00	510.71	1.52	2.32E+002	51.85	1.17E+002
	7	2323-	2343	2332.98	583.23	0.77	2.00E+002	49.45	1.20E+002
	8	2429-	2445	2437.23	609.30	1.05	1.53E+002	40.14	8.48E+001
	9	2641-	2653	2646.72	661.69	0.62	2.81E+001	28.73	6.69E+001
	10	3637-	3657	3645.82	911.54	1.04	1.32E+002	44.56	1.04E+002
	11	3870-	3886	3877.56	969.49	0.93	6.82E+001	34.25	7.58E+001
	12	4477-	4491	4483.95	1121.13	1.35	5.85E+001	28.42	5.25E+001
	13	5833-	5861	5847.12	1462.03	2.12	1.19E+003	69.53	1.42E+001
	14	7057-	7071	7063.92	1766.32	0.35	5.82E+001	17.72	7.84E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.997	511.00*	100.00	3.16630E-001	8.27166E-002
K-40	0.950	1460.81*	10.67	2.00260E+001	1.99733E+000
Cs-137	1.000	661.65*	85.12	4.90557E-002	5.04784E-002
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.46588E+000	4.01223E-001
		583.14*	84.20	3.37731E-001	9.45378E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.20577E+001	2.66944E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.78092E-001	2.29306E-001
Bi-214	0.972	609.31*	46.30	4.78284E-001	1.38487E-001
		1120.29*	15.10	6.52287E-001	3.24316E-001
		1764.49*	15.80	6.83423E-001	2.19155E-001
Ac-228	0.628	338.32	11.40		
		911.07*	27.70	7.56481E-001	2.69462E-001
		969.11*	16.60	6.62984E-001	3.40204E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.997	2.436798E-001	8.516671E-002
K-40		0.950	2.002599E+001	1.997329E+000
Cs-137		1.000	4.905567E-002	5.047843E-002
TL-208		0.751	3.377306E-001	9.389495E-002
Pb-212	@	0.520	7.780924E-001	2.293059E-001
Bi-214		0.972	5.501349E-001	1.101167E-001
Ac-228		0.628	7.204370E-001	2.112304E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.75	6.4679E-001	18.84
3	84.76	3.9464E-001	58.55
5	352.08	3.1712E-001	27.23

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0872E-001	8.06E-002	6.1359E-002
		1332.49	100.00	8.0613E-002		-7.8708E-002
	Nb-94	702.63	100.00	1.0202E-001	9.22E-002	1.5284E-002
		871.10	100.00	9.2163E-002		-1.4031E-002
	Ag-108m	79.20	7.10	5.3164E+000	1.19E-001	-1.7101E+000
		433.93	89.90	1.2088E-001		-1.6453E-002
		614.37	90.40	1.3294E-001		-1.2444E-001
		722.95	90.50	1.1905E-001		1.5763E-001
	Sb-125	176.33	6.89	2.3578E+000	3.68E-001	1.0223E+000
		427.89	29.33	3.6763E-001		7.6313E-003
		463.38	10.35	1.0244E+000		-1.8814E-001
		600.56	17.80	5.6564E-001		-1.1913E-002
		606.64	5.02	2.5991E+000		4.3140E+000
		635.90	11.32	9.3311E-001		-2.7222E-002
	Cs-134	563.23	8.38	1.2291E+000	1.20E-001	9.2641E-001
		569.32	15.43	6.5132E-001		-5.1633E-002
		604.70	97.60	1.2348E-001		-2.4464E-004
		795.84	85.40	1.2002E-001		9.5468E-002
		801.93	8.73	1.1485E+000		1.4817E-002
+	Cs-137	661.65*	85.12	8.3200E-002	8.32E-002	4.9056E-002
	Eu-152	121.78	28.40	7.8394E-001	3.33E-001	-1.4879E-001
		244.69	7.49	1.8874E+000		8.6061E-002
		344.27	26.50	4.4499E-001		-9.8846E-002
		778.89	12.74	7.3266E-001		2.1211E-001
		867.32	4.16	2.2922E+000		-5.6950E-001
		964.01	14.40	8.6014E-001		1.3700E-001
		1085.78	10.00	9.4357E-001		-1.4893E+000
		1112.02	13.30	7.9807E-001		4.3979E-002
		1407.95	20.70	3.3260E-001		-1.6846E-002
	Eu-154	123.07	40.50	5.4290E-001	2.55E-001	-1.0322E-001
		247.94	6.60	2.0167E+000		-9.2319E-001
		591.81	4.83	2.1309E+000		5.6961E-001
		723.30	19.70	5.3343E-001		-1.2186E-002
		756.87	4.33	2.2646E+000		7.8041E-003
		873.19	11.50	7.6394E-001		-5.7296E-001
		996.32	10.30	8.7100E-001		3.8974E-001
		1004.76	17.90	4.7332E-001		-2.5950E-001
		1274.45	35.50	2.5456E-001		5.9538E-002
	Eu-155	86.54	30.90	1.1051E+000	1.11E+000	7.2265E-002
		105.31	20.70	1.2939E+000		2.7733E-001
	Am-241	59.54	35.90	1.4159E+000	1.42E+000	-1.5985E+000
	Cm-243	228.19	10.56	1.3354E+000	9.48E-001	-1.2239E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.4814E-001	9.48E-001	-1.3591E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 5:32:56 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-136-F-
Sample Title: OOL-09-05-136-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 5:22:49 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-136-F-
Title: OOL-09-05-136-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	308	291.61	72.73	1.14	5.04E+002	77.00	1.69E+003
m	2	287-	308	300.35	74.92	1.14	9.69E+002	90.20	2.52E+003
	3	333-	346	339.79	84.78	0.88	2.08E+002	145.63	1.92E+003
	4	949-	961	954.57	238.52	1.38	2.19E+002	69.08	3.88E+002
	5	1173-	1187	1181.14	295.18	0.39	9.10E+001	59.16	2.85E+002
	6	1349-	1359	1353.30	338.23	0.80	5.24E+001	40.47	1.56E+002
	7	1402-	1414	1408.00	351.91	1.06	1.16E+002	45.86	1.63E+002
	8	1846-	1855	1850.23	462.50	0.30	2.73E+001	28.27	7.97E+001
	9	2037-	2056	2045.12	511.24	1.44	1.39E+002	52.78	1.65E+002
	10	2323-	2341	2332.68	583.15	1.35	1.58E+002	44.99	1.09E+002
	11	2425-	2445	2437.10	609.27	1.55	1.67E+002	48.76	1.25E+002
	12	2637-	2650	2644.06	661.02	1.24	3.11E+001	32.30	8.49E+001
	13	3635-	3655	3644.99	911.33	1.52	1.54E+002	36.32	5.24E+001
	14	3868-	3884	3876.04	969.11	1.81	7.92E+001	32.07	5.98E+001
	15	5831-	5859	5845.75	1461.69	1.88	1.16E+003	67.82	7.25E+000
	16	7053-	7068	7061.19	1765.64	0.86	4.71E+001	14.21	1.86E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.998	511.00*		100.00	1.89045E-001	7.64307E-002
K-40	0.974	1460.81*		10.67	1.95211E+001	1.94733E+000
Cs-137	0.986	661.65*		85.12	5.41935E-002	5.67304E-002
TL-208	0.751	277.35		6.80		
		510.84*		21.60	8.75210E-001	3.60993E-001
		583.14*		84.20	2.66872E-001	8.36947E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	1.38640E+001	3.00821E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.31330E-001	1.87453E-001
Bi-214	0.689	609.31*		46.30	5.22137E-001	1.65295E-001
		1120.29		15.10		
		1764.49*		15.80	5.53931E-001	1.75861E-001
PB-214	0.582	74.82*	@	6.21	2.38881E+001	5.46562E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.46097E-001	3.66721E-001
		351.92*		37.20	3.77500E-001	1.62129E-001
Ac-228	0.999	338.32*		11.40	5.50955E-001	4.33951E-001
		911.07*		27.70	8.79351E-001	2.31170E-001
		969.11*		16.60	7.69870E-001	3.22042E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.998	1.314009E-001	7.851714E-002
K-40		0.974	1.952112E+001	1.947325E+000
Cs-137		0.986	5.419345E-002	5.673041E-002
TL-208		0.751	2.668723E-001	8.324157E-002
Pb-212	@	0.520	5.313302E-001	1.874532E-001
Bi-214		0.689	5.370501E-001	1.204435E-001
PB-214	@	0.582	4.050655E-001	1.482838E-001
Ac-228		0.999	7.961935E-001	1.723493E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.73	8.4063E-001	15.27
3	84.78	3.4681E-001	69.99
8	462.50	4.5569E-002	103.41

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	9.9537E-002	8.61E-002	2.7138E-002
		1332.49	100.00	8.6144E-002		-6.3795E-003
	Nb-94	702.63	100.00	1.0473E-001	9.72E-002	6.1009E-002
		871.10	100.00	9.7174E-002		-4.2252E-002
	Ag-108m	79.20	7.10	5.5422E+000	1.20E-001	-9.2535E-001
		433.93	89.90	1.2685E-001		-9.0367E-002
		614.37	90.40	1.3593E-001		1.7690E-002
		722.95	90.50	1.2036E-001		-2.3811E-002
	Sb-125	176.33	6.89	2.4577E+000	3.74E-001	1.6348E+000
		427.89	29.33	3.7401E-001		-9.6859E-002
		463.38	10.35	1.1562E+000		2.3166E-001
		600.56	17.80	5.7722E-001		-2.3084E-002
		606.64	5.02	2.7069E+000		3.5470E+000
		635.90	11.32	8.4595E-001		-1.5776E-001
	Cs-134	563.23	8.38	1.3283E+000	1.24E-001	2.3144E-001
		569.32	15.43	6.7690E-001		-2.1104E-002
		604.70	97.60	1.2984E-001		-5.1692E-003
		795.84	85.40	1.2394E-001		7.8141E-002
		801.93	8.73	1.1668E+000		-1.3521E+000
+	Cs-137	661.65*	85.12	9.3770E-002	9.38E-002	5.4193E-002
	Eu-152	121.78	28.40	8.2427E-001	3.43E-001	7.4386E-002
		244.69	7.49	1.9341E+000		1.7433E-001
		344.27	26.50	4.5520E-001		-1.8937E-001
		778.89	12.74	7.2816E-001		-2.1490E-001
		867.32	4.16	2.2922E+000		-4.8171E+000
		964.01	14.40	8.6665E-001		-1.5511E-001
		1085.78	10.00	9.8294E-001		8.3174E-001
		1112.02	13.30	6.5882E-001		5.2753E-002
		1407.95	20.70	3.4274E-001		1.3449E-001
	Eu-154	123.07	40.50	5.7271E-001	2.74E-001	-2.2191E-002
		247.94	6.60	2.0793E+000		3.0592E-001
		591.81	4.83	2.1448E+000		-9.6593E-001
		723.30	19.70	5.5655E-001		-9.8008E-002
		756.87	4.33	2.4144E+000		3.5084E-001
		873.19	11.50	8.4039E-001		-3.9761E-001
		996.32	10.30	8.8715E-001		-4.3978E-001
		1004.76	17.90	5.3691E-001		3.6353E-001
		1274.45	35.50	2.7423E-001		1.2251E-001
	Eu-155	86.54	30.90	1.1513E+000	1.15E+000	3.0937E-001
		105.31	20.70	1.3568E+000		-3.4807E-001
	Am-241	59.54	35.90	1.4509E+000	1.45E+000	-7.5812E-001
	Cm-243	228.19	10.56	1.3839E+000	9.40E-001	3.9079E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.3970E-001	9.40E-001	1.7984E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 6:33:52 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-137-F-
Sample Title: OOL-09-05-137-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 6:23:48 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-137-F-
Title: OOL-09-05-137-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	291.68	72.75	1.22	4.96E+002	80.74	2.41E+003
m	2	284-	308	300.59	74.98	1.22	1.10E+003	95.49	2.92E+003
	3	332-	344	340.25	84.89	1.49	4.24E+002	145.76	1.94E+003
	4	947-	961	954.13	238.41	1.51	2.79E+002	81.72	5.06E+002
	5	1175-	1187	1181.58	295.29	1.27	7.12E+001	50.64	2.27E+002
	6	1343-	1359	1352.97	338.15	0.59	8.38E+001	56.83	2.42E+002
	7	1402-	1417	1407.42	351.77	0.84	1.64E+002	53.94	1.96E+002
	8	2326-	2341	2332.16	583.02	1.88	1.64E+002	44.27	1.13E+002
	9	2428-	2444	2437.15	609.28	1.64	1.42E+002	42.36	1.04E+002
	10	3635-	3658	3645.63	911.49	1.68	1.89E+002	43.44	7.58E+001
	11	4687-	4705	4695.28	1173.98	0.72	7.86E+001	35.86	7.54E+001
	12	5322-	5341	5332.55	1333.35	1.32	1.20E+002	28.23	2.50E+001
	13	5831-	5859	5846.02	1461.75	2.03	1.23E+003	71.96	2.49E+001
	14	7053-	7069	7062.04	1765.85	0.88	6.48E+001	17.32	4.25E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.969	1460.81*		10.67	2.07006E+001	2.06545E+000
Co-60	0.977	1173.22*		100.00	1.34114E-001	6.20833E-002
		1332.49*		100.00	2.11057E-001	5.23276E-002
TL-208	0.471	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.78079E-001	8.32136E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	1.56735E+001	3.36149E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.79110E-001	2.25374E-001
Bi-214	0.685	609.31*		46.30	4.43179E-001	1.43110E-001
		1120.29		15.10		
		1764.49*		15.80	7.60833E-001	2.17312E-001
PB-214	0.582	74.82*	@	6.21	2.70058E+001	6.11472E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	4.27108E-001	3.12342E-001
		351.92*		37.20	5.33920E-001	1.97036E-001
Ac-228	0.537	338.32*		11.40	8.80488E-001	6.12872E-001
		911.07*		27.70	1.08318E+000	2.78072E-001
		969.11		16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.969	2.070063E+001	2.065455E+000
Co-60		0.977	1.790991E-001	4.001105E-002
TL-208		0.471	2.780794E-001	8.321357E-002
Pb-212	@	0.520	6.791103E-001	2.253740E-001
Bi-214		0.685	5.392678E-001	1.195206E-001
PB-214	@	0.582	5.035141E-001	1.666480E-001
Ac-228		0.537	1.048580E+000	2.532260E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.75	8.2686E-001	16.28
3	84.89	7.0648E-001	34.39

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
+	Co-60	1173.22*	100.00	9.4459E-002	5.89E-002	1.3411E-001
		1332.49*	100.00	5.8859E-002		2.1106E-001
	Nb-94	702.63	100.00	1.0831E-001	9.69E-002	1.4854E-001
		871.10	100.00	9.6887E-002		-2.2943E-002
	Ag-108m	79.20	7.10	5.9905E+000	1.25E-001	-3.2897E+000
		433.93	89.90	1.2901E-001		-5.1172E-002
		614.37	90.40	1.3207E-001		-1.0338E-001
		722.95	90.50	1.2546E-001		-1.0318E-001
	Sb-125	176.33	6.89	2.7137E+000	3.91E-001	-1.4426E-001
		427.89	29.33	3.9141E-001		7.2563E-003
		463.38	10.35	1.1308E+000		-6.5266E-001
		600.56	17.80	6.1420E-001		-5.9913E-002
		606.64	5.02	2.6829E+000		4.9455E+000
		635.90	11.32	8.5708E-001		9.0890E-003
	Cs-134	563.23	8.38	1.3425E+000	1.29E-001	1.0089E+000
		569.32	15.43	7.4447E-001		3.1209E-001
		604.70	97.60	1.2946E-001		-2.4656E-002
		795.84	85.40	1.3196E-001		1.7134E-001
		801.93	8.73	1.2084E+000		-1.2564E+000
	Cs-137	661.65	85.12	1.4375E-001	1.44E-001	1.3913E-001
	Eu-152	121.78	28.40	9.0805E-001	3.40E-001	-5.1540E-001
		244.69	7.49	2.1469E+000		-1.2513E-001
		344.27	26.50	4.6320E-001		-6.2751E-001
		778.89	12.74	7.9083E-001		-7.9590E-001
		867.32	4.16	2.3270E+000		-4.5891E+000
		964.01	14.40	8.9376E-001		2.2810E-002
		1085.78	10.00	9.7972E-001		-5.8427E-001
		1112.02	13.30	7.4904E-001		7.9637E-002
		1407.95	20.70	3.4024E-001		-2.2751E-001
	Eu-154	123.07	40.50	6.3502E-001	2.57E-001	1.1944E-001
		247.94	6.60	2.3607E+000		3.2382E-001
		591.81	4.83	2.2916E+000		3.2341E-001
		723.30	19.70	5.7412E-001		-3.7736E-001
		756.87	4.33	2.4603E+000		3.8140E-001
		873.19	11.50	8.6268E-001		3.0106E-001
		996.32	10.30	9.4588E-001		-1.3032E-001
		1004.76	17.90	5.2628E-001		-1.7156E-001
		1274.45	35.50	2.5670E-001		-2.0430E-001
	Eu-155	86.54	30.90	1.2398E+000	1.24E+000	-3.8128E-001
		105.31	20.70	1.4634E+000		3.7298E-001
	Am-241	59.54	35.90	1.5514E+000	1.55E+000	-1.6459E-002
	Cm-243	228.19	10.56	1.5434E+000	1.04E+000	1.1783E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0420E+000	1.04E+000	5.2118E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 9:18:47 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-138-F-
Sample Title: OOL-09-05-138-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 9:08:43 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-138-F-
Title: OOL-09-05-138-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	307	291.68	72.75	1.14	5.38E+002	82.74	2.76E+003
m	2	283-	307	300.13	74.86	1.15	9.92E+002	95.73	2.85E+003
	3	332-	345	340.16	84.87	1.48	3.98E+002	157.95	2.21E+003
	4	945-	960	954.60	238.53	1.35	2.48E+002	85.04	5.41E+002
	5	1400-	1416	1406.35	351.50	1.46	2.02E+002	53.14	1.70E+002
	6	2030-	2053	2042.20	510.51	1.64	2.26E+002	56.96	1.54E+002
	7	2320-	2338	2332.22	583.04	1.43	1.88E+002	49.75	1.35E+002
	8	2429-	2448	2436.70	609.17	1.61	1.83E+002	49.96	1.33E+002
	9	2902-	2915	2907.64	726.94	1.10	3.67E+001	27.94	6.03E+001
	10	3634-	3653	3643.58	910.98	1.21	1.54E+002	41.21	8.23E+001
	11	3864-	3883	3875.50	968.97	0.58	6.79E+001	41.53	1.08E+002
	12	4474-	4489	4480.96	1120.38	0.91	5.57E+001	28.69	5.23E+001
	13	5830-	5857	5844.13	1461.28	2.12	1.30E+003	74.79	3.49E+001
	14	7051-	7066	7058.60	1764.99	1.27	5.01E+001	18.16	1.19E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.992	511.00*	100.00	3.08827E-001	8.82376E-002
K-40	0.992	1460.81*	10.67	2.17900E+001	2.16471E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.42975E+000	4.24867E-001
		583.14*	84.20	3.18656E-001	9.38622E-002
		860.37	12.46		
Bi-212	0.998	727.17*	11.80	4.71209E-001	3.62702E-001
Pb-212	0.520	74.81* @	10.70	1.42135E+001	3.10499E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.01907E-001	2.27252E-001
Bi-214	0.998	609.31*	46.30	5.72186E-001	1.71193E-001
		1120.29*	15.10	6.20807E-001	3.26515E-001
		1764.49*	15.80	5.88787E-001	2.21369E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	8.79641E-001	2.56645E-001
		969.11*	16.60	6.60601E-001	4.09655E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.992	2.399973E-001	9.050910E-002
K-40		0.992	2.179000E+001	2.164707E+000
TL-208		0.751	3.186562E-001	9.328598E-002
Bi-212		0.998	4.712087E-001	3.627024E-001
Pb-212	@	0.520	6.019073E-001	2.272519E-001
Bi-214		0.998	5.846233E-001	1.250900E-001
Ac-228		0.633	8.179016E-001	2.174887E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.75	8.9732E-001	15.37
3	84.87	6.6333E-001	39.69
5	351.50	3.3738E-001	26.25

