

Report Generated On 7/31/2006 10:57:09 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-10-01-101-F-

Sample Title: OOL-10-01-101-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 10:47:07 AM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-101-F-
Title: OOL-10-01-101-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	306	299.17	74.82	1.25	1.62E+002	86.80	7.10E+002
2	947-	963	954.25	238.60	1.53	2.46E+002	67.86	3.03E+002
3	1401-	1418	1407.38	351.89	1.28	1.33E+002	45.90	1.26E+002
4	2326-	2344	2332.65	583.23	0.85	1.60E+002	38.17	6.37E+001
5	2427-	2445	2437.85	609.53	0.62	1.27E+002	37.56	7.13E+001
6	3637-	3654	3645.51	911.48	1.14	8.55E+001	28.92	4.05E+001
7	3869-	3881	3875.86	969.07	0.32	3.29E+001	23.85	4.31E+001
8	5832-	5859	5846.24	1461.71	2.16	7.32E+002	55.83	1.75E+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: 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	0.971	1460.81*	10.67	1.69236E+001	1.88186E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.55553E-001	9.64839E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	5.09562E+000	2.90714E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.61394E-001	2.41215E-001
Bi-214	0.406	609.31*	46.30	5.20249E-001	1.66941E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.625	338.32	11.40		
		911.07*	27.70	6.48820E-001	2.31786E-001
		969.11*	16.60	4.22266E-001	3.09564E-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	0.971	1.692363E+001	1.881864E+000
TL-208	0.470	3.555526E-001	9.648388E-002
Pb-212 @	0.576	7.613939E-001	2.412146E-001
Bi-214	0.406	5.202487E-001	1.669411E-001
Ac-228	0.625	5.674344E-001	1.855401E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.89	2.2122E-001	34.58

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.1194E-001	8.25E-002	3.3608E-002
	1332.49	100.00	8.2534E-002		8.0828E-003
Nb-94	702.63	100.00	1.1206E-001	1.12E-001	-2.6198E-002
	871.10	100.00	1.1432E-001		2.9321E-002
Ag-108m	79.20	7.10	6.8734E+000	1.31E-001	-8.1832E+000
	433.93	89.90	1.3285E-001		-2.4029E-002
	614.37	90.40	1.5386E-001		-7.3898E-003
	722.95	90.50	1.3109E-001		2.0131E-002
Sb-125	176.33	6.89	2.5143E+000	4.24E-001	2.8812E-001
	427.89	29.33	4.2390E-001		-1.8416E-002
	463.38	10.35	1.2223E+000		8.7867E-002
	600.56	17.80	6.3757E-001		1.9618E-001
	606.64	5.02	3.0754E+000		5.4631E+000
	635.90	11.32	9.7247E-001		-3.7242E-001
Cs-134	563.23	8.38	1.4468E+000	1.32E-001	1.0182E+000
	569.32	15.43	7.3581E-001		-3.3380E-001
	604.70	97.60	1.4603E-001		-1.5255E-002
	795.84	85.40	1.3231E-001		4.1321E-003
	801.93	8.73	1.2219E+000		-1.3961E-001
Cs-137	661.65	85.12	1.3765E-001	1.38E-001	-1.6258E-002
Eu-152	121.78	28.40	8.0726E-001	4.32E-001	8.0183E-001
	244.69	7.49	2.0125E+000		-1.8670E+000
	344.27	26.50	4.9959E-001		-7.0201E-001
	778.89	12.74	8.3907E-001		-1.3958E-001
	867.32	4.16	2.7352E+000		-2.2871E+000
	964.01	14.40	8.8019E-001		-2.4492E-001
	1085.78	10.00	1.1237E+000		-4.3518E-001
	1112.02	13.30	8.0801E-001		-3.6985E-001
1407.95	20.70	4.3188E-001	2.5551E-001		
Eu-154	123.07	40.50	5.6024E-001	2.82E-001	3.8914E-001
	247.94	6.60	2.1753E+000		-3.1195E+000
	591.81	4.83	2.5396E+000		1.8657E+000
	723.30	19.70	6.0033E-001		7.3208E-002
	756.87	4.33	2.3713E+000		-6.0293E+000
	873.19	11.50	9.6797E-001		-5.4013E-002
	996.32	10.30	9.3996E-001		-8.0469E-001
	1004.76	17.90	5.3266E-001		-1.3629E-001
1274.45	35.50	2.8224E-001	-4.8022E-002		
Eu-155	86.54	30.90	1.2986E+000	1.30E+000	1.3759E+000
	105.31	20.70	1.4133E+000		7.1946E-001
Am-241	59.54	35.90	2.6887E+000	2.69E+000	1.0739E+000
Cm-243	228.19	10.56	1.5311E+000	1.03E+000	1.1873E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.0278E+000	1.03E+000	5.0193E-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 7/28/2006 3:13:20 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-01-102

Sample Title: OOL-10-01-102-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 3:04:25 PM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-102
Title: OOL-10-01-102-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	310	301.29	75.28	0.54	2.20E+002	101.68	8.48E+002
2	944-	962	954.80	238.68	1.70	2.51E+002	74.74	3.56E+002
3	1399-	1418	1407.41	351.84	1.38	1.91E+002	55.54	1.75E+002
4	1845-	1858	1851.05	462.77	0.41	2.83E+001	31.43	8.27E+001
5	2323-	2342	2332.97	583.26	0.86	1.42E+002	40.30	8.01E+001
6	2427-	2447	2437.74	609.46	1.43	2.01E+002	46.53	9.98E+001
7	3635-	3655	3644.95	911.30	0.83	1.26E+002	30.28	3.12E+001
8	5833-	5859	5845.26	1461.45	2.28	8.14E+002	58.89	2.03E+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: 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	0.986	1460.81*	10.67	1.84969E+001	2.00855E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.16718E-001	9.89626E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	8.46045E+000	4.25304E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.402	238.63*	44.60	8.18173E-001	2.75640E-001
		609.31*	46.30	8.29349E-001	2.17254E-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	0.986	1.849690E+001	2.008549E+000
TL-208	0.471	3.167178E-001	9.896258E-002
Pb-212 @	0.593	8.181730E-001	2.756398E-001
Bi-214	0.402	8.293488E-001	2.172538E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.1901E-001	29.02
4	462.77	4.7162E-002	111.06
7	911.30	2.0960E-001	24.08

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	1.0674E-001	8.24E-002	-1.5222E-001
	1332.49	100.00	8.2383E-002		3.3586E-002
Nb-94	702.63	100.00	1.1604E-001	1.04E-001	-1.7931E-002
	871.10	100.00	1.0367E-001		1.4266E-002
Ag-108m	79.20	7.10	9.1674E+000	1.45E-001	-7.9636E+000
	433.93	89.90	1.4687E-001		6.2873E-002
	614.37	90.40	1.8837E-001		7.0427E-002
	722.95	90.50	1.4518E-001		-5.5715E-002
Sb-125	176.33	6.89	2.8135E+000	4.55E-001	-2.6854E-001
	427.89	29.33	4.5463E-001		-5.0434E-002
	463.38	10.35	1.3047E+000		3.2040E-001
	600.56	17.80	7.0745E-001		-5.8404E-001
	606.64	5.02	3.6428E+000		7.7998E+000
	635.90	11.32	9.9781E-001		2.0884E-001
Cs-134	563.23	8.38	1.5109E+000	1.29E-001	-3.1581E-001
	569.32	15.43	7.9927E-001		-4.0300E-001
	604.70	97.60	1.8373E-001		4.3002E-002
	795.84	85.40	1.2851E-001		-5.8688E-002
	801.93	8.73	1.2187E+000		-1.2428E+000
Cs-137	661.65	85.12	1.3761E-001	1.38E-001	-1.1119E-001
Eu-152	121.78	28.40	9.0689E-001	3.81E-001	-7.1749E-001
	244.69	7.49	2.3419E+000		-1.3536E+000
	344.27	26.50	5.4001E-001		-9.0054E-001
	778.89	12.74	9.1940E-001		-5.8937E-001
	867.32	4.16	2.6784E+000		1.0401E+000
	964.01	14.40	1.0231E+000		8.7443E-001
	1085.78	10.00	1.1810E+000		8.0567E-002
	1112.02	13.30	8.1121E-001		-5.1180E-001
1407.95	20.70	3.8063E-001	2.3995E-002		
Eu-154	123.07	40.50	6.3103E-001	2.85E-001	-4.1417E-001
	247.94	6.60	2.5048E+000		-1.7387E+000
	591.81	4.83	2.6468E+000		5.8662E-001
	723.30	19.70	6.6177E-001		-6.7823E-001
	756.87	4.33	2.8487E+000		6.9688E-001
	873.19	11.50	8.8084E-001		-1.4735E-001
	996.32	10.30	9.3993E-001		-5.1774E-001
	1004.76	17.90	5.6634E-001		2.2023E-001
	1274.45	35.50	2.8466E-001		5.6005E-002
	Eu-155	86.54	30.90		1.5514E+000
105.31		20.70	1.6000E+000	-1.1972E-001	
Am-241	59.54	35.90	5.3122E+000	5.31E+000	5.4152E+000
Cm-243	228.19	10.56	1.7443E+000	1.13E+000	4.2301E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1330E+000	1.13E+000	2.1363E-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 7/28/2006 10:51:30 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-01-103-

Sample Title: OOL-10-01-103-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 10:41:27 AM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-103-
 Title: OOL-10-01-103-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-	307	290.39	72.55	1.27	1.30E+002	44.11	7.70E+002
m	2	284-	307	300.93	75.19	1.27	2.40E+002	50.33	1.02E+003
	3	944-	963	954.89	238.70	1.38	2.75E+002	73.81	3.24E+002
	4	1401-	1416	1407.66	351.91	1.12	1.02E+002	44.03	1.34E+002
	5	1510-	1524	1519.25	379.81	0.55	2.69E+001	31.81	8.21E+001
	6	2032-	2049	2041.65	510.42	0.61	1.08E+002	41.49	1.04E+002
	7	2323-	2343	2332.35	583.11	1.45	1.61E+002	41.04	7.63E+001
	8	2428-	2445	2436.17	609.07	1.90	1.22E+002	37.30	7.37E+001
	9	3635-	3654	3643.52	910.95	1.77	1.41E+002	32.63	3.91E+001
	10	3867-	3882	3873.89	968.55	0.37	5.10E+001	28.68	5.40E+001
	11	4475-	4489	4481.71	1120.52	0.45	2.78E+001	23.77	4.02E+001
	12	5830-	5858	5843.78	1461.08	2.10	8.53E+002	60.34	2.10E+001
	13	7052-	7067	7060.33	1765.26	1.47	4.80E+001	15.18	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: 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	0.989	511.00*	100.00	1.94291E-001	7.90206E-002
K-40	0.998	1460.81*	10.67	1.93877E+001	2.08445E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	8.99497E-001	3.73138E-001
		583.14*	84.20	3.58719E-001	1.02825E-001
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	9.28220E+000	2.66466E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.994	238.63*	44.60	8.99081E-001	2.79163E-001
		609.31*	46.30	5.03974E-001	1.65753E-001
		1120.29*	15.10	4.10420E-001	3.53326E-001
Ac-228	0.629	1764.49*	15.80	7.80634E-001	2.58949E-001
		338.32	11.40		
		911.07*	27.70	1.07209E+000	2.77317E-001
		969.11*	16.60	6.58231E-001	3.76625E-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	0.989	1.168080E-001	8.204372E-002
K-40	0.998	1.938774E+001	2.084447E+000
TL-208	0.752	3.587192E-001	1.021581E-001
Pb-212 @	0.593	8.990808E-001	2.791633E-001
Bi-214	0.994	5.608925E-001	1.298354E-001
Ac-228	0.629	9.265914E-001	2.233113E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.1685E-001	33.90
4	351.91	1.7052E-001	43.03
5	379.81	4.4755E-002	118.45

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: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	1.0890E-001	9.35E-002	-2.2551E-002
	1332.49	100.00	9.3452E-002		-7.7151E-002
Nb-94	702.63	100.00	1.2709E-001	1.12E-001	8.2616E-002
	871.10	100.00	1.1153E-001		-1.9244E-002
Ag-108m	79.20	7.10	9.3528E+000	1.42E-001	-1.0310E+001
	433.93	89.90	1.4216E-001		-1.4970E-001
	614.37	90.40	1.6451E-001		-9.1628E-002
	722.95	90.50	1.4632E-001		1.4549E-001
Sb-125	176.33	6.89	2.7086E+000	4.29E-001	-1.7993E-002
	427.89	29.33	4.2932E-001		-2.5340E-001
	463.38	10.35	1.2728E+000		-4.9452E-001
	600.56	17.80	6.5459E-001		-5.2643E-001
	606.64	5.02	3.1558E+000		4.6906E+000
	635.90	11.32	1.0959E+000		2.1068E-001
Cs-134	563.23	8.38	1.3765E+000	1.50E-001	-2.6185E+000
	569.32	15.43	8.2561E-001		3.7157E-001
	604.70	97.60	1.5949E-001		6.2272E-002
	795.84	85.40	1.4957E-001		8.9936E-002
	801.93	8.73	1.2985E+000		-1.8577E+000
Cs-137	661.65	85.12	1.4527E-001	1.45E-001	5.0144E-002
Eu-152	121.78	28.40	9.2775E-001	3.93E-001	-1.3968E-002
	244.69	7.49	2.2981E+000		-6.1171E-002
	344.27	26.50	5.2184E-001		-9.6884E-001
	778.89	12.74	8.7410E-001		-6.4456E-001
	867.32	4.16	2.8035E+000		-4.7585E-001
	964.01	14.40	1.0304E+000		2.9075E-001
	1085.78	10.00	1.1716E+000		6.4573E-002
	1112.02	13.30	9.2514E-001		2.0725E-001
1407.95	20.70	3.9289E-001	2.8438E-001		
Eu-154	123.07	40.50	6.4369E-001	3.10E-001	5.4260E-001
	247.94	6.60	2.4738E+000		-1.9436E+000
	591.81	4.83	2.5130E+000		1.5419E+000
	723.30	19.70	6.6177E-001		2.2252E-001
	756.87	4.33	2.6694E+000		9.3606E-001
	873.19	11.50	9.5865E-001		-1.0358E-001
	996.32	10.30	1.0935E+000		1.0797E-001
	1004.76	17.90	5.8096E-001		4.1740E-001
1274.45	35.50	3.0951E-001	1.9421E-002		
Eu-155	86.54	30.90	1.6027E+000	1.56E+000	2.5143E+000
	105.31	20.70	1.5635E+000		5.4019E-001
Am-241	59.54	35.90	4.8209E+000	4.82E+000	-4.6543E+000
Cm-243	228.19	10.56	1.6472E+000	1.16E+000	1.5045E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1645E+000	1.16E+000	5.3381E-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 7/31/2006 10:35:02 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-104-F-

Sample Title: OOL-10-01-104-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 10:25:12 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: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-104-F-
Title: OOL-10-01-104-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	919-	929	922.45	230.65	0.62	4.78E+001	40.72	1.60E+002
2	946-	961	954.58	238.68	1.48	1.95E+002	66.57	3.18E+002
3	1347-	1358	1351.28	337.87	1.03	4.77E+001	37.88	1.29E+002
4	1399-	1414	1405.97	351.54	0.56	8.92E+001	42.64	1.27E+002
5	2324-	2343	2333.11	583.35	1.63	1.56E+002	39.57	7.17E+001
6	2426-	2447	2437.97	609.56	1.19	1.55E+002	39.31	6.59E+001
7	3637-	3653	3644.64	911.26	1.11	8.67E+001	29.84	4.63E+001
8	3868-	3884	3876.58	969.25	1.27	4.78E+001	27.63	4.72E+001
9	5834-	5858	5845.66	1461.57	2.01	7.84E+002	56.29	9.58E+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: 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	0.980	1460.81*	10.67	1.81230E+001	1.96061E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.46733E-001	9.87027E-002
		860.37	12.46		
Pb-212	0.420	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.405	238.63*	44.60	6.01897E-001	2.26276E-001
		609.31*	46.30	6.36483E-001	1.79385E-001
		1120.29	15.10		
Ac-228	0.998	1764.49	15.80		
		338.32*	11.40	6.38951E-001	5.17361E-001
		911.07*	27.70	6.57883E-001	2.38712E-001
		969.11*	16.60	6.13574E-001	3.60737E-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	0.980	1.812304E+001	1.960605E+000
TL-208	0.469	3.467326E-001	9.870273E-002
Pb-212 @	0.420	6.018970E-001	2.262759E-001
Bi-214	0.405	6.364833E-001	1.793854E-001
Ac-228	0.998	6.436879E-001	1.857927E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	230.65	7.9595E-002	85.27
4	351.54	1.4871E-001	47.79