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0689E-001	8.86E-002	4.3930E-002
	1332.49	100.00	8.8574E-002		7.5449E-002
Nb-94	702.63	100.00	1.0521E-001	9.34E-002	6.2945E-002
	871.10	100.00	9.3368E-002		1.4547E-002
Ag-108m	79.20	7.10	5.9460E+000	1.24E-001	-2.0881E+000
	433.93	89.90	1.2883E-001		-1.6701E-003
	614.37	90.40	1.4314E-001		5.9263E-002
	722.95	90.50	1.2370E-001		5.4426E-002
Sb-125	176.33	6.89	2.7212E+000	4.02E-001	-6.0699E-002
	427.89	29.33	4.0169E-001		2.6942E-001
	463.38	10.35	1.1372E+000		4.1452E-001
	600.56	17.80	5.9601E-001		-5.5607E-001
	606.64	5.02	2.8911E+000		-2.2862E-001
	635.90	11.32	9.3311E-001		-3.4895E-001
Cs-134	563.23	8.38	1.3067E+000	1.26E-001	-2.6392E-001
	569.32	15.43	7.1875E-001		6.0531E-001
	604.70	97.60	1.3696E-001		-6.1771E-002
	795.84	85.40	1.2628E-001		9.2948E-002
	801.93	8.73	1.1455E+000		-2.3146E-001
Cs-137	661.65	85.12	1.3694E-001	1.37E-001	4.1844E-002
Eu-152	121.78	28.40	9.1262E-001	3.38E-001	3.4349E-001
	244.69	7.49	2.1944E+000		-4.8601E-001
	344.27	26.50	4.4292E-001		-3.6493E-001
	778.89	12.74	8.0519E-001		-6.7467E-001
	867.32	4.16	2.2852E+000		-3.4856E+000
	964.01	14.40	9.2461E-001		2.1642E-001
	1085.78	10.00	1.0114E+000		3.4993E-001
	1112.02	13.30	7.4904E-001		-4.6850E-001
	1407.95	20.70	3.3771E-001		-9.2382E-002
Eu-154	123.07	40.50	6.2977E-001	2.80E-001	-2.6102E-001
	247.94	6.60	2.3452E+000		1.6832E-001
	591.81	4.83	2.3469E+000		5.5993E-001
	723.30	19.70	5.6949E-001		1.6377E-001
	756.87	4.33	2.2892E+000		-1.7261E+000
	873.19	11.50	8.0967E-001		2.8530E-001
	996.32	10.30	9.6071E-001		3.2261E-001
	1004.76	17.90	5.5076E-001		3.0140E-001
	1274.45	35.50	2.8013E-001		-7.2299E-002
Eu-155	86.54	30.90	1.2718E+000	1.27E+000	8.9046E-002
	105.31	20.70	1.4919E+000		7.4264E-001
Am-241	59.54	35.90	1.5684E+000	1.57E+000	-1.0878E+000
Cm-243	228.19	10.56	1.5145E+000	1.03E+000	-1.8770E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0315E+000	1.03E+000	-7.5183E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 10:16:50 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-139-F-
Sample Title: OOL-09-05-139-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 10:06:45 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-139-F-
Title: OOL-09-05-139-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	307	291.75	72.77	1.13	4.52E+002	77.85	2.19E+003
m	2	285-	307	300.09	74.85	1.13	7.96E+002	89.24	2.61E+003
	3	331-	345	339.45	84.69	1.31	3.22E+002	157.79	2.14E+003
	4	944-	976	954.30	238.45	1.16	5.09E+002	131.08	7.68E+002
	5	1345-	1359	1353.14	338.19	0.90	9.84E+001	48.62	1.80E+002
	6	1402-	1415	1407.19	351.71	1.61	1.41E+002	48.94	1.73E+002
	7	2323-	2337	2331.24	582.79	1.41	1.68E+002	40.35	8.90E+001
	8	2428-	2444	2435.42	608.85	0.85	1.66E+002	42.04	9.41E+001
	9	2901-	2915	2907.47	726.89	1.11	4.40E+001	28.96	5.80E+001
	10	3632-	3652	3643.39	910.93	1.93	1.98E+002	39.98	6.02E+001
	11	3864-	3882	3874.24	968.66	0.92	8.05E+001	35.53	7.35E+001
	12	4474-	4487	4479.91	1120.12	1.29	5.81E+001	26.72	4.59E+001
	13	5826-	5855	5841.97	1460.74	1.84	1.30E+003	73.76	2.56E+001
	14	6028-	6041	6034.87	1508.98	0.63	1.41E+001	12.26	8.90E+000
	15	7049-	7065	7057.02	1764.59	0.65	6.05E+001	18.29	8.50E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	2.17427E+001	2.15159E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.84189E-001	7.76545E-002
		860.37	12.46		
Bi-212	0.997	727.17*	11.80	5.64164E-001	3.77417E-001
Pb-212	0.520	74.81* @	10.70	1.14080E+001	2.57561E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.23719E+000	3.73022E-001
Bi-214	0.995	609.31*	46.30	5.18062E-001	1.45935E-001
		1120.29*	15.10	6.48097E-001	3.05745E-001
		1764.49*	15.80	7.10797E-001	2.26308E-001
Ac-228	0.997	338.32*	11.40	1.03412E+000	5.35946E-001
		911.07*	27.70	1.13188E+000	2.63268E-001
		969.11*	16.60	7.83025E-001	3.54988E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		1.000	2.174272E+001	2.151586E+000
TL-208		0.468	2.841889E-001	7.765455E-002
Bi-212		0.997	5.641639E-001	3.774173E-001
Pb-212	@	0.520	1.237186E+000	3.730220E-001
Bi-214		0.995	5.848464E-001	1.138294E-001
Ac-228		0.997	1.011599E+000	1.967041E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.77	7.5330E-001	17.22
3	84.69	5.3696E-001	48.98
6	351.71	2.3464E-001	34.76
14	1508.98	2.3496E-002	86.98

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0658E-001	8.19E-002	2.4026E-002
	1332.49	100.00	8.1925E-002		4.8104E-002
Nb-94	702.63	100.00	1.1177E-001	9.12E-002	9.3979E-003
	871.10	100.00	9.1249E-002		-2.1273E-002
Ag-108m	79.20	7.10	5.7150E+000	1.25E-001	-1.9753E+000
	433.93	89.90	1.2901E-001		-2.4026E-002
	614.37	90.40	1.2763E-001		9.7481E-003
	722.95	90.50	1.2521E-001		-1.2516E-001
Sb-125	176.33	6.89	2.4689E+000	4.09E-001	2.6299E-001
	427.89	29.33	4.0910E-001		-1.1371E-001
	463.38	10.35	1.1420E+000		1.3969E-002
	600.56	17.80	6.0699E-001		-1.9270E-001
	606.64	5.02	2.8071E+000		6.4153E+000
	635.90	11.32	9.2702E-001		5.7160E-001
Cs-134	563.23	8.38	1.3163E+000	1.22E-001	-2.1433E-001
	569.32	15.43	7.1085E-001		-2.9510E-001
	604.70	97.60	1.4253E-001		5.3973E-003
	795.84	85.40	1.2215E-001		7.9460E-002
	801.93	8.73	1.1516E+000		9.6121E-002
Cs-137	661.65	85.12	1.3002E-001	1.30E-001	1.3648E-001
Eu-152	121.78	28.40	8.6511E-001	3.38E-001	2.2579E-002
	244.69	7.49	1.9390E+000		1.0344E-002
	344.27	26.50	4.4344E-001		-3.9103E-001
	778.89	12.74	8.1328E-001		-1.7626E-001
	867.32	4.16	2.3270E+000		-3.3423E+000
	964.01	14.40	9.0623E-001		9.4164E-002
	1085.78	10.00	9.5688E-001		-2.5022E-001
	1112.02	13.30	8.0929E-001		2.6870E-001
	1407.95	20.70	3.3771E-001		-3.7448E-001
Eu-154	123.07	40.50	5.9387E-001	2.55E-001	-3.1099E-001
	247.94	6.60	2.1041E+000		-1.0577E+000
	591.81	4.83	2.1768E+000		-7.5342E-001
	723.30	19.70	5.7412E-001		-2.9677E-001
	756.87	4.33	2.4374E+000		-5.8548E-001
	873.19	11.50	7.8850E-001		-6.7284E-001
	996.32	10.30	9.8108E-001		1.5268E-001
	1004.76	17.90	5.7252E-001		2.6499E-001
	1274.45	35.50	2.5456E-001		-6.7501E-002
Eu-155	86.54	30.90	1.1904E+000	1.19E+000	-1.3476E-001
	105.31	20.70	1.4033E+000		-9.2416E-002
Am-241	59.54	35.90	1.5111E+000	1.51E+000	-6.6754E-002
Cm-243	228.19	10.56	1.4290E+000	9.89E-001	3.9865E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.8926E-001	9.89E-001	1.8109E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 6:24:01 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-140-F-
Sample Title: OOL-09-05-140-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 6:13:59 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-140-F-
Title: OOL-09-05-140-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	290-	305	296.77	74.15	1.29	4.20E+002	143.26	1.64E+003
2	2319-	2339	2327.04	581.72	1.03	1.69E+002	46.32	1.07E+002
3	5821-	5850	5835.64	1458.88	2.91	9.33E+002	62.11	1.50E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.885	1460.81*	10.67	2.04684E+001	2.14546E+000
TL-208	0.428	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.67113E-001	1.11689E-001
		860.37	12.46		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.885	2.046836E+001	2.145465E+000
TL-208	0.428	3.671128E-001	1.116894E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	74.15	6.9968E-001	34.13

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.3692E-001	9.93E-002	1.9456E-001
	1332.49	100.00	9.9317E-002		1.7682E-002
Nb-94	702.63	100.00	1.3222E-001	1.21E-001	-7.2070E-002
	871.10	100.00	1.2099E-001		-2.6089E-002
Ag-108m	79.20	7.10	1.2132E+001	1.54E-001	-1.7291E+001
	433.93	89.90	1.6078E-001		-1.7386E-001
	614.37	90.40	1.6670E-001		-2.7024E-001
	722.95	90.50	1.5414E-001		-1.0219E-001
Sb-125	176.33	6.89	3.3590E+000	4.82E-001	-1.0188E+000
	427.89	29.33	4.8247E-001		3.3816E-001
	463.38	10.35	1.3815E+000		5.6281E-001
	600.56	17.80	7.8031E-001		-9.3541E-001
	606.64	5.02	3.4291E+000		5.5784E+000
	635.90	11.32	1.1401E+000		-3.4065E-001
Cs-134	563.23	8.38	1.6456E+000	1.55E-001	5.1153E-001
	569.32	15.43	9.2266E-001		-1.4071E-002
	604.70	97.60	1.7778E-001		3.0318E-001
	795.84	85.40	1.5500E-001		4.8724E-002
	801.93	8.73	1.4151E+000		-8.0164E-001
Cs-137	661.65	85.12	1.6571E-001	1.66E-001	8.1281E-002
Eu-152	121.78	28.40	1.1693E+000	3.96E-001	-6.8586E-001
	244.69	7.49	2.6035E+000		-4.2530E+000
	344.27	26.50	6.1023E-001		-1.0530E+000
	778.89	12.74	9.8665E-001		-9.7540E-001
	867.32	4.16	2.9604E+000		-6.4149E-002
	964.01	14.40	1.0957E+000		6.0603E-001
	1085.78	10.00	1.1867E+000		-6.2632E-001
	1112.02	13.30	9.3877E-001		-1.0243E+000
	1407.95	20.70	3.9581E-001		7.3924E-003
Eu-154	123.07	40.50	8.1881E-001	3.28E-001	3.7045E-001
	247.94	6.60	2.8581E+000		6.1292E-001
	591.81	4.83	2.8332E+000		6.4586E-001
	723.30	19.70	7.1894E-001		2.5502E-001
	756.87	4.33	3.0055E+000		1.7954E-001
	873.19	11.50	1.0559E+000		-5.8720E-001
	996.32	10.30	1.0910E+000		-6.4037E-001
	1004.76	17.90	6.3391E-001		-2.6329E-001
	1274.45	35.50	3.2782E-001		-1.8296E-001
Eu-155	86.54	30.90	2.1474E+000	2.15E+000	4.0192E+000
	105.31	20.70	2.1733E+000		1.9590E+000
Am-241	59.54	35.90	5.5820E+000	5.58E+000	-3.3469E+000
Cm-243	228.19	10.56	1.9006E+000	1.31E+000	-1.8059E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3147E+000	1.31E+000	1.1785E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 6:09:52 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-141-F-
Sample Title: OOL-09-05-141-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 5:59:51 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-141-F-
Title: OOL-09-05-141-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	946-	956	950.50	237.58	0.70	5.90E+001	58.73	3.38E+002
2	2320-	2339	2327.74	581.89	0.65	1.57E+002	43.22	9.28E+001
3	2423-	2443	2433.67	608.38	1.47	1.52E+002	41.98	8.43E+001
4	5538-	5551	5544.35	1386.05	0.43	8.29E+000	11.15	8.71E+000
5	5820-	5850	5835.31	1458.80	2.54	8.53E+002	59.75	1.55E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.876	1460.81*		10.67	1.87232E+001	2.00400E+000
TL-208	0.438	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	3.42491E-001	1.04207E-001
		860.37		12.46		
Pb-212	0.434	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.90667E-001	1.92146E-001
Bi-214	0.386	609.31*		46.30	6.09952E-001	1.84753E-001
		1120.29		15.10		
		1764.49		15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.876	1.872322E+001	2.004000E+000
TL-208		0.438	3.424906E-001	1.042070E-001
Pb-212	@	0.434	1.906674E-001	1.921461E-001
Bi-214		0.386	6.099516E-001	1.847534E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
4	1386.05	1.3824E-002	134.44

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2856E-001	1.02E-001	1.0557E-001
	1332.49	100.00	1.0219E-001		-2.5209E-002
Nb-94	702.63	100.00	1.2734E-001	1.21E-001	4.4069E-002
	871.10	100.00	1.2061E-001		4.5774E-002
Ag-108m	79.20	7.10	1.1725E+001	1.54E-001	-1.9619E+001
	433.93	89.90	1.5419E-001		-1.5680E-001
	614.37	90.40	1.6175E-001		7.1860E-002
	722.95	90.50	1.6106E-001		1.7139E-001
Sb-125	176.33	6.89	3.3313E+000	4.66E-001	8.7586E-001
	427.89	29.33	4.6586E-001		1.7897E-001
	463.38	10.35	1.4395E+000		1.6393E+000
	600.56	17.80	7.0820E-001		-1.2131E+000
	606.64	5.02	3.2690E+000		5.3461E+000
	635.90	11.32	1.0690E+000		1.5920E-001
Cs-134	563.23	8.38	1.6552E+000	1.46E-001	1.5281E+000
	569.32	15.43	9.1416E-001		-5.1426E-001
	604.70	97.60	1.6748E-001		-1.5941E-002
	795.84	85.40	1.4571E-001		9.2775E-002
	801.93	8.73	1.2987E+000		-7.5624E-001
Cs-137	661.65	85.12	1.5248E-001	1.52E-001	-7.8062E-002
Eu-152	121.78	28.40	1.1188E+000	4.14E-001	-1.3024E-001
	244.69	7.49	2.4912E+000		-4.3763E+000
	344.27	26.50	5.6527E-001		-8.7184E-001
	778.89	12.74	9.7002E-001		1.1442E-001
	867.32	4.16	2.8694E+000		3.6547E-001
	964.01	14.40	9.8739E-001		8.6377E-001
	1085.78	10.00	1.1605E+000		2.2436E-001
	1112.02	13.30	9.7534E-001		1.8666E-001
	1407.95	20.70	4.1366E-001		2.9767E-001
Eu-154	123.07	40.50	7.8059E-001	3.22E-001	7.3445E-001
	247.94	6.60	2.7992E+000		3.0078E+000
	591.81	4.83	3.0394E+000		2.6765E+000
	723.30	19.70	7.3253E-001		5.1442E-001
	756.87	4.33	2.9273E+000		-3.9934E-002
	873.19	11.50	1.0493E+000		-1.2725E-001
	996.32	10.30	1.0114E+000		-4.1952E-001
	1004.76	17.90	5.9888E-001		-2.2759E-001
	1274.45	35.50	3.2237E-001		1.9737E-001
Eu-155	86.54	30.90	2.0453E+000	2.05E+000	2.2787E+000
	105.31	20.70	2.0874E+000		-1.5380E+000
Am-241	59.54	35.90	5.4414E+000	5.44E+000	2.0898E+000
Cm-243	228.19	10.56	1.8576E+000	1.19E+000	-2.8589E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1869E+000	1.19E+000	-4.5129E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 2:06:17 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-142-F-
Sample Title: OOL-09-05-142-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 1:56:14 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-142-F-
Title: OOL-09-05-142-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	292.24	72.89	1.15	4.90E+002	78.32	2.42E+003
m	2	284-	306	300.53	74.96	1.16	9.76E+002	92.63	2.54E+003
	3	332-	345	340.17	84.88	1.33	2.80E+002	149.08	1.99E+003
	4	949-	961	955.57	238.77	0.45	2.61E+002	72.31	4.18E+002
	5	1401-	1416	1407.48	351.78	1.09	1.28E+002	56.61	2.34E+002
	6	2035-	2054	2044.29	511.03	0.65	1.57E+002	51.88	1.55E+002
	7	2328-	2344	2333.79	583.43	1.60	1.47E+002	42.28	1.01E+002
	8	2426-	2450	2438.66	609.66	1.22	2.54E+002	46.90	7.59E+001
	9	2774-	2785	2779.95	695.01	0.74	1.92E+001	21.19	3.88E+001
	10	3636-	3658	3647.77	912.02	1.87	1.68E+002	41.96	7.48E+001
	11	3872-	3888	3879.83	970.06	1.41	6.79E+001	32.68	6.71E+001
	12	4480-	4493	4486.18	1121.69	0.88	4.51E+001	26.28	4.69E+001
	13	5837-	5864	5850.08	1462.77	1.96	1.14E+003	68.83	2.04E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	1.000	511.00*		100.00	2.13960E-001	7.64808E-002
K-40	0.875	1460.81*		10.67	1.91684E+001	1.93436E+000
TL-208	0.750	277.35		6.80		
		510.84*		21.60	9.90557E-001	3.63201E-001
		583.14*		84.20	2.48579E-001	7.85366E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	1.39517E+001	3.03829E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.34478E-001	2.02027E-001
Bi-214	0.684	609.31*		46.30	7.93587E-001	1.76083E-001
		1120.29*		15.10	5.02741E-001	2.97886E-001
		1764.49		15.80		
Ac-228	0.609	338.32		11.40		
		911.07*		27.70	9.63224E-001	2.64488E-001
		969.11*		16.60	6.60440E-001	3.25261E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	1.000	1.602673E-001	7.832003E-002
K-40	0.875	1.916840E+001	1.934356E+000
TL-208	0.750	2.485787E-001	7.811768E-002
Pb-212 @	0.520	6.344777E-001	2.020271E-001
Bi-214	0.684	7.182759E-001	1.515816E-001
Ac-228	0.609	8.427061E-001	2.052068E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.89	8.1670E-001	15.98
3	84.88	4.6599E-001	53.32
5	351.78	2.1304E-001	44.29
9	695.01	3.1925E-002	110.60

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0280E-001	8.57E-002	1.0604E-002
	1332.49	100.00	8.5732E-002		6.2845E-002
Nb-94	702.63	100.00	1.0665E-001	9.34E-002	1.3793E-001
	871.10	100.00	9.3368E-002		-2.3243E-002
Ag-108m	79.20	7.10	5.7211E+000	1.20E-001	-7.6467E+000
	433.93	89.90	1.2937E-001		2.9210E-002
	614.37	90.40	1.5018E-001		4.2385E-002
	722.95	90.50	1.1957E-001		2.1555E-004
Sb-125	176.33	6.89	2.6720E+000	3.98E-001	-5.0513E-001
	427.89	29.33	3.9794E-001		-7.2936E-002
	463.38	10.35	1.1179E+000		-4.3337E-002
	600.56	17.80	5.6303E-001		2.9000E-001
	606.64	5.02	2.7574E+000		-6.6616E-001
	635.90	11.32	8.8532E-001		-1.0835E-001
Cs-134	563.23	8.38	1.2945E+000	1.18E-001	-9.7731E-002
	569.32	15.43	7.1350E-001		-2.6123E-001
	604.70	97.60	1.2387E-001		-2.0682E-002
	795.84	85.40	1.1817E-001		3.2839E-002
	801.93	8.73	1.1046E+000		-1.5154E+000
Cs-137	661.65	85.12	1.2353E-001	1.24E-001	4.9918E-002
Eu-152	121.78	28.40	8.6990E-001	3.19E-001	-3.7321E-001
	244.69	7.49	2.0826E+000		5.3446E-001
	344.27	26.50	4.7106E-001		-6.5928E-001
	778.89	12.74	7.4158E-001		-1.0145E-001
	867.32	4.16	2.1989E+000		-2.1255E+000
	964.01	14.40	7.9022E-001		-1.4144E-001
	1085.78	10.00	1.0145E+000		-4.4135E-002
	1112.02	13.30	7.1944E-001		-3.8835E-001
	1407.95	20.70	3.1943E-001		1.7827E-001
Eu-154	123.07	40.50	6.0451E-001	2.34E-001	-3.5349E-001
	247.94	6.60	2.2101E+000		-7.0719E-001
	591.81	4.83	2.1540E+000		7.6854E-001
	723.30	19.70	5.5536E-001		3.6999E-001
	756.87	4.33	2.3675E+000		-6.9688E-001
	873.19	11.50	8.4540E-001		7.7777E-001
	996.32	10.30	9.1236E-001		-6.8697E-001
	1004.76	17.90	5.2268E-001		3.1396E-001
	1274.45	35.50	2.3432E-001		-3.2244E-002
Eu-155	86.54	30.90	1.1845E+000	1.18E+000	-2.9261E-001
	105.31	20.70	1.4180E+000		-6.7443E-002
Am-241	59.54	35.90	1.5388E+000	1.54E+000	7.5040E-001
Cm-243	228.19	10.56	1.4866E+000	1.01E+000	1.0138E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0088E+000	1.01E+000	2.0590E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 3:02:31 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-143-F-
Sample Title: OOL-09-05-143-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 2:52:26 PM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-143-F-
Title: OOL-09-05-143-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	292.31	72.91	1.16	4.86E+002	75.57	2.22E+003
m	2	284-	308	300.78	75.02	1.16	8.99E+002	86.76	2.34E+003
	3	332-	345	340.03	84.84	0.61	2.95E+002	142.01	1.80E+003
	4	945-	962	955.12	238.66	1.26	2.52E+002	86.86	5.24E+002
	5	1349-	1358	1353.47	338.28	0.90	3.95E+001	36.41	1.35E+002
	6	1398-	1418	1408.24	351.97	1.06	2.05E+002	59.86	2.01E+002
	7	2035-	2052	2043.43	510.82	0.96	1.26E+002	49.04	1.53E+002
	8	2323-	2341	2334.00	583.48	1.56	1.61E+002	47.59	1.26E+002
	9	2430-	2445	2438.16	609.53	1.36	1.48E+002	40.89	9.56E+001
	10	3636-	3656	3647.19	911.88	1.28	1.58E+002	36.55	5.25E+001
	11	3869-	3888	3877.68	969.52	0.86	9.03E+001	33.73	5.77E+001
	12	5834-	5863	5848.49	1462.37	2.26	1.06E+003	67.93	2.92E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*	100.00	1.71354E-001	7.07981E-002
K-40	0.918	1460.81*	10.67	1.78626E+001	1.84123E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	7.93306E-001	3.34111E-001
		583.14*	84.20	2.72371E-001	8.80119E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.28425E+001	2.80548E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.13346E-001	2.32054E-001
Bi-214	0.397	609.31*	46.30	4.63472E-001	1.39872E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.987	338.32*	11.40	4.14713E-001	3.88104E-001
		911.07*	27.70	9.01640E-001	2.33498E-001
		969.11*	16.60	8.77725E-001	3.40589E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.999	1.125219E-001	7.328099E-002
K-40	0.918	1.786264E+001	1.841227E+000
TL-208	0.749	2.723708E-001	8.756312E-002
Pb-212 @	0.520	6.133458E-001	2.320544E-001
Bi-214	0.397	4.634715E-001	1.398720E-001
Ac-228	0.987	7.992953E-001	1.725137E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.91	8.1048E-001	15.54
3	84.84	4.9237E-001	48.07
6	351.97	3.4228E-001	29.15

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.4421E-002	7.70E-002	-1.0878E-001
	1332.49	100.00	7.6999E-002		-7.9111E-003
Nb-94	702.63	100.00	1.0448E-001	8.88E-002	2.1726E-002
	871.10	100.00	8.8763E-002		-1.4466E-001
Ag-108m	79.20	7.10	5.3172E+000	1.15E-001	-2.8020E+000
	433.93	89.90	1.1817E-001		8.2040E-002
	614.37	90.40	1.3907E-001		-5.7736E-002
	722.95	90.50	1.1529E-001		3.9440E-002
Sb-125	176.33	6.89	2.4661E+000	3.69E-001	9.9590E-001
	427.89	29.33	3.6938E-001		-8.6259E-002
	463.38	10.35	1.0832E+000		-1.1529E-001
	600.56	17.80	5.9847E-001		3.9299E-001
	606.64	5.02	2.6863E+000		4.3182E+000
	635.90	11.32	8.2324E-001		-4.3195E-001
Cs-134	563.23	8.38	1.2871E+000	1.18E-001	6.0801E-001
	569.32	15.43	6.8521E-001		1.3377E-001
	604.70	97.60	1.2660E-001		-4.9279E-002
	795.84	85.40	1.1848E-001		6.2313E-002
	801.93	8.73	1.1078E+000		-1.5288E-001
Cs-137	661.65	85.12	1.3081E-001	1.31E-001	1.8692E-001
Eu-152	121.78	28.40	8.0934E-001	3.62E-001	2.5406E-002
	244.69	7.49	1.9845E+000		5.9384E-001
	344.27	26.50	4.4859E-001		8.8775E-002
	778.89	12.74	7.5257E-001		-1.1021E-001
	867.32	4.16	2.3131E+000		-6.0788E-001
	964.01	14.40	8.6340E-001		1.3850E-001
	1085.78	10.00	9.7972E-001		-3.5611E-001
	1112.02	13.30	7.2696E-001		2.4861E-001
	1407.95	20.70	3.6212E-001		3.2873E-001
Eu-154	123.07	40.50	5.6652E-001	2.55E-001	1.0285E-001
	247.94	6.60	2.1012E+000		-1.1043E+000
	591.81	4.83	2.1029E+000		-6.1939E-001
	723.30	19.70	5.2969E-001		5.6621E-002
	756.87	4.33	2.4829E+000		7.0486E-002
	873.19	11.50	8.0180E-001		4.6745E-002
	996.32	10.30	9.0299E-001		3.1737E-001
	1004.76	17.90	4.9674E-001		2.6527E-002
	1274.45	35.50	2.5456E-001		9.4333E-002
Eu-155	86.54	30.90	1.1293E+000	1.13E+000	-2.4082E-001
	105.31	20.70	1.3261E+000		-1.5481E-002
Am-241	59.54	35.90	1.4702E+000	1.47E+000	-3.2669E-001
Cm-243	228.19	10.56	1.4066E+000	9.70E-001	9.4105E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.7004E-001	9.70E-001	-4.1922E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 4:08:21 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-144-F-
Sample Title: OOL-09-05-144-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 3:58:18 PM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-144-F-
Title: OOL-09-05-144-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	308	291.67	72.75	1.16	4.45E+002	76.66	1.90E+003
m	2	286-	308	300.60	74.98	1.16	9.61E+002	88.74	2.42E+003
	3	331-	346	339.42	84.69	1.14	1.57E+002	163.80	2.27E+003
	4	948-	960	954.81	238.58	1.04	2.49E+002	67.69	3.59E+002
	5	1175-	1185	1180.80	295.10	0.96	7.93E+001	42.44	1.64E+002
	6	1397-	1417	1407.65	351.83	0.95	1.83E+002	57.12	1.84E+002
	7	2034-	2053	2042.01	510.46	1.98	1.50E+002	48.26	1.30E+002
	8	2324-	2342	2333.15	583.27	1.52	1.79E+002	41.26	7.82E+001
	9	2425-	2447	2437.66	609.40	1.52	1.62E+002	45.18	9.49E+001
	10	2904-	2916	2908.52	727.16	0.92	4.36E+001	25.97	4.94E+001
	11	3638-	3654	3645.65	911.49	1.07	1.21E+002	34.71	6.14E+001
	12	3868-	3885	3876.52	969.23	1.29	9.15E+001	31.53	5.15E+001
	13	5831-	5859	5846.05	1461.76	2.24	1.17E+003	68.90	1.43E+001
	14	7056-	7069	7062.16	1765.88	0.49	4.02E+001	16.09	9.78E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.990	511.00*		100.00	2.03862E-001	7.13830E-002
K-40	0.969	1460.81*		10.67	1.96386E+001	1.96571E+000
TL-208	0.750	277.35		6.80		
		510.84*		21.60	9.43807E-001	3.39346E-001
		583.14*		84.20	3.02579E-001	8.01782E-002
		860.37		12.46		
Bi-212	1.000	727.17*		11.80	5.59932E-001	3.39585E-001
Pb-212	0.520	74.81*	@	10.70	1.37326E+001	2.97540E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.04732E-001	1.89927E-001
Bi-214	0.685	609.31*		46.30	5.06385E-001	1.54258E-001
		1120.29		15.10		
		1764.49*		15.80	4.72600E-001	1.94884E-001
PB-214	0.582	74.82*	@	6.21	2.36617E+001	5.40680E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	4.75860E-001	2.66957E-001
		351.92*		37.20	5.96917E-001	2.11105E-001
Ac-228	0.630	338.32		11.40		
		911.07*		27.70	6.90386E-001	2.13949E-001
		969.11*		16.60	8.89994E-001	3.20414E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.990	1.385053E-001	7.342290E-002
K-40		0.969	1.963865E+001	1.965707E+000
TL-208		0.750	3.025788E-001	7.956950E-002
Bi-212		1.000	5.599319E-001	3.395852E-001
Pb-212	@	0.520	6.047321E-001	1.899271E-001
Bi-214		0.685	4.933707E-001	1.209527E-001
PB-214	@	0.582	5.503413E-001	1.655869E-001
Ac-228		0.630	7.519388E-001	1.779293E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.75	7.4160E-001	17.23
3	84.69	2.6155E-001	104.38

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.9868E-002	7.32E-002	-6.1381E-002
	1332.49	100.00	7.3194E-002		-4.7756E-002
Nb-94	702.63	100.00	9.7932E-002	9.49E-002	-6.4657E-003
	871.10	100.00	9.4851E-002		1.9615E-003
Ag-108m	79.20	7.10	5.4629E+000	1.20E-001	-2.1627E+000
	433.93	89.90	1.2315E-001		-1.9403E-002
	614.37	90.40	1.2512E-001		-2.7871E-003
	722.95	90.50	1.2036E-001		-3.6328E-002
Sb-125	176.33	6.89	2.4670E+000	3.69E-001	-5.6021E-001
	427.89	29.33	3.6880E-001		5.9203E-002
	463.38	10.35	1.0965E+000		2.4921E-001
	600.56	17.80	5.4846E-001		-9.4554E-002
	606.64	5.02	2.5416E+000		2.2087E-001
	635.90	11.32	8.3694E-001		-9.6303E-001
Cs-134	563.23	8.38	1.2135E+000	1.19E-001	3.0453E-001
	569.32	15.43	6.4108E-001		-1.6373E-001
	604.70	97.60	1.2047E-001		-4.3842E-003
	795.84	85.40	1.1910E-001		1.0040E-001
	801.93	8.73	1.1174E+000		-5.3737E-001
Cs-137	661.65	85.12	1.2736E-001	1.27E-001	6.2190E-002
Eu-152	121.78	28.40	8.2964E-001	3.40E-001	6.0372E-001
	244.69	7.49	1.9072E+000		6.4775E-001
	344.27	26.50	4.3295E-001		-1.5887E-002
	778.89	12.74	7.4819E-001		-6.1186E-001
	867.32	4.16	2.3131E+000		-1.2870E+000
	964.01	14.40	8.2850E-001		4.6863E-001
	1085.78	10.00	8.8465E-001		-3.8074E-001
	1112.02	13.30	6.9377E-001		-2.8767E-001
	1407.95	20.70	3.4024E-001		1.3312E-001
Eu-154	123.07	40.50	5.7283E-001	2.55E-001	-1.6172E-001
	247.94	6.60	2.0030E+000		-6.7292E-001
	591.81	4.83	2.0164E+000		-2.1145E-001
	723.30	19.70	5.5774E-001		-1.2461E-001
	756.87	4.33	2.0217E+000		2.8884E-001
	873.19	11.50	8.3788E-001		4.0401E-001
	996.32	10.30	8.5120E-001		-3.9771E-001
	1004.76	17.90	5.1357E-001		3.1273E-001
	1274.45	35.50	2.5456E-001		-3.1678E-002
Eu-155	86.54	30.90	1.1514E+000	1.15E+000	5.5776E-001
	105.31	20.70	1.3835E+000		-1.0662E-001
Am-241	59.54	35.90	1.4486E+000	1.45E+000	-2.8645E-002
Cm-243	228.19	10.56	1.3337E+000	9.55E-001	-7.4934E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.5499E-001	9.55E-001	3.0196E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 4:26:05 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-145-F-
Sample Title: OOL-09-05-145-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 4:16:03 PM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-145-F-
Title: OOL-09-05-145-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	314	291.88	72.80	1.23	4.34E+002	73.59	1.61E+003
m	2	287-	314	300.36	74.92	1.23	9.30E+002	84.38	2.19E+003
m	3	287-	314	309.45	77.19	1.24	1.82E+002	65.14	1.90E+003
M	4	333-	357	339.66	84.75	1.06	3.47E+002	69.65	1.62E+003
m	5	333-	357	351.15	87.62	1.07	1.46E+002	60.65	1.67E+003
	6	947-	963	954.98	238.62	1.25	2.68E+002	79.66	4.40E+002
	7	1178-	1185	1181.15	295.18	0.93	5.31E+001	35.42	1.35E+002
	8	1399-	1414	1408.22	351.97	0.50	1.22E+002	50.44	1.80E+002
	9	2036-	2052	2041.78	510.41	0.67	1.27E+002	46.91	1.42E+002
	10	2323-	2343	2332.87	583.20	1.28	1.91E+002	46.66	1.03E+002
	11	2428-	2447	2436.72	609.17	0.92	1.98E+002	43.16	8.19E+001
	12	2637-	2651	2645.61	661.41	0.70	5.76E+001	31.42	6.94E+001
	13	3636-	3656	3645.08	911.35	1.27	1.15E+002	39.66	8.13E+001
	14	3867-	3886	3876.64	969.26	1.04	9.83E+001	32.36	4.97E+001
	15	5832-	5860	5846.04	1461.76	2.13	1.10E+003	67.29	1.80E+001
	16	7054-	7072	7062.69	1766.01	0.34	6.03E+001	17.13	4.75E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.988	511.00*	100.00	1.72900E-001	6.81303E-002
K-40	0.969	1460.81*	10.67	1.83854E+001	1.86810E+000
Cs-137	0.998	661.65*	85.12	1.00612E-001	5.61113E-002
Eu-155	0.309	86.54*	30.90	5.81746E-001	2.67761E-001
		105.31	20.70		
TL-208	0.751	277.35	6.80		
		510.84*	21.60	8.00464E-001	3.22121E-001
		583.14*	84.20	3.23397E-001	8.94919E-002
		860.37	12.46		
Pb-212	1.000	74.81* @	10.70	1.33020E+001	2.87316E+000
		77.11* @	18.00	1.48256E+000	6.05921E-001
		87.30* @	8.00	2.24700E+000	1.03422E+000
		238.63*	44.60	6.52614E-001	2.19033E-001
Bi-214	0.682	609.31*	46.30	6.18638E-001	1.54806E-001
		1120.29	15.10		
		1764.49*	15.80	7.07970E-001	2.13392E-001
PB-214	0.850	74.82* @	6.21	2.29197E+001	5.22265E+000
		77.11* @	10.50	2.54153E+000	1.05591E+000
		87.30* @	4.67	3.84924E+000	1.79540E+000
		241.98	7.49		
		295.21*	19.20	3.18472E-001	2.19191E-001
		351.92*	37.20	3.97145E-001	1.77203E-001
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	6.56536E-001	2.39226E-001
		969.11*	16.60	9.55377E-001	3.30170E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.988	1.030465E-001	7.078283E-002
K-40		0.969	1.838539E+001	1.868105E+000
Cs-137		0.998	1.006124E-001	5.611133E-002
Eu-155		0.309	3.574370E-001	2.744802E-001
TL-208		0.751	3.233967E-001	8.886920E-002
Pb-212	@	1.000	6.526143E-001	2.190326E-001
Bi-214		0.682	6.494409E-001	1.253058E-001
PB-214	@	0.850	3.662198E-001	1.368802E-001
Ac-228		0.632	7.594132E-001	1.937211E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.80	7.2348E-001	16.95
M 4	84.75	5.7806E-001	20.08

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0533E-001	7.97E-002	5.7286E-002
		1332.49	100.00	7.9726E-002		2.4665E-002
	Nb-94	702.63	100.00	9.6884E-002	9.03E-002	-2.9460E-002
		871.10	100.00	9.0325E-002		-2.1577E-002
	Ag-108m	79.20	7.10	5.2320E+000	1.11E-001	-1.6804E+000
		433.93	89.90	1.2296E-001		-4.2635E-003
		614.37	90.40	1.3119E-001		-2.7302E-002
		722.95	90.50	1.1084E-001		-1.3329E-001
	Sb-125	176.33	6.89	2.3007E+000	3.65E-001	-5.7446E-001
		427.89	29.33	3.6528E-001		-2.2665E-001
		463.38	10.35	1.0798E+000		7.2092E-001
		600.56	17.80	5.4980E-001		6.7278E-002
		606.64	5.02	2.6378E+000		-7.9559E-001
		635.90	11.32	8.0693E-001		-5.9539E-001
	Cs-134	563.23	8.38	1.1544E+000	1.20E-001	-1.1769E+000
		569.32	15.43	6.3961E-001		-1.5699E-001
		604.70	97.60	1.2583E-001		-3.0760E-002
		795.84	85.40	1.2033E-001		1.0701E-001
		801.93	8.73	1.0950E+000		-1.0352E+000
+	Cs-137	661.65*	85.12	8.5809E-002	8.58E-002	1.0061E-001
	Eu-152	121.78	28.40	7.6713E-001	3.50E-001	-1.5868E-001
		244.69	7.49	1.8189E+000		3.2926E-001
		344.27	26.50	4.3454E-001		-7.4281E-002
		778.89	12.74	7.1907E-001		-1.0649E+000
		867.32	4.16	2.2922E+000		-1.5523E+000
		964.01	14.40	7.9908E-001		-1.5705E-002
		1085.78	10.00	9.1979E-001		-6.1047E-001
		1112.02	13.30	7.2446E-001		6.1303E-001
		1407.95	20.70	3.5015E-001		-1.2745E-001
	Eu-154	123.07	40.50	5.3471E-001	2.52E-001	-4.1170E-002
		247.94	6.60	1.9661E+000		-6.9232E-001
		591.81	4.83	2.1355E+000		6.5145E-001
		723.30	19.70	5.1312E-001		-6.0344E-001
		756.87	4.33	2.3197E+000		2.1222E+000
		873.19	11.50	8.0706E-001		-7.8497E-002
		996.32	10.30	8.4785E-001		2.3763E-001
		1004.76	17.90	4.8713E-001		7.8158E-002
		1274.45	35.50	2.5240E-001		-3.6865E-001
+	Eu-155	86.54*	30.90	7.6977E-001	7.70E-001	5.8175E-001
		105.31	20.70	1.3183E+000		2.2854E-001
	Am-241	59.54	35.90	1.4026E+000	1.40E+000	2.8234E-001
	Cm-243	228.19	10.56	1.2992E+000	9.14E-001	1.2852E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.1388E-001	9.14E-001	8.6471E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 6:18:54 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-146-F-
Sample Title: OOL-09-05-146-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 6:08:49 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-146-F-
Title: OOL-09-05-146-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	307	292.20	72.88	1.13	4.56E+002	74.83	2.09E+003
m	2	284-	307	300.25	74.89	1.13	9.11E+002	88.87	2.49E+003
M	3	331-	357	339.45	84.69	1.29	4.93E+002	75.43	2.09E+003
m	4	331-	357	350.52	87.46	1.29	2.12E+002	66.96	2.29E+003
	5	948-	961	954.67	238.55	0.68	2.69E+002	73.82	4.17E+002
	6	1174-	1188	1179.99	294.89	0.52	5.96E+001	54.82	2.50E+002
	7	1348-	1362	1353.44	338.27	0.57	6.35E+001	51.90	2.18E+002
	8	1401-	1417	1407.56	351.80	0.89	1.79E+002	54.68	1.91E+002
	9	2033-	2049	2044.12	510.99	0.57	1.23E+002	46.64	1.41E+002
	10	2324-	2342	2332.91	583.21	1.44	2.24E+002	48.22	1.13E+002
	11	2429-	2449	2437.43	609.35	1.79	1.55E+002	47.63	1.20E+002
	12	3637-	3655	3645.53	911.47	1.13	1.36E+002	39.91	8.22E+001
	13	3866-	3886	3877.06	969.37	1.45	9.08E+001	36.66	7.12E+001
	14	4686-	4701	4694.65	1173.82	0.92	4.42E+001	25.54	4.18E+001
	15	5831-	5860	5846.26	1461.81	1.96	1.23E+003	73.51	3.75E+001
	16	7055-	7071	7063.46	1766.20	0.47	4.88E+001	16.23	6.18E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	1.000	511.00*	100.00	1.67745E-001	6.75579E-002
K-40	0.966	1460.81*	10.67	2.06076E+001	2.07466E+000
Eu-155	0.315	86.54*	30.90	8.48032E-001	3.15453E-001
		105.31	20.70		
TL-208	0.751	277.35	6.80		
		510.84*	21.60	7.76596E-001	3.19134E-001
		583.14*	84.20	3.79014E-001	9.53632E-002
		860.37	12.46		
Pb-212	0.677	74.81* @	10.70	1.30334E+001	2.85380E+000
		77.11 @	18.00		
		87.30* @	8.00	3.27552E+000	1.21844E+000
		238.63*	44.60	6.54198E-001	2.06698E-001
Bi-214	0.678	609.31*	46.30	4.83968E-001	1.60250E-001
		1120.29	15.10		
		1764.49*	15.80	5.73705E-001	1.99187E-001
PB-214	0.669	74.82* @	6.21	2.24570E+001	5.18037E+000
		77.11 @	10.50		
		87.30* @	4.67	5.61118E+000	2.12987E+000
		241.98	7.49		
		295.21*	19.20	3.57665E-001	3.34330E-001
		351.92*	37.20	5.81608E-001	2.02891E-001
Ac-228	0.997	338.32*	11.40	6.67306E-001	5.55269E-001
		911.07*	27.70	7.77196E-001	2.45301E-001
		969.11*	16.60	8.82595E-001	3.68297E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		1.000	8.587767E-002	7.057801E-002
K-40		0.966	2.060760E+001	2.074657E+000
Eu-155		0.315	5.997132E-001	3.210090E-001
TL-208		0.751	3.790142E-001	9.455992E-002
Pb-212	@	0.677	6.541984E-001	2.066976E-001
Bi-214		0.678	5.192282E-001	1.248584E-001
PB-214	@	0.669	5.223711E-001	1.715816E-001
Ac-228		0.997	7.926402E-001	1.916198E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.88	7.6028E-001	16.40
M 3	84.69	8.2118E-001	15.31
14	1173.82	7.3697E-002	57.75

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.1659E-001	9.13E-002	1.6587E-001
		1332.49	100.00	9.1323E-002		3.2987E-002
	Nb-94	702.63	100.00	1.1017E-001	9.22E-002	4.3116E-002
		871.10	100.00	9.2163E-002		-4.2991E-002
	Ag-108m	79.20	7.10	5.5177E+000	1.26E-001	-2.5601E+000
		433.93	89.90	1.2575E-001		-6.5455E-002
		614.37	90.40	1.3657E-001		2.2013E-002
		722.95	90.50	1.2769E-001		6.5924E-002
	Sb-125	176.33	6.89	2.4819E+000	3.96E-001	1.2552E+000
		427.89	29.33	3.9632E-001		2.5381E-001
		463.38	10.35	1.1244E+000		4.1217E-001
		600.56	17.80	5.9970E-001		-2.9403E-001
		606.64	5.02	2.7171E+000		-5.5504E-001
		635.90	11.32	8.9593E-001		5.5898E-002
	Cs-134	563.23	8.38	1.3235E+000	1.16E-001	5.5981E-001
		569.32	15.43	6.8107E-001		-1.7321E-001
		604.70	97.60	1.2890E-001		-5.2270E-002
		795.84	85.40	1.1629E-001		-9.6380E-002
		801.93	8.73	1.0721E+000		-1.7466E+000
	Cs-137	661.65	85.12	1.3237E-001	1.32E-001	-4.0053E-002
	Eu-152	121.78	28.40	8.2796E-001	2.94E-001	-9.4081E-002
		244.69	7.49	2.0150E+000		5.3622E-001
		344.27	26.50	4.5470E-001		-2.4221E-001
		778.89	12.74	7.8249E-001		-3.7925E-001
		867.32	4.16	2.3062E+000		-2.9862E+000
		964.01	14.40	8.9533E-001		3.0209E-001
		1085.78	10.00	9.7649E-001		4.8896E-001
		1112.02	13.30	7.4662E-001		-7.5776E-002
		1407.95	20.70	2.9411E-001		9.2138E-002
	Eu-154	123.07	40.50	5.6998E-001	2.57E-001	-3.0267E-001
		247.94	6.60	2.1257E+000		-1.0679E+000
		591.81	4.83	2.2700E+000		3.0615E-001
		723.30	19.70	5.9227E-001		4.3374E-001
		756.87	4.33	2.4432E+000		1.0521E+000
		873.19	11.50	8.2262E-001		1.7707E-001
		996.32	10.30	9.1855E-001		-1.8716E-001
		1004.76	17.90	5.2806E-001		-7.3183E-001
		1274.45	35.50	2.5670E-001		2.2961E-001
+	Eu-155	86.54*	30.90	9.0155E-001	9.02E-001	8.4803E-001
		105.31	20.70	1.3788E+000		5.4182E-002
	Am-241	59.54	35.90	1.4712E+000	1.47E+000	-4.9200E-001
	Cm-243	228.19	10.56	1.4179E+000	9.60E-001	7.6489E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.6029E-001	9.60E-001	3.5768E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 9:32:42 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-147-F-
Sample Title: OOL-09-05-147-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 9:22:39 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-147-F-
Title: OOL-09-05-147-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	291.51	72.71	1.11	4.50E+002	77.19	2.17E+003
m	2	285-	306	300.18	74.87	1.11	8.38E+002	90.58	2.64E+003
	3	740-	753	744.90	186.09	0.48	1.40E+002	77.84	5.20E+002
	4	946-	963	954.25	238.44	1.33	3.45E+002	89.20	5.29E+002
	5	1173-	1187	1180.18	294.94	0.41	6.80E+001	58.05	2.81E+002
	6	1346-	1358	1353.88	338.38	0.99	6.28E+001	45.94	1.85E+002
	7	1401-	1415	1407.35	351.75	1.13	1.32E+002	52.96	2.07E+002
	8	2321-	2338	2331.59	582.88	1.71	2.36E+002	44.87	8.82E+001
	9	2424-	2443	2435.97	608.98	0.94	1.87E+002	43.82	8.99E+001
	10	3631-	3655	3643.57	910.97	1.15	1.88E+002	41.50	6.26E+001
M	11	3852-	3883	3858.66	964.76	1.44	3.13E+001	16.15	5.20E+001
m	12	3852-	3883	3875.67	969.02	1.44	8.29E+001	21.91	6.18E+001
	13	4199-	4210	4204.30	1051.20	0.40	1.80E+001	15.58	1.80E+001
	14	4687-	4699	4692.11	1173.19	0.63	4.27E+001	22.71	3.43E+001
	15	5828-	5857	5843.51	1461.13	2.11	1.26E+003	72.90	2.63E+001
	16	7051-	7068	7059.10	1765.12	0.98	6.10E+001	17.51	5.97E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.997	1460.81*	10.67	2.10947E+001	2.10043E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.99094E-001	9.20079E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.19954E+001	2.68514E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.38063E-001	2.53523E-001
Bi-214	0.693	609.31*	46.30	5.84195E-001	1.54596E-001
		1120.29	15.10		
		1764.49*	15.80	7.17107E-001	2.17848E-001
PB-214	0.581	74.82* @	6.21	2.06684E+001	4.86378E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.07719E-001	3.54986E-001
		351.92*	37.20	4.29248E-001	1.86779E-001
Ac-228	1.000	338.32*	11.40	6.59449E-001	4.93731E-001
		911.07*	27.70	1.07837E+000	2.67968E-001
		969.11*	16.60	8.05947E-001	2.29140E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.997	2.109469E+001	2.100432E+000
TL-208		0.469	3.990935E-001	9.200793E-002
Pb-212	@	0.520	8.380633E-001	2.535230E-001
Bi-214		0.693	6.287113E-001	1.260756E-001
PB-214	@	0.581	4.245804E-001	1.652952E-001
Ac-228		1.000	8.920665E-001	1.642342E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.71	7.5019E-001	17.15
3	186.09	2.3303E-001	55.67
M 11	964.76	5.2144E-002	51.61
13	1051.20	3.0000E-002	86.57
14	1173.19	7.1088E-002	53.25