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: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	1.1296E-001	8.56E-002	7.0263E-002
	1332.49	100.00	8.5644E-002		5.8712E-002
Nb-94	702.63	100.00	1.1444E-001	9.80E-002	7.3217E-002
	871.10	100.00	9.8000E-002		-2.0005E-002
Ag-108m	79.20	7.10	7.0834E+000	1.24E-001	-2.1003E+001
	433.93	89.90	1.2417E-001		-9.6797E-002
	614.37	90.40	1.5418E-001		-8.0039E-002
	722.95	90.50	1.3728E-001		2.1208E-002
Sb-125	176.33	6.89	2.4907E+000	3.77E-001	-2.7701E+000
	427.89	29.33	3.7660E-001		-2.0628E-001
	463.38	10.35	1.3020E+000		9.6580E-001
	600.56	17.80	6.3757E-001		1.5492E-001
	606.64	5.02	3.0806E+000		-1.0697E-001
	635.90	11.32	9.9268E-001		-1.7426E-001
Cs-134	563.23	8.38	1.4392E+000	1.30E-001	2.6480E-001
	569.32	15.43	7.7245E-001		2.7318E-001
	604.70	97.60	1.4102E-001		-3.5323E-002
	795.84	85.40	1.2983E-001		1.3290E-001
Cs-137	801.93	8.73	1.2770E+000	1.56E-001	5.1106E-001
	661.65	85.12	1.5646E-001		1.0045E-001
Eu-152	121.78	28.40	7.9988E-001	4.46E-001	-4.6758E-002
	244.69	7.49	2.1266E+000		-1.7277E+000
	344.27	26.50	5.1220E-001		-3.1521E-002
	778.89	12.74	8.0368E-001		-7.5952E-001
	867.32	4.16	2.4373E+000		-1.8207E+000
	964.01	14.40	8.8581E-001		-7.5142E-001
	1085.78	10.00	1.0425E+000		-1.1768E+000
	1112.02	13.30	8.2343E-001		-3.1120E-001
1407.95	20.70	4.4644E-001	2.8652E-001		
Eu-154	123.07	40.50	5.5258E-001	3.02E-001	-2.9395E-001
	247.94	6.60	2.1980E+000		-1.5141E+000
	591.81	4.83	2.3065E+000		1.1764E+000
	723.30	19.70	6.2325E-001		-2.7154E-001
	756.87	4.33	2.5137E+000		-3.5497E-001
	873.19	11.50	8.7008E-001		-2.2342E-001
	996.32	10.30	1.0214E+000		-5.1094E-001
	1004.76	17.90	5.9448E-001		5.2683E-002
1274.45	35.50	3.0237E-001	-8.1539E-003		
Eu-155	86.54	30.90	1.3344E+000	1.33E+000	1.9949E+000
	105.31	20.70	1.3895E+000		8.3211E-001
Am-241	59.54	35.90	2.6015E+000	2.60E+000	-7.8809E-001
Cm-243	228.19	10.56	1.5455E+000	9.82E-001	-6.4515E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.8200E-001	9.82E-001	-6.9041E-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 7/28/2006 2:57:31 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-01-105

Sample Title: OOL-10-01-105-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 2:47:22 PM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-105
Title: OOL-10-01-105-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 13 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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 TL-208	0.983 0.472	1460.81*	10.67	2.11965E+001	2.21658E+000
		277.35	6.80		
		510.84	21.60		
		583.14*	84.20		
Pb-212	0.593	860.37	12.46	1.40485E+001	5.54360E+000
		74.81* @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.991	238.63*	44.60	7.35060E-001	3.47449E-001
		609.31*	46.30		
		1120.29*	15.10		
		1764.49*	15.80		
PB-214	0.626	74.82* @	6.21	2.42060E+001	9.71206E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
Ac-228	0.997	295.21*	19.20	2.93677E-001	3.14473E-001
		351.92*	37.20		
		338.32*	11.40		
		911.07*	27.70		
		969.11*	16.60	7.54651E-001	3.48850E-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	0.983	2.119649E+001	2.216575E+000
TL-208	0.472	2.865658E-001	9.541433E-002
Pb-212 @	0.593	7.350603E-001	3.474489E-001
Bi-214	0.991	9.621723E-001	1.745054E-001
PB-214 @	0.626	6.140326E-001	1.978289E-001
Ac-228	0.997	8.367263E-001	1.914718E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.6825E-001	101.78

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: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	1.1514E-001	9.55E-002	-8.5128E-002
	1332.49	100.00	9.5502E-002		7.5359E-002
Nb-94	702.63	100.00	1.1833E-001	1.07E-001	8.3610E-002
	871.10	100.00	1.0698E-001		-1.5062E-002
Ag-108m	79.20	7.10	9.6994E+000	1.46E-001	-6.5024E+000
	433.93	89.90	1.5353E-001		2.5588E-002
	614.37	90.40	2.0439E-001		-1.6560E-002
	722.95	90.50	1.4632E-001		-4.7994E-002
Sb-125	176.33	6.89	2.8301E+000	4.57E-001	1.7002E+000
	427.89	29.33	4.5708E-001		9.0600E-002
	463.38	10.35	1.3192E+000		4.0081E-001
	600.56	17.80	7.0563E-001		1.8174E-001
	606.64	5.02	3.8523E+000		-8.5383E-001
	635.90	11.32	1.0465E+000		6.0317E-001
Cs-134	563.23	8.38	1.5649E+000	1.42E-001	3.9580E-001
	569.32	15.43	8.1961E-001		-2.8340E-001
	604.70	97.60	1.9096E-001		-8.6617E-003
	795.84	85.40	1.4246E-001		-2.2343E-002
	801.93	8.73	1.3504E+000		-6.8294E-001
Cs-137	661.65	85.12	1.4975E-001	1.50E-001	4.7832E-002
Eu-152	121.78	28.40	9.4714E-001	4.59E-001	3.5229E-003
	244.69	7.49	2.3707E+000		-8.0493E-001
	344.27	26.50	5.7597E-001		-2.5204E-001
	778.89	12.74	9.9494E-001		-2.0404E-001
	867.32	4.16	2.6244E+000		-3.3870E+000
	964.01	14.40	9.6803E-001		-3.8525E-001
	1085.78	10.00	1.1427E+000		7.8711E-001
	1112.02	13.30	8.8288E-001		1.5955E-001
1407.95	20.70	4.5913E-001	5.7050E-001		
Eu-154	123.07	40.50	6.5214E-001	3.10E-001	-3.0658E-001
	247.94	6.60	2.5931E+000		-3.2770E-001
	591.81	4.83	2.5198E+000		-2.0309E+000
	723.30	19.70	6.7051E-001		-3.0451E-001
	756.87	4.33	2.6787E+000		-4.5605E-001
	873.19	11.50	9.5078E-001		-2.6397E-001
	996.32	10.30	1.0272E+000		-8.8858E-001
	1004.76	17.90	6.1997E-001		3.9388E-001
1274.45	35.50	3.0951E-001	-1.3275E-001		
Eu-155	86.54	30.90	1.6361E+000	1.58E+000	-7.3932E-001
	105.31	20.70	1.5815E+000		-1.7163E+000
Am-241	59.54	35.90	4.9208E+000	4.92E+000	-5.1141E+000
Cm-243	228.19	10.56	1.6806E+000	1.15E+000	-1.0442E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1466E+000	1.15E+000	6.1269E-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 7/28/2006 11:06:06 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-01-106-

Sample Title: OOL-10-01-106-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 10:56:04 AM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-106-
Title: OOL-10-01-106-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	293-	308	302.29	75.53	1.05	2.32E+002	118.81	1.15E+003
2	944-	962	954.65	238.64	1.90	2.10E+002	74.86	3.70E+002
3	2322-	2339	2332.65	583.18	1.94	1.59E+002	42.06	9.24E+001
4	2429-	2445	2436.87	609.24	0.88	1.15E+002	36.16	7.18E+001
5	3634-	3653	3644.48	911.19	0.60	1.09E+002	34.74	5.78E+001
6	3867-	3883	3876.40	969.17	0.83	8.42E+001	26.58	3.18E+001
7	5832-	5857	5843.89	1461.11	1.86	8.53E+002	61.33	2.95E+001
8	7054-	7067	7060.09	1765.20	0.54	2.72E+001	16.53	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: 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	0.997	1460.81*	10.67	1.93763E+001	2.09866E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.53982E-001	1.04580E-001
		860.37	12.46		
Pb-212	0.592	74.81* @	10.70	8.84867E+000	4.84509E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.85727E-001	2.66954E-001
Bi-214	0.694	609.31*	46.30	4.74550E-001	1.60050E-001
		1120.29	15.10		
		1764.49*	15.80	4.41560E-001	2.72353E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	8.31498E-001	2.81205E-001
		969.11*	16.60	1.08678E+000	3.61615E-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	0.997	1.937633E+001	2.098658E+000
TL-208	0.471	3.539816E-001	1.045805E-001
Pb-212 @	0.592	6.857273E-001	2.669542E-001
Bi-214	0.694	4.660818E-001	1.379871E-001
Ac-228	0.633	9.276985E-001	2.219850E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.2434E-001	8.16E-002	-1.2403E-002
	1332.49	100.00	8.1587E-002		-2.3816E-002
Nb-94	702.63	100.00	1.1565E-001	1.10E-001	9.6989E-003
	871.10	100.00	1.0973E-001		-1.0522E-003
Ag-108m	79.20	7.10	1.0211E+001	1.44E-001	-7.3999E+000
	433.93	89.90	1.5037E-001		1.2855E-001
	614.37	90.40	1.6573E-001		5.9525E-004
	722.95	90.50	1.4442E-001		3.1084E-002
Sb-125	176.33	6.89	2.9088E+000	4.29E-001	1.2966E+000
	427.89	29.33	4.2932E-001		3.8046E-002
	463.38	10.35	1.3263E+000		6.5559E-001
	600.56	17.80	6.8532E-001		6.9538E-002
	606.64	5.02	3.1862E+000		6.9852E+000
	635.90	11.32	1.0989E+000		4.6608E-001
Cs-134	563.23	8.38	1.6306E+000	1.48E-001	6.2599E-001
	569.32	15.43	8.0951E-001		1.3289E-001
	604.70	97.60	1.6082E-001		-3.5658E-002
	795.84	85.40	1.4826E-001		6.6913E-002
	801.93	8.73	1.3224E+000		-1.7724E+000
Cs-137	661.65	85.12	1.3935E-001	1.39E-001	2.3915E-003
Eu-152	121.78	28.40	9.1447E-001	3.76E-001	-4.7061E-002
	244.69	7.49	2.3903E+000		1.8156E-001
	344.27	26.50	5.2029E-001		-4.6634E-001
	778.89	12.74	8.2971E-001		-4.5736E-001
	867.32	4.16	2.6461E+000		-1.4935E+000
	964.01	14.40	1.0683E+000		-1.9446E-001
	1085.78	10.00	1.0616E+000		-4.3600E-003
	1112.02	13.30	9.0427E-001		-9.4107E-001
1407.95	20.70	3.7645E-001	-1.6952E-003		
Eu-154	123.07	40.50	6.3175E-001	2.90E-001	-2.0675E-002
	247.94	6.60	2.5288E+000		-5.1481E-001
	591.81	4.83	2.4290E+000		-3.8383E-001
	723.30	19.70	6.6703E-001		5.4614E-001
	756.87	4.33	2.7336E+000		-1.1419E+000
	873.19	11.50	9.7420E-001		7.3383E-001
	996.32	10.30	1.1900E+000		2.7950E-002
	1004.76	17.90	6.2800E-001		-1.0252E-001
1274.45	35.50	2.8981E-001	-1.0626E-001		
Eu-155	86.54	30.90	1.6275E+000	1.60E+000	1.8666E+000
	105.31	20.70	1.6044E+000		2.6864E-001
Am-241	59.54	35.90	5.1817E+000	5.18E+000	3.6724E-001
Cm-243	228.19	10.56	1.6347E+000	1.14E+000	1.4224E+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	-5.8938E-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 7/31/2006 10:21:48 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-107-F-

Sample Title: OOL-10-01-107-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 10:11:44 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: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-107-F-
Title: OOL-10-01-107-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	308	300.00	75.02	1.27	2.10E+002	98.59	8.37E+002
2	332-	344	339.70	84.95	0.60	8.06E+001	82.62	6.44E+002
3	947-	961	955.27	238.86	1.26	1.94E+002	66.92	3.36E+002
4	1399-	1414	1407.50	351.92	0.83	6.90E+001	44.48	1.48E+002
5	2322-	2341	2333.14	583.35	0.55	1.26E+002	43.64	1.05E+002
6	2426-	2445	2437.23	609.38	1.27	1.19E+002	37.04	6.76E+001
7	3636-	3654	3644.28	911.17	1.20	9.77E+001	32.17	5.03E+001
8	3866-	3884	3876.08	969.13	0.84	7.02E+001	29.93	4.78E+001
9	5832-	5859	5845.09	1461.43	2.16	7.93E+002	57.26	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: 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	0.987	1460.81*	10.67	1.83297E+001	1.98798E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.78976E-001	1.03397E-001
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	6.55888E+000	3.33332E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.98772E-001	2.27084E-001
Bi-214	0.407	609.31*	46.30	4.89855E-001	1.63530E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.628	338.32	11.40		
		911.07*	27.70	7.41258E-001	2.58567E-001
		969.11*	16.60	9.02234E-001	3.95962E-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	0.987	1.832969E+001	1.987984E+000
TL-208	0.469	2.789758E-001	1.033974E-001
Pb-212 @	0.575	5.987719E-001	2.270839E-001
Bi-214	0.407	4.898550E-001	1.635302E-001
Ac-228	0.628	7.893810E-001	2.164954E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.95	1.3426E-001	102.56
4	351.92	1.1506E-001	64.43

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: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	1.1346E-001	8.72E-002	8.1815E-002
	1332.49	100.00	8.7153E-002		9.7436E-002
Nb-94	702.63	100.00	1.1126E-001	1.09E-001	-1.2777E-001
	871.10	100.00	1.0856E-001		-9.3650E-003
Ag-108m	79.20	7.10	7.2441E+000	1.38E-001	-3.7587E+000
	433.93	89.90	1.3796E-001		-6.2846E-002
	614.37	90.40	1.5124E-001		-1.1358E-001
	722.95	90.50	1.4124E-001		7.6257E-002
Sb-125	176.33	6.89	2.5085E+000	4.24E-001	-1.4695E-001
	427.89	29.33	4.2390E-001		1.8744E-001
	463.38	10.35	1.2543E+000		4.6502E-001
	600.56	17.80	6.3154E-001		5.8377E-002
	606.64	5.02	2.9803E+000		5.0100E+000
	635.90	11.32	1.0571E+000		5.7143E-001
Cs-134	563.23	8.38	1.4240E+000	1.31E-001	7.3958E-001
	569.32	15.43	7.4895E-001		-3.9910E-001
	604.70	97.60	1.4251E-001		1.3630E-002
	795.84	85.40	1.3082E-001		5.7297E-002
	801.93	8.73	1.2167E+000		-2.6351E-001
Cs-137	661.65	85.12	1.4239E-001	1.42E-001	-6.8908E-002
Eu-152	121.78	28.40	8.2589E-001	3.89E-001	-6.0985E-002
	244.69	7.49	2.1866E+000		5.1189E-001
	344.27	26.50	4.9202E-001		-5.9781E-001
	778.89	12.74	7.8905E-001		-7.2737E-001
	867.32	4.16	2.6182E+000		-1.9841E+000
	964.01	14.40	9.7366E-001		3.7110E-001
	1085.78	10.00	1.1431E+000		-1.1178E+000
	1112.02	13.30	8.3480E-001		5.7306E-001
1407.95	20.70	3.8880E-001	1.0970E-001		
Eu-154	123.07	40.50	5.6625E-001	2.59E-001	-5.7752E-001
	247.94	6.60	2.2885E+000		-4.3773E-001
	591.81	4.83	2.4783E+000		-1.0454E+000
	723.30	19.70	6.4351E-001		2.0345E-001
	756.87	4.33	2.6104E+000		-1.8659E-001
	873.19	11.50	9.7948E-001		1.5872E-001
	996.32	10.30	1.0643E+000		1.8374E-001
	1004.76	17.90	5.6594E-001		-5.8096E-001
	1274.45	35.50	2.5855E-001		-2.8906E-001
	Eu-155	86.54	30.90		1.3019E+000
	105.31	20.70	1.4039E+000		-4.2638E-001
Am-241	59.54	35.90	2.6433E+000	2.64E+000	9.5058E-002
Cm-243	228.19	10.56	1.5395E+000	1.02E+000	1.4655E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.0162E+000	1.02E+000	-2.8992E-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 7/28/2006 2:37:53 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-01-108

Sample Title: OOL-10-01-108-F-G

Description: Satulated soil 10%

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 2:27:11 PM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-108
Title: OOL-10-01-108-F-G
Description: Satulated soil 10%

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	309	300.79	75.15	1.50	3.56E+002	123.39	1.07E+003
2	945-	963	955.42	238.83	1.35	2.23E+002	78.36	4.07E+002
3	1346-	1358	1353.06	338.25	1.00	5.98E+001	39.03	1.28E+002
4	1401-	1416	1407.63	351.90	1.76	1.67E+002	50.32	1.63E+002
5	2324-	2342	2332.68	583.19	1.98	1.73E+002	37.47	5.56E+001
6	2429-	2449	2436.83	609.23	1.63	3.03E+002	44.98	6.21E+001
7	3638-	3659	3646.16	911.60	1.26	1.19E+002	35.39	5.53E+001
8	3751-	3762	3756.21	939.12	0.88	1.29E+001	13.86	1.31E+001
9	3869-	3886	3877.56	969.46	0.35	8.35E+001	28.51	3.95E+001
10	4473-	4490	4481.69	1120.52	1.38	9.10E+001	28.74	3.80E+001
11	5834-	5860	5846.10	1461.66	2.20	8.55E+002	59.65	1.65E+001
12	7055-	7073	7062.81	1765.88	0.48	5.43E+001	17.15	6.68E+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: 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	0.976	1460.81*	10.67	1.94241E+001	2.07642E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.87006E-001	9.76358E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.38067E+001	5.49313E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.26971E-001	2.80075E-001
Bi-214	0.987	609.31*	46.30	1.24801E+000	2.40761E-001
		1120.29*	15.10	1.34204E+000	4.47245E-001
		1764.49*	15.80	8.83440E-001	2.92574E-001
Ac-228	0.994	338.32*	11.40	8.30379E-001	5.57443E-001
		911.07*	27.70	9.03793E-001	2.88735E-001
		969.11*	16.60	1.07874E+000	3.85063E-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	0.976	1.942413E+001	2.076418E+000
TL-208	0.471	3.870056E-001	9.763581E-002
Pb-212 @	0.593	7.269707E-001	2.800752E-001
Bi-214	0.987	1.136354E+000	1.716676E-001
Ac-228	0.994	9.467687E-001	2.134073E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.90	2.7825E-001	30.14
8	939.12	2.1538E-002	107.25

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: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	1.1615E-001	9.68E-002	-2.0859E-002
	1332.49	100.00	9.6842E-002		2.4930E-002
Nb-94	702.63	100.00	1.1871E-001	1.18E-001	6.4159E-002
	871.10	100.00	1.1758E-001		9.3681E-003
Ag-108m	79.20	7.10	9.6726E+000	1.49E-001	-4.9543E+000
	433.93	89.90	1.5301E-001		-7.7006E-002
	614.37	90.40	1.9970E-001		-6.1099E-002
	722.95	90.50	1.4856E-001		6.7124E-002
Sb-125	176.33	6.89	2.9581E+000	4.81E-001	-1.6541E+000
	427.89	29.33	4.8087E-001		1.6243E-001
	463.38	10.35	1.2901E+000		-1.1432E-001
	600.56	17.80	6.8532E-001		-5.3327E-002
	606.64	5.02	3.8606E+000		-2.4091E+000
	635.90	11.32	1.1138E+000		-9.2517E-002
Cs-134	563.23	8.38	1.5073E+000	1.45E-001	-1.2189E-001
	569.32	15.43	8.0133E-001		-1.0757E+000
	604.70	97.60	1.9119E-001		-1.7856E-001
	795.84	85.40	1.4472E-001		1.1312E-001
	801.93	8.73	1.3914E+000		-5.1721E-001
Cs-137	661.65	85.12	1.4814E-001	1.48E-001	-2.0934E-002
Eu-152	121.78	28.40	9.7551E-001	4.56E-001	-2.1687E-001
	244.69	7.49	2.4393E+000		-3.4673E-002
	344.27	26.50	5.5323E-001		-6.1299E-001
	778.89	12.74	9.2568E-001		-6.0435E-002
	867.32	4.16	2.8440E+000		-1.5799E+000
	964.01	14.40	1.0542E+000		-4.6562E-001
	1085.78	10.00	1.1904E+000		-1.4359E-001
	1112.02	13.30	7.5378E-001		-1.9080E+000
1407.95	20.70	4.5573E-001	2.4036E-001		
Eu-154	123.07	40.50	6.7009E-001	2.95E-001	-4.8422E-001
	247.94	6.60	2.5547E+000		-1.9947E+000
	591.81	4.83	2.6663E+000		-1.2443E-002
	723.30	19.70	6.8766E-001		2.8920E-003
	756.87	4.33	2.8138E+000		-1.0768E+000
	873.19	11.50	1.0339E+000		-9.1251E-002
	996.32	10.30	1.1296E+000		-2.8209E-001
	1004.76	17.90	6.7158E-001		4.1797E-002
1274.45	35.50	2.9487E-001	1.8309E-001		
Eu-155	86.54	30.90	1.6649E+000	1.63E+000	3.7404E+000
	105.31	20.70	1.6319E+000		-9.6870E-001
Am-241	59.54	35.90	5.1289E+000	5.13E+000	7.3670E+000
Cm-243	228.19	10.56	1.5951E+000	1.20E+000	-1.8130E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1962E+000	1.20E+000	1.9559E-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 7/28/2006 11:22:41 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-10-01-109-

Sample Title: OOL-10-01-109-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 11:12:39 AM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-109-
Title: OOL-10-01-109-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It contains 9 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	2.02061E+001	2.14064E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	5.76387E-001	3.58715E-001
		583.14*	84.20	3.40534E-001	1.06590E-001
		860.37	12.46		
Pb-212	0.446	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.694	238.63*	44.60	7.51335E-001	2.41073E-001
		609.31*	46.30	4.48973E-001	1.70147E-001
		1120.29	15.10		
Ac-228	0.632	1764.49*	15.80	3.62466E-001	2.34128E-001
		338.32	11.40		
		911.07*	27.70	8.94829E-001	2.60936E-001
		969.11*	16.60	8.16661E-001	4.25919E-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	0.988		
	K-40	0.996	2.020607E+001	2.140641E+000
	TL-208	0.751	3.596687E-001	1.021748E-001
	Pb-212 @	0.446	7.513348E-001	2.410734E-001
	Bi-214	0.694	4.190752E-001	1.376400E-001
	Ac-228	0.632	8.734970E-001	2.225001E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1230.89	2.9399E-002	100.15

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: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	1.1959E-001	8.55E-002	2.3736E-002
	1332.49	100.00	8.5487E-002		-3.3893E-002
Nb-94	702.63	100.00	1.1642E-001	1.11E-001	-3.9897E-002
	871.10	100.00	1.1108E-001		-3.5898E-002
Ag-108m	79.20	7.10	9.1957E+000	1.47E-001	-1.4764E+001
	433.93	89.90	1.4660E-001		7.7897E-003
	614.37	90.40	1.6783E-001		5.9380E-002
	722.95	90.50	1.5114E-001		-1.8670E-002
Sb-125	176.33	6.89	2.8151E+000	4.17E-001	-1.0864E+000
	427.89	29.33	4.1697E-001		-4.7889E-001
	463.38	10.35	1.3382E+000		2.0622E-001
	600.56	17.80	6.5655E-001		-3.4379E-002
	606.64	5.02	3.1404E+000		4.6543E+000
	635.90	11.32	1.0746E+000		-6.0712E-001
Cs-134	563.23	8.38	1.5649E+000	1.47E-001	-1.0089E+000
	569.32	15.43	8.5303E-001		6.5691E-001
	604.70	97.60	1.5922E-001		5.5168E-002
	795.84	85.40	1.4650E-001		1.8057E-001
Cs-137	801.93	8.73	1.3176E+000	1.48E-001	-2.2602E+000
	661.65	85.12	1.4814E-001		3.9667E-002
Eu-152	121.78	28.40	9.1721E-001	3.50E-001	-1.9875E-001
	244.69	7.49	2.3635E+000		-3.4653E+000
	344.27	26.50	5.1641E-001		-6.8195E-001
	778.89	12.74	9.2880E-001		4.0696E-001
	867.32	4.16	2.6569E+000		-4.5712E+000
	964.01	14.40	1.0589E+000		3.1053E-001
	1085.78	10.00	1.0721E+000		-6.6404E-001
	1112.02	13.30	8.5348E-001		-2.7302E-001
1407.95	20.70	3.5020E-001	8.0507E-002		
Eu-154	123.07	40.50	6.3799E-001	2.78E-001	4.0487E-001
	247.94	6.60	2.4694E+000		-1.3196E+000
	591.81	4.83	2.4361E+000		5.3076E-001
	723.30	19.70	7.0107E-001		2.0173E-001
	756.87	4.33	3.0088E+000		-1.9103E-002
	873.19	11.50	9.9705E-001		7.1859E-001
	996.32	10.30	1.1072E+000		2.4116E-001
	1004.76	17.90	6.1997E-001		2.2792E-002
1274.45	35.50	2.7764E-001	3.6143E-002		
Eu-155	86.54	30.90	1.5408E+000	1.54E+000	1.7423E+000
	105.31	20.70	1.5714E+000		3.2569E-001
Am-241	59.54	35.90	4.7205E+000	4.72E+000	1.5706E+000
Cm-243	228.19	10.56	1.6880E+000	1.12E+000	5.3670E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1181E+000	1.12E+000	-1.3024E+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 7/31/2006 9:59:13 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-10-01-110-F-

Sample Title: OOL-10-01-110-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 9:49:09 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: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-110-F-
 Title: OOL-10-01-110-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	295-	307	300.32	75.10	0.92	1.35E+002	91.68	7.77E+002
2	944-	962	954.33	238.62	1.26	2.66E+002	69.67	2.94E+002
3	1171-	1188	1181.64	295.45	1.28	7.40E+001	49.19	1.71E+002
4	1399-	1413	1407.36	351.89	0.79	7.77E+001	41.83	1.31E+002
5	2324-	2342	2332.27	583.14	1.82	1.46E+002	40.69	8.45E+001
6	2427-	2446	2436.60	609.22	1.78	1.06E+002	38.04	7.74E+001
7	3635-	3655	3644.66	911.27	1.32	1.29E+002	31.31	3.44E+001
8	3867-	3883	3875.09	968.88	0.86	5.63E+001	25.88	3.77E+001
9	5832-	5858	5845.30	1461.48	2.05	7.08E+002	53.73	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: 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	0.984	1460.81*	10.67	1.63560E+001	1.81513E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.22721E-001	9.95556E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	4.19358E+000	2.96657E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.20127E-001	2.50688E-001
Bi-214	0.406	609.31*	46.30	4.33501E-001	1.64983E-001
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.614	74.82* @	6.21	7.22565E+000	5.13832E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.65590E-001	3.87932E-001
Ac-228	0.627	351.92*	37.20	3.22854E-001	1.82018E-001
		338.32	11.40		
		911.07*	27.70	9.75725E-001	2.62779E-001
		969.11*	16.60	7.22964E-001	3.41012E-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	0.984	1.635603E+001	1.815134E+000
TL-208	0.470	3.227212E-001	9.955556E-002
Pb-212 @	0.576	8.201271E-001	2.506876E-001
Bi-214	0.406	4.335006E-001	1.649835E-001
PB-214 @	0.614	3.666508E-001	1.647815E-001
Ac-228	0.627	8.815540E-001	2.081484E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.1040E-001	8.25E-002	1.4740E-002
	1332.49	100.00	8.2534E-002		6.2620E-003
Nb-94	702.63	100.00	1.1484E-001	1.05E-001	-2.3024E-002
	871.10	100.00	1.0485E-001		3.6479E-002
Ag-108m	79.20	7.10	7.1691E+000	1.28E-001	-5.2736E+000
	433.93	89.90	1.3907E-001		5.2032E-002
	614.37	90.40	1.4272E-001		-1.3955E-002
	722.95	90.50	1.2809E-001		2.0221E-003
Sb-125	176.33	6.89	2.4504E+000	4.13E-001	1.1024E+000
	427.89	29.33	4.1282E-001		-1.9011E-001
	463.38	10.35	1.1843E+000		1.7435E-001
	600.56	17.80	6.3154E-001		9.6506E-002
	606.64	5.02	2.9642E+000		2.5689E-002
	635.90	11.32	1.0190E+000		-1.5961E-001
Cs-134	563.23	8.38	1.3572E+000	1.27E-001	4.6054E-001
	569.32	15.43	7.2015E-001		2.3350E-001
	604.70	97.60	1.4340E-001		3.2621E-002
	795.84	85.40	1.2729E-001		1.2072E-001
	801.93	8.73	1.1801E+000		-9.5477E-001
Cs-137	661.65	85.12	1.3983E-001	1.40E-001	1.3096E-001
Eu-152	121.78	28.40	8.0342E-001	4.21E-001	4.7259E-002
	244.69	7.49	2.0832E+000		-1.2749E+000
	344.27	26.50	4.6774E-001		-6.5203E-001
	778.89	12.74	7.6656E-001		-6.3965E-001
	867.32	4.16	2.5853E+000		-3.0693E+000
	964.01	14.40	9.6346E-001		5.4915E-001
	1085.78	10.00	1.0530E+000		-7.1740E-001
	1112.02	13.30	7.9228E-001		-6.4192E-001
1407.95	20.70	4.2061E-001	3.4771E-001		
Eu-154	123.07	40.50	5.5642E-001	2.51E-001	-3.8463E-001
	247.94	6.60	2.2159E+000		-1.6955E+000
	591.81	4.83	2.3287E+000		1.5090E+000
	723.30	19.70	5.8452E-001		-8.0471E-002
	756.87	4.33	2.6574E+000		-2.0525E+000
	873.19	11.50	9.4053E-001		1.2537E-001
	996.32	10.30	1.0596E+000		1.4640E-001
	1004.76	17.90	5.7177E-001		-1.0865E-001
1274.45	35.50	2.5078E-001	-6.9018E-002		
Eu-155	86.54	30.90	1.3141E+000	1.31E+000	1.6231E+000
	105.31	20.70	1.3895E+000		7.6104E-002
Am-241	59.54	35.90	2.6551E+000	2.66E+000	1.5224E-003
Cm-243	228.19	10.56	1.5057E+000	1.02E+000	1.0042E+000

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	-1.3245E-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 7/28/2006 2:17:33 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-01-111

Sample Title: OOL-10-01-111-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 2:07:35 PM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-111
 Title: OOL-10-01-111-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	945-	961	955.14	238.76	1.16	2.28E+002	67.68	3.08E+002
2	1171-	1191	1182.21	295.54	0.87	1.66E+002	64.88	2.56E+002
3	1401-	1416	1407.80	351.94	1.33	2.33E+002	53.03	1.65E+002
4	2326-	2342	2333.19	583.32	2.04	1.50E+002	35.49	5.69E+001
5	2428-	2449	2437.43	609.38	1.61	2.66E+002	46.22	7.84E+001
6	3635-	3654	3645.63	911.47	0.79	1.16E+002	33.51	5.01E+001
7	5832-	5859	5845.98	1461.63	1.93	7.95E+002	60.49	3.50E+001
8	6918-	6931	6924.03	1731.18	0.53	1.54E+001	12.27	8.65E+000
9	7053-	7069	7062.15	1765.72	0.58	4.11E+001	16.72	9.90E+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: 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	0.978	1460.81*	10.67	1.80714E+001	2.00785E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.35172E-001	9.04350E-002
Pb-212	0.446	860.37	12.46		
		74.81 @	10.70		
		77.11 @	18.00		
Bi-214	0.687	87.30 @	8.00		
		238.63*	44.60	7.44610E-001	2.49897E-001
		609.31*	46.30	1.09445E+000	2.33334E-001
PB-214	0.549	1120.29	15.10		
		1764.49*	15.80	6.68438E-001	2.80038E-001
		74.82 @	6.21		
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.32242E+000	5.63745E-001
		351.92*	37.20	9.99950E-001	2.82594E-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	0.978	1.807138E+001	2.007853E+000
TL-208	0.471	3.351718E-001	9.043501E-002
Pb-212 @	0.446	7.446101E-001	2.498974E-001
Bi-214	0.687	9.198807E-001	1.792619E-001
PB-214 @	0.549	1.064708E+000	2.526302E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
6	911.47	1.9311E-001	28.92
8	1731.18	2.5590E-002	79.89