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1460E-001	9.40E-002	9.8524E-002
	1332.49	100.00	9.3987E-002		5.4769E-002
Nb-94	702.63	100.00	1.1109E-001	9.72E-002	-5.3618E-002
	871.10	100.00	9.7174E-002		-5.5891E-003
Ag-108m	79.20	7.10	5.6219E+000	1.31E-001	-6.5014E+000
	433.93	89.90	1.3201E-001		-6.3470E-002
	614.37	90.40	1.3572E-001		-7.9973E-002
	722.95	90.50	1.3108E-001		1.7426E-001
Sb-125	176.33	6.89	2.5394E+000	4.11E-001	-1.3913E-001
	427.89	29.33	4.1067E-001		1.2037E-002
	463.38	10.35	1.1749E+000		4.8832E-001
	600.56	17.80	5.6953E-001		-1.0025E-001
	606.64	5.02	2.6518E+000		2.9465E+000
	635.90	11.32	9.1884E-001		1.0127E-001
Cs-134	563.23	8.38	1.2920E+000	1.23E-001	2.3578E-002
	569.32	15.43	6.9883E-001		-1.5695E-002
	604.70	97.60	1.2984E-001		-2.7051E-003
	795.84	85.40	1.2334E-001		6.0085E-003
	801.93	8.73	1.1516E+000		-1.9470E-001
Cs-137	661.65	85.12	1.3518E-001	1.35E-001	8.5360E-002
Eu-152	121.78	28.40	8.5432E-001	3.40E-001	-3.1899E-001
	244.69	7.49	1.9998E+000		-6.2217E-002
	344.27	26.50	4.6270E-001		-3.8270E-001
	778.89	12.74	7.7195E-001		-2.0780E-001
	867.32	4.16	2.2568E+000		-4.4684E+000
	964.01	14.40	8.8111E-001		2.2174E-002
	1085.78	10.00	1.0660E+000		6.0264E-001
	1112.02	13.30	7.4175E-001		-6.6787E-001
	1407.95	20.70	3.4024E-001		6.3733E-002
Eu-154	123.07	40.50	5.9638E-001	2.63E-001	3.5119E-001
	247.94	6.60	2.1557E+000		-3.1320E-001
	591.81	4.83	2.2438E+000		-3.0389E-001
	723.30	19.70	6.0223E-001		4.8967E-001
	756.87	4.33	2.3675E+000		2.1999E-001
	873.19	11.50	8.5532E-001		-2.2388E-001
	996.32	10.30	1.0038E+000		4.6301E-001
	1004.76	17.90	5.5247E-001		-2.0948E-001
	1274.45	35.50	2.6303E-001		2.3032E-002
Eu-155	86.54	30.90	1.1989E+000	1.20E+000	1.7899E+000
	105.31	20.70	1.3944E+000		-5.2036E-001
Am-241	59.54	35.90	1.4658E+000	1.47E+000	-3.5386E-001
Cm-243	228.19	10.56	1.4689E+000	1.04E+000	6.8591E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0427E+000	1.04E+000	5.0571E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 10:01:53 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-148-F-
Sample Title: OOL-09-05-148-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 9:51:52 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-148-F-
Title: OOL-09-05-148-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	307	291.56	72.72	1.01	4.40E+002	74.12	2.02E+003
m	2	283-	307	300.21	74.88	1.02	8.39E+002	86.73	2.21E+003
	3	332-	344	340.05	84.84	0.82	2.82E+002	140.11	1.83E+003
	4	947-	961	954.17	238.42	1.07	1.92E+002	76.26	4.59E+002
	5	1346-	1362	1352.37	338.00	0.59	1.20E+002	52.39	1.90E+002
	6	1400-	1417	1407.05	351.68	0.97	1.71E+002	57.07	2.07E+002
	7	2325-	2338	2330.88	582.70	1.55	1.75E+002	37.99	7.28E+001
	8	2424-	2446	2435.17	608.78	1.89	2.02E+002	47.13	9.72E+001
	9	2902-	2916	2909.12	727.31	0.40	5.28E+001	28.32	5.42E+001
	10	3634-	3652	3642.75	910.77	1.49	1.49E+002	37.19	6.20E+001
	11	3866-	3883	3874.02	968.60	1.21	9.74E+001	31.51	4.96E+001
	12	4473-	4486	4479.69	1120.07	0.35	3.78E+001	24.97	4.52E+001
	13	5828-	5856	5842.14	1460.78	2.13	1.22E+003	70.71	1.82E+001
	14	6346-	6359	6353.00	1588.54	0.35	1.81E+001	14.73	1.39E+001
	15	7052-	7065	7058.40	1764.94	0.54	3.93E+001	18.11	1.67E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	2.04079E+001	2.03386E+000
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.96397E-001	7.49815E-002
		860.37	12.46		
Bi-212	0.999	727.17*	11.80	6.77049E-001	3.72031E-001
Pb-212	0.520	74.81* @	10.70	1.20055E+001	2.66061E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.65973E-001	1.99244E-001
Bi-214	0.992	609.31*	46.30	6.30014E-001	1.66363E-001
		1120.29*	15.10	4.21912E-001	2.81962E-001
		1764.49*	15.80	4.61993E-001	2.17768E-001
Ac-228	0.995	338.32*	11.40	1.25976E+000	5.84799E-001
		911.07*	27.70	8.52624E-001	2.34369E-001
		969.11*	16.60	9.46560E-001	3.21963E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		1.000	2.040794E+001	2.033862E+000
TL-208		0.466	2.963973E-001	7.498150E-002
Bi-212		0.999	6.770488E-001	3.720313E-001
Pb-212	@	0.520	4.659734E-001	1.992438E-001
Bi-214		0.992	5.417495E-001	1.196968E-001
Ac-228		0.995	9.207509E-001	1.802566E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.72	7.3321E-001	16.85
3	84.84	4.6937E-001	49.75
6	351.68	2.8491E-001	33.38
14	1588.54	3.0208E-002	81.29

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0750E-001	9.05E-002	2.6276E-002
	1332.49	100.00	9.0547E-002		3.8637E-002
Nb-94	702.63	100.00	1.0350E-001	9.60E-002	2.9329E-002
	871.10	100.00	9.6020E-002		-8.3952E-002
Ag-108m	79.20	7.10	5.5759E+000	1.19E-001	-5.5925E+000
	433.93	89.90	1.1856E-001		-1.2361E-001
	614.37	90.40	1.2831E-001		1.8844E-002
	722.95	90.50	1.2166E-001		-2.5184E-002
Sb-125	176.33	6.89	2.5185E+000	3.77E-001	-1.9886E-001
	427.89	29.33	3.7744E-001		1.2168E-001
	463.38	10.35	1.0815E+000		3.7003E-001
	600.56	17.80	5.8732E-001		1.6976E-001
	606.64	5.02	2.7034E+000		-1.1772E-001
	635.90	11.32	9.3311E-001		1.4582E-001
Cs-134	563.23	8.38	1.2772E+000	1.23E-001	-5.6251E-001
	569.32	15.43	6.7690E-001		-7.1661E-001
	604.70	97.60	1.3463E-001		6.7012E-003
	795.84	85.40	1.2275E-001		8.0898E-002
	801.93	8.73	1.1485E+000		-2.7259E-001
Cs-137	661.65	85.12	1.3365E-001	1.34E-001	8.6555E-002
Eu-152	121.78	28.40	8.5852E-001	3.74E-001	1.6355E-001
	244.69	7.49	2.0359E+000		6.1059E-001
	344.27	26.50	4.3401E-001		-4.8719E-001
	778.89	12.74	7.6340E-001		-6.6717E-001
	867.32	4.16	2.4481E+000		1.6846E+000
	964.01	14.40	8.7632E-001		9.8680E-002
	1085.78	10.00	9.3346E-001		-4.7216E-001
	1112.02	13.30	7.1184E-001		-2.6263E-001
	1407.95	20.70	3.7369E-001		2.5919E-001
Eu-154	123.07	40.50	5.9604E-001	2.63E-001	2.7038E-001
	247.94	6.60	2.1415E+000		-1.8211E+000
	591.81	4.83	2.1494E+000		-1.5634E-001
	723.30	19.70	5.5774E-001		-2.2560E-001
	756.87	4.33	2.3616E+000		-6.0088E-001
	873.19	11.50	8.2005E-001		7.1852E-003
	996.32	10.30	8.9352E-001		-1.5089E-002
	1004.76	17.90	4.9864E-001		-6.9522E-002
	1274.45	35.50	2.6303E-001		1.6486E-001
Eu-155	86.54	30.90	1.1843E+000	1.18E+000	-3.3546E-001
	105.31	20.70	1.3803E+000		-2.2298E-001
Am-241	59.54	35.90	1.4916E+000	1.49E+000	1.2010E-001
Cm-243	228.19	10.56	1.3624E+000	1.02E+000	-3.6197E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0153E+000	1.02E+000	7.1720E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 5:47:26 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-149-F-
Sample Title: OOL-09-05-149-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 5:37:23 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-149-F-
Title: OOL-09-05-149-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	242-	248	244.95	61.06	0.97	6.70E+001	79.20	8.26E+002
M	2	286-	307	291.92	72.81	1.09	4.38E+002	77.64	2.07E+003
m	3	286-	307	300.40	74.93	1.09	8.23E+002	90.13	2.49E+003
	4	332-	354	339.88	84.80	1.48	4.39E+002	222.66	3.21E+003
	5	947-	960	955.09	238.65	1.27	2.43E+002	74.94	4.43E+002
	6	1349-	1358	1353.36	338.25	0.75	3.75E+001	39.27	1.61E+002
	7	1403-	1414	1407.55	351.80	0.44	9.50E+001	47.20	1.92E+002
	8	2039-	2053	2043.51	510.84	0.96	7.49E+001	47.53	1.74E+002
	9	2324-	2341	2332.86	583.20	1.18	2.05E+002	45.81	1.05E+002
	10	2430-	2446	2437.47	609.36	1.03	1.92E+002	43.66	9.74E+001
	11	3635-	3653	3645.26	911.40	1.39	1.42E+002	41.79	9.25E+001
	12	3868-	3884	3877.45	969.46	0.97	1.08E+002	32.51	5.32E+001
	13	5833-	5859	5845.71	1461.68	2.25	1.18E+003	70.93	2.94E+001
	14	7053-	7071	7062.56	1765.98	0.40	5.73E+001	16.78	4.75E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.974	1460.81*	10.67	1.98539E+001	1.99985E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	4.72983E-001	3.09295E-001
		583.14*	84.20	3.46898E-001	8.97181E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.17719E+001	2.64305E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.90978E-001	2.04402E-001
Bi-214	0.683	609.31*	46.30	5.98213E-001	1.54961E-001
		1120.29	15.10		
		1764.49*	15.80	6.72716E-001	2.08355E-001
Ac-228	0.997	338.32*	11.40	3.94049E-001	4.17249E-001
		911.07*	27.70	8.09975E-001	2.56703E-001
		969.11*	16.60	1.04802E+000	3.34608E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
X	ANN		0.999		
	K-40		0.974	1.985387E+001	1.999849E+000
	TL-208		0.752	3.566837E-001	8.616624E-002
	Pb-212	@	0.520	5.909779E-001	2.044024E-001
	Bi-214		0.683	6.247465E-001	1.243414E-001
	Ac-228		0.997	8.011664E-001	1.830296E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
	1	61.06	1.1158E-001	118.30
M	2	72.81	7.3007E-001	17.72
	4	84.80	7.3110E-001	50.76
	7	351.80	1.5833E-001	49.68

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0118E-001	8.41E-002	-4.1374E-002
	1332.49	100.00	8.4063E-002		6.7039E-002
Nb-94	702.63	100.00	1.0251E-001	9.37E-002	-6.7665E-003
	871.10	100.00	9.3666E-002		6.0532E-002
Ag-108m	79.20	7.10	5.7264E+000	1.21E-001	-1.6836E+000
	433.93	89.90	1.3305E-001		8.1716E-002
	614.37	90.40	1.3969E-001		-3.4481E-002
	722.95	90.50	1.2062E-001		-1.6470E-002
Sb-125	176.33	6.89	2.6236E+000	4.03E-001	-2.8413E+000
	427.89	29.33	4.0329E-001		-3.7750E-002
	463.38	10.35	1.1324E+000		3.2395E-001
	600.56	17.80	6.0941E-001		2.7274E-001
	606.64	5.02	2.9070E+000		-2.2754E-003
	635.90	11.32	9.0014E-001		-2.7091E-001
Cs-134	563.23	8.38	1.3042E+000	1.20E-001	1.0867E+000
	569.32	15.43	6.3664E-001		-7.5702E-001
	604.70	97.60	1.3943E-001		-3.7427E-002
	795.84	85.40	1.1972E-001		4.6850E-002
	801.93	8.73	1.0655E+000		-8.0453E-001
Cs-137	661.65	85.12	1.3288E-001	1.33E-001	-2.8104E-002
Eu-152	121.78	28.40	8.7212E-001	3.30E-001	-2.2963E-001
	244.69	7.49	2.1589E+000		1.9888E+000
	344.27	26.50	4.7252E-001		-1.1392E-001
	778.89	12.74	7.8459E-001		-4.3610E-001
	867.32	4.16	2.2281E+000		-7.4027E+000
	964.01	14.40	9.0313E-001		-1.6507E-001
	1085.78	10.00	9.6347E-001		-3.4571E-001
	1112.02	13.30	7.2945E-001		5.7057E-001
	1407.95	20.70	3.3001E-001		1.0912E-001
Eu-154	123.07	40.50	6.0597E-001	2.59E-001	-5.7571E-002
	247.94	6.60	2.2700E+000		-9.9182E-001
	591.81	4.83	2.1722E+000		1.1772E+000
	723.30	19.70	5.6011E-001		1.6339E-001
	756.87	4.33	2.3075E+000		-1.6431E-001
	873.19	11.50	8.3282E-001		5.8020E-002
	996.32	10.30	8.8394E-001		-1.1184E+000
	1004.76	17.90	5.3162E-001		8.4761E-002
	1274.45	35.50	2.5883E-001		2.4177E-001
Eu-155	86.54	30.90	1.1957E+000	1.20E+000	6.9826E-002
	105.31	20.70	1.4193E+000		-9.2954E-001
Am-241	59.54	35.90	1.4946E+000	1.49E+000	-5.7574E-001
Cm-243	228.19	10.56	1.4526E+000	1.01E+000	-1.3858E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0131E+000	1.01E+000	-3.6198E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 6:04:01 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-150-F-
Sample Title: OOL-09-05-150-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 5:53:58 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-150-F-
Title: OOL-09-05-150-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	308	291.20	72.63	1.28	5.10E+002	76.47	1.81E+003
m	2	285-	308	300.58	74.97	1.29	1.08E+003	89.95	2.61E+003
	3	330-	344	338.75	84.52	0.73	3.14E+002	150.28	1.93E+003
	4	945-	962	954.69	238.55	1.49	3.94E+002	88.30	5.01E+002
	5	1174-	1190	1181.02	295.15	1.13	8.02E+001	59.61	2.70E+002
	6	1347-	1360	1352.38	338.00	1.50	9.42E+001	48.29	1.85E+002
	7	1398-	1415	1408.48	352.03	1.28	1.62E+002	58.37	2.23E+002
	8	2325-	2343	2332.65	583.14	0.80	2.07E+002	49.31	1.22E+002
	9	2427-	2446	2436.40	609.09	1.36	1.78E+002	47.78	1.18E+002
	10	3636-	3657	3644.90	911.31	1.78	2.05E+002	40.78	6.05E+001
	11	3869-	3886	3876.51	969.23	1.30	9.32E+001	35.95	7.48E+001
	12	4326-	4338	4331.60	1083.03	0.44	2.30E+001	18.74	2.60E+001
	13	4475-	4490	4482.03	1120.65	0.89	4.24E+001	30.05	6.16E+001
	14	5832-	5860	5845.88	1461.72	2.08	1.39E+003	76.90	3.20E+001
	15	6348-	6361	6354.49	1588.91	0.63	1.56E+001	11.16	5.43E+000
	16	7056-	7069	7062.42	1765.95	1.29	3.88E+001	16.02	1.02E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.972	1460.81*	10.67	2.33659E+001	2.28973E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.50588E-001	9.51178E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.54934E+001	3.29765E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.58041E-001	2.61999E-001
Bi-214	0.983	609.31*	46.30	5.55563E-001	1.64120E-001
		1120.29*	15.10	4.72324E-001	3.38799E-001
		1764.49*	15.80	4.55989E-001	1.93646E-001
PB-214	0.582	74.82* @	6.21	2.66956E+001	6.00333E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.81511E-001	3.66788E-001
		351.92*	37.20	5.28270E-001	2.09626E-001
Ac-228	0.998	338.32*	11.40	9.90003E-001	5.30554E-001
		911.07*	27.70	1.17049E+000	2.69426E-001
		969.11*	16.60	9.06571E-001	3.62237E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.972	2.336590E+001	2.289732E+000
TL-208		0.471	3.505881E-001	9.511782E-002
Pb-212	@	0.520	9.580408E-001	2.619991E-001
Bi-214		0.983	5.089380E-001	1.174397E-001
PB-214	@	0.582	5.167575E-001	1.819990E-001
Ac-228		0.998	1.064172E+000	2.002024E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.63	8.4943E-001	15.00
3	84.52	5.2256E-001	47.93
12	1083.03	3.8333E-002	81.49
15	1588.91	2.5952E-002	71.67

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0719E-001	8.02E-002	-1.9619E-002
	1332.49	100.00	8.0170E-002		3.2368E-002
Nb-94	702.63	100.00	1.0593E-001	9.09E-002	-5.4928E-002
	871.10	100.00	9.0942E-002		-2.1429E-002
Ag-108m	79.20	7.10	5.3508E+000	1.22E-001	-4.0291E+000
	433.93	89.90	1.2278E-001		-9.7002E-002
	614.37	90.40	1.4132E-001		1.9202E-002
	722.95	90.50	1.2191E-001		-5.4415E-003
Sb-125	176.33	6.89	2.4993E+000	3.90E-001	-8.3186E-001
	427.89	29.33	3.8976E-001		2.6422E-001
	463.38	10.35	1.1452E+000		6.0397E-001
	600.56	17.80	6.3069E-001		4.2099E-001
	606.64	5.02	2.8462E+000		1.0077E+000
	635.90	11.32	9.7075E-001		6.4100E-002
Cs-134	563.23	8.38	1.3402E+000	1.31E-001	-1.4982E-001
	569.32	15.43	6.8383E-001		-1.0992E+000
	604.70	97.60	1.3732E-001		7.8847E-003
	795.84	85.40	1.3084E-001		6.1777E-002
	801.93	8.73	1.1668E+000		-9.2147E-001
Cs-137	661.65	85.12	1.3818E-001	1.38E-001	-2.3788E-002
Eu-152	121.78	28.40	8.2780E-001	3.30E-001	-4.0503E-002
	244.69	7.49	2.0208E+000		9.5825E-001
	344.27	26.50	4.5872E-001		-1.7951E-001
	778.89	12.74	7.8667E-001		-6.8928E-001
	867.32	4.16	2.4018E+000		-1.3926E+000
	964.01	14.40	9.1700E-001		-3.0639E-002
	1085.78	10.00	9.7649E-001		-6.7228E-001
	1112.02	13.30	7.6810E-001		2.1672E-001
	1407.95	20.70	3.3001E-001		3.5391E-002
Eu-154	123.07	40.50	5.7590E-001	2.69E-001	2.7088E-001
	247.94	6.60	2.2184E+000		1.5476E+000
	591.81	4.83	2.3002E+000		1.0291E-001
	723.30	19.70	5.6129E-001		7.1380E-002
	756.87	4.33	2.5220E+000		5.7451E-002
	873.19	11.50	7.8311E-001		-5.9818E-001
	996.32	10.30	9.3988E-001		-2.5239E-001
	1004.76	17.90	5.2806E-001		5.0342E-001
	1274.45	35.50	2.6920E-001		2.6252E-003
Eu-155	86.54	30.90	1.1475E+000	1.15E+000	5.5099E-004
	105.31	20.70	1.3663E+000		3.2272E-001
Am-241	59.54	35.90	1.4042E+000	1.40E+000	-1.0994E+000
Cm-243	228.19	10.56	1.3985E+000	1.02E+000	-1.4834E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0216E+000	1.02E+000	3.5909E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 9:47:18 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: OOL-09-05-151-F-
Sample Title: OOL-09-05-151-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 9:37:27 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: OOL-09-05-151-F-
Title: OOL-09-05-151-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	307	291.71	72.76	1.17	5.69E+002	80.76	2.32E+003
m	2	284-	307	300.07	74.85	1.17	1.03E+003	94.38	2.95E+003
	3	945-	962	954.43	238.49	1.38	4.12E+002	91.40	5.41E+002
	4	1170-	1190	1180.33	294.98	0.94	1.21E+002	73.63	3.53E+002
	5	1345-	1359	1352.87	338.13	0.80	1.14E+002	52.55	2.10E+002
	6	1399-	1416	1406.50	351.54	0.90	1.08E+002	60.55	2.60E+002
	7	2030-	2053	2042.09	510.48	1.18	2.19E+002	57.73	1.60E+002
	8	2320-	2341	2331.72	582.91	1.25	2.08E+002	54.55	1.51E+002
	9	2430-	2445	2435.42	608.85	1.71	2.10E+002	43.25	9.09E+001
	10	3171-	3182	3176.35	794.13	0.59	2.63E+001	26.01	5.97E+001
	11	3633-	3651	3643.28	910.90	1.37	1.52E+002	40.53	8.11E+001
	12	3866-	3882	3874.33	968.68	0.76	9.75E+001	37.01	8.25E+001
	13	4469-	4489	4481.08	1120.41	0.64	8.69E+001	32.70	5.21E+001
	14	5827-	5857	5842.39	1460.85	2.26	1.38E+003	74.66	1.55E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.991	511.00*		100.00	2.98303E-001	8.85007E-002
K-40	1.000	1460.81*		10.67	2.30705E+001	2.24877E+000
TL-208	0.750	277.35		6.80		
		510.84*		21.60	1.38103E+000	4.24965E-001
		583.14*		84.20	3.51714E-001	1.03049E-001
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	1.47466E+001	3.19098E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.00194E+000	2.72098E-001
Bi-214	0.695	609.31*		46.30	6.56040E-001	1.57372E-001
		1120.29*		15.10	9.68244E-001	3.78784E-001
		1764.49		15.80		
PB-214	0.580	74.82*	@	6.21	2.54087E+001	5.79929E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	7.23804E-001	4.58246E-001
		351.92*		37.20	3.51253E-001	2.05704E-001
Ac-228	0.997	338.32*		11.40	1.19779E+000	5.83207E-001
		911.07*		27.70	8.69158E-001	2.52603E-001
		969.11*		16.60	9.47693E-001	3.73284E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.991	2.223328E-001	9.122326E-002
K-40		1.000	2.307052E+001	2.248773E+000
TL-208		0.750	3.517140E-001	1.024096E-001
Pb-212	@	0.520	1.001940E+000	2.720981E-001
Bi-214		0.695	7.019976E-001	1.453280E-001
PB-214	@	0.580	4.137340E-001	1.876632E-001
Ac-228		0.997	9.284790E-001	1.969183E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.76	9.4846E-001	14.19
10	794.13	4.3808E-002	98.95