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: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	1.2665E-001	9.14E-002	1.3733E-001
	1332.49	100.00	9.1354E-002		7.5212E-002
Nb-94	702.63	100.00	1.2674E-001	1.18E-001	8.2778E-002
	871.10	100.00	1.1842E-001		-2.5409E-002
Ag-108m	79.20	7.10	9.6672E+000	1.31E-001	-2.4634E+001
	433.93	89.90	1.4412E-001		6.3854E-002
	614.37	90.40	1.9642E-001		-5.0646E-002
	722.95	90.50	1.3117E-001		-3.4160E-002
Sb-125	176.33	6.89	2.9000E+000	4.40E-001	-1.6522E+000
	427.89	29.33	4.4047E-001		1.4255E-001
	463.38	10.35	1.2703E+000		-1.8911E-001
	600.56	17.80	6.9832E-001		-2.1864E-001
	606.64	5.02	3.8063E+000		-1.2011E+000
	635.90	11.32	9.8103E-001		5.2050E-003
Cs-134	563.23	8.38	1.5146E+000	1.38E-001	1.1672E+000
	569.32	15.43	7.7626E-001		-2.8526E-001
	604.70	97.60	1.8941E-001		-7.7262E-002
	795.84	85.40	1.3829E-001		6.8321E-002
Cs-137	801.93	8.73	1.2741E+000	1.52E-001	-1.1280E+000
	661.65	85.12	1.5214E-001		-2.2117E-002
Eu-152	121.78	28.40	9.4748E-001	4.38E-001	-3.2778E-001
	244.69	7.49	2.4219E+000		-3.6288E-001
	344.27	26.50	5.3553E-001		-9.7406E-001
	778.89	12.74	8.7410E-001		-5.5869E-001
	867.32	4.16	2.9231E+000		-2.1784E+000
	964.01	14.40	9.7573E-001		-8.6986E-002
	1085.78	10.00	1.0018E+000		2.6825E-002
	1112.02	13.30	7.7894E-001		-1.0823E+000
1407.95	20.70	4.3825E-001	1.0979E-001		
Eu-154	123.07	40.50	6.6026E-001	2.95E-001	-1.8185E-001
	247.94	6.60	2.5740E+000		-3.2971E+000
	591.81	4.83	2.5471E+000		1.2997E+000
	723.30	19.70	6.1226E-001		8.7977E-002
	756.87	4.33	2.7426E+000		-1.5096E-001
	873.19	11.50	1.0008E+000		-5.1957E-001
	996.32	10.30	1.0981E+000		-1.9216E-002
	1004.76	17.90	6.4373E-001		-5.2440E-001
1274.45	35.50	2.9487E-001	4.6009E-002		
Eu-155	86.54	30.90	1.7049E+000	1.70E+000	2.6706E+000
	105.31	20.70	1.7016E+000		7.0953E-001
Am-241	59.54	35.90	4.8741E+000	4.87E+000	-4.0195E-001
Cm-243	228.19	10.56	1.6447E+000	1.17E+000	-1.1433E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1656E+000	1.17E+000	2.4534E-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 7/28/2006 11:37:10 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-01-112-

Sample Title: OOL-10-01-112-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 11:27:08 AM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-112-
 Title: OOL-10-01-112-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	947-	973	955.29	238.80	1.50	2.82E+002	40.08	3.03E+002
m	2	947-	973	966.47	241.60	1.51	5.16E+001	28.76	3.55E+002
	3	1347-	1359	1352.29	338.06	0.86	6.75E+001	40.52	1.35E+002
	4	1400-	1417	1407.87	351.96	0.78	9.32E+001	49.51	1.67E+002
	5	2035-	2053	2043.44	510.87	0.69	9.49E+001	42.71	1.12E+002
	6	2325-	2342	2333.04	583.28	1.05	1.29E+002	38.49	7.86E+001
	7	2428-	2446	2436.09	609.05	0.71	1.23E+002	35.14	5.87E+001
	8	2901-	2915	2908.29	727.12	0.59	3.09E+001	25.98	5.01E+001
	9	3634-	3654	3644.04	911.08	0.84	9.62E+001	36.61	6.88E+001
M	10	3851-	3884	3857.90	964.55	1.44	3.42E+001	15.04	2.98E+001
m	11	3851-	3884	3876.25	969.14	1.45	5.57E+001	18.51	3.79E+001
	12	4473-	4488	4480.52	1120.22	0.60	4.07E+001	21.73	2.73E+001
	13	4945-	4958	4952.44	1238.22	0.92	2.54E+001	20.27	2.96E+001
	14	5830-	5858	5844.12	1461.17	1.84	8.91E+002	61.55	2.10E+001
	15	7053-	7067	7060.43	1765.28	0.75	2.83E+001	13.16	5.73E+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	1.70415E-001	8.01236E-002
K-40	0.996	1460.81*	10.67	2.02514E+001	2.15533E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	7.88958E-001	3.76497E-001
		583.14*	84.20	2.88961E-001	9.37979E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	5.24120E-001	4.45519E-001
Pb-212	0.446	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.20686E-001	1.94847E-001
Bi-214	0.994	609.31*	46.30	5.07902E-001	1.57723E-001
		1120.29*	15.10	6.00048E-001	3.26848E-001
		1764.49*	15.80	4.59796E-001	2.18878E-001
PB-214	0.311	74.82 @	6.21		
		77.11 @	10.50		
		87.30 @	4.67		
		241.98*	7.49	1.00626E+000	5.85000E-001
Ac-228	1.000	295.21	19.20		
		351.92*	37.20	4.00668E-001	2.23050E-001
		338.32*	11.40	9.36837E-001	5.81598E-001
		911.07*	27.70	7.32370E-001	2.91127E-001
		969.11*	16.60	7.18949E-001	2.50616E-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	1.079992E-001	8.262043E-002
K-40	0.996	2.025136E+001	2.155326E+000
TL-208	0.752	2.889614E-001	9.332395E-002
Bi-212	1.000	5.241199E-001	4.455188E-001
Pb-212 @	0.446	9.206862E-001	1.948466E-001
Bi-214	0.994	5.058916E-001	1.191551E-001
PB-214 @	0.311	4.775317E-001	2.084143E-001
Ac-228	1.000	7.451090E-001	1.805500E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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 10	964.55	5.7079E-002	43.90
13	1238.22	4.2402E-002	79.69

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: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	9.82E-002	-2.5982E-002
	1332.49	100.00	9.8162E-002		-1.7052E-002
Nb-94	702.63	100.00	1.1947E-001	1.08E-001	3.3810E-002
	871.10	100.00	1.0791E-001		6.2928E-002
Ag-108m	79.20	7.10	9.0818E+000	1.39E-001	-1.8083E+001
	433.93	89.90	1.3931E-001		-1.5098E-001
	614.37	90.40	1.5986E-001		-4.0520E-003
	722.95	90.50	1.4594E-001		6.1045E-002
Sb-125	176.33	6.89	2.7647E+000	4.40E-001	5.4429E-001
	427.89	29.33	4.3963E-001		-7.2798E-003
	463.38	10.35	1.2426E+000		-5.2348E-001
	600.56	17.80	7.0381E-001		5.4062E-002
	606.64	5.02	3.0782E+000		2.7899E+000
	635.90	11.32	1.0715E+000		2.4422E-001
Cs-134	563.23	8.38	1.4473E+000	1.45E-001	-1.2201E+000
	569.32	15.43	8.0338E-001		1.6701E-001
	604.70	97.60	1.5598E-001		-2.3992E-002
	795.84	85.40	1.4472E-001		1.3085E-001
	801.93	8.73	1.3365E+000		1.5836E-001
Cs-137	661.65	85.12	1.3674E-001	1.37E-001	2.1053E-002
Eu-152	121.78	28.40	9.2977E-001	3.85E-001	-2.4291E-001
	244.69	7.49	2.4009E+000		-1.5154E-001
	344.27	26.50	5.7806E-001		-2.6984E-001
	778.89	12.74	9.4732E-001		-5.6659E-001
	867.32	4.16	2.5355E+000		-1.1790E+000
	964.01	14.40	1.0775E+000		2.8983E-001
	1085.78	10.00	1.0563E+000		1.0493E-001
	1112.02	13.30	8.5721E-001		-9.7993E-002
1407.95	20.70	3.8477E-001	-4.5756E-001		
Eu-154	123.07	40.50	6.3870E-001	3.16E-001	-3.7124E-001
	247.94	6.60	2.5353E+000		7.5081E-001
	591.81	4.83	2.7863E+000		2.1133E+000
	723.30	19.70	6.7225E-001		4.9980E-001
	756.87	4.33	2.6414E+000		-1.0719E+000
	873.19	11.50	9.1032E-001		-3.3578E-001
	996.32	10.30	1.1472E+000		3.3398E-001
	1004.76	17.90	6.1456E-001		-2.9862E-001
1274.45	35.50	3.1579E-001	-9.2226E-002		
Eu-155	86.54	30.90	1.6170E+000	1.57E+000	2.8024E+000
	105.31	20.70	1.5708E+000		1.5122E-002
Am-241	59.54	35.90	4.5129E+000	4.51E+000	-2.0240E-001
Cm-243	228.19	10.56	1.6782E+000	1.11E+000	6.7860E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1100E+000	1.11E+000	2.5536E-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 7/31/2006 9:39:18 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-10-01-113-F-

Sample Title: OOL-10-01-113-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 9:29:14 AM

Live Time: 600.0 seconds

Real Time: 601.0 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-113-F-
 Title: OOL-10-01-113-F-G
 Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	308	299.83	74.98	0.78	1.21E+002	98.71	8.71E+002
2	947-	964	954.33	238.62	1.25	2.59E+002	74.17	3.55E+002
3	1399-	1416	1406.72	351.73	1.07	1.22E+002	46.66	1.34E+002
4	2324-	2341	2332.18	583.12	1.51	1.43E+002	40.89	8.96E+001
5	2427-	2442	2435.40	608.92	1.34	1.05E+002	34.82	6.93E+001
6	3635-	3655	3644.78	911.30	0.36	1.36E+002	31.99	3.62E+001
7	4148-	4159	4153.58	1038.51	0.42	1.24E+001	14.43	1.66E+001
8	4474-	4488	4481.51	1120.50	0.65	5.12E+001	20.22	1.88E+001
9	5450-	5461	5455.16	1363.93	0.93	1.34E+001	8.82	2.63E+000
10	5831-	5857	5844.66	1461.32	2.16	7.70E+002	56.41	1.35E+001
11	7053-	7068	7060.95	1765.42	0.35	3.10E+001	13.76	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: 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	0.991	1460.81*	10.67	1.77778E+001	1.94164E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.17952E-001	9.96934E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	3.79304E+000	3.17253E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.990	238.63*	44.60	8.00431E-001	2.61223E-001
		609.31*	46.30	4.29384E-001	1.52348E-001
		1120.29*	15.10	7.48042E-001	3.06094E-001
		1764.49*	15.80	5.27187E-001	2.40062E-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	0.991	1.777781E+001	1.941637E+000
TL-208	0.470	3.179522E-001	9.969343E-002
Pb-212 @	0.576	8.004305E-001	2.612229E-001
Bi-214	0.990	5.010773E-001	1.185860E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.73	2.0261E-001	38.38
6	911.30	2.2641E-001	23.55
7	1038.51	2.0690E-002	116.23
9	1363.93	2.2292E-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: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	1.0672E-001	7.85E-002	-3.5467E-002
	1332.49	100.00	7.8460E-002		-4.9810E-002
Nb-94	702.63	100.00	1.1004E-001	1.05E-001	-5.8823E-002
	871.10	100.00	1.0485E-001		5.9980E-002
Ag-108m	79.20	7.10	7.2921E+000	1.33E-001	-3.7561E+000
	433.93	89.90	1.3343E-001		6.0969E-002
	614.37	90.40	1.3988E-001		-1.0461E-001
	722.95	90.50	1.3360E-001		-4.4263E-002
Sb-125	176.33	6.89	2.5507E+000	4.01E-001	-7.6508E-001
	427.89	29.33	4.0142E-001		-6.1712E-002
	463.38	10.35	1.2397E+000		1.5473E+000
	600.56	17.80	6.8202E-001		4.0917E-001
	606.64	5.02	3.0177E+000		4.2697E+000
	635.90	11.32	1.0909E+000		2.6273E-002
Cs-134	563.23	8.38	1.4047E+000	1.33E-001	8.4106E-001
	569.32	15.43	7.5544E-001		2.9162E-001
	604.70	97.60	1.5087E-001		-2.4288E-002
	795.84	85.40	1.3329E-001		6.1695E-002
Cs-137	801.93	8.73	1.3060E+000	1.47E-001	1.4639E-001
	661.65	85.12	1.4737E-001		1.0444E-002
Eu-152	121.78	28.40	8.3828E-001	3.76E-001	-6.9922E-001
	244.69	7.49	2.0887E+000		-1.1701E+000
	344.27	26.50	5.2378E-001		-4.2119E-001
	778.89	12.74	8.3212E-001		-6.2041E-001
	867.32	4.16	2.4607E+000		-4.1537E+000
	964.01	14.40	9.8124E-001		5.1949E-001
	1085.78	10.00	1.1139E+000		-8.5428E-001
	1112.02	13.30	7.9624E-001		2.5360E-001
1407.95	20.70	3.7612E-001	-2.2971E-001		
Eu-154	123.07	40.50	5.9116E-001	2.68E-001	-1.6859E-001
	247.94	6.60	2.2426E+000		-9.9744E-001
	591.81	4.83	2.2991E+000		-2.0479E+000
	723.30	19.70	6.2699E-001		3.7018E-001
	756.87	4.33	2.7217E+000		1.7616E+000
	873.19	11.50	9.3654E-001		2.3892E-001
	996.32	10.30	9.9668E-001		5.4583E-001
	1004.76	17.90	5.7754E-001		1.7999E-001
1274.45	35.50	2.6793E-001	-3.1954E-001		
Eu-155	86.54	30.90	1.3451E+000	1.35E+000	1.5967E+000
	105.31	20.70	1.4010E+000		-1.4492E+000
Am-241	59.54	35.90	2.7434E+000	2.74E+000	3.7044E-001
Cm-243	228.19	10.56	1.5094E+000	1.02E+000	-3.1486E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.0209E+000	1.02E+000	-7.9190E-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 7/28/2006 11:51:40 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-01-114-

Sample Title: OOL-10-01-114-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 11:41:38 AM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-114-
Title: OOL-10-01-114-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	946-	960	955.06	238.74	1.80	2.61E+002	66.47	3.09E+002
2	1347-	1361	1352.25	338.05	1.00	6.53E+001	42.38	1.39E+002
3	1397-	1417	1407.27	351.81	1.20	1.12E+002	58.57	2.15E+002
4	2324-	2340	2331.79	582.97	1.58	1.52E+002	38.06	7.20E+001
5	2427-	2446	2436.77	609.22	0.67	1.08E+002	40.41	9.03E+001
6	3634-	3655	3644.59	911.21	1.17	1.60E+002	35.11	4.32E+001
7	3866-	3883	3875.40	968.92	1.05	8.51E+001	32.01	5.59E+001
8	5830-	5858	5844.40	1461.24	2.16	9.51E+002	62.01	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: 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	2.16204E+001	2.24731E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.39268E-001	9.57472E-002
		860.37	12.46		
Pb-212	0.446	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.51542E-001	2.54789E-001
Bi-214	0.402	609.31*	46.30	4.43966E-001	1.75238E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.999	338.32*	11.40	9.06100E-001	6.05391E-001
		911.07*	27.70	1.21658E+000	3.01672E-001
		969.11*	16.60	1.09900E+000	4.28985E-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	2.162037E+001	2.247308E+000
TL-208	0.471	3.392683E-001	9.574720E-002
Pb-212 @	0.446	8.515419E-001	2.547887E-001
Bi-214	0.402	4.439656E-001	1.752379E-001
Ac-228	0.999	1.138984E+000	2.285109E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.81	1.8686E-001	52.24

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: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	1.2104E-001	8.47E-002	7.6179E-002
	1332.49	100.00	8.4722E-002		4.0117E-002
Nb-94	702.63	100.00	1.2603E-001	1.18E-001	5.8348E-002
	871.10	100.00	1.1800E-001		-9.1604E-002
Ag-108m	79.20	7.10	9.7502E+000	1.44E-001	-1.6301E+001
	433.93	89.90	1.5353E-001		-8.0420E-002
	614.37	90.40	1.6783E-001		6.2883E-003
	722.95	90.50	1.4404E-001		7.1679E-002
Sb-125	176.33	6.89	2.9204E+000	4.94E-001	-2.2408E-001
	427.89	29.33	4.9383E-001		-1.6003E-001
	463.38	10.35	1.3358E+000		3.2548E-001
	600.56	17.80	7.0745E-001		4.3461E-001
	606.64	5.02	3.1913E+000		4.3545E+000
	635.90	11.32	1.1256E+000		-4.2283E-001
Cs-134	563.23	8.38	1.6101E+000	1.46E-001	3.8365E-001
	569.32	15.43	9.0165E-001		9.8458E-001
	604.70	97.60	1.6029E-001		2.8098E-002
	795.84	85.40	1.4561E-001		8.1039E-002
	801.93	8.73	1.3365E+000		-1.6881E+000
Cs-137	661.65	85.12	1.4527E-001	1.45E-001	2.4207E-002
Eu-152	121.78	28.40	9.7583E-001	4.09E-001	6.2015E-001
	244.69	7.49	2.4341E+000		-4.6145E+000
	344.27	26.50	5.6543E-001		-2.4425E-002
	778.89	12.74	1.0122E+000		-2.4875E-002
	867.32	4.16	3.0283E+000		7.7614E-001
	964.01	14.40	1.1205E+000		6.6353E-003
	1085.78	10.00	1.0876E+000		-6.3953E-001
	1112.02	13.30	8.9364E-001		-1.3881E+000
1407.95	20.70	4.0862E-001	-3.9184E-002		
Eu-154	123.07	40.50	6.6759E-001	3.23E-001	-2.2328E-001
	247.94	6.60	2.6205E+000		-1.5099E+000
	591.81	4.83	2.5941E+000		7.2465E-001
	723.30	19.70	6.5468E-001		-5.6534E-002
	756.87	4.33	2.7154E+000		5.1794E-002
	873.19	11.50	1.0519E+000		-4.4062E-001
	996.32	10.30	1.0797E+000		-4.6146E-001
	1004.76	17.90	6.2533E-001		-3.3178E-001
1274.45	35.50	3.2345E-001	-5.8365E-002		
Eu-155	86.54	30.90	1.6578E+000	1.66E+000	1.3899E+000
	105.31	20.70	1.6668E+000		7.1946E-001
Am-241	59.54	35.90	5.2886E+000	5.29E+000	-3.3648E+000
Cm-243	228.19	10.56	1.7289E+000	1.22E+000	-1.7811E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2218E+000	1.22E+000	-4.9265E-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 7/28/2006 3:27:11 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-10-01-115