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1111E-001	9.87E-002	8.9404E-002
	1332.49	100.00	9.8735E-002		1.2110E-001
Nb-94	702.63	100.00	1.0831E-001	9.12E-002	-4.9472E-002
	871.10	100.00	9.1249E-002		-5.5154E-002
Ag-108m	79.20	7.10	5.7583E+000	1.31E-001	-4.1563E+000
	433.93	89.90	1.3443E-001		-2.8677E-002
	614.37	90.40	1.3741E-001		3.5535E-002
	722.95	90.50	1.3084E-001		1.1480E-001
Sb-125	176.33	6.89	2.7472E+000	4.07E-001	1.1012E-001
	427.89	29.33	4.0700E-001		1.0405E-001
	463.38	10.35	1.1515E+000		-2.1897E-002
	600.56	17.80	6.0336E-001		-3.8133E-001
	606.64	5.02	2.8623E+000		6.1993E+000
	635.90	11.32	8.9593E-001		3.9266E-001
Cs-134	563.23	8.38	1.3018E+000	1.34E-001	-3.1598E-001
	569.32	15.43	7.2397E-001		2.5489E-001
	604.70	97.60	1.4219E-001		-3.1595E-001
	795.84	85.40	1.3389E-001		1.8922E-001
	801.93	8.73	1.2171E+000		2.8921E-001
Cs-137	661.65	85.12	1.3818E-001	1.38E-001	1.0813E-001
Eu-152	121.78	28.40	9.0040E-001	3.45E-001	-4.3806E-001
	244.69	7.49	2.1502E+000		-5.0595E-001
	344.27	26.50	4.5922E-001		-4.3060E-001
	778.89	12.74	8.0316E-001		-5.0078E-001
	867.32	4.16	2.1989E+000		-1.1217E+000
	964.01	14.40	9.8189E-001		2.4242E-001
	1085.78	10.00	1.0083E+000		7.5216E-001
	1112.02	13.30	7.9126E-001		-6.2460E-001
	1407.95	20.70	3.4523E-001		1.4837E-001
Eu-154	123.07	40.50	6.3042E-001	2.72E-001	2.2338E-002
	247.94	6.60	2.3633E+000		1.6585E+000
	591.81	4.83	2.2657E+000		-1.1797E+000
	723.30	19.70	5.9115E-001		-6.0211E-003
	756.87	4.33	2.3969E+000		-4.8258E-002
	873.19	11.50	8.2518E-001		1.0458E-001
	996.32	10.30	9.9252E-001		4.1640E-001
	1004.76	17.90	5.8227E-001		1.4834E-001
	1274.45	35.50	2.7223E-001		-1.8339E-001
Eu-155	86.54	30.90	1.2403E+000	1.24E+000	2.4666E+000
	105.31	20.70	1.4966E+000		9.9931E-001
Am-241	59.54	35.90	1.5276E+000	1.53E+000	4.6397E-001
Cm-243	228.19	10.56	1.5338E+000	1.07E+000	2.8463E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0721E+000	1.07E+000	-2.1491E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 5:22:22 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-152-F-
Sample Title: OOL-09-05-152-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 5:12:21 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-152-F-
Title: OOL-09-05-152-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	305	287.67	71.87	1.64	2.31E+002	64.43	1.25E+003
m	2	282-	305	297.51	74.33	1.65	4.50E+002	70.35	1.95E+003
	3	5821-	5851	5835.90	1458.94	3.01	1.05E+003	66.72	2.30E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.892	1460.81*	10.67	2.29689E+001	2.36652E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.892	2.296888E+001	2.366516E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	71.87	3.8574E-001	27.84
m 2	74.33	7.5066E-001	15.62

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2606E-001	1.03E-001	4.0235E-002
	1332.49	100.00	1.0331E-001		2.9034E-002
Nb-94	702.63	100.00	1.2534E-001	1.16E-001	-3.5473E-002
	871.10	100.00	1.1634E-001		-9.8555E-003
Ag-108m	79.20	7.10	1.2302E+001	1.48E-001	-1.5779E+001
	433.93	89.90	1.5934E-001		-4.2362E-002
	614.37	90.40	1.5966E-001		-1.6290E-001
	722.95	90.50	1.4795E-001		5.7335E-002
Sb-125	176.33	6.89	3.5014E+000	4.57E-001	-3.0176E-001
	427.89	29.33	4.5654E-001		-5.5333E-001
	463.38	10.35	1.3749E+000		1.3491E+000
	600.56	17.80	7.7719E-001		1.3539E-001
	606.64	5.02	3.2218E+000		5.1909E+000
	635.90	11.32	1.1037E+000		5.9620E-001
Cs-134	563.23	8.38	1.5903E+000	1.47E-001	-3.1174E-001
	569.32	15.43	8.5581E-001		3.3331E-001
	604.70	97.60	1.6578E-001		2.3902E-001
	795.84	85.40	1.4654E-001		3.8319E-003
	801.93	8.73	1.3689E+000		-1.0889E+000
Cs-137	661.65	85.12	1.5023E-001	1.50E-001	3.9243E-002
Eu-152	121.78	28.40	1.1807E+000	4.41E-001	9.0669E-001
	244.69	7.49	2.6210E+000		-4.7957E+000
	344.27	26.50	5.7550E-001		-6.3546E-001
	778.89	12.74	9.4163E-001		1.4373E-001
	867.32	4.16	2.7171E+000		-2.0886E+000
	964.01	14.40	1.0013E+000		9.0488E-001
	1085.78	10.00	1.1292E+000		1.8789E-001
	1112.02	13.30	8.4006E-001		-5.1187E-001
	1407.95	20.70	4.4061E-001		3.8351E-001
Eu-154	123.07	40.50	8.1583E-001	3.45E-001	-2.1382E-001
	247.94	6.60	2.8712E+000		-1.8356E+000
	591.81	4.83	2.6661E+000		-2.4330E-003
	723.30	19.70	6.9252E-001		7.3411E-001
	756.87	4.33	3.0589E+000		1.8118E-001
	873.19	11.50	1.0426E+000		-2.0287E-002
	996.32	10.30	1.1036E+000		-8.2178E-001
	1004.76	17.90	6.8963E-001		8.7978E-001
	1274.45	35.50	3.4493E-001		1.1218E-001
Eu-155	86.54	30.90	2.1162E+000	2.12E+000	2.9000E+000
	105.31	20.70	2.1579E+000		7.3560E-001
Am-241	59.54	35.90	5.3689E+000	5.37E+000	-1.0244E+000
Cm-243	228.19	10.56	1.9144E+000	1.28E+000	-2.0278E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2818E+000	1.28E+000	5.5251E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 11:24:01 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-153-F-
Sample Title: OOL-09-05-153-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 11:13:57 AM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-153-F-
Title: OOL-09-05-153-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	975-	992	985.73	246.39	0.66	8.28E+001	62.37	2.85E+002
2	2032-	2054	2044.15	511.00	1.25	1.19E+002	54.37	1.65E+002
3	2319-	2341	2328.83	582.17	1.34	1.86E+002	48.32	1.09E+002
4	2423-	2446	2435.00	608.71	1.25	1.52E+002	45.90	9.88E+001
5	3632-	3654	3643.85	910.93	0.56	1.36E+002	37.62	6.00E+001
6	5826-	5857	5841.61	1460.37	2.99	9.50E+002	64.09	2.39E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	1.000	511.00*	100.00	2.09240E-001	9.97081E-002
K-40	0.994	1460.81*	10.67	2.08543E+001	2.19766E+000
TL-208	0.732	277.35	6.80		
		510.84*	21.60	9.68705E-001	4.68341E-001
		583.14*	84.20	4.05767E-001	1.17817E-001
		860.37	12.46		
Bi-214	0.396	609.31*	46.30	6.12166E-001	1.99382E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	1.000	1.215946E-001	1.028648E-001
K-40	0.994	2.085429E+001	2.197659E+000
TL-208	0.732	4.057673E-001	1.170724E-001
Bi-214	0.396	6.121662E-001	1.993820E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	246.39	1.3794E-001	75.36
5	910.93	2.2659E-001	27.67

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1458E-001	9.76E-002	-1.3665E-003
	1332.49	100.00	9.7552E-002		-7.5453E-002
Nb-94	702.63	100.00	1.2768E-001	1.19E-001	-8.7862E-002
	871.10	100.00	1.1869E-001		3.7657E-002
Ag-108m	79.20	7.10	1.1963E+001	1.49E-001	-2.1990E+001
	433.93	89.90	1.5493E-001		-4.0579E-002
	614.37	90.40	1.6670E-001		-9.5019E-002
	722.95	90.50	1.4865E-001		2.9142E-002
Sb-125	176.33	6.89	3.2558E+000	4.71E-001	-8.7217E-001
	427.89	29.33	4.7121E-001		1.3370E-001
	463.38	10.35	1.3415E+000		-4.4522E-001
	600.56	17.80	7.2524E-001		5.0434E-001
	606.64	5.02	3.3248E+000		6.0584E+000
	635.90	11.32	1.0512E+000		-3.8886E-001
Cs-134	563.23	8.38	1.6360E+000	1.63E-001	-1.6799E-001
	569.32	15.43	8.8460E-001		-2.0391E-001
	604.70	97.60	1.6772E-001		5.2350E-002
	795.84	85.40	1.6264E-001		6.9447E-002
	801.93	8.73	1.4477E+000		-6.4885E-001
Cs-137	661.65	85.12	1.6259E-001	1.63E-001	1.8730E-001
Eu-152	121.78	28.40	1.1328E+000	4.14E-001	7.7411E-001
	244.69	7.49	2.4644E+000		-4.7165E+000
	344.27	26.50	6.0896E-001		-1.0815E+000
	778.89	12.74	9.0933E-001		-8.4767E-001
	867.32	4.16	3.0312E+000		3.4070E-001
	964.01	14.40	1.0529E+000		1.1305E+000
	1085.78	10.00	1.2373E+000		3.5995E-001
	1112.02	13.30	9.1674E-001		-1.6421E+000
	1407.95	20.70	4.1366E-001		-4.5299E-001
Eu-154	123.07	40.50	7.8931E-001	3.18E-001	-2.2956E-002
	247.94	6.60	2.7053E+000		-4.6818E-001
	591.81	4.83	2.6038E+000		-1.5237E+000
	723.30	19.70	6.7810E-001		-9.5554E-003
	756.87	4.33	2.9977E+000		-4.4853E-001
	873.19	11.50	1.0258E+000		-1.8710E-002
	996.32	10.30	1.1203E+000		2.4598E-001
	1004.76	17.90	6.4831E-001		-2.2249E-001
	1274.45	35.50	3.1821E-001		8.4077E-002
Eu-155	86.54	30.90	2.0712E+000	2.07E+000	-4.3447E-001
	105.31	20.70	2.0973E+000		-3.4388E-001
Am-241	59.54	35.90	5.7568E+000	5.76E+000	5.7682E+000
Cm-243	228.19	10.56	1.8091E+000	1.24E+000	-1.5302E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2368E+000	1.24E+000	-2.4113E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 10:28:48 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-154-F-
Sample Title: OOL-09-05-154-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 10:18:45 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-154-F-
Title: OOL-09-05-154-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	3632-	3655	3641.58	910.36	1.08	1.47E+002	35.50	4.51E+001
2	3867-	3887	3874.47	968.58	0.29	6.49E+001	31.00	5.11E+001
3	5826-	5856	5841.19	1460.27	2.73	8.60E+002	61.10	2.31E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.990	1460.81*	10.67	1.88737E+001	2.03311E+000
Ac-228	0.625	338.32	11.40		
		911.07*	27.70	1.07782E+000	2.88568E-001
		969.11*	16.60	8.07178E-001	3.94461E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.990	1.887373E+001	2.033114E+000
Ac-228	0.625	9.834725E-001	2.329009E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2479E-001	1.16E-001	5.9054E-002
	1332.49	100.00	1.1640E-001		9.6916E-002
Nb-94	702.63	100.00	1.2997E-001	1.12E-001	1.0996E-001
	871.10	100.00	1.1231E-001		5.5969E-002
Ag-108m	79.20	7.10	1.2184E+001	1.52E-001	-3.0403E+001
	433.93	89.90	1.5666E-001		-4.6069E-002
	614.37	90.40	1.6898E-001		-1.6243E-001
	722.95	90.50	1.5176E-001		1.0871E-001
Sb-125	176.33	6.89	3.3326E+000	4.81E-001	-1.4204E+000
	427.89	29.33	4.8098E-001		2.8104E-003
	463.38	10.35	1.3572E+000		7.3877E-001
	600.56	17.80	7.0992E-001		-9.5868E-001
	606.64	5.02	3.2408E+000		3.8875E+000
	635.90	11.32	1.0512E+000		-1.2304E+000
Cs-134	563.23	8.38	1.6166E+000	1.41E-001	-7.8708E-001
	569.32	15.43	8.6672E-001		2.1096E-001
	604.70	97.60	1.6332E-001		1.7656E-001
	795.84	85.40	1.4061E-001		-6.8617E-002
	801.93	8.73	1.3387E+000		-1.0803E+000
Cs-137	661.65	85.12	1.5098E-001	1.51E-001	1.3216E-002
Eu-152	121.78	28.40	1.1685E+000	3.99E-001	-4.9551E-001
	244.69	7.49	2.6586E+000		-4.5796E+000
	344.27	26.50	5.5625E-001		-9.9781E-001
	778.89	12.74	9.3002E-001		2.6853E-001
	867.32	4.16	2.8601E+000		-1.6311E+000
	964.01	14.40	9.7799E-001		1.8940E-001
	1085.78	10.00	1.1016E+000		-1.9848E-001
	1112.02	13.30	8.4355E-001		-1.2108E+000
	1407.95	20.70	3.9945E-001		2.5290E-001
Eu-154	123.07	40.50	8.0608E-001	3.13E-001	-6.3227E-001
	247.94	6.60	2.8107E+000		-1.4421E+000
	591.81	4.83	2.6661E+000		-8.1782E-001
	723.30	19.70	6.8775E-001		9.9999E-002
	756.87	4.33	2.9035E+000		6.4879E-001
	873.19	11.50	9.5896E-001		-3.8551E-001
	996.32	10.30	1.1036E+000		6.0665E-001
	1004.76	17.90	6.4594E-001		6.8633E-001
	1274.45	35.50	3.1258E-001		-3.4010E-001
Eu-155	86.54	30.90	2.1638E+000	2.13E+000	1.8101E+000
	105.31	20.70	2.1302E+000		-5.9465E-001
Am-241	59.54	35.90	5.3268E+000	5.33E+000	-1.1901E+000
Cm-243	228.19	10.56	1.9196E+000	1.26E+000	-1.1792E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2580E+000	1.26E+000	1.1741E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/7/2006 5:38:20 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-155-F-
Sample Title: OOL-09-05-155-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/7/2006 5:28:18 PM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-155-F-
Title: OOL-09-05-155-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	293-	305	297.27	74.27	0.58	2.25E+002	112.40	1.16E+003
2	1881-	1890	1885.70	471.38	0.37	2.05E+001	24.00	5.75E+001
3	2426-	2442	2434.57	608.60	1.48	9.43E+001	35.65	7.57E+001
4	5823-	5850	5835.75	1458.91	2.99	7.39E+002	55.85	1.67E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.888	1460.81*	10.67	1.62198E+001	1.79605E+000
Bi-214	0.393	609.31*	46.30	3.79308E-001	1.50783E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.888	1.621977E+001	1.796048E+000
Bi-214	0.393	3.793080E-001	1.507826E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	74.27	3.7423E-001	50.06
2	471.38	3.4209E-002	116.92

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1176E-001	9.58E-002	2.6380E-002
	1332.49	100.00	9.5752E-002		5.0396E-002
Nb-94	702.63	100.00	1.0905E-001	1.02E-001	7.1812E-002
	871.10	100.00	1.0239E-001		-1.2801E-002
Ag-108m	79.20	7.10	1.1330E+001	1.43E-001	-2.0772E+001
	433.93	89.90	1.4885E-001		1.2132E-002
	614.37	90.40	1.4353E-001		-1.0364E-001
	722.95	90.50	1.4257E-001		2.7976E-002
Sb-125	176.33	6.89	3.0951E+000	4.60E-001	4.6542E-001
	427.89	29.33	4.5966E-001		1.8168E-001
	463.38	10.35	1.3118E+000		1.0527E+000
	600.56	17.80	6.9951E-001		-4.1251E-001
	606.64	5.02	3.0151E+000		4.5738E+000
	635.90	11.32	1.0392E+000		3.7027E-002
Cs-134	563.23	8.38	1.6296E+000	1.47E-001	3.8628E-001
	569.32	15.43	8.3354E-001		3.7120E-001
	604.70	97.60	1.5281E-001		-1.3310E-001
	795.84	85.40	1.4696E-001		5.4712E-002
	801.93	8.73	1.3387E+000		1.5140E-001
Cs-137	661.65	85.12	1.3501E-001	1.35E-001	-9.8182E-003
Eu-152	121.78	28.40	1.0812E+000	4.14E-001	4.8741E-001
	244.69	7.49	2.3434E+000		-2.3837E+000
	344.27	26.50	5.5625E-001		-2.2803E-001
	778.89	12.74	8.4406E-001		-2.6320E-001
	867.32	4.16	2.5658E+000		1.2829E-001
	964.01	14.40	9.3944E-001		5.3981E-001
	1085.78	10.00	1.0441E+000		3.8023E-001
	1112.02	13.30	8.8095E-001		-1.4131E-001
	1407.95	20.70	4.1366E-001		1.3618E-001
Eu-154	123.07	40.50	7.4610E-001	2.92E-001	-1.4199E-001
	247.94	6.60	2.5706E+000		-5.5961E-001
	591.81	4.83	2.6476E+000		1.6053E+000
	723.30	19.70	6.6002E-001		3.8405E-001
	756.87	4.33	2.5263E+000		-7.8395E-001
	873.19	11.50	8.6273E-001		-5.7783E-002
	996.32	10.30	1.0738E+000		2.2820E-001
	1004.76	17.90	6.5773E-001		3.7573E-001
	1274.45	35.50	2.9195E-001		-1.6950E-001
Eu-155	86.54	30.90	2.0705E+000	1.97E+000	3.4411E+000
	105.31	20.70	1.9704E+000		2.5606E-001
Am-241	59.54	35.90	5.0866E+000	5.09E+000	6.3121E-002
Cm-243	228.19	10.56	1.7384E+000	1.17E+000	-6.5972E-003

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1654E+000	1.17E+000	1.0711E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 11:07:23 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-156-F-
Sample Title: OOL-09-05-156-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 10:57:16 AM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-156-F-
Title: OOL-09-05-156-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	308	291.54	72.84	1.55	2.32E+002	70.83	1.10E+003
m	2	287-	308	299.87	74.92	1.56	5.67E+002	74.69	1.79E+003
	3	333-	345	338.95	84.69	0.90	1.53E+002	114.29	1.23E+003
	4	948-	962	954.55	238.59	1.19	2.06E+002	72.74	4.05E+002
	5	1400-	1413	1406.43	351.57	0.42	9.09E+001	46.14	1.67E+002
	6	2029-	2048	2041.54	510.35	1.71	1.24E+002	48.27	1.36E+002
	7	2321-	2341	2330.85	582.67	1.35	1.64E+002	42.99	8.70E+001
	8	2427-	2446	2435.35	608.80	1.66	1.29E+002	39.47	7.88E+001
	9	2656-	2668	2662.10	665.49	0.46	2.04E+001	22.88	4.36E+001
	10	3434-	3446	3439.53	859.84	1.46	2.88E+001	20.14	2.93E+001
	11	3632-	3655	3641.53	910.35	1.52	1.46E+002	39.22	6.32E+001
M	12	3852-	3883	3858.55	964.60	1.71	2.92E+001	16.45	5.24E+001
m	13	3852-	3883	3874.51	968.59	1.72	7.37E+001	20.60	6.11E+001
	14	4473-	4487	4480.06	1119.98	0.37	2.52E+001	25.75	5.08E+001
	15	5827-	5856	5842.11	1460.50	2.24	9.38E+002	63.39	2.26E+001
	16	7051-	7064	7057.48	1764.34	1.14	2.99E+001	15.57	1.21E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.986	511.00*		100.00	2.18156E-001	8.98499E-002
K-40	0.997	1460.81*		10.67	2.05984E+001	2.17192E+000
TL-208	0.897	277.35		6.80		
		510.84*		21.60	1.00998E+000	4.24071E-001
		583.14*		84.20	3.57516E-001	1.04629E-001
		860.37*		12.46	4.63636E-001	3.29678E-001
Pb-212	0.599	74.81*	@	10.70	2.30317E+001	5.43976E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.65378E-001	2.57424E-001
Bi-214	0.994	609.31*		46.30	5.19423E-001	1.71132E-001
		1120.29*		15.10	3.56386E-001	3.66346E-001
		1764.49*		15.80	4.85825E-001	2.57489E-001
Ac-228	0.625	338.32		11.40		
		911.07*		27.70	1.06959E+000	3.13068E-001
		969.11*		16.60	9.16288E-001	2.73466E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.986	1.388545E-001	9.236724E-002
K-40		0.997	2.059837E+001	2.171915E+000
TL-208		0.897	3.671363E-001	9.915349E-002
Pb-212	@	0.599	6.653784E-001	2.574240E-001
Bi-214		0.994	4.890499E-001	1.328271E-001
Ac-228		0.625	9.826330E-001	2.059571E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.84	3.8644E-001	30.55
3	84.69	2.5574E-001	74.48
5	351.57	1.5148E-001	50.76
9	665.49	3.3958E-002	112.28
M 12	964.60	4.8642E-002	56.35