Sample Title: OOL-10-01-115-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 3:17:20 PM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-115
Title: OOL-10-01-115-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	210-	225	217.22	54.26	1.05	2.28E+002	116.07	1.08E+003
2	295-	310	301.39	75.30	1.02	1.93E+002	113.42	1.04E+003
3	948-	962	954.87	238.70	1.72	2.16E+002	61.38	2.64E+002
4	1173-	1186	1181.66	295.40	0.59	7.44E+001	45.05	1.65E+002
5	1400-	1416	1407.13	351.77	1.97	1.71E+002	45.40	1.17E+002
6	2427-	2448	2437.03	609.28	1.76	2.18E+002	43.57	7.36E+001
7	3637-	3656	3645.65	911.48	0.80	1.30E+002	30.64	3.31E+001
8	3869-	3885	3877.16	969.36	0.55	5.98E+001	27.14	4.22E+001
9	4476-	4490	4482.01	1120.60	0.98	4.46E+001	24.88	4.04E+001
10	5832-	5858	5845.74	1461.57	1.90	7.68E+002	57.37	2.03E+001
11	7055-	7070	7061.79	1765.63	0.65	4.15E+001	16.73	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	1.74510E+001	1.92265E+000
Pb-212	0.593	74.81* @	10.70	7.43453E+000	4.60047E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.991	238.63*	44.60	7.05461E-001	2.28861E-001
		609.31*	46.30	9.00018E-001	2.10988E-001
		1120.29*	15.10	6.57334E-001	3.73622E-001
PB-214	0.626	1764.49*	15.80	6.74340E-001	2.80327E-001
		74.82* @	6.21	1.28099E+001	7.98109E+000
		77.11 @	10.50		
Ac-228	0.629	87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.93778E-001	3.73192E-001
		351.92*	37.20	7.36381E-001	2.30660E-001
		338.32	11.40		
Ac-228	0.629	911.07*	27.70	9.88754E-001	2.59465E-001
		969.11*	16.60	7.72781E-001	3.59604E-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	0.981	1.745098E+001	1.922647E+000
Pb-212 @	0.593	7.054607E-001	2.288605E-001
Bi-214	0.991	7.911626E-001	1.536593E-001
PB-214 @	0.626	6.969634E-001	1.962074E-001
Ac-228	0.629	9.148123E-001	2.104120E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	54.26	3.7973E-001	50.94

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: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	1.0837E-001	8.70E-002	-2.8212E-002
	1332.49	100.00	8.6993E-002		3.0061E-002
Nb-94	702.63	100.00	1.1369E-001	1.02E-001	-9.3935E-002
	871.10	100.00	1.0222E-001		-1.0241E-002
Ag-108m	79.20	7.10	9.9115E+000	1.41E-001	-1.7266E+000
	433.93	89.90	1.4131E-001		-4.1486E-002
	614.37	90.40	1.8380E-001		-1.6667E-002
	722.95	90.50	1.5439E-001		1.5609E-001
Sb-125	176.33	6.89	2.7212E+000	4.22E-001	-2.3998E+000
	427.89	29.33	4.2231E-001		-7.1604E-001
	463.38	10.35	1.3334E+000		8.7109E-001
	600.56	17.80	6.5459E-001		-2.8324E-001
	606.64	5.02	3.5264E+000		-8.5078E-001
	635.90	11.32	1.0465E+000		-2.8151E-001
Cs-134	563.23	8.38	1.4625E+000	1.42E-001	-7.7706E-001
	569.32	15.43	8.2760E-001		-3.6919E-001
	604.70	97.60	1.7230E-001		-1.0218E-002
	795.84	85.40	1.4154E-001		2.4441E-005
Cs-137	801.93	8.73	1.3870E+000	1.43E-001	5.2787E-001
	661.65	85.12	1.4319E-001		2.7673E-002
Eu-152	121.78	28.40	9.4449E-001	4.20E-001	-2.3149E-001
	244.69	7.49	2.3365E+000		-8.3537E-001
	344.27	26.50	5.4593E-001		-8.4300E-001
	778.89	12.74	8.1554E-001		-2.4846E-001
	867.32	4.16	2.5127E+000		-6.0601E-001
	964.01	14.40	1.0231E+000		-3.5223E-002
	1085.78	10.00	1.0773E+000		5.5509E-002
	1112.02	13.30	8.3454E-001		-1.1340E+000
1407.95	20.70	4.2000E-001	3.6801E-001		
Eu-154	123.07	40.50	6.6118E-001	2.85E-001	-2.0154E-001
	247.94	6.60	2.5070E+000		-2.2747E+000
	591.81	4.83	2.5335E+000		1.4474E+000
	723.30	19.70	7.0767E-001		6.5714E-001
	756.87	4.33	2.5941E+000		-3.0894E+000
	873.19	11.50	9.1445E-001		1.2705E-001
	996.32	10.30	1.0173E+000		2.1643E-001
	1004.76	17.90	6.1997E-001		-8.0410E-004
1274.45	35.50	2.8466E-001	-2.6306E-001		
Eu-155	86.54	30.90	1.7019E+000	1.66E+000	3.1027E+000
	105.31	20.70	1.6578E+000		1.2361E-001
Am-241	59.54	35.90	5.1547E+000	5.15E+000	8.8214E-001
Cm-243	228.19	10.56	1.6522E+000	1.17E+000	-9.8981E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1667E+000	1.17E+000	-2.7645E-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 7/31/2006 8:38:11 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-116-F-

Sample Title: OOL-10-01-116-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 8:28:10 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: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-116-F-
Title: OOL-10-01-116-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	308	300.75	75.21	0.70	8.21E+001	92.53	8.12E+002
2	947-	961	953.86	238.50	1.06	1.28E+002	62.12	3.04E+002
3	1343-	1356	1351.93	338.03	0.58	6.15E+001	38.79	1.18E+002
4	1398-	1416	1407.53	351.93	0.62	1.13E+002	47.06	1.37E+002
5	2323-	2341	2332.58	583.22	0.61	1.36E+002	37.10	6.59E+001
6	2424-	2443	2436.30	609.15	1.44	1.34E+002	34.05	4.76E+001
7	3635-	3655	3642.99	910.85	0.42	1.02E+002	30.55	3.93E+001
8	4477-	4489	4482.52	1120.75	0.53	2.00E+001	20.56	3.20E+001
9	5830-	5858	5844.52	1461.28	2.01	7.44E+002	55.79	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: 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	0.992	1460.81*	10.67	1.71775E+001	1.89607E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.01813E-001	9.11911E-002
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	2.54267E+000	2.90740E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.95219E-001	2.01616E-001
Bi-214	0.709	609.31*	46.30	5.51340E-001	1.55365E-001
		1120.29*	15.10	2.93056E-001	3.02180E-001
		1764.49	15.80		
Ac-228	0.540	338.32*	11.40	8.24442E-001	5.35684E-001
		911.07*	27.70	7.71523E-001	2.48226E-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: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	0.992	1.717754E+001	1.896073E+000
TL-208	0.470	3.018128E-001	9.119110E-002
Pb-212 @	0.575	3.952191E-001	2.016156E-001
Bi-214	0.709	4.973385E-001	1.381722E-001
Ac-228	0.540	7.808770E-001	2.252208E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.93	1.8765E-001	41.79

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: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	1.0619E-001	7.85E-002	-7.5687E-002
	1332.49	100.00	7.8460E-002		2.3456E-002
Nb-94	702.63	100.00	1.0714E-001	9.80E-002	7.0179E-002
	871.10	100.00	9.8000E-002		4.5510E-003
Ag-108m	79.20	7.10	7.1301E+000	1.29E-001	-4.5948E+000
	433.93	89.90	1.2904E-001		-3.2718E-002
	614.37	90.40	1.3476E-001		-1.2619E-001
	722.95	90.50	1.3525E-001		1.5059E-002
Sb-125	176.33	6.89	2.4504E+000	4.12E-001	-1.1145E+000
	427.89	29.33	4.1196E-001		1.0517E-001
	463.38	10.35	1.1894E+000		-5.6865E-001
	600.56	17.80	6.1927E-001		-7.9048E-003
	606.64	5.02	2.9097E+000		4.5415E+000
	635.90	11.32	9.7587E-001		2.5320E-001
Cs-134	563.23	8.38	1.3491E+000	1.30E-001	-1.2390E+000
	569.32	15.43	7.3801E-001		-1.0393E-001
	604.70	97.60	1.4251E-001		-4.3673E-002
	795.84	85.40	1.3033E-001		7.8271E-002
	801.93	8.73	1.0740E+000		-1.1600E+000
Cs-137	661.65	85.12	1.3983E-001	1.40E-001	1.3743E-001
Eu-152	121.78	28.40	7.7764E-001	3.58E-001	-7.6993E-001
	244.69	7.49	2.0369E+000		-4.2278E-001
	344.27	26.50	4.9430E-001		-4.4767E-002
	778.89	12.74	8.2862E-001		5.3039E-001
	867.32	4.16	2.3658E+000		-5.9379E-001
	964.01	14.40	9.3215E-001		1.4014E-001
	1085.78	10.00	1.0940E+000		1.6456E-001
	1112.02	13.30	8.1961E-001		-8.7751E-001
1407.95	20.70	3.5844E-001	4.8609E-002		
Eu-154	123.07	40.50	5.4595E-001	2.64E-001	-1.1188E-001
	247.94	6.60	2.2002E+000		-1.0334E+000
	591.81	4.83	2.2991E+000		-3.2382E-001
	723.30	19.70	6.1571E-001		-8.9673E-002
	756.87	4.33	2.4639E+000		9.0883E-002
	873.19	11.50	8.5261E-001		-4.8264E-001
	996.32	10.30	9.9668E-001		-2.3932E-001
	1004.76	17.90	5.7177E-001		-3.4213E-002
1274.45	35.50	2.6422E-001	2.1546E-002		
Eu-155	86.54	30.90	1.2969E+000	1.30E+000	1.7105E+000
	105.31	20.70	1.3930E+000		5.7580E-001
Am-241	59.54	35.90	2.6683E+000	2.67E+000	7.0305E-003
Cm-243	228.19	10.56	1.4712E+000	9.86E-001	3.3723E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.8559E-001	9.86E-001	-9.2630E-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 7/28/2006 4:01:34 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-01-117

Sample Title: OOL-10-01-117-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 3:51:08 PM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-117
Title: OOL-10-01-117-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	307	301.12	75.24	0.99	1.88E+002	104.39	9.59E+002
2	932-	963	955.42	238.83	1.34	2.41E+002	106.81	5.47E+002
3	1171-	1188	1182.52	295.62	0.40	5.29E+001	54.13	2.18E+002
4	1349-	1360	1355.27	338.81	0.32	4.19E+001	38.80	1.39E+002
5	1397-	1417	1407.25	351.80	1.00	1.81E+002	55.79	1.73E+002
6	2036-	2053	2042.38	510.61	0.30	8.96E+001	40.95	1.06E+002
7	2322-	2343	2332.88	583.24	1.43	1.61E+002	38.52	6.01E+001
8	2429-	2449	2436.89	609.25	0.45	1.91E+002	41.95	7.21E+001
9	3636-	3656	3645.18	911.36	1.52	1.02E+002	33.77	5.30E+001
10	3867-	3885	3875.55	968.96	0.62	8.30E+001	28.15	3.60E+001
11	5832-	5859	5845.35	1461.47	2.18	7.61E+002	56.34	1.43E+001
12	7055-	7069	7061.50	1765.55	0.95	4.27E+001	17.69	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: 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	1.60968E-001	7.67107E-002
K-40	0.985	1460.81*	10.67	1.72910E+001	1.89733E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	7.45224E-001	3.60319E-001
		583.14*	84.20	3.59155E-001	9.78723E-002
		860.37	12.46		
Pb-212	0.592	74.81* @	10.70	7.27060E+000	4.27332E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.690	238.63*	44.60	7.87645E-001	3.69926E-001
		609.31*	46.30	7.86569E-001	1.98135E-001
		1120.29	15.10		
PB-214	0.625	1764.49*	15.80	6.94851E-001	2.95913E-001
		74.82* @	6.21	1.25275E+001	7.41900E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
Ac-228	0.997	295.21*	19.20	4.21955E-001	4.37922E-001
		351.92*	37.20	7.75834E-001	2.72544E-001
		338.32*	11.40	5.82629E-001	5.46751E-001
		911.07*	27.70	7.76455E-001	2.72148E-001
		969.11*	16.60	1.07120E+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: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	8.339092E-002	7.953020E-002
K-40	0.985	1.729100E+001	1.897333E+000
TL-208	0.752	3.591552E-001	9.716989E-002
Pb-212 @	0.592	7.876449E-001	3.699265E-001
Bi-214	0.690	7.581780E-001	1.646369E-001
PB-214 @	0.625	6.770342E-001	2.313916E-001
Ac-228	0.997	8.348862E-001	2.051689E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.1207E-001	8.24E-002	-8.5493E-002
	1332.49	100.00	8.2383E-002		6.6312E-003
Nb-94	702.63	100.00	1.1369E-001	1.12E-001	-1.7211E-001
	871.10	100.00	1.1197E-001		-2.9597E-002
Ag-108m	79.20	7.10	9.7875E+000	1.40E-001	-1.0822E+001
	433.93	89.90	1.4131E-001		-3.9148E-002
	614.37	90.40	1.7714E-001		-1.4344E-001
	722.95	90.50	1.4015E-001		6.6769E-002
Sb-125	176.33	6.89	2.7243E+000	4.39E-001	-1.1041E+000
	427.89	29.33	4.3878E-001		-2.3072E-001
	463.38	10.35	1.2578E+000		6.4181E-001
	600.56	17.80	7.1107E-001		6.9592E-001
	606.64	5.02	3.4200E+000		-1.7982E+000
	635.90	11.32	1.0110E+000		-1.0072E+000
Cs-134	563.23	8.38	1.4587E+000	1.41E-001	8.1447E-001
	569.32	15.43	7.7200E-001		-4.3600E-001
	604.70	97.60	1.6806E-001		-3.7080E-002
	795.84	85.40	1.4062E-001		3.7498E-002
Cs-137	801.93	8.73	1.3870E+000	1.32E-001	-9.6241E-001
	661.65	85.12	1.3225E-001		-1.9020E-002
Eu-152	121.78	28.40	9.3850E-001	4.31E-001	4.0568E-001
	244.69	7.49	2.3564E+000		1.0543E-001
	344.27	26.50	5.3402E-001		-5.4573E-001
	778.89	12.74	8.4708E-001		-6.5146E-001
	867.32	4.16	2.6677E+000		-3.1667E+000
	964.01	14.40	9.7573E-001		-4.2453E-002
	1085.78	10.00	1.1230E+000		8.0647E-001
	1112.02	13.30	7.8714E-001		-9.7859E-001
1407.95	20.70	4.3105E-001	2.4531E-001		
Eu-154	123.07	40.50	6.5284E-001	2.88E-001	1.7296E-001
	247.94	6.60	2.4982E+000		-3.9702E+000
	591.81	4.83	2.5061E+000		1.1212E+000
	723.30	19.70	6.4751E-001		1.3968E-001
	756.87	4.33	2.6508E+000		-2.6635E-002
	873.19	11.50	9.6646E-001		-6.3729E-001
	996.32	10.30	1.0369E+000		-1.7626E-001
	1004.76	17.90	5.5130E-001		-2.4968E-001
1274.45	35.50	2.8811E-001	-2.4802E-001		
Eu-155	86.54	30.90	1.6680E+000	1.58E+000	2.0184E+000
	105.31	20.70	1.5810E+000		-3.2776E-001
Am-241	59.54	35.90	4.7205E+000	4.72E+000	1.5178E+000
Cm-243	228.19	10.56	1.6422E+000	1.11E+000	2.1800E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1077E+000	1.11E+000	-2.3696E-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 7/28/2006 3:46:04 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-01-118

Sample Title: OOL-10-01-118-F-G

Description: Jersey Barrier

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 3:35:27 PM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-118
 Title: OOL-10-01-118-F-G
 Description: Jersey Barrier

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	249-	260	255.51	63.83	1.00	7.00E+001	77.91	6.02E+002
2	605-	612	608.16	152.01	0.71	4.01E+001	45.20	2.41E+002
3	944-	962	954.80	238.68	1.30	2.64E+002	75.28	3.58E+002
4	1172-	1188	1181.52	295.36	0.76	7.59E+001	54.50	2.23E+002
5	1397-	1417	1406.88	351.71	0.43	1.96E+002	57.25	1.81E+002
6	2322-	2342	2332.55	583.16	1.78	1.41E+002	41.88	8.65E+001
7	2427-	2448	2437.42	609.38	1.66	1.91E+002	45.70	9.44E+001
8	3636-	3653	3645.12	911.35	1.95	9.74E+001	30.96	4.66E+001
9	3869-	3883	3876.37	969.17	0.94	5.75E+001	25.21	3.75E+001
10	5831-	5860	5845.34	1461.47	2.50	8.74E+002	60.87	1.89E+001
11	7054-	7071	7062.57	1765.82	0.51	6.75E+001	17.77	4.50E+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
K-40	0.985	1460.81*	10.67	1.98694E+001	2.12176E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.15788E-001	1.02113E-001
		860.37	12.46		
Pb-212	0.446	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.60177E-001	2.80325E-001
Bi-214	0.685	609.31*	46.30	7.85349E-001	2.11715E-001
		1120.29	15.10		
		1764.49*	15.80	1.09787E+000	3.09125E-001
PB-214	0.549	74.82 @	6.21		
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	6.05788E-001	4.46773E-001
		351.92*	37.20	8.41793E-001	2.83369E-001
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	7.41749E-001	2.50620E-001
		969.11*	16.60	7.42423E-001	3.34662E-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	0.985	1.986935E+001	2.121765E+000
TL-208	0.472	3.157875E-001	1.021131E-001
Pb-212 @	0.446	8.601771E-001	2.803251E-001
Bi-214	0.685	8.851366E-001	1.746752E-001
PB-214 @	0.549	7.740888E-001	2.392953E-001
Ac-228	0.631	7.419909E-001	2.006045E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	63.83	1.1664E-001	111.32
2	152.01	6.6806E-002	112.75

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: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	9.62E-002	-8.0628E-002
	1332.49	100.00	9.6174E-002		-5.2953E-002
Nb-94	702.63	100.00	1.1871E-001	1.17E-001	-4.5504E-002
	871.10	100.00	1.1674E-001		-2.1980E-002
Ag-108m	79.20	7.10	1.0039E+001	1.52E-001	-2.0757E+001
	433.93	89.90	1.6040E-001		8.7526E-002
	614.37	90.40	1.8542E-001		5.4522E-002
	722.95	90.50	1.5223E-001		9.0126E-002
Sb-125	176.33	6.89	2.9695E+000	4.95E-001	1.0994E+000
	427.89	29.33	4.9458E-001		1.6207E-001
	463.38	10.35	1.3192E+000		2.4367E-001
	600.56	17.80	6.8906E-001		3.8674E-001
	606.64	5.02	3.5536E+000		9.5555E-001
	635.90	11.32	1.0684E+000		-1.6167E-001
Cs-134	563.23	8.38	1.6306E+000	1.47E-001	-1.1960E-001
	569.32	15.43	8.7582E-001		1.9522E-001
	604.70	97.60	1.7571E-001		5.1279E-002
	795.84	85.40	1.4739E-001		7.4932E-002
	801.93	8.73	1.2790E+000		-1.6527E+000
Cs-137	661.65	85.12	1.4064E-001	1.41E-001	-3.5261E-002
Eu-152	121.78	28.40	9.8063E-001	4.66E-001	3.6504E-001
	244.69	7.49	2.4669E+000		-1.9425E+000
	344.27	26.50	5.2029E-001		-1.1188E+000
	778.89	12.74	9.4426E-001		2.5589E-002
	867.32	4.16	2.8540E+000		-6.7119E-001
	964.01	14.40	9.7828E-001		-3.8551E-001
	1085.78	10.00	1.0563E+000		2.3577E-001
	1112.02	13.30	9.1824E-001		-1.4129E-002
1407.95	20.70	4.6587E-001	4.7582E-002		
Eu-154	123.07	40.50	6.7641E-001	2.93E-001	2.4756E-001
	247.94	6.60	2.7232E+000		1.3077E+000
	591.81	4.83	2.5941E+000		3.0664E-001
	723.30	19.70	7.0107E-001		5.6268E-001
	756.87	4.33	2.8138E+000		-1.6252E+000
	873.19	11.50	1.0045E+000		3.1656E-001
	996.32	10.30	1.0935E+000		-5.9419E-001
	1004.76	17.90	6.1183E-001		-1.4573E-001
1274.45	35.50	2.9320E-001	-3.0868E-001		
Eu-155	86.54	30.90	1.6461E+000	1.65E+000	6.3602E-001
	105.31	20.70	1.6827E+000		3.1676E-001
Am-241	59.54	35.90	4.9148E+000	4.91E+000	2.2245E+000
Cm-243	228.19	10.56	1.7289E+000	1.13E+000	-6.2497E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1330E+000	1.13E+000	8.6072E-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 7/31/2006 8:19:16 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: YEL7810

Sample ID: OOL-10-01-119-F-

Sample Title: OOL-10-01-119-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 8:09:15 AM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-119-F-
Title: OOL-10-01-119-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	297-	307	300.58	75.17	0.94	1.75E+002	84.21	6.93E+002
2	946-	964	954.23	238.60	0.68	2.23E+002	74.80	3.65E+002
3	1342-	1360	1352.56	338.19	1.45	6.65E+001	50.43	1.76E+002
4	2324-	2340	2332.44	583.18	1.33	1.07E+002	39.29	9.38E+001
5	2428-	2447	2435.58	608.97	0.68	1.61E+002	37.34	5.71E+001
6	3635-	3653	3643.54	910.99	0.38	7.78E+001	31.64	5.42E+001
7	3868-	3882	3874.53	968.74	0.40	5.87E+001	24.28	3.23E+001
8	5831-	5858	5844.07	1461.17	1.98	7.61E+002	56.02	1.31E+001
9	7052-	7065	7058.90	1764.91	0.49	3.09E+001	13.12	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: 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	0.995	1460.81*	10.67	1.75782E+001	1.92360E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.37820E-001	9.24753E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	5.43216E+000	2.82001E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.87702E-001	2.54970E-001
Bi-214	0.692	609.31*	46.30	6.60026E-001	1.73457E-001
		1120.29	15.10		
		1764.49*	15.80	5.26155E-001	2.29390E-001
Ac-228	0.998	338.32*	11.40	8.90870E-001	6.90208E-001
		911.07*	27.70	5.90407E-001	2.49512E-001
		969.11*	16.60	7.53513E-001	3.21750E-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	0.995	1.757818E+001	1.923597E+000
TL-208	0.470	2.378198E-001	9.247534E-002
Pb-212 @	0.576	6.877018E-001	2.549696E-001
Bi-214	0.692	6.113264E-001	1.383550E-001
Ac-228	0.998	6.697079E-001	1.895875E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.1092E-001	7.68E-002	5.6914E-002
	1332.49	100.00	7.6764E-002		-6.7838E-003
Nb-94	702.63	100.00	1.1444E-001	1.11E-001	-4.8135E-002
	871.10	100.00	1.1081E-001		2.5423E-002
Ag-108m	79.20	7.10	7.4670E+000	1.31E-001	-3.7885E+000
	433.93	89.90	1.3052E-001		-4.2154E-003
	614.37	90.40	1.5091E-001		4.6807E-002
	722.95	90.50	1.3728E-001		-4.5487E-002
Sb-125	176.33	6.89	2.4952E+000	3.92E-001	6.4909E-001
	427.89	29.33	3.9151E-001		3.0804E-001
	463.38	10.35	1.2568E+000		2.7492E-001
	600.56	17.80	6.4947E-001		1.4013E-001
	606.64	5.02	3.0858E+000		-1.7958E+000
	635.90	11.32	1.0190E+000		-2.4357E-001
Cs-134	563.23	8.38	1.4803E+000	1.35E-001	1.4233E+000
	569.32	15.43	7.7245E-001		-6.4500E-001
	604.70	97.60	1.5143E-001		-7.3705E-002
	795.84	85.40	1.3474E-001		7.4485E-002
	801.93	8.73	1.1907E+000		-1.8325E+000
Cs-137	661.65	85.12	1.4737E-001	1.47E-001	-2.8987E-002
Eu-152	121.78	28.40	8.1584E-001	3.58E-001	-1.0867E+000
	244.69	7.49	2.1674E+000		-1.0375E+000
	344.27	26.50	4.8199E-001		-2.1394E-001
	778.89	12.74	8.1803E-001		-1.3232E+000
	867.32	4.16	2.7969E+000		6.5623E-001
	964.01	14.40	9.3480E-001		3.6068E-002
	1085.78	10.00	1.0103E+000		-3.1502E-001
	1112.02	13.30	8.1961E-001		-1.0796E+000
1407.95	20.70	3.5844E-001	-2.7605E-001		
Eu-154	123.07	40.50	5.6890E-001	2.73E-001	-3.0491E-001
	247.94	6.60	2.2993E+000		-1.6922E-001
	591.81	4.83	2.3434E+000		-1.5566E+000
	723.30	19.70	6.3439E-001		-7.2468E-002
	756.87	4.33	2.4639E+000		-1.2597E-001
	873.19	11.50	8.9562E-001		-2.1727E-001
	996.32	10.30	1.0454E+000		3.8040E-001
	1004.76	17.90	5.5707E-001		-1.8662E-001
1274.45	35.50	2.7339E-001	-3.5877E-002		
Eu-155	86.54	30.90	1.3614E+000	1.36E+000	1.8803E+000
	105.31	20.70	1.4250E+000		7.7854E-001
Am-241	59.54	35.90	2.7047E+000	2.70E+000	8.3104E-001
Cm-243	228.19	10.56	1.5155E+000	1.01E+000	-7.1248E-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	2.3239E-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 7/31/2006 8:03:54 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-120-F-

Sample Title: OOL-10-01-120-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 7:53:55 AM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-120-F-
Title: OOL-10-01-120-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	307	300.64	75.18	1.26	1.48E+002	89.72	7.71E+002
2	946-	962	954.98	238.78	0.85	2.36E+002	72.81	3.64E+002
3	1173-	1188	1180.57	295.18	0.78	8.92E+001	48.14	1.71E+002
4	1348-	1358	1352.79	338.24	0.77	6.92E+001	36.59	1.17E+002
5	1402-	1417	1407.28	351.87	0.73	8.24E+001	45.83	1.54E+002
6	2323-	2342	2331.77	583.01	1.67	1.89E+002	40.49	6.82E+001
7	2425-	2448	2436.58	609.22	1.39	1.51E+002	43.46	8.54E+001
8	3170-	3182	3176.47	794.21	0.87	2.87E+001	18.98	2.43E+001
9	3634-	3653	3643.63	911.01	1.20	1.10E+002	30.40	3.75E+001
10	3868-	3883	3875.42	968.96	0.65	6.08E+001	28.54	5.02E+001
11	5828-	5858	5843.72	1461.08	2.28	8.03E+002	56.20	3.89E+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: 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	1.85519E+001	1.98529E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.18722E-001	1.05043E-001
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	4.58855E+000	2.92222E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.29323E-001	2.52351E-001
Bi-214	0.406	609.31*	46.30	6.17948E-001	1.93904E-001
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.614	74.82* @	6.21	7.90620E+000	5.06767E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	6.81423E-001	3.85406E-001
		351.92*	37.20	3.42631E-001	1.98877E-001
Ac-228	1.000	338.32*	11.40	9.27628E-001	5.11455E-001
		911.07*	27.70	8.31140E-001	2.49728E-001
		969.11*	16.60	7.81476E-001	3.75705E-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	0.997	1.855187E+001	1.985288E+000
TL-208	0.469	4.187219E-001	1.050430E-001
Pb-212 @	0.575	7.293227E-001	2.523514E-001
Bi-214	0.406	6.179478E-001	1.939044E-001
PB-214 @	0.614	4.138726E-001	1.767341E-001
Ac-228	1.000	8.317714E-001	1.926568E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
8	794.21	4.7846E-002	66.13

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	1.0726E-001	7.50E-002	-4.4080E-002
	1332.49	100.00	7.5026E-002		-5.0679E-002
Nb-94	702.63	100.00	1.2312E-001	1.03E-001	5.2890E-002
	871.10	100.00	1.0342E-001		-6.6922E-003
Ag-108m	79.20	7.10	7.5112E+000	1.37E-001	-2.7088E+000
	433.93	89.90	1.3740E-001		2.3747E-002
	614.37	90.40	1.4412E-001		1.9517E-002
	722.95	90.50	1.4007E-001		6.3854E-002
Sb-125	176.33	6.89	2.5866E+000	4.27E-001	1.0948E-001
	427.89	29.33	4.2725E-001		1.2264E-001
	463.38	10.35	1.2640E+000		-1.1783E+000
	600.56	17.80	6.8388E-001		1.8290E-001
	606.64	5.02	3.2126E+000		-3.8707E-001
	635.90	11.32	1.0909E+000		2.0910E-001
Cs-134	563.23	8.38	1.3772E+000	1.28E-001	-2.8380E-001
	569.32	15.43	7.5973E-001		1.2422E-001
	604.70	97.60	1.5931E-001		-3.3647E-002
	795.84	85.40	1.2831E-001		2.2591E-002
Cs-137	801.93	8.73	1.1312E+000	1.39E-001	7.9675E-001
	661.65	85.12	1.3896E-001		2.8020E-002
Eu-152	121.78	28.40	8.3118E-001	3.76E-001	-5.1351E-001
	244.69	7.49	2.1068E+000		-2.7584E+000
	344.27	26.50	4.8742E-001		-5.6472E-001
	778.89	12.74	7.9273E-001		-9.1220E-001
	867.32	4.16	2.4723E+000		-2.8385E+000
	964.01	14.40	1.0061E+000		-2.7740E-001
	1085.78	10.00	1.0372E+000		2.0376E-001
	1112.02	13.30	8.6796E-001		6.8413E-001
1407.95	20.70	3.7612E-001	-6.2037E-001		
Eu-154	123.07	40.50	5.7960E-001	2.82E-001	-1.1310E-001
	247.94	6.60	2.2315E+000		-1.5109E+000
	591.81	4.83	2.3797E+000		3.7967E-001
	723.30	19.70	6.3988E-001		1.0735E-001
	756.87	4.33	2.6009E+000		1.9989E+000
	873.19	11.50	8.8295E-001		-2.7399E-001
	996.32	10.30	1.0689E+000		4.4404E-001
	1004.76	17.90	5.6300E-001		2.9244E-002
1274.45	35.50	2.8224E-001	-1.7218E-001		
Eu-155	86.54	30.90	1.3673E+000	1.37E+000	1.7664E+000
	105.31	20.70	1.4586E+000		-2.6184E-001
Am-241	59.54	35.90	2.6624E+000	2.66E+000	-1.2009E+000
Cm-243	228.19	10.56	1.5455E+000	1.02E+000	-5.8473E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.0209E+000	1.02E+000	5.9629E-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 7/31/2006 7:50:40 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-121-F-

Sample Title: OOL-10-01-121-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 7:40:37 AM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-121-F-
Title: OOL-10-01-121-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	297-	306	301.12	75.30	1.03	1.57E+002	77.20	6.13E+002
2	945-	961	954.99	238.78	1.47	2.26E+002	69.89	3.33E+002
3	1349-	1358	1353.78	338.49	0.42	4.69E+001	31.88	9.61E+001
4	1399-	1415	1406.26	351.61	0.61	1.01E+002	45.50	1.40E+002
5	2325-	2341	2331.59	582.97	1.97	1.41E+002	38.10	7.56E+001
6	2428-	2445	2435.54	608.96	1.40	9.78E+001	36.97	7.92E+001
7	3634-	3654	3642.94	910.84	1.62	1.39E+002	30.57	2.86E+001
8	5830-	5857	5842.68	1460.82	2.26	7.94E+002	58.00	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: 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	1.000	1460.81*	10.67	1.83451E+001	2.00015E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.13659E-001	9.38420E-002
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	4.83327E+000	2.56230E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.99170E-001	2.42168E-001
Bi-214	0.404	609.31*	46.30	4.01468E-001	1.59551E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.541	338.32*	11.40	6.28466E-001	4.38535E-001
		911.07*	27.70	1.05753E+000	2.61926E-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: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	1.000	1.834509E+001	2.000151E+000
TL-208	0.469	3.136593E-001	9.384201E-002
Pb-212 @	0.575	6.991697E-001	2.421677E-001
Bi-214	0.404	4.014676E-001	1.595512E-001
Ac-228	0.541	9.447138E-001	2.248698E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.61	1.6828E-001	45.07