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.3019E-001	1.14E-001	-1.2148E-002
	1332.49	100.00	1.1441E-001		1.1876E-001
Nb-94	702.63	100.00	1.2330E-001	1.16E-001	-4.8870E-002
	871.10	100.00	1.1594E-001		8.1911E-002
Ag-108m	79.20	7.10	1.2306E+001	1.48E-001	-1.1223E+001
	433.93	89.90	1.5419E-001		1.1956E-002
	614.37	90.40	1.6145E-001		2.5304E-002
	722.95	90.50	1.4759E-001		4.0334E-002
Sb-125	176.33	6.89	3.4211E+000	4.88E-001	-1.0918E+000
	427.89	29.33	4.8836E-001		-1.1151E-001
	463.38	10.35	1.3550E+000		3.6311E-001
	600.56	17.80	7.1164E-001		2.5640E-002
	606.64	5.02	3.1398E+000		5.1523E+000
	635.90	11.32	1.1859E+000		5.0812E-001
Cs-134	563.23	8.38	1.6488E+000	1.49E-001	-3.0937E-001
	569.32	15.43	9.1073E-001		5.6345E-001
	604.70	97.60	1.6082E-001		-3.9154E-002
	795.84	85.40	1.4901E-001		3.7303E-002
	801.93	8.73	1.3560E+000		-1.2205E+000
Cs-137	661.65	85.12	1.5581E-001	1.56E-001	5.1167E-002
Eu-152	121.78	28.40	1.1950E+000	4.37E-001	-2.6553E-001
	244.69	7.49	2.5811E+000		-1.3544E+000
	344.27	26.50	5.7685E-001		-6.3138E-001
	778.89	12.74	1.0003E+000		-7.5073E-002
	867.32	4.16	2.6476E+000		-3.3833E+000
	964.01	14.40	1.1020E+000		-1.1870E-001
	1085.78	10.00	1.1867E+000		2.0150E-001
	1112.02	13.30	8.8757E-001		-4.0092E-001
	1407.95	20.70	4.3734E-001		1.5913E-001
Eu-154	123.07	40.50	8.2804E-001	2.92E-001	-1.6685E-001
	247.94	6.60	2.8202E+000		-1.8503E+000
	591.81	4.83	2.6414E+000		2.4684E-001
	723.30	19.70	6.7322E-001		1.5620E-001
	756.87	4.33	2.7976E+000		-2.2686E+000
	873.19	11.50	9.9121E-001		6.3083E-001
	996.32	10.30	1.0252E+000		3.2078E-001
	1004.76	17.90	6.0911E-001		-2.1595E-001
	1274.45	35.50	2.9195E-001		5.2835E-002
Eu-155	86.54	30.90	2.1982E+000	2.18E+000	3.5340E+000
	105.31	20.70	2.1820E+000		-8.4690E-002
Am-241	59.54	35.90	5.5626E+000	5.56E+000	-1.8972E+000
Cm-243	228.19	10.56	1.9280E+000	1.27E+000	1.4204E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2739E+000	1.27E+000	9.8235E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 10:52:37 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-157-F-
Sample Title: OOL-09-05-157-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 10:42:34 AM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-157-F-
Title: OOL-09-05-157-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	945-	964	953.95	238.44	1.28	3.63E+002	92.39	5.27E+002
2	1400-	1416	1406.83	351.67	1.06	1.25E+002	53.17	1.94E+002
3	2034-	2051	2040.55	510.10	1.94	1.18E+002	47.87	1.46E+002
4	2323-	2340	2331.11	582.74	1.34	1.99E+002	43.00	8.69E+001
5	2426-	2447	2434.89	608.68	1.29	1.55E+002	49.20	1.27E+002
6	3632-	3653	3642.38	910.56	1.87	1.62E+002	38.34	5.87E+001
7	3866-	3882	3873.13	968.25	1.03	7.65E+001	31.43	5.75E+001
8	4471-	4489	4477.76	1119.41	0.57	5.29E+001	27.41	4.21E+001
9	5828-	5854	5842.11	1460.50	2.45	9.37E+002	65.02	3.73E+001
10	7050-	7065	7057.47	1764.34	0.86	4.07E+001	16.76	1.03E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.974	511.00*		100.00	2.07383E-001	8.86948E-002
K-40	0.997	1460.81*		10.67	2.05615E+001	2.19268E+000
TL-208	0.746	277.35		6.80		
		510.84*		21.60	9.60107E-001	4.18043E-001
		583.14*		84.20	4.34037E-001	1.09452E-001
		860.37		12.46		
Pb-212	0.453	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.17507E+000	3.51088E-001
Bi-214	0.987	609.31*		46.30	6.21229E-001	2.12110E-001
		1120.29*		15.10	7.47811E-001	3.95912E-001
		1764.49*		15.80	6.60902E-001	2.79975E-001
Ac-228	0.624	338.32		11.40		
		911.07*		27.70	1.19058E+000	3.12947E-001
		969.11*		16.60	9.50502E-001	4.03050E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.974	1.136310E-001	9.174076E-002
K-40		0.997	2.056152E+001	2.192684E+000
TL-208		0.746	4.340370E-001	1.085343E-001
Pb-212	@	0.453	1.175067E+000	3.510883E-001
Bi-214		0.987	6.529879E-001	1.554851E-001
Ac-228		0.624	1.100279E+000	2.471847E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	351.67	2.0898E-001	42.40

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2938E-001	1.00E-001	-1.8565E-002
	1332.49	100.00	1.0048E-001		-5.2359E-002
Nb-94	702.63	100.00	1.2997E-001	1.15E-001	6.0854E-002
	871.10	100.00	1.1515E-001		1.0294E-001
Ag-108m	79.20	7.10	1.3031E+001	1.52E-001	-3.3079E+001
	433.93	89.90	1.5568E-001		-1.0942E-001
	614.37	90.40	1.7562E-001		-1.0041E-001
	722.95	90.50	1.5176E-001		-1.4701E-001
Sb-125	176.33	6.89	3.6944E+000	4.76E-001	-2.1062E+000
	427.89	29.33	4.7650E-001		-3.6624E-002
	463.38	10.35	1.3617E+000		-2.8250E-001
	600.56	17.80	8.0940E-001		8.2663E-001
	606.64	5.02	3.5732E+000		6.2883E+000
	635.90	11.32	1.1753E+000		-4.0494E-001
Cs-134	563.23	8.38	1.6552E+000	1.51E-001	-6.9800E-001
	569.32	15.43	9.1245E-001		-3.4486E-001
	604.70	97.60	1.8004E-001		1.7698E-002
	795.84	85.40	1.5144E-001		6.6656E-002
	801.93	8.73	1.3604E+000		-1.9363E+000
Cs-137	661.65	85.12	1.6775E-001	1.68E-001	1.0732E-001
Eu-152	121.78	28.40	1.2727E+000	4.41E-001	-1.9197E-001
	244.69	7.49	2.7835E+000		-1.0305E+000
	344.27	26.50	5.9737E-001		-7.0539E-001
	778.89	12.74	9.4738E-001		-1.3741E+000
	867.32	4.16	2.8601E+000		-8.7628E-001
	964.01	14.40	1.0873E+000		6.3605E-001
	1085.78	10.00	1.1996E+000		8.4703E-001
	1112.02	13.30	8.9414E-001		3.2073E-002
	1407.95	20.70	4.4061E-001		-1.1169E-001
Eu-154	123.07	40.50	8.7895E-001	3.26E-001	-5.4505E-002
	247.94	6.60	2.9832E+000		-1.2087E+000
	591.81	4.83	2.8216E+000		-4.2664E-001
	723.30	19.70	7.0196E-001		-6.3294E-002
	756.87	4.33	3.0589E+000		1.4561E+000
	873.19	11.50	1.0052E+000		5.5931E-001
	996.32	10.30	1.1407E+000		3.4080E-001
	1004.76	17.90	6.3875E-001		-1.6736E-001
	1274.45	35.50	3.2647E-001		-1.5375E-002
Eu-155	86.54	30.90	2.3224E+000	2.32E+000	1.3290E+000
	105.31	20.70	2.3399E+000		7.6451E-001
Am-241	59.54	35.90	5.9335E+000	5.93E+000	2.8228E+000
Cm-243	228.19	10.56	2.0120E+000	1.36E+000	5.8435E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3562E+000	1.36E+000	1.4568E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 10:35:20 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-158-F-
Sample Title: OOL-09-05-158-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 10:25:19 AM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-158-F-
Title: OOL-09-05-158-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	308	291.29	72.78	1.47	3.29E+002	63.33	1.47E+003
m	2	282-	308	300.08	74.98	1.48	5.59E+002	70.34	2.03E+003
	3	946-	962	953.69	238.38	1.26	2.43E+002	84.00	5.09E+002
	4	1396-	1416	1406.10	351.48	1.47	1.16E+002	62.83	2.48E+002
	5	2032-	2055	2043.45	510.82	1.88	1.78E+002	57.57	1.71E+002
	6	2322-	2340	2331.29	582.78	0.90	1.74E+002	43.45	9.32E+001
	7	2425-	2446	2435.47	608.83	1.31	1.46E+002	44.61	9.90E+001
	8	3435-	3447	3440.41	860.07	0.37	2.05E+001	25.98	5.85E+001
	9	3633-	3653	3643.02	910.72	2.16	1.33E+002	40.58	8.15E+001
	10	4473-	4486	4478.89	1119.69	1.08	4.95E+001	24.46	3.85E+001
	11	5827-	5856	5841.47	1460.34	1.85	1.03E+003	67.02	2.98E+001
	12	6513-	6526	6519.70	1629.89	0.47	1.75E+001	10.21	3.50E+000
	13	7050-	7065	7057.85	1764.43	1.57	5.18E+001	17.21	8.18E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*	100.00	3.13235E-001	1.09751E-001
K-40	0.993	1460.81*	10.67	2.25678E+001	2.34566E+000
TL-208	0.901	277.35	6.80		
		510.84*	21.60	1.45016E+000	5.21726E-001
		583.14*	84.20	3.78801E-001	1.06782E-001
		860.37*	12.46	3.30609E-001	4.20879E-001
Pb-212	0.598	74.81* @	10.70	2.26655E+001	5.27866E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.87030E-001	2.98413E-001
Bi-214	0.993	609.31*	46.30	5.87096E-001	1.93416E-001
		1120.29*	15.10	7.00348E-001	3.54050E-001
		1764.49*	15.80	8.41319E-001	2.91802E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.999	2.320362E-001	1.119768E-001
K-40	0.993	2.256775E+001	2.345656E+000
TL-208	0.901	3.759214E-001	1.028484E-001
Pb-212 @	0.598	7.870302E-001	2.984126E-001
Bi-214	0.993	6.708177E-001	1.467215E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.78	5.4752E-001	19.28
4	351.48	1.9288E-001	54.29
9	910.72	2.2084E-001	30.63
12	1629.89	2.9167E-002	58.33

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.3100E-001	1.00E-001	2.2930E-003
	1332.49	100.00	1.0048E-001		7.6714E-002
Nb-94	702.63	100.00	1.3538E-001	1.31E-001	7.7891E-002
	871.10	100.00	1.3084E-001		-7.7023E-002
Ag-108m	79.20	7.10	1.2349E+001	1.62E-001	-6.9165E+000
	433.93	89.90	1.6220E-001		-1.1789E-002
	614.37	90.40	1.7122E-001		3.6826E-002
	722.95	90.50	1.6234E-001		1.7037E-001
Sb-125	176.33	6.89	3.5194E+000	4.99E-001	-3.7887E+000
	427.89	29.33	4.9922E-001		-1.8240E-001
	463.38	10.35	1.3256E+000		5.5233E-001
	600.56	17.80	7.5168E-001		-2.2075E-002
	606.64	5.02	3.3660E+000		4.5154E+000
	635.90	11.32	1.1401E+000		-4.7533E-002
Cs-134	563.23	8.38	1.7298E+000	1.44E-001	1.6889E+000
	569.32	15.43	9.0557E-001		-9.0738E-001
	604.70	97.60	1.7341E-001		4.7387E-002
	795.84	85.40	1.4403E-001		-2.9358E-002
	801.93	8.73	1.3560E+000		-6.2512E-001
Cs-137	661.65	85.12	1.5397E-001	1.54E-001	-5.6189E-003
Eu-152	121.78	28.40	1.2294E+000	4.93E-001	6.8725E-001
	244.69	7.49	2.6461E+000		-1.8644E+000
	344.27	26.50	6.1214E-001		-4.1670E-001
	778.89	12.74	1.0003E+000		-1.6950E-001
	867.32	4.16	3.2500E+000		0.0000E+000
	964.01	14.40	1.1267E+000		2.3187E+000
	1085.78	10.00	1.0588E+000		-2.9550E-001
	1112.02	13.30	8.3656E-001		-1.1276E+000
	1407.95	20.70	4.9269E-001		9.7268E-002
Eu-154	123.07	40.50	8.5263E-001	3.14E-001	4.8018E-001
	247.94	6.60	2.9029E+000		-1.3650E+000
	591.81	4.83	2.7089E+000		-1.6709E+000
	723.30	19.70	7.3849E-001		4.5485E-001
	756.87	4.33	2.8306E+000		1.3517E-001
	873.19	11.50	1.1321E+000		5.0434E-001
	996.32	10.30	1.1036E+000		-8.5582E-001
	1004.76	17.90	6.6470E-001		1.1517E-001
	1274.45	35.50	3.1399E-001		1.8241E-001
Eu-155	86.54	30.90	2.2461E+000	2.25E+000	2.8894E+000
	105.31	20.70	2.3171E+000		1.9800E+000
Am-241	59.54	35.90	6.1403E+000	6.14E+000	6.2942E+000
Cm-243	228.19	10.56	1.9990E+000	1.33E+000	7.7472E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3347E+000	1.33E+000	8.1238E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 10:21:33 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-159-F-
Sample Title: OOL-09-05-159-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 10:11:32 AM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-159-F-
Title: OOL-09-05-159-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	307	300.11	74.98	0.82	3.50E+002	149.93	1.76E+003
2	948-	964	954.49	238.58	1.27	3.46E+002	79.28	4.09E+002
3	1399-	1416	1405.78	351.40	1.25	1.40E+002	53.13	1.83E+002
4	2035-	2048	2043.10	510.74	1.03	1.03E+002	40.49	1.17E+002
5	2323-	2342	2331.02	582.72	1.93	1.66E+002	48.79	1.29E+002
6	2427-	2445	2436.38	609.05	1.74	1.71E+002	42.60	8.94E+001
7	3632-	3651	3643.02	910.72	0.97	1.13E+002	40.06	8.63E+001
8	3865-	3883	3874.96	968.70	0.99	6.36E+001	35.53	7.84E+001
9	4542-	4553	4547.33	1136.80	0.45	2.97E+001	17.96	2.13E+001
10	5828-	5856	5841.67	1460.39	2.34	9.78E+002	65.73	3.21E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.998	511.00*		100.00	1.81179E-001	7.52986E-002
K-40	0.994	1460.81*		10.67	2.14645E+001	2.25867E+000
TL-208	0.748	277.35		6.80		
		510.84*		21.60	8.38790E-001	3.55271E-001
		583.14*		84.20	3.62585E-001	1.16359E-001
		860.37		12.46		
Pb-212	0.599	74.81*	@	10.70	1.41901E+001	6.68116E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.11962E+000	3.10803E-001
Bi-214	0.402	609.31*		46.30	6.86210E-001	1.91025E-001
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.632	338.32		11.40		
		911.07*		27.70	8.26703E-001	3.08963E-001
		969.11*		16.60	7.90100E-001	4.49230E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.998	1.028603E-001	7.934143E-002
K-40		0.994	2.146448E+001	2.258674E+000
TL-208		0.748	3.625854E-001	1.157579E-001
Pb-212	@	0.599	1.119619E+000	3.108028E-001
Bi-214		0.402	6.862100E-001	1.910250E-001
Ac-228		0.632	8.149491E-001	2.545676E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	351.40	2.3386E-001	37.86
9	1136.80	4.9510E-002	60.45

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1505E-001	9.81E-002	6.7885E-002
	1332.49	100.00	9.8144E-002		1.3373E-002
Nb-94	702.63	100.00	1.2997E-001	1.17E-001	-2.0779E-002
	871.10	100.00	1.1713E-001		-5.0459E-002
Ag-108m	79.20	7.10	1.2393E+001	1.50E-001	-4.4132E+000
	433.93	89.90	1.5518E-001		-5.3356E-002
	614.37	90.40	1.7399E-001		-1.2308E-001
	722.95	90.50	1.5039E-001		1.4901E-001
Sb-125	176.33	6.89	3.4506E+000	4.70E-001	-2.4656E+000
	427.89	29.33	4.6969E-001		3.4080E-002
	463.38	10.35	1.2884E+000		7.8126E-002
	600.56	17.80	7.3693E-001		-4.6199E-001
	606.64	5.02	3.4513E+000		5.4957E+000
	635.90	11.32	1.1207E+000		-7.0744E-001
Cs-134	563.23	8.38	1.6002E+000	1.41E-001	3.2344E-001
	569.32	15.43	8.9164E-001		-2.5982E-002
	604.70	97.60	1.7550E-001		-6.7175E-002
	795.84	85.40	1.4147E-001		1.3053E-001
	801.93	8.73	1.4397E+000		9.2609E-002
Cs-137	661.65	85.12	1.5726E-001	1.57E-001	-4.7413E-002
Eu-152	121.78	28.40	1.1931E+000	4.21E-001	7.8342E-001
	244.69	7.49	2.5731E+000		-2.3517E+000
	344.27	26.50	6.0832E-001		-3.2525E-001
	778.89	12.74	9.4451E-001		-2.5591E-002
	867.32	4.16	2.7848E+000		-4.8381E+000
	964.01	14.40	1.0978E+000		-1.8493E-001
	1085.78	10.00	1.1016E+000		-8.6984E-001
	1112.02	13.30	8.6076E-001		-3.1089E+000
	1407.95	20.70	4.2057E-001		-5.9931E-001
Eu-154	123.07	40.50	8.1788E-001	3.29E-001	-1.2438E+000
	247.94	6.60	2.7972E+000		8.2776E-001
	591.81	4.83	2.7688E+000		6.7302E-001
	723.30	19.70	6.9410E-001		5.6863E-001
	756.87	4.33	2.9745E+000		-1.8022E+000
	873.19	11.50	9.9121E-001		-8.7178E-001
	996.32	10.30	1.1448E+000		-2.2893E-001
	1004.76	17.90	6.4831E-001		-2.0677E-001
	1274.45	35.50	3.2917E-001		-4.4566E-002
Eu-155	86.54	30.90	2.1837E+000	2.16E+000	3.2772E+000
	105.31	20.70	2.1600E+000		-3.8776E-001
Am-241	59.54	35.90	5.6281E+000	5.63E+000	-2.0827E+000
Cm-243	228.19	10.56	1.9312E+000	1.31E+000	-3.9422E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3119E+000	1.31E+000	3.1528E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 10:04:58 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-160-F-
Sample Title: OOL-09-05-160-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 9:54:57 AM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-160-F-
Title: OOL-09-05-160-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	307	299.13	74.74	1.21	2.81E+002	123.82	1.34E+003
2	330-	343	338.23	84.51	0.48	1.32E+002	119.16	1.29E+003
3	946-	963	954.07	238.47	1.21	2.25E+002	80.45	4.47E+002
4	1344-	1359	1351.21	337.76	0.52	7.99E+001	49.54	1.86E+002
5	2321-	2338	2330.45	582.57	0.94	1.44E+002	39.88	8.31E+001
6	2425-	2448	2436.00	608.96	2.04	1.75E+002	45.86	9.33E+001
7	3630-	3653	3644.17	911.01	1.95	1.52E+002	38.03	5.64E+001
8	4472-	4487	4478.50	1119.59	0.36	5.50E+001	26.91	4.40E+001
9	5828-	5856	5841.70	1460.39	2.39	1.20E+003	71.94	3.21E+001
10	7051-	7064	7057.55	1764.36	0.39	3.37E+001	14.65	7.32E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.994	1460.81*	10.67	2.63359E+001	2.65320E+000
TL-208	0.465	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.13734E-001	9.60577E-002
		860.37	12.46		
Pb-212	0.599	74.81* @	10.70	1.15095E+001	5.55480E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.28061E-001	2.84167E-001
Bi-214	0.994	609.31*	46.30	7.02636E-001	2.03709E-001
		1120.29*	15.10	7.78148E-001	3.89650E-001
		1764.49*	15.80	5.46880E-001	2.44064E-001
Ac-228	0.537	338.32*	11.40	1.09334E+000	6.99050E-001
		911.07*	27.70	1.11266E+000	3.07051E-001
		969.11	16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.994	2.633591E+001	2.653203E+000
TL-208	0.465	3.137343E-001	9.605765E-002
Pb-212 @	0.599	7.280609E-001	2.841674E-001
Bi-214	0.994	6.580322E-001	1.451377E-001
Ac-228	0.537	1.109534E+000	2.811269E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.51	2.2064E-001	90.01