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: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	1.0937E-001	7.76E-002	-7.9149E-002
	1332.49	100.00	7.7617E-002		-2.9695E-002
Nb-94	702.63	100.00	1.0797E-001	1.08E-001	-9.1700E-002
	871.10	100.00	1.0992E-001		5.6410E-002
Ag-108m	79.20	7.10	7.3112E+000	1.31E-001	-7.8405E+000
	433.93	89.90	1.3571E-001		-4.8991E-003
	614.37	90.40	1.4131E-001		3.4013E-002
	722.95	90.50	1.3067E-001		1.6257E-002
Sb-125	176.33	6.89	2.5824E+000	4.32E-001	1.2436E+000
	427.89	29.33	4.3223E-001		-1.1124E-001
	463.38	10.35	1.2323E+000		1.0834E+000
	600.56	17.80	6.6308E-001		-4.2456E-001
	606.64	5.02	3.0388E+000		5.4893E+000
	635.90	11.32	1.0726E+000		3.5422E-001
Cs-134	563.23	8.38	1.3732E+000	1.33E-001	1.8294E-001
	569.32	15.43	7.5112E-001		3.8931E-001
	604.70	97.60	1.5337E-001		-1.5460E-003
	795.84	85.40	1.3329E-001		5.8201E-003
	801.93	8.73	1.1960E+000		-7.6765E-001
Cs-137	661.65	85.12	1.4778E-001	1.48E-001	1.4136E-001
Eu-152	121.78	28.40	8.2589E-001	3.72E-001	-3.8998E-001
	244.69	7.49	2.1497E+000		-1.1875E+000
	344.27	26.50	4.7886E-001		-5.0642E-001
	778.89	12.74	8.6293E-001		-1.8933E-001
	867.32	4.16	2.6827E+000		-9.9461E-001
	964.01	14.40	9.3480E-001		5.9034E-001
	1085.78	10.00	1.0103E+000		-1.8170E+000
	1112.02	13.30	8.1576E-001		-9.9991E-001
1407.95	20.70	3.7179E-001	2.2495E-001		
Eu-154	123.07	40.50	5.6780E-001	2.72E-001	-1.1645E-001
	247.94	6.60	2.3334E+000		-2.0552E-001
	591.81	4.83	2.4645E+000		5.7477E-002
	723.30	19.70	6.1190E-001		2.1680E-001
	756.87	4.33	2.5818E+000		1.6282E+000
	873.19	11.50	9.5631E-001		6.1107E-001
	996.32	10.30	1.0407E+000		2.6475E-001
	1004.76	17.90	5.8608E-001		-2.9444E-001
1274.45	35.50	2.7158E-001	-3.7042E-003		
Eu-155	86.54	30.90	1.3145E+000	1.31E+000	8.0438E-001
	105.31	20.70	1.4419E+000		-2.7139E-002
Am-241	59.54	35.90	2.7220E+000	2.72E+000	-1.0672E+000
Cm-243	228.19	10.56	1.5537E+000	1.03E+000	5.1717E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.0289E+000	1.03E+000	-4.3886E-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 7/31/2006 7:46:51 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-10-01-122-F-

Sample Title: OOL-10-01-122-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 7:36:49 AM

Live Time: 600.0 seconds

Real Time: 601.0 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-122-F-
Title: OOL-10-01-122-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	946-	963	956.73	239.14	2.35	1.49E+002	66.97	3.13E+002
2	2320-	2342	2331.00	582.71	0.68	1.54E+002	40.77	7.24E+001
3	2426-	2447	2434.92	608.69	1.77	1.22E+002	38.16	6.85E+001
4	3630-	3652	3639.89	909.93	1.98	9.28E+001	32.37	4.62E+001
5	5826-	5853	5839.94	1459.95	2.95	7.13E+002	56.22	2.45E+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	1.56374E+001	1.76774E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.34779E-001	9.89940E-002
		860.37	12.46		
Pb-212	0.449	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.395	238.63*	44.60	4.82250E-001	2.29585E-001
		609.31*	46.30	4.88541E-001	1.64839E-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	0.976	1.563742E+001	1.767736E+000
TL-208	0.468	3.347791E-001	9.899404E-002
Pb-212 @	0.449	4.822505E-001	2.295847E-001
Bi-214	0.395	4.885407E-001	1.648385E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	909.93	1.5467E-001	34.88

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: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	1.0737E-001	8.34E-002	7.5801E-002
	1332.49	100.00	8.3385E-002		4.6752E-002
Nb-94	702.63	100.00	1.0588E-001	1.01E-001	-5.2417E-002
	871.10	100.00	1.0103E-001		4.9969E-002
Ag-108m	79.20	7.10	8.9947E+000	1.33E-001	-1.0363E+001
	433.93	89.90	1.3782E-001		6.9197E-002
	614.37	90.40	1.4943E-001		5.1641E-002
	722.95	90.50	1.3310E-001		-5.0987E-002
Sb-125	176.33	6.89	2.5848E+000	3.93E-001	2.7988E+000
	427.89	29.33	3.9309E-001		1.1306E-001
	463.38	10.35	1.1852E+000		-1.2641E-001
	600.56	17.80	6.2942E-001		1.3201E-001
	606.64	5.02	2.9324E+000		4.2889E+000
	635.90	11.32	8.9543E-001		-6.4005E-001
Cs-134	563.23	8.38	1.3213E+000	1.17E-001	-7.5560E-001
	569.32	15.43	7.7087E-001		-3.9128E-001
	604.70	97.60	1.4904E-001		5.5735E-002
	795.84	85.40	1.1736E-001		3.6973E-002
	801.93	8.73	1.1290E+000		5.0781E-002
Cs-137	661.65	85.12	1.3244E-001	1.32E-001	-1.1486E-001
Eu-152	121.78	28.40	8.6192E-001	3.53E-001	8.7316E-001
	244.69	7.49	2.1197E+000		-1.9028E+000
	344.27	26.50	5.0636E-001		-7.2398E-001
	778.89	12.74	8.0766E-001		-6.5064E-001
	867.32	4.16	2.4594E+000		-1.4961E+000
	964.01	14.40	9.6612E-001		9.0934E-001
	1085.78	10.00	9.2320E-001		-9.3487E-001
	1112.02	13.30	7.2725E-001		-1.4432E+000
1407.95	20.70	3.5308E-001	-1.1715E-001		
Eu-154	123.07	40.50	5.9338E-001	2.68E-001	-2.8627E-001
	247.94	6.60	2.3284E+000		-5.5853E-001
	591.81	4.83	2.2357E+000		1.3896E+000
	723.30	19.70	6.1330E-001		2.5542E-001
	756.87	4.33	2.4701E+000		2.2801E-001
	873.19	11.50	8.7084E-001		1.8593E-001
	996.32	10.30	1.0114E+000		0.0000E+000
	1004.76	17.90	5.1233E-001		-1.9355E-001
1274.45	35.50	2.6798E-001	3.4277E-002		
Eu-155	86.54	30.90	1.5515E+000	1.53E+000	1.8251E+000
	105.31	20.70	1.5272E+000		7.4982E-001
Am-241	59.54	35.90	4.2412E+000	4.24E+000	2.5066E+000
Cm-243	228.19	10.56	1.5420E+000	1.08E+000	5.6247E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0752E+000	1.08E+000	2.7443E-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 7/31/2006 7:19:55 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-10-01-123-F-

Sample Title: OOL-10-01-123-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 7:09:51 AM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-123-F-
Title: OOL-10-01-123-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	309	300.41	75.13	1.29	3.88E+002	119.16	9.77E+002
2	944-	961	954.67	238.71	1.20	2.39E+002	70.60	3.24E+002
3	1171-	1186	1181.41	295.40	0.96	1.17E+002	46.48	1.48E+002
4	1397-	1417	1406.34	351.63	0.44	1.60E+002	51.96	1.50E+002
5	2032-	2053	2041.71	510.49	1.50	1.28E+002	41.78	8.71E+001
6	2323-	2340	2331.04	582.83	0.95	1.72E+002	38.77	6.61E+001
7	2427-	2446	2434.87	608.79	0.95	1.39E+002	38.42	7.03E+001
8	3019-	3030	3024.99	756.33	0.89	1.69E+001	18.94	3.01E+001
9	3633-	3653	3643.00	910.85	1.41	1.31E+002	34.11	4.75E+001
10	3866-	3885	3874.25	968.67	0.53	7.57E+001	28.12	3.73E+001
11	4473-	4485	4478.96	1119.86	0.84	2.07E+001	21.35	3.73E+001
12	5830-	5855	5841.89	1460.63	2.27	8.26E+002	57.96	1.20E+001
13	6364-	6377	6370.85	1592.88	0.52	9.42E+000	11.53	8.58E+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: 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	0.991	511.00*	100.00	2.26560E-001	8.01537E-002
K-40	0.999	1460.81*	10.67	1.90774E+001	2.04390E+000
TL-208	0.748	277.35	6.80		
		510.84*	21.60	1.04889E+000	3.80840E-001
		583.14*	84.20	3.81180E-001	9.92644E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	1.20658E+001	4.39215E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.704	238.63*	44.60	7.39788E-001	2.47042E-001
		609.31*	46.30	5.68826E-001	1.72498E-001
		1120.29*	15.10	3.02072E-001	3.13806E-001
PB-214	0.613	1764.49	15.80		
		74.82* @	6.21	2.07897E+001	7.71681E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
Ac-228	0.625	295.21*	19.20	8.92587E-001	3.85741E-001
		351.92*	37.20	6.66403E-001	2.42924E-001
		338.32	11.40		
		911.07*	27.70	9.97687E-001	2.83147E-001
		969.11*	16.60	9.72122E-001	3.75351E-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	0.991	1.442249E-001	8.292847E-002
K-40	0.999	1.907744E+001	2.043896E+000
TL-208	0.748	3.811801E-001	9.848408E-002
Pb-212 @	0.576	7.397879E-001	2.470416E-001
Bi-214	0.704	5.069260E-001	1.511649E-001
PB-214 @	0.613	7.306331E-001	2.055580E-001
Ac-228	0.625	9.884152E-001	2.260446E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
8	756.33	2.8085E-002	112.42
13	1592.88	1.5694E-002	122.43

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: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	1.2214E-001	8.01E-002	8.8741E-003
	1332.49	100.00	8.0117E-002		1.9855E-002
Nb-94	702.63	100.00	1.1754E-001	1.02E-001	-3.2095E-002
	871.10	100.00	1.0246E-001		-8.5325E-002
Ag-108m	79.20	7.10	7.2514E+000	1.31E-001	-6.3486E+000
	433.93	89.90	1.3140E-001		-9.5810E-002
	614.37	90.40	1.4024E-001		-3.2202E-003
	722.95	90.50	1.4007E-001		4.1631E-002
Sb-125	176.33	6.89	2.6220E+000	4.17E-001	1.5667E+000
	427.89	29.33	4.1712E-001		9.3926E-002
	463.38	10.35	1.2047E+000		5.5904E-001
	600.56	17.80	6.4947E-001		-1.2441E-001
	606.64	5.02	3.1269E+000		-9.7167E-001
	635.90	11.32	1.0571E+000		2.9226E-001
Cs-134	563.23	8.38	1.2995E+000	1.26E-001	-8.2429E-001
	569.32	15.43	7.3359E-001		4.9586E-002
	604.70	97.60	1.5556E-001		-2.1241E-002
	795.84	85.40	1.2626E-001		-6.5637E-003
	801.93	8.73	1.1423E+000		-1.2506E+000
Cs-137	661.65	85.12	1.4655E-001	1.47E-001	7.9774E-002
Eu-152	121.78	28.40	8.1045E-001	3.93E-001	-2.8348E-001
	244.69	7.49	2.1674E+000		3.5078E-002
	344.27	26.50	5.1000E-001		-2.5562E-001
	778.89	12.74	8.4938E-001		-2.6077E-001
	867.32	4.16	2.4953E+000		-2.2054E+000
	964.01	14.40	9.6857E-001		-4.3486E-001
	1085.78	10.00	1.1479E+000		5.6540E-001
	1112.02	13.30	8.2343E-001		-6.4644E-001
1407.95	20.70	3.9293E-001	-5.5014E-001		
Eu-154	123.07	40.50	5.6470E-001	2.70E-001	-3.8747E-002
	247.94	6.60	2.2993E+000		-2.3214E+000
	591.81	4.83	2.2076E+000		-2.0824E+000
	723.30	19.70	6.5251E-001		5.2043E-001
	756.87	4.33	2.5722E+000		-9.4683E-001
	873.19	11.50	8.9980E-001		1.5070E-001
	996.32	10.30	1.0262E+000		1.1193E-001
	1004.76	17.90	5.4195E-001		1.5095E-002
1274.45	35.50	2.6976E-001	7.5229E-002		
Eu-155	86.54	30.90	1.3223E+000	1.32E+000	1.3669E+000
	105.31	20.70	1.4284E+000		6.7629E-001
Am-241	59.54	35.90	2.7032E+000	2.70E+000	-1.7517E+000
Cm-243	228.19	10.56	1.5526E+000	1.07E+000	-1.1447E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.0671E+000	1.07E+000	-5.1690E-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 7/31/2006 7:36:49 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-124-F-

Sample Title: OOL-10-01-124-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 7:26:45 AM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-124-F-
Title: OOL-10-01-124-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	308	300.32	75.10	0.49	3.91E+002	115.78	9.53E+002
2	944-	964	954.19	238.58	1.55	2.97E+002	79.82	3.74E+002
3	1397-	1417	1407.08	351.82	1.00	1.50E+002	53.37	1.63E+002
4	2324-	2337	2330.48	582.69	1.54	1.03E+002	34.76	7.68E+001
5	2426-	2445	2436.20	609.12	0.74	1.36E+002	37.80	6.72E+001
6	3633-	3653	3643.69	911.02	1.01	1.29E+002	31.91	3.71E+001
7	3867-	3883	3874.42	968.71	0.81	7.88E+001	26.01	3.12E+001
8	5830-	5856	5842.71	1460.83	1.81	8.56E+002	60.02	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: 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	1.000	1460.81*	10.67	1.97647E+001	2.11717E+000
TL-208	0.465	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.28742E-001	8.26331E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	1.21641E+001	4.31778E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.17867E-001	2.85471E-001
Bi-214	0.406	609.31*	46.30	5.57253E-001	1.69629E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.627	338.32	11.40		
		911.07*	27.70	9.77914E-001	2.66999E-001
		969.11*	16.60	1.01289E+000	3.50576E-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	1.000	1.976471E+001	2.117168E+000
TL-208	0.465	2.287421E-001	8.263305E-002
Pb-212 @	0.576	9.178670E-001	2.854714E-001
Bi-214	0.406	5.572530E-001	1.696292E-001
Ac-228	0.627	9.907550E-001	2.124104E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.82	2.5016E-001	35.56

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: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	1.1740E-001	7.41E-002	6.9102E-002
	1332.49	100.00	7.4140E-002		-1.5866E-002
Nb-94	702.63	100.00	1.1246E-001	1.07E-001	1.0857E-002
	871.10	100.00	1.0672E-001		4.4085E-002
Ag-108m	79.20	7.10	7.4248E+000	1.33E-001	-6.6306E+000
	433.93	89.90	1.4447E-001		-6.5510E-002
	614.37	90.40	1.4721E-001		-6.9562E-002
	722.95	90.50	1.3277E-001		-1.3378E-003
Sb-125	176.33	6.89	2.5421E+000	4.32E-001	-1.2060E+000
	427.89	29.33	4.3223E-001		2.4447E-001
	463.38	10.35	1.1997E+000		-3.9890E-001
	600.56	17.80	6.3757E-001		1.1714E-001
	606.64	5.02	3.1116E+000		6.6478E+000
	635.90	11.32	1.0446E+000		-7.6187E-001
Cs-134	563.23	8.38	1.3287E+000	1.44E-001	-6.6785E-001
	569.32	15.43	7.4678E-001		1.6550E-001
	604.70	97.60	1.5365E-001		1.9410E-002
	795.84	85.40	1.4450E-001		8.2152E-002
	801.93	8.73	1.3107E+000		-8.4529E-002
Cs-137	661.65	85.12	1.3722E-001	1.37E-001	-4.6862E-002
Eu-152	121.78	28.40	8.3459E-001	4.28E-001	2.3022E-001
	244.69	7.49	2.1032E+000		-1.0682E+000
	344.27	26.50	5.1875E-001		1.9487E-001
	778.89	12.74	8.8612E-001		1.3457E-001
	867.32	4.16	2.3899E+000		-2.7133E+000
	964.01	14.40	1.0134E+000		-2.6453E-001
	1085.78	10.00	1.0478E+000		9.9258E-001
	1112.02	13.30	7.7620E-001		-1.0660E+000
1407.95	20.70	4.2816E-001	-2.2179E-001		
Eu-154	123.07	40.50	5.7263E-001	2.99E-001	-4.2671E-002
	247.94	6.60	2.3249E+000		-1.3253E+000
	591.81	4.83	2.3507E+000		-1.6920E-001
	723.30	19.70	6.0999E-001		5.5066E-002
	756.87	4.33	2.6480E+000		2.7410E-001
	873.19	11.50	8.9980E-001		-5.9754E-001
	996.32	10.30	1.0262E+000		1.5367E-001
	1004.76	17.90	5.5108E-001		-3.4007E-001
1274.45	35.50	2.9911E-001	-1.0574E-001		
Eu-155	86.54	30.90	1.3109E+000	1.31E+000	6.3762E-001
	105.31	20.70	1.4245E+000		-1.0985E+000
Am-241	59.54	35.90	2.6989E+000	2.70E+000	-2.3147E-001
Cm-243	228.19	10.56	1.5251E+000	1.07E+000	-6.2767E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.0748E+000	1.07E+000	1.0948E+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 7/31/2006 7:29:19 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-10-01-125-F-

Sample Title: OOL-10-01-125-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 7:19:16 AM

Live Time: 600.0 seconds

Real Time: 601.0 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-125-F-
Title: OOL-10-01-125-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	944-	961	954.56	238.60	0.64	2.38E+002	68.17	2.99E+002
2	1399-	1417	1406.23	351.52	0.37	1.41E+002	47.96	1.35E+002
3	2032-	2048	2043.08	510.73	0.72	3.82E+001	39.84	1.20E+002
4	3631-	3652	3641.49	910.34	0.73	1.28E+002	31.21	3.33E+001
5	3869-	3881	3874.13	968.50	0.83	2.89E+001	24.34	4.41E+001
6	5823-	5854	5839.24	1459.78	2.30	7.77E+002	56.00	7.92E+000
7	7046-	7059	7052.39	1763.07	0.99	2.08E+001	17.07	1.82E+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	6.72206E-002	7.06196E-002
K-40	0.966	1460.81*	10.67	1.70529E+001	1.84839E+000
Pb-212	0.454	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Ac-228	0.624	238.63*	44.60	7.70599E-001	2.51476E-001
		338.32	11.40		
		911.07*	27.70	9.37264E-001	2.53197E-001
		969.11*	16.60	3.58915E-001	3.04822E-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	6.722060E-002	7.061963E-002
K-40	0.966	1.705293E+001	1.848386E+000
Pb-212 @	0.454	7.705986E-001	2.514761E-001
Ac-228	0.624	7.011407E-001	1.947692E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.52	2.3475E-001	34.05
7	1763.07	3.4679E-002	82.02

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: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	1.0122E-001	8.55E-002	3.2169E-002
	1332.49	100.00	8.5466E-002		5.2534E-002
Nb-94	702.63	100.00	1.0748E-001	9.49E-002	-1.2235E-002
	871.10	100.00	9.4853E-002		-4.2017E-002
Ag-108m	79.20	7.10	9.5415E+000	1.30E-001	-1.6986E+001
	433.93	89.90	1.4332E-001		6.8159E-002
	614.37	90.40	1.4151E-001		-2.5961E-001
	722.95	90.50	1.2992E-001		5.5673E-002
Sb-125	176.33	6.89	2.7498E+000	4.34E-001	9.3158E-002
	427.89	29.33	4.3398E-001		3.0315E-001
	463.38	10.35	1.1903E+000		9.8302E-001
	600.56	17.80	6.2353E-001		-5.5680E-001
	606.64	5.02	2.9533E+000		4.4922E+000
	635.90	11.32	1.0146E+000		1.6832E-001
	795.84	85.40	1.2348E-001		-2.6227E-002
Cs-134	563.23	8.38	1.5259E+000	1.23E-001	5.8276E-001
	569.32	15.43	7.5227E-001		-5.0582E-002
	604.70	97.60	1.4986E-001		1.5667E-001
	801.93	8.73	1.1079E+000		-1.2526E+000
Cs-137	661.65	85.12	1.2668E-001	1.27E-001	1.0154E-001
Eu-152	121.78	28.40	8.7425E-001	3.99E-001	-3.4903E-001
	244.69	7.49	2.1412E+000		-2.7297E+000
	344.27	26.50	5.0404E-001		-9.7300E-001
	778.89	12.74	8.6953E-001		4.2577E-002
	867.32	4.16	2.3479E+000		-2.2824E+000
	964.01	14.40	9.3944E-001		-3.4621E-001
	1085.78	10.00	1.0732E+000		-3.8657E-001
	1112.02	13.30	7.1077E-001		-2.0902E+000
Eu-154	1407.95	20.70	3.9945E-001	2.63E-001	1.5999E-001
	123.07	40.50	6.1087E-001		2.6462E-001
	247.94	6.60	2.3947E+000		2.2674E-001
	591.81	4.83	2.4406E+000		1.2358E+000
	723.30	19.70	6.0240E-001		1.7732E-001
	756.87	4.33	2.5901E+000		8.3964E-001
	873.19	11.50	8.3789E-001		3.5922E-001
	996.32	10.30	1.0114E+000		8.1102E-001
Eu-155	1004.76	17.90	5.5320E-001	1.52E+000	2.4418E-001
	1274.45	35.50	2.6291E-001		2.0255E-002
	86.54	30.90	1.6394E+000		2.2137E+000
Am-241	105.31	20.70	1.5236E+000	4.01E+000	-5.6752E-001
	59.54	35.90	4.0140E+000		-4.6597E-001
Cm-243	228.19	10.56	1.5886E+000	1.08E+000	2.6884E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0834E+000	1.08E+000	-4.2779E-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 7/28/2006 10:48:53 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-10-01-126-F

Sample Title: OOL-10-01-126-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 10:38:16 PM

Live Time: 600.0 seconds

Real Time: 600.9 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-126-F
Title: OOL-10-01-126-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	246-	254	250.98	62.70	0.45	5.71E+001	53.96	3.28E+002
2	944-	963	954.62	238.61	2.32	2.02E+002	75.82	3.68E+002
3	5828-	5858	5842.81	1460.67	2.64	7.92E+002	56.89	1.09E+001
4	7052-	7065	7058.30	1764.55	1.27	2.80E+001	15.32	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	0.999	1460.81*	10.67	1.73885E+001	1.88188E+000
Pb-212	0.454	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.55092E-001	2.65925E-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	1.738847E+001	1.881878E+000
Pb-212 @	0.454	6.550916E-001	2.659252E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	62.70	9.5127E-002	94.54
4	1764.55	4.6719E-002	54.67

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	1.0331E-001	7.44E-002	-5.5222E-003
	1332.49	100.00	7.4432E-002		-7.9198E-002
Nb-94	702.63	100.00	1.1658E-001	9.78E-002	4.6555E-002
	871.10	100.00	9.7753E-002		-1.0860E-002
Ag-108m	79.20	7.10	9.0223E+000	1.27E-001	-4.6657E+000
	433.93	89.90	1.3384E-001		-7.8455E-002
	614.37	90.40	1.6175E-001		-1.9963E-001
	722.95	90.50	1.2747E-001		5.1493E-002
Sb-125	176.33	6.89	2.7773E+000	4.42E-001	-3.9083E-001
	427.89	29.33	4.4217E-001		3.1686E-001
	463.38	10.35	1.2106E+000		-3.1415E-001
	600.56	17.80	6.9951E-001		1.2027E-001
	606.64	5.02	3.2218E+000		4.8313E+000
	635.90	11.32	1.0146E+000		2.6307E-001
Cs-134	563.23	8.38	1.4980E+000	1.28E-001	6.5372E-001
	569.32	15.43	7.8703E-001		1.2129E-001
	604.70	97.60	1.6032E-001		1.1378E-001
	795.84	85.40	1.2787E-001		6.1719E-002
	801.93	8.73	1.2048E+000		-4.7984E-001
Cs-137	661.65	85.12	1.3069E-001	1.31E-001	-1.2828E-002
Eu-152	121.78	28.40	8.7569E-001	3.77E-001	2.5444E-001
	244.69	7.49	2.2585E+000		-2.5291E-001
	344.27	26.50	5.2079E-001		-8.2511E-001
	778.89	12.74	8.6953E-001		-3.3293E-001
	867.32	4.16	2.5449E+000		-1.0822E+000
	964.01	14.40	9.4679E-001		1.8222E+000
	1085.78	10.00	1.0684E+000		4.6472E-001
	1112.02	13.30	8.0432E-001		-1.6014E+000
1407.95	20.70	3.7704E-001	-2.1214E-001		
Eu-154	123.07	40.50	6.0636E-001	2.75E-001	-3.1513E-002
	247.94	6.60	2.3284E+000		-2.5477E+000
	591.81	4.83	2.4541E+000		-1.8457E-001
	723.30	19.70	5.7997E-001		2.5918E-001
	756.87	4.33	2.5263E+000		-4.9841E-001
	873.19	11.50	8.3789E-001		-1.7211E-001
	996.32	10.30	9.5943E-001		4.5700E-001
	1004.76	17.90	5.6430E-001		-5.9727E-002
1274.45	35.50	2.7459E-001	-2.3347E-001		
Eu-155	86.54	30.90	1.5640E+000	1.55E+000	1.0805E+000
	105.31	20.70	1.5548E+000		6.7669E-001
Am-241	59.54	35.90	4.2174E+000	4.22E+000	-3.7206E-001
Cm-243	228.19	10.56	1.6139E+000	1.11E+000	1.5117E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1054E+000	1.11E+000	4.6759E-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 7/28/2006 3:50:36 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-127-

Sample Title: OOL-10-01-127-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 3:40:34 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-127-
Title: OOL-10-01-127-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	308	299.74	74.96	1.53	2.99E+002	119.37	1.05E+003
2	945-	960	954.54	238.67	1.17	2.49E+002	66.44	3.00E+002
3	1174-	1187	1180.36	295.13	1.65	1.19E+002	43.11	1.30E+002
4	1398-	1414	1406.89	351.77	1.71	1.81E+002	51.21	1.60E+002
5	2033-	2047	2040.57	510.21	1.34	8.00E+001	35.11	8.30E+001
6	2322-	2342	2330.51	582.70	1.42	1.71E+002	38.57	5.95E+001
7	2427-	2443	2435.19	608.87	1.73	1.79E+002	44.35	1.05E+002
8	2903-	2915	2907.92	727.06	0.45	5.01E+001	24.83	4.19E+001
9	3634-	3653	3642.71	910.78	1.71	1.17E+002	31.01	3.77E+001
10	4472-	4487	4479.54	1120.01	0.52	3.64E+001	24.53	3.96E+001
11	5831-	5856	5842.14	1460.69	2.23	7.73E+002	55.45	6.50E+000
12	7052-	7067	7058.51	1764.81	0.40	5.28E+001	15.17	2.20E+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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Unit)	Activity Uncertainty
ANN	0.978	511.00*	100.00	1.41667E-001	6.51050E-002
K-40	0.999	1460.81*	10.67	1.78426E+001	1.93060E+000
TL-208	0.744	277.35	6.80		
		510.84*	21.60	6.55864E-001	3.06134E-001
		583.14*	84.20	3.80196E-001	9.88169E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	8.49523E-001	4.33016E-001
Pb-212	0.576	74.81* @	10.70	9.33949E+000	4.15774E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.69376E-001	2.38058E-001
Bi-214	0.995	609.31*	46.30	7.35492E-001	2.03279E-001
		1120.29*	15.10	5.32627E-001	3.63055E-001
		1764.49*	15.80	8.98832E-001	2.73436E-001
PB-214	0.614	74.82* @	6.21	1.60922E+001	7.25851E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	9.11671E-001	3.63474E-001
		351.92*	37.20	7.53215E-001	2.47244E-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/Unit)	Wt mean Activity Uncertainty
ANN	0.978	5.954416E-002	6.846226E-002
K-40	0.999	1.784258E+001	1.930602E+000
TL-208	0.744	3.801964E-001	9.803701E-002
Bi-212	1.000	8.495226E-001	4.330162E-001
Pb-212 @	0.576	7.693759E-001	2.380584E-001
Bi-214	0.995	7.497870E-001	1.488045E-001
PB-214 @	0.614	8.033409E-001	2.044313E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
9	910.78	1.9550E-001	26.44

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:YEL7810

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	1.2074E-001	9.01E-002	-2.7176E-002
	1332.49	100.00	9.0091E-002		4.8402E-002
Nb-94	702.63	100.00	1.1484E-001	1.11E-001	1.1064E-001
	871.10	100.00	1.1126E-001		3.3328E-002
Ag-108m	79.20	7.10	7.6103E+000	1.39E-001	-1.7510E+000
	433.93	89.90	1.3851E-001		-2.5907E-002
	614.37	90.40	1.5547E-001		-1.1013E-001
	722.95	90.50	1.4811E-001		-3.2953E-002
Sb-125	176.33	6.89	2.6818E+000	4.23E-001	1.2894E+000
	427.89	29.33	4.2306E-001		2.9497E-001
	463.38	10.35	1.3274E+000		6.1955E-001
	600.56	17.80	6.5144E-001		5.9712E-002
	606.64	5.02	3.6140E+000		8.4400E+000
	635.90	11.32	1.0414E+000		4.5899E-001
Cs-134	563.23	8.38	1.2825E+000	1.36E-001	-9.5506E-001
	569.32	15.43	7.4022E-001		-4.5982E-003
	604.70	97.60	1.7372E-001		-5.1712E-002
	795.84	85.40	1.3618E-001		1.2876E-001
	801.93	8.73	1.2964E+000		-1.4877E-001
Cs-137	661.65	85.12	1.3229E-001	1.32E-001	-4.2337E-002
Eu-152	121.78	28.40	8.1172E-001	4.43E-001	-2.1069E-001
	244.69	7.49	2.1568E+000		-1.4699E+000
	344.27	26.50	4.8121E-001		-3.2042E-001
	778.89	12.74	8.2510E-001		-2.0572E-001
	867.32	4.16	2.6933E+000		-3.0187E+000
	964.01	14.40	9.4270E-001		1.1407E+000
	1085.78	10.00	1.0634E+000		-7.9438E-001
	1112.02	13.30	7.9228E-001		2.1848E-001
1407.95	20.70	4.4285E-001	-2.0453E-001		
Eu-154	123.07	40.50	5.6425E-001	3.02E-001	-3.3849E-001
	247.94	6.60	2.2820E+000		-2.4084E+000
	591.81	4.83	2.3361E+000		1.5264E+000
	723.30	19.70	6.8216E-001		-2.3283E-001
	756.87	4.33	2.7577E+000		1.6689E+000
	873.19	11.50	9.8328E-001		4.1529E-001
	996.32	10.30	1.0736E+000		2.3440E-001
	1004.76	17.90	5.9448E-001		3.4082E-001
1274.45	35.50	3.0237E-001	-8.1539E-003		
Eu-155	86.54	30.90	1.3727E+000	1.37E+000	7.3384E-001
	105.31	20.70	1.4733E+000		-1.5082E-001
Am-241	59.54	35.90	2.7576E+000	2.76E+000	-1.1785E+000
Cm-243	228.19	10.56	1.5455E+000	9.66E-001	2.2899E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	9.6624E-001	9.66E-001	-3.5846E-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 7/28/2006 10:32:54 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-128-F

Sample Title: OOL-10-01-128-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 10:22:18 PM

Live Time: 600.0 seconds

Real Time: 600.9 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-10-01-128-F
Title: OOL-10-01-128-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	274-	306	297.38	74.30	0.78	3.28E+002	161.03	1.25E+003
2	1398-	1414	1405.06	351.22	0.67	9.57E+001	46.09	1.46E+002
3	5828-	5858	5842.76	1460.66	2.09	6.00E+002	54.09	3.37E+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	0.999	1460.81*	10.67	1.31765E+001	1.59612E+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	0.999	1.317652E+001	1.596119E+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	5.4657E-001	49.10
2	351.22	1.5953E-001	48.15

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: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	1.0227E-001	7.98E-002	-5.8876E-002
	1332.49	100.00	7.9787E-002		-2.1982E-002
Nb-94	702.63	100.00	1.0905E-001	1.06E-001	-3.7073E-002
	871.10	100.00	1.0595E-001		7.1370E-002
Ag-108m	79.20	7.10	8.4808E+000	1.29E-001	-7.9982E+000
	433.93	89.90	1.2943E-001		-3.1667E-002
	614.37	90.40	1.5007E-001		-2.8348E-002
	722.95	90.50	1.3310E-001		9.4563E-002
Sb-125	176.33	6.89	2.5963E+000	4.12E-001	-3.9978E-001
	427.89	29.33	4.1188E-001		1.2469E-001
	463.38	10.35	1.1513E+000		6.5816E-002
	600.56	17.80	6.4674E-001		-6.2782E-002
	606.64	5.02	2.9792E+000		4.2450E+000
	635.90	11.32	9.1296E-001		-4.5710E-001
Cs-134	563.23	8.38	1.3803E+000	1.17E-001	1.9541E-001
	569.32	15.43	7.3746E-001		2.3082E-001
	604.70	97.60	1.4850E-001		1.1098E-001
	795.84	85.40	1.1684E-001		4.0881E-002
	801.93	8.73	1.0863E+000		-3.9436E-001
Cs-137	661.65	85.12