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.3730E-001	1.02E-001	7.9197E-002
	1332.49	100.00	1.0162E-001		-1.1040E-001
Nb-94	702.63	100.00	1.2834E-001	1.18E-001	1.2301E-001
	871.10	100.00	1.1791E-001		-4.6748E-002
Ag-108m	79.20	7.10	1.2091E+001	1.53E-001	-1.0028E+001
	433.93	89.90	1.5740E-001		-6.9164E-002
	614.37	90.40	1.7508E-001		-4.7133E-002
	722.95	90.50	1.5279E-001		-5.0750E-002
Sb-125	176.33	6.89	3.3728E+000	4.93E-001	1.8891E+000
	427.89	29.33	4.9273E-001		3.2038E-001
	463.38	10.35	1.3968E+000		3.8314E-001
	600.56	17.80	7.6931E-001		-1.1853E-001
	606.64	5.02	3.3841E+000		-1.1572E+000
	635.90	11.32	1.1673E+000		-7.3581E-001
Cs-134	563.23	8.38	1.6991E+000	1.42E-001	-5.8601E-001
	569.32	15.43	9.0729E-001		4.9257E-001
	604.70	97.60	1.7224E-001		-6.1233E-002
	795.84	85.40	1.4233E-001		1.0411E-001
	801.93	8.73	1.3859E+000		-5.7681E-001
Cs-137	661.65	85.12	1.4832E-001	1.48E-001	7.4199E-002
Eu-152	121.78	28.40	1.1826E+000	4.44E-001	-4.3824E-001
	244.69	7.49	2.5078E+000		-2.6216E-001
	344.27	26.50	5.7143E-001		-1.4594E-001
	778.89	12.74	9.7560E-001		-1.0373E+000
	867.32	4.16	2.9244E+000		-1.6421E+000
	964.01	14.40	1.0999E+000		2.2069E+000
	1085.78	10.00	1.2165E+000		1.9900E-001
	1112.02	13.30	9.1992E-001		-6.2251E-001
	1407.95	20.70	4.4386E-001		-1.8325E-002
Eu-154	123.07	40.50	8.2233E-001	3.13E-001	-1.6146E-002
	247.94	6.60	2.6974E+000		-5.1822E-001
	591.81	4.83	2.8041E+000		-1.3133E+000
	723.30	19.70	7.0040E-001		9.0365E-002
	756.87	4.33	2.8632E+000		-1.1180E-001
	873.19	11.50	9.8058E-001		1.8807E-001
	996.32	10.30	1.1568E+000		-8.1674E-001
	1004.76	17.90	6.9847E-001		8.0411E-001
	1274.45	35.50	3.1258E-001		4.5993E-003
Eu-155	86.54	30.90	2.1724E+000	2.13E+000	-6.4368E-001
	105.31	20.70	2.1327E+000		8.9261E-001
Am-241	59.54	35.90	5.1776E+000	5.18E+000	-1.0252E+000
Cm-243	228.19	10.56	1.8258E+000	1.24E+000	5.4042E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2398E+000	1.24E+000	-9.0559E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 1:54:47 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-161-F-
Sample Title: OOL-09-05-161-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 1:44:46 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-161-F-
Title: OOL-09-05-161-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1403-	1416	1407.90	351.93	0.47	6.81E+001	46.13	1.70E+002
2	2030-	2049	2037.31	509.29	0.66	8.98E+001	47.98	1.45E+002
3	2700-	2712	2706.25	676.53	0.52	1.81E+001	21.65	3.89E+001
4	5823-	5853	5837.76	1459.41	3.09	9.05E+002	61.96	1.94E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.908	511.00*	100.00	1.57684E-001	8.69482E-002
K-40	0.938	1460.81*	10.67	1.98483E+001	2.10497E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.908	1.576836E-001	8.694817E-002
K-40	0.938	1.984829E+001	2.104970E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	351.93	1.1346E-001	67.77
3	676.53	3.0154E-002	119.65

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1643E-001	9.87E-002	-2.5923E-002
	1332.49	100.00	9.8732E-002		7.0061E-002
Nb-94	702.63	100.00	1.2226E-001	1.19E-001	-4.3541E-002
	871.10	100.00	1.1869E-001		8.9669E-002
Ag-108m	79.20	7.10	1.2216E+001	1.42E-001	-3.3014E+001
	433.93	89.90	1.6006E-001		-4.2048E-003
	614.37	90.40	1.6584E-001		-2.5300E-001
	722.95	90.50	1.4220E-001		9.1008E-002
Sb-125	176.33	6.89	3.5326E+000	5.00E-001	5.6326E-001
	427.89	29.33	4.9994E-001		1.3354E-001
	463.38	10.35	1.3661E+000		-3.6210E-001
	600.56	17.80	7.2860E-001		-5.4930E-003
	606.64	5.02	3.2643E+000		6.5845E+000
	635.90	11.32	1.1151E+000		2.6626E-001
Cs-134	563.23	8.38	1.5466E+000	1.45E-001	2.2842E-001
	569.32	15.43	8.6672E-001		-6.6037E-002
	604.70	97.60	1.6208E-001		-6.3769E-003
	795.84	85.40	1.4487E-001		9.0021E-003
	801.93	8.73	1.2480E+000		-5.2846E-001
Cs-137	661.65	85.12	1.4716E-001	1.47E-001	-2.2374E-002
Eu-152	121.78	28.40	1.2620E+000	4.03E-001	8.6009E-001
	244.69	7.49	2.6618E+000		-6.8541E+000
	344.27	26.50	5.8021E-001		-1.2568E+000
	778.89	12.74	9.0333E-001		-3.2546E-001
	867.32	4.16	2.8601E+000		1.8166E+000
	964.01	14.40	9.8270E-001		6.8690E-001
	1085.78	10.00	1.1246E+000		-4.8775E-001
	1112.02	13.30	8.8757E-001		-1.2466E+000
	1407.95	20.70	4.0305E-001		3.4348E-001
Eu-154	123.07	40.50	8.7393E-001	2.83E-001	3.1156E-002
	247.94	6.60	2.9342E+000		7.0770E-001
	591.81	4.83	2.7330E+000		-1.1667E+000
	723.30	19.70	6.5500E-001		2.3752E-001
	756.87	4.33	2.8794E+000		2.6971E+000
	873.19	11.50	1.0224E+000		-4.4837E-001
	996.32	10.30	1.1326E+000		1.1321E+000
	1004.76	17.90	6.2658E-001		-1.9565E-001
	1274.45	35.50	2.8263E-001		-1.1847E-001
Eu-155	86.54	30.90	2.1638E+000	2.16E+000	2.8728E+000
	105.31	20.70	2.2339E+000		2.8460E-001
Am-241	59.54	35.90	5.5551E+000	5.56E+000	-1.1637E+000
Cm-243	228.19	10.56	1.9520E+000	1.31E+000	-1.0449E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3099E+000	1.31E+000	-3.5908E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 11:37:59 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-09-05-162-F-
Sample Title: OOL-09-05-162-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 11:28:00 AM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-09-05-162-F-
Title: OOL-09-05-162-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	288-	302	297.39	74.30	1.00	3.25E+002	121.11	1.20E+003
2	2423-	2446	2434.32	608.54	1.03	1.06E+002	42.95	9.32E+001
3	5825-	5855	5840.35	1460.06	2.81	7.98E+002	58.53	1.93E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.982	1460.81*	10.67	1.75059E+001	1.91287E+000
Bi-214	0.391	609.31*	46.30	4.25526E-001	1.80483E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.982	1.750589E+001	1.912871E+000
Bi-214	0.391	4.255255E-001	1.804828E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	74.30	5.4088E-001	37.32

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2134E-001	1.08E-001	5.6176E-002
	1332.49	100.00	1.0822E-001		1.1901E-001
Nb-94	702.63	100.00	1.2052E-001	1.11E-001	2.2061E-002
	871.10	100.00	1.1148E-001		6.0428E-002
Ag-108m	79.20	7.10	1.1330E+001	1.43E-001	-1.2303E+001
	433.93	89.90	1.4729E-001		-8.8071E-003
	614.37	90.40	1.5229E-001		-3.0945E-002
	722.95	90.50	1.4257E-001		5.5937E-002
Sb-125	176.33	6.89	3.1128E+000	4.60E-001	7.6787E-001
	427.89	29.33	4.5966E-001		2.3050E-001
	463.38	10.35	1.2281E+000		2.9746E-001
	600.56	17.80	7.0992E-001		9.1940E-002
	606.64	5.02	2.9637E+000		1.4617E+000
	635.90	11.32	1.0602E+000		9.7593E-001
Cs-134	563.23	8.38	1.4874E+000	1.37E-001	6.9852E-001
	569.32	15.43	7.8101E-001		-6.1974E-002
	604.70	97.60	1.5040E-001		-4.7267E-003
	795.84	85.40	1.3710E-001		1.3463E-001
	801.93	8.73	1.2942E+000		-1.5761E-001
Cs-137	661.65	85.12	1.4243E-001	1.42E-001	-1.5006E-001
Eu-152	121.78	28.40	1.1010E+000	3.23E-001	9.1580E-001
	244.69	7.49	2.4627E+000		-3.0848E+000
	344.27	26.50	5.7819E-001		-5.3467E-001
	778.89	12.74	9.2710E-001		-1.0129E+000
	867.32	4.16	2.6677E+000		-2.1258E+000
	964.01	14.40	9.4190E-001		7.0743E-001
	1085.78	10.00	1.0241E+000		5.8213E-001
	1112.02	13.30	8.6754E-001		-8.0643E-002
	1407.95	20.70	3.2266E-001		1.2072E-002
Eu-154	123.07	40.50	7.4895E-001	2.93E-001	-7.6438E-001
	247.94	6.60	2.7429E+000		2.1717E+000
	591.81	4.83	2.6289E+000		-6.3120E-001
	723.30	19.70	6.5332E-001		-4.2266E-001
	756.87	4.33	2.6612E+000		7.3066E-001
	873.19	11.50	9.6260E-001		-6.5121E-002
	996.32	10.30	1.0994E+000		-7.0582E-002
	1004.76	17.90	6.1915E-001		3.1326E-001
	1274.45	35.50	2.9348E-001		9.9732E-002
Eu-155	86.54	30.90	1.9875E+000	1.99E+000	1.6604E+000
	105.31	20.70	2.0210E+000		-1.1199E-001
Am-241	59.54	35.90	5.3190E+000	5.32E+000	3.1780E+000
Cm-243	228.19	10.56	1.7477E+000	1.18E+000	-1.3016E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1826E+000	1.18E+000	5.3023E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/11/2006 11:47:53 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-05-300-F-
Sample Title: OOL-09-05-300-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/11/2006 11:42:51 AM
Live Time: 300.0 seconds
Real Time: 300.2 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: OOL-09-05-300-F-
Title: OOL-09-05-300-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2324-	2337	2330.87	582.76	0.36	2.16E+001	17.09	1.84E+001
2	2431-	2441	2435.97	609.03	0.53	2.76E+001	12.48	5.37E+000
3	5829-	5852	5840.08	1460.13	1.38	1.74E+002	27.58	6.00E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.985	1460.81*	10.67	2.47021E+001	4.39690E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.96013E-001	2.37476E-001
		860.37	12.46		
Bi-214	0.404	609.31*	46.30	6.98572E-001	3.27234E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.985	2.470211E+001	4.396904E+000
TL-208	0.469	2.960129E-001	2.374761E-001
Bi-214	0.404	6.985725E-001	3.272336E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	4.6314E-001	4.37E-001	-2.0955E-001
	1332.49	100.00	4.3689E-001		-3.1224E-003
Nb-94	702.63	100.00	3.9638E-001	3.96E-001	-1.4993E-001
	871.10	100.00	4.1664E-001		2.7986E-002
Ag-108m	79.20	7.10	2.8459E+001	3.99E-001	-4.8110E+001
	433.93	89.90	4.1883E-001		-6.8335E-002
	614.37	90.40	4.8732E-001		-5.5945E-001
	722.95	90.50	3.9932E-001		9.4864E-002
Sb-125	176.33	6.89	9.7929E+000	1.24E+000	-2.8396E+000
	427.89	29.33	1.2427E+000		-2.9083E-001
	463.38	10.35	4.3637E+000		-2.5170E+000
	600.56	17.80	2.5949E+000		2.2467E+000
	606.64	5.02	9.2992E+000		1.5157E+000
	635.90	11.32	3.3314E+000		-3.1526E+000
Cs-134	563.23	8.38	4.3755E+000	4.56E-001	-4.0102E+000
	569.32	15.43	2.6668E+000		8.4692E-001
	604.70	97.60	5.1456E-001		-1.4047E-001
	795.84	85.40	4.5584E-001		1.9846E-001
	801.93	8.73	4.6818E+000		1.7077E+000
Cs-137	661.65	85.12	4.8415E-001	4.84E-001	-4.7200E-001
Eu-152	121.78	28.40	3.2104E+000	1.20E+000	-9.3579E-001
	244.69	7.49	7.1245E+000		2.4949E+000
	344.27	26.50	1.5473E+000		-1.7139E+000
	778.89	12.74	3.6178E+000		-1.5943E+000
	867.32	4.16	9.8927E+000		7.6583E-001
	964.01	14.40	2.9404E+000		1.9743E+000
	1085.78	10.00	4.0136E+000		2.7613E+000
	1112.02	13.30	2.8210E+000		2.5808E-001
	1407.95	20.70	1.2031E+000		1.0228E-001
Eu-154	123.07	40.50	2.2493E+000	1.16E+000	-9.6727E-002
	247.94	6.60	7.5522E+000		-8.9938E+000
	591.81	4.83	8.4700E+000		-4.8144E-001
	723.30	19.70	1.8597E+000		1.2448E+000
	756.87	4.33	9.6203E+000		7.6531E-001
	873.19	11.50	3.6250E+000		4.7406E-001
	996.32	10.30	3.9046E+000		4.6034E-001
	1004.76	17.90	2.1315E+000		1.6462E-001
	1274.45	35.50	1.1601E+000		4.1986E-001
Eu-155	86.54	30.90	5.3540E+000	5.35E+000	1.9537E+000
	105.31	20.70	5.6637E+000		4.5755E+000
Am-241	59.54	35.90	1.0246E+001	1.02E+001	-1.1999E+000
Cm-243	228.19	10.56	5.4746E+000	3.45E+000	-4.2860E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.4508E+000	3.45E+000	-7.0502E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/11/2006 1:32:39 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-05-301-F-
Sample Title: OOL-09-05-301-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/11/2006 1:27:38 PM
Live Time: 300.0 seconds
Real Time: 300.2 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: OOL-09-05-301-F-
Title: OOL-09-05-301-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2426-	2444	2436.08	609.06	0.60	7.15E+001	19.96	9.50E+000
2	2621-	2632	2626.75	656.73	0.25	9.33E+000	9.59	5.67E+000
3	3638-	3650	3643.60	910.96	0.29	1.67E+001	13.78	1.23E+001
4	5829-	5849	5839.75	1460.04	0.42	1.51E+002	27.01	1.05E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.981	1460.81*	10.67	2.15026E+001	4.21135E+000
Bi-214	0.405	609.31*	46.30	1.80785E+000	5.52583E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.981	2.150260E+001	4.211352E+000
Bi-214	0.405	1.807850E+000	5.525835E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	656.73	3.1111E-002	102.80
3	910.96	5.5603E-002	82.62

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	4.2698E-001	3.73E-001	2.2261E-001
	1332.49	100.00	3.7339E-001		-4.7589E-002
Nb-94	702.63	100.00	3.9638E-001	3.33E-001	-4.7270E-001
	871.10	100.00	3.3294E-001		6.4102E-003
Ag-108m	79.20	7.10	2.9250E+001	4.37E-001	-3.9073E+001
	433.93	89.90	4.3737E-001		-1.3009E-001
	614.37	90.40	5.7559E-001		4.8032E-002
	722.95	90.50	4.4089E-001		9.5959E-003
Sb-125	176.33	6.89	9.1681E+000	1.57E+000	8.4678E+000
	427.89	29.33	1.5671E+000		1.1873E+000
	463.38	10.35	4.1898E+000		6.5119E-001
	600.56	17.80	2.3737E+000		-8.8947E-001
	606.64	5.02	1.1628E+001		1.6069E+001
	635.90	11.32	3.7345E+000		2.8843E+000
Cs-134	563.23	8.38	4.5711E+000	4.21E-001	-1.5474E+000
	569.32	15.43	2.6179E+000		-2.7830E-001
	604.70	97.60	6.0018E-001		-3.5035E-001
	795.84	85.40	4.2061E-001		2.8216E-002
	801.93	8.73	3.8728E+000		-1.2459E+000
Cs-137	661.65	85.12	4.9847E-001	4.98E-001	-6.0560E-003
Eu-152	121.78	28.40	3.0943E+000	1.45E+000	-3.1566E+000
	244.69	7.49	6.8598E+000		-6.1204E+000
	344.27	26.50	1.6760E+000		-2.0182E+000
	778.89	12.74	3.2569E+000		2.2917E-001
	867.32	4.16	8.4129E+000		-2.6939E+000
	964.01	14.40	3.4621E+000		1.7158E+000
	1085.78	10.00	3.6041E+000		-4.3924E-001
	1112.02	13.30	3.1613E+000		-2.4059E+000
	1407.95	20.70	1.4523E+000		1.0108E+000
Eu-154	123.07	40.50	2.1688E+000	9.95E-001	-1.4530E+000
	247.94	6.60	8.1094E+000		7.1015E+000
	591.81	4.83	9.1579E+000		-7.6835E+000
	723.30	19.70	2.0482E+000		2.6342E-001
	756.87	4.33	9.3135E+000		5.0152E+000
	873.19	11.50	2.8968E+000		-1.6921E+000
	996.32	10.30	3.5856E+000		-2.9783E+000
	1004.76	17.90	2.1624E+000		-5.3895E-001
	1274.45	35.50	9.9460E-001		-5.2665E-001
Eu-155	86.54	30.90	5.2830E+000	5.28E+000	3.7383E+000
	105.31	20.70	5.6802E+000		1.4913E+000
Am-241	59.54	35.90	1.0625E+001	1.06E+001	7.8357E+000
Cm-243	228.19	10.56	5.1992E+000	3.57E+000	-1.8972E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.5676E+000	3.57E+000	4.1222E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/11/2006 1:50:32 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-05-302-F-
Sample Title: OOL-09-05-302-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/11/2006 1:45:30 PM
Live Time: 300.0 seconds
Real Time: 300.2 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: OOL-09-05-302-F-
Title: OOL-09-05-302-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2426-	2443	2435.00	608.79	0.80	5.41E+001	20.26	1.59E+001
2	5829-	5850	5839.79	1460.05	1.88	1.47E+002	26.90	1.10E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.981	1460.81*	10.67	2.08686E+001	4.17525E+000
Bi-214	0.401	609.31*	46.30	1.36797E+000	5.39760E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.981	2.086863E+001	4.175253E+000
Bi-214	0.401	1.367969E+000	5.397602E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	4.5313E-001	3.59E-001	1.9376E-001
	1332.49	100.00	3.5918E-001		3.2214E-001
Nb-94	702.63	100.00	3.6874E-001	3.69E-001	9.2087E-002
	871.10	100.00	3.8251E-001		-3.5256E-002
Ag-108m	79.20	7.10	2.9198E+001	4.46E-001	-2.5905E+001
	433.93	89.90	4.5510E-001		2.5318E-003
	614.37	90.40	5.4429E-001		-1.5584E-001
	722.95	90.50	4.4579E-001		3.2948E-002
Sb-125	176.33	6.89	9.2417E+000	1.39E+000	1.2856E+000
	427.89	29.33	1.3887E+000		6.0842E-001
	463.38	10.35	3.9135E+000		-9.5817E-001
	600.56	17.80	2.3094E+000		2.6187E-001
	606.64	5.02	1.1192E+001		1.1645E+001
	635.90	11.32	2.8196E+000		4.7198E-001
Cs-134	563.23	8.38	5.0672E+000	4.78E-001	-1.6118E+000
	569.32	15.43	2.7147E+000		-2.4120E-001
	604.70	97.60	5.6351E-001		-1.4958E-001
	795.84	85.40	4.7775E-001		2.5726E-001
	801.93	8.73	4.6818E+000		-2.5721E+000
Cs-137	661.65	85.12	4.6937E-001	4.69E-001	1.3071E-001
Eu-152	121.78	28.40	3.0943E+000	1.45E+000	-4.4701E+000
	244.69	7.49	7.2646E+000		-4.5024E+000
	344.27	26.50	1.6180E+000		-6.5546E-001
	778.89	12.74	2.8054E+000		-3.4382E+000
	867.32	4.16	8.9363E+000		-1.0891E+001
	964.01	14.40	3.1353E+000		2.1634E+000
	1085.78	10.00	3.2063E+000		-7.3975E-001
	1112.02	13.30	2.9536E+000		-5.6811E+000
	1407.95	20.70	1.4523E+000		3.7388E-001
Eu-154	123.07	40.50	2.1977E+000	1.11E+000	3.8795E-001
	247.94	6.60	8.2161E+000		6.0489E-001
	591.81	4.83	7.5365E+000		-3.2652E+000
	723.30	19.70	2.0482E+000		8.7820E-001
	756.87	4.33	9.2087E+000		-3.9423E+000
	873.19	11.50	3.5429E+000		-5.1839E-001
	996.32	10.30	3.9550E+000		2.3068E+000
	1004.76	17.90	2.1928E+000		-9.2671E-001
	1274.45	35.50	1.1080E+000		9.0290E-001
Eu-155	86.54	30.90	5.2246E+000	5.22E+000	3.6520E+000
	105.31	20.70	5.3402E+000		-1.9838E+000
Am-241	59.54	35.90	1.0294E+001	1.03E+001	3.7987E+000
Cm-243	228.19	10.56	5.4147E+000	3.54E+000	-2.3866E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.5388E+000	3.54E+000	1.5745E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/11/2006 2:00:18 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-05-303-F-
Sample Title: OOL-09-05-303-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/11/2006 1:55:17 PM
Live Time: 300.0 seconds
Real Time: 300.2 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: OOL-09-05-303-F-
Title: OOL-09-05-303-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5829-	5852	5839.45	1459.97	1.31	1.49E+002	25.45	5.35E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.977	1460.81*	10.67	2.11028E+001	3.99654E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.977	2.110279E+001	3.996544E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	4.3764E-001	4.25E-001	-2.4401E-002
	1332.49	100.00	4.2502E-001		3.8335E-001
Nb-94	702.63	100.00	3.6874E-001	3.69E-001	-1.9384E-001
	871.10	100.00	3.8759E-001		-8.9010E-002
Ag-108m	79.20	7.10	3.0271E+001	4.87E-001	2.9697E+000
	433.93	89.90	5.1050E-001		3.7339E-001
	614.37	90.40	5.2603E-001		-6.5258E-001
	722.95	90.50	4.8750E-001		2.9321E-001
Sb-125	176.33	6.89	9.2049E+000	1.35E+000	4.8987E+000
	427.89	29.33	1.3456E+000		-8.7263E-001
	463.38	10.35	4.0079E+000		1.4227E+000
	600.56	17.80	2.4361E+000		-1.5548E+000
	606.64	5.02	1.1303E+001		8.5578E+000
	635.90	11.32	3.4839E+000		-1.9776E+000
Cs-134	563.23	8.38	4.6186E+000	4.67E-001	-1.5546E+000
	569.32	15.43	2.4118E+000		-1.0150E+000
	604.70	97.60	5.8356E-001		3.2459E-001
	795.84	85.40	4.6693E-001		-2.3870E-001
	801.93	8.73	4.7338E+000		3.4292E+000
Cs-137	661.65	85.12	5.3895E-001	5.39E-001	5.0907E-001
Eu-152	121.78	28.40	3.1020E+000	1.62E+000	8.1674E-001
	244.69	7.49	7.6470E+000		-2.6992E+000
	344.27	26.50	1.7949E+000		-1.7625E+000
	778.89	12.74	3.2569E+000		7.5991E-001
	867.32	4.16	9.0619E+000		-1.1545E+000
	964.01	14.40	3.3473E+000		3.1074E+000
	1085.78	10.00	3.4771E+000		-5.3606E+000
	1112.02	13.30	2.5829E+000		-4.3459E+000
	1407.95	20.70	1.6205E+000		8.2827E-001
Eu-154	123.07	40.50	2.1475E+000	1.01E+000	-6.7892E-001
	247.94	6.60	8.1629E+000		-7.4613E+000
	591.81	4.83	8.6280E+000		6.3558E-002
	723.30	19.70	2.2194E+000		5.6067E-001
	756.87	4.33	8.9952E+000		-5.9466E+000
	873.19	11.50	3.5429E+000		2.3546E+000
	996.32	10.30	3.9550E+000		-3.1930E-001
	1004.76	17.90	2.3383E+000		1.9536E+000
	1274.45	35.50	1.0145E+000		9.4316E-002
Eu-155	86.54	30.90	5.1195E+000	5.12E+000	1.2651E+000
	105.31	20.70	5.2338E+000		1.3980E+000
Am-241	59.54	35.90	9.9681E+000	9.97E+000	-8.9431E+000
Cm-243	228.19	10.56	5.4147E+000	3.65E+000	-3.1680E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.6526E+000	3.65E+000	-4.7765E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/1/2006 1:49:21 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: ORG7829

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-05-304-F-G
Sample ID: OOL-09-05-304-F
Sample Title: OOL-09-05-304-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/11/2006 2:05:30 PM
Live Time: 300.0 seconds
Real Time: 300.3 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-05-304-F-G
Log Number: OOL-09-05-304-F
Title: OOL-09-05-304-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5830-	5850	5840.12	1460.14	2.07	1.59E+002	26.14	5.25E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-05-304-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.985	1460.81*	10.67	2.25372E+001	4.13488E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-05-304-F-G

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.985	2.253718E+001	4.134877E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-09-05-304-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	4.2153E-001	3.94E-001	2.1751E-001
	1332.49	100.00	3.9364E-001		2.8852E-001
Nb-94	702.63	100.00	4.3428E-001	4.12E-001	7.9524E-002
	871.10	100.00	4.1195E-001		-9.7755E-002
Ag-108m	79.20	7.10	3.0221E+001	4.95E-001	-8.5410E+000
	433.93	89.90	4.9489E-001		2.5283E-001
	614.37	90.40	5.5493E-001		-2.0524E-001
	722.95	90.50	5.0057E-001		4.0399E-001
Sb-125	176.33	6.89	9.6713E+000	1.55E+000	9.1513E+000
	427.89	29.33	1.5483E+000		4.8500E-001
	463.38	10.35	4.2777E+000		2.3607E+000
	600.56	17.80	2.4566E+000		-7.5287E-001
	606.64	5.02	1.1681E+001		2.0133E+001
	635.90	11.32	3.6294E+000		-1.5504E+000
Cs-134	563.23	8.38	5.3973E+000	4.61E-001	2.4316E-001
	569.32	15.43	2.6908E+000		-1.3323E+000
	604.70	97.60	5.7506E-001		3.5884E-001
	795.84	85.40	4.6142E-001		-2.2274E-001
	801.93	8.73	4.7852E+000		-1.4900E+000
Cs-137	661.65	85.12	4.8415E-001	4.84E-001	-6.5815E-002
Eu-152	121.78	28.40	3.3505E+000	1.36E+000	1.4150E+000
	244.69	7.49	7.0054E+000		-8.0879E+000
	344.27	26.50	1.8298E+000		5.1065E-001
	778.89	12.74	3.0776E+000		-2.0269E+000
	867.32	4.16	1.0442E+001		-3.2327E+000
	964.01	14.40	3.2882E+000		1.4812E+000
	1085.78	10.00	3.3448E+000		-4.7726E-001
	1112.02	13.30	2.7285E+000		-6.4689E+000
	1407.95	20.70	1.3590E+000		8.6637E-001
Eu-154	123.07	40.50	2.3368E+000	1.09E+000	3.1330E-001
	247.94	6.60	8.1629E+000		-9.3839E-001
	591.81	4.83	8.3087E+000		3.1815E+000
	723.30	19.70	2.2800E+000		1.0779E+000
	756.87	4.33	9.5193E+000		-3.3324E-001
	873.19	11.50	3.5842E+000		9.5091E-001
	996.32	10.30	3.6953E+000		-9.3636E-001
	1004.76	17.90	2.0027E+000		-3.9111E-001
	1274.45	35.50	1.0900E+000		-2.9885E-001
Eu-155	86.54	30.90	5.5403E+000	5.48E+000	6.7643E+000
	105.31	20.70	5.4788E+000		-9.2092E+000
Am-241	59.54	35.90	1.0578E+001	1.06E+001	-5.4050E+000
Cm-243	228.19	10.56	5.4147E+000	4.06E+000	1.7240E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	4.0624E+000	4.06E+000	3.6549E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/11/2006 2:27:03 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-05-305-F-
Sample Title: OOL-09-05-305-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/11/2006 2:21:54 PM
Live Time: 300.0 seconds
Real Time: 300.2 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: OOL-09-05-305-F-
Title: OOL-09-05-305-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5830-	5851	5841.45	1460.47	1.16	1.63E+002	26.54	5.49E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.996	1460.81*	10.67	2.30723E+001	4.20511E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.996	2.307234E+001	4.205108E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	5.3180E-001	4.97E-001	1.0698E-002
	1332.49	100.00	4.9665E-001		1.5570E-001
Nb-94	702.63	100.00	4.1790E-001	4.18E-001	2.3598E-002
	871.10	100.00	4.6068E-001		-7.3152E-002
Ag-108m	79.20	7.10	2.8352E+001	4.69E-001	-3.5449E+001
	433.93	89.90	4.7212E-001		-2.4680E-001
	614.37	90.40	4.9532E-001		-6.0959E-001
	722.95	90.50	4.6946E-001		-2.3301E-001
Sb-125	176.33	6.89	9.0189E+000	1.45E+000	2.0526E+000
	427.89	29.33	1.4508E+000		1.4610E+000
	463.38	10.35	4.4200E+000		2.0384E+000
	600.56	17.80	2.3947E+000		-1.2995E+000
	606.64	5.02	1.0322E+001		7.7061E+000
	635.90	11.32	3.1709E+000		-6.1882E-001
Cs-134	563.23	8.38	5.0672E+000	4.78E-001	3.6444E+000
	569.32	15.43	2.8306E+000		2.2252E+000
	604.70	97.60	5.2095E-001		-1.5556E-001
	795.84	85.40	4.7775E-001		-1.0551E-001
	801.93	8.73	4.5758E+000		3.0613E+000
Cs-137	661.65	85.12	5.5174E-001	5.52E-001	9.0576E-002
Eu-152	121.78	28.40	3.0092E+000	1.36E+000	-8.8398E-001
	244.69	7.49	7.2182E+000		-3.0245E+000
	344.27	26.50	1.7411E+000		-1.0254E+000
	778.89	12.74	3.1507E+000		-1.6301E+000
	867.32	4.16	1.0226E+001		1.8723E+000
	964.01	14.40	3.3764E+000		3.0778E+000
	1085.78	10.00	4.0684E+000		2.6229E+000
	1112.02	13.30	2.8210E+000		-1.0600E+000
	1407.95	20.70	1.3590E+000		3.8355E-001
Eu-154	123.07	40.50	2.0851E+000	9.95E-001	-1.9196E-001
	247.94	6.60	8.3213E+000		3.2044E+000
	591.81	4.83	8.1440E+000		-2.5478E+000
	723.30	19.70	2.1569E+000		-7.3239E-001
	756.87	4.33	7.7041E+000		-1.7089E+000
	873.19	11.50	3.9347E+000		-1.0648E+000
	996.32	10.30	3.6409E+000		2.2279E+000
	1004.76	17.90	1.8639E+000		6.4781E-001
	1274.45	35.50	9.9460E-001		-5.9715E-001
Eu-155	86.54	30.90	5.1791E+000	5.18E+000	2.8024E+000
	105.31	20.70	5.2158E+000		1.5915E+000
Am-241	59.54	35.90	1.0625E+001	1.06E+001	5.8388E+000
Cm-243	228.19	10.56	5.3081E+000	3.41E+000	-4.5844E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.4059E+000	3.41E+000	-2.7849E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/11/2006 2:36:17 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-05-306-F-
Sample Title: OOL-09-05-306-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/11/2006 2:31:14 PM
Live Time: 300.0 seconds
Real Time: 300.3 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: OOL-09-05-306-F-
Title: OOL-09-05-306-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	452-	461	455.78	113.95	0.67	4.09E+001	36.11	1.31E+002
2	2326-	2336	2331.62	582.94	1.57	2.48E+001	13.08	8.21E+000
3	2429-	2443	2436.45	609.15	0.53	4.18E+001	16.87	1.13E+001
4	5829-	5852	5840.43	1460.21	1.77	1.61E+002	25.73	2.88E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.988	1460.81*	10.67	2.28746E+001	4.09557E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.39736E-001	1.84761E-001
		860.37	12.46		
Bi-214	0.405	609.31*	46.30	1.05568E+000	4.46404E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.988	2.287458E+001	4.095573E+000
TL-208	0.471	3.397362E-001	1.847613E-001
Bi-214	0.405	1.055684E+000	4.464038E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	113.95	1.3638E-001	88.26

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	4.4287E-001	4.07E-001	5.4378E-001
	1332.49	100.00	4.0651E-001		3.2681E-001
Nb-94	702.63	100.00	4.0513E-001	3.67E-001	-2.4394E-002
	871.10	100.00	3.6681E-001		6.7927E-002
Ag-108m	79.20	7.10	2.9067E+001	4.69E-001	-1.6808E+001
	433.93	89.90	4.6877E-001		3.9585E-002
	614.37	90.40	5.7896E-001		-3.3974E-001
	722.95	90.50	4.9189E-001		8.2052E-002
Sb-125	176.33	6.89	9.2233E+000	1.46E+000	1.3426E-001
	427.89	29.33	1.4608E+000		-2.9970E-001
	463.38	10.35	4.3637E+000		2.1464E+000
	600.56	17.80	2.4361E+000		1.0362E+000
	606.64	5.02	1.0679E+001		8.8035E+000
	635.90	11.32	3.2921E+000		1.6257E+000
Cs-134	563.23	8.38	4.9372E+000	4.78E-001	-4.4792E+000
	569.32	15.43	2.8755E+000		2.5171E-001
	604.70	97.60	5.4871E-001		6.4684E-004
	795.84	85.40	4.7775E-001		3.3955E-001
	801.93	8.73	4.6291E+000		3.2126E+000
Cs-137	661.65	85.12	4.7928E-001	4.79E-001	5.1734E-002
Eu-152	121.78	28.40	3.2650E+000	1.41E+000	1.4805E-001
	244.69	7.49	7.4920E+000		2.6322E+000
	344.27	26.50	1.8976E+000		1.0324E-001
	778.89	12.74	3.6178E+000		2.3710E+000
	867.32	4.16	8.5471E+000		-5.7832E+000
	964.01	14.40	3.1038E+000		-7.8850E-001
	1085.78	10.00	3.2764E+000		1.1250E+000
	1112.02	13.30	3.2402E+000		-2.8172E+000
	1407.95	20.70	1.4065E+000		-7.6502E-001
Eu-154	123.07	40.50	2.2417E+000	1.05E+000	1.1891E+000
	247.94	6.60	7.9465E+000		-3.1094E+000
	591.81	4.83	7.6265E+000		-6.5738E+000
	723.30	19.70	2.2998E+000		9.0293E-001
	756.87	4.33	9.1026E+000		-2.5976E+000
	873.19	11.50	2.9482E+000		-1.8995E+000
	996.32	10.30	3.4720E+000		1.8404E+000
	1004.76	17.90	1.7517E+000		-1.7339E+000
	1274.45	35.50	1.0530E+000		-5.5468E-001
Eu-155	86.54	30.90	5.2471E+000	5.25E+000	2.2856E+000
	105.31	20.70	5.6802E+000		8.6531E-002
Am-241	59.54	35.90	1.2005E+001	1.20E+001	9.8415E+000
Cm-243	228.19	10.56	4.9903E+000	3.54E+000	-3.3987E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.5388E+000	3.54E+000	1.5745E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/11/2006 3:20:23 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-05-307-F-
Sample Title: OOL-09-05-307-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/11/2006 3:18:06 PM
Live Time: 134.9 seconds
Real Time: 135.0 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: OOL-09-05-307-F-
Title: OOL-09-05-307-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5832-	5851	5841.34	1460.44	0.43	8.60E+001	18.18	0.00E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.996	1460.81*	10.67	8.69268E+000	1.96740E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.996	8.692680E+000	1.967402E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.3584E-001	2.36E-001	1.3402E-001
	1332.49	100.00	2.4658E-001		-6.7377E-002
Nb-94	702.63	100.00	2.0334E-001	1.75E-001	1.7459E-002
	871.10	100.00	1.7466E-001		-7.7322E-003
Ag-108m	79.20	7.10	1.6448E+001	2.10E-001	-1.9558E+001
	433.93	89.90	2.4394E-001		1.8279E-001
	614.37	90.40	2.4880E-001		-9.7392E-002
	722.95	90.50	2.0968E-001		-1.2710E-001
Sb-125	176.33	6.89	4.2815E+000	7.33E-001	1.0254E+000
	427.89	29.33	7.3349E-001		-1.2446E-001
	463.38	10.35	2.1974E+000		-5.0054E-001
	600.56	17.80	9.2415E-001		-1.2726E+000
	606.64	5.02	4.6857E+000		3.7874E+000
	635.90	11.32	2.0104E+000		8.1697E-001
Cs-134	563.23	8.38	2.9410E+000	2.52E-001	1.1249E+000
	569.32	15.43	1.4683E+000		3.3007E-001
	604.70	97.60	2.5171E-001		1.6022E-001
	795.84	85.40	2.7154E-001		1.5019E-001
	801.93	8.73	2.6608E+000		1.2870E+000
Cs-137	661.65	85.12	2.9339E-001	2.93E-001	8.7160E-002
Eu-152	121.78	28.40	1.5756E+000	6.75E-001	5.0817E-001
	244.69	7.49	3.8092E+000		-7.5097E-001
	344.27	26.50	9.5895E-001		-2.8767E-001
	778.89	12.74	1.3373E+000		-1.2477E+000
	867.32	4.16	3.7133E+000		-2.1664E+000
	964.01	14.40	1.8065E+000		1.0081E+000
	1085.78	10.00	1.9764E+000		-9.4745E-001
	1112.02	13.30	1.2951E+000		-7.3045E-001
	1407.95	20.70	6.7544E-001		7.4706E-002
Eu-154	123.07	40.50	1.0632E+000	6.20E-001	-1.1774E+000
	247.94	6.60	4.0106E+000		-1.6105E+000
	591.81	4.83	4.0901E+000		1.6612E+000
	723.30	19.70	9.8926E-001		2.8445E-001
	756.87	4.33	4.6619E+000		2.2702E+000
	873.19	11.50	1.5727E+000		6.0545E-002
	996.32	10.30	2.1432E+000		-1.2269E-003
	1004.76	17.90	1.1145E+000		4.9558E-001
	1274.45	35.50	6.1997E-001		2.5221E-001
Eu-155	86.54	30.90	2.8843E+000	2.84E+000	3.2647E+000
	105.31	20.70	2.8361E+000		2.0796E+000
Am-241	59.54	35.90	6.7440E+000	6.74E+000	-8.2404E-001
Cm-243	228.19	10.56	2.6407E+000	1.78E+000	1.6969E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.7849E+000	1.78E+000	-3.1744E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/11/2006 3:33:16 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-05-308-F-
Sample Title: OOL-09-05-308-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/11/2006 3:28:14 PM
Live Time: 300.0 seconds
Real Time: 300.2 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: OOL-09-05-308-F-
Title: OOL-09-05-308-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2323-	2334	2329.22	582.34	0.90	2.10E+001	14.01	1.20E+001
2	5829-	5853	5841.18	1460.40	1.60	1.75E+002	29.48	1.24E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.994	1460.81*	10.67	2.47934E+001	4.64144E+000
TL-208	0.458	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.87723E-001	1.95645E-001
		860.37	12.46		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.994	2.479342E+001	4.641437E+000
TL-208	0.458	2.877234E-001	1.956448E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	3.8101E-001	3.81E-001	1.0096E-001
	1332.49	100.00	3.8702E-001		2.7779E-001
Nb-94	702.63	100.00	4.3025E-001	4.07E-001	-1.5831E-001
	871.10	100.00	4.0721E-001		3.4171E-001
Ag-108m	79.20	7.10	2.8190E+001	4.23E-001	-1.6592E+001
	433.93	89.90	4.2261E-001		-2.3020E-001
	614.37	90.40	5.1475E-001		-3.2266E-001
	722.95	90.50	4.6015E-001		1.4004E-001
Sb-125	176.33	6.89	8.0850E+000	1.35E+000	-1.0528E+000
	427.89	29.33	1.3456E+000		8.4705E-002
	463.38	10.35	4.1301E+000		2.2708E-001
	600.56	17.80	2.4768E+000		-1.3765E+000
	606.64	5.02	1.0262E+001		6.4239E+000
	635.90	11.32	3.6648E+000		-3.5836E+000
Cs-134	563.23	8.38	4.8931E+000	4.02E-001	-1.5446E+000
	569.32	15.43	2.7617E+000		1.3079E+000
	604.70	97.60	5.2095E-001		1.9768E-001
	795.84	85.40	4.0172E-001		-2.1001E-003
	801.93	8.73	3.9367E+000		-3.8846E-001
Cs-137	661.65	85.12	5.4751E-001	5.48E-001	3.7093E-001
Eu-152	121.78	28.40	3.0053E+000	1.36E+000	-1.6194E+000
	244.69	7.49	7.1245E+000		7.7967E-001
	344.27	26.50	1.7135E+000		5.9304E-001
	778.89	12.74	3.3595E+000		-7.3540E-001
	867.32	4.16	9.5464E+000		4.7429E-001
	964.01	14.40	3.0069E+000		-5.0003E-001
	1085.78	10.00	4.1757E+000		2.4431E-001
	1112.02	13.30	2.8210E+000		-3.8233E+000
	1407.95	20.70	1.3590E+000		-1.2635E-001
Eu-154	123.07	40.50	2.1233E+000	1.13E+000	1.2058E-001
	247.94	6.60	7.8360E+000		6.2338E-001
	591.81	4.83	9.4464E+000		1.5840E+000
	723.30	19.70	2.0704E+000		-1.0901E+000
	756.87	4.33	9.4170E+000		1.0512E+001
	873.19	11.50	3.3722E+000		3.7845E-001
	996.32	10.30	3.5856E+000		-2.8614E-001
	1004.76	17.90	2.3938E+000		2.4971E+000
	1274.45	35.50	1.1257E+000		-3.6318E-001
Eu-155	86.54	30.90	4.9695E+000	4.97E+000	3.6843E+000
	105.31	20.70	5.0014E+000		-3.1681E-001
Am-241	59.54	35.90	9.7503E+000	9.75E+000	2.4919E+000
Cm-243	228.19	10.56	4.9739E+000	3.51E+000	6.3814E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.5097E+000	3.51E+000	2.7594E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/11/2006 3:46:23 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-09-05-309-F-
Sample Title: OOL-09-05-309-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/11/2006 3:41:21 PM
Live Time: 300.0 seconds
Real Time: 300.2 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: OOL-09-05-309-F-
Title: OOL-09-05-309-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2129-	2138	2133.97	533.53	0.36	8.78E+000	9.37	6.22E+000
2	5831-	5852	5842.05	1460.62	0.89	1.53E+002	26.60	8.33E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.999	1460.81*	10.67	2.16764E+001	4.16489E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.999	2.167635E+001	4.164888E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	533.53	2.9278E-002	106.68

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	3.8709E-001	3.44E-001	-2.7201E-001
	1332.49	100.00	3.4431E-001		8.7491E-002
Nb-94	702.63	100.00	3.8740E-001	3.72E-001	5.4104E-002
	871.10	100.00	3.7212E-001		-4.5182E-001
Ag-108m	79.20	7.10	2.8936E+001	4.10E-001	-1.5957E+001
	433.93	89.90	4.9489E-001		3.1179E-001
	614.37	90.40	4.7504E-001		-2.5673E-001
	722.95	90.50	4.1015E-001		5.8144E-004
Sb-125	176.33	6.89	8.3746E+000	1.27E+000	-1.9384E+000
	427.89	29.33	1.2664E+000		4.4494E-001
	463.38	10.35	4.1301E+000		2.9638E+000
	600.56	17.80	2.2875E+000		-1.8944E+000
	606.64	5.02	9.1627E+000		7.8650E+000
	635.90	11.32	3.6648E+000		-6.3095E-001
Cs-134	563.23	8.38	4.7580E+000	3.82E-001	3.4440E+000
	569.32	15.43	2.4651E+000		-1.0433E+000
	604.70	97.60	4.7078E-001		3.3805E-001
	795.84	85.40	3.8178E-001		-3.7355E-001
	801.93	8.73	4.2983E+000		-5.6990E-001
Cs-137	661.65	85.12	4.4353E-001	4.44E-001	-2.4171E-002
Eu-152	121.78	28.40	2.9417E+000	1.58E+000	-1.0247E+000
	244.69	7.49	6.6603E+000		-7.6820E+000
	344.27	26.50	1.6472E+000		-6.7084E-001
	778.89	12.74	2.8054E+000		1.3980E+000
	867.32	4.16	8.4129E+000		-6.9821E+000
	964.01	14.40	3.2882E+000		7.2759E-001
	1085.78	10.00	3.3448E+000		3.8584E-001
	1112.02	13.30	3.2789E+000		1.1514E-001
	1407.95	20.70	1.5804E+000		-5.3405E-001
Eu-154	123.07	40.50	2.0377E+000	1.07E+000	-1.2737E+000
	247.94	6.60	7.5232E+000		-4.9026E+000
	591.81	4.83	9.4464E+000		4.3007E+000
	723.30	19.70	1.8844E+000		3.6196E-001
	756.87	4.33	9.5193E+000		3.9389E+000
	873.19	11.50	3.1914E+000		-1.4411E+000
	996.32	10.30	3.4720E+000		7.7133E-001
	1004.76	17.90	2.1928E+000		5.5874E-001
	1274.45	35.50	1.0717E+000		-6.0821E-002
Eu-155	86.54	30.90	5.2019E+000	5.20E+000	1.6663E+000
	105.31	20.70	5.4617E+000		2.0587E+000
Am-241	59.54	35.90	9.8849E+000	9.88E+000	-4.5777E-001
Cm-243	228.19	10.56	4.8233E+000	3.55E+000	2.5514E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.5532E+000	3.55E+000	2.3238E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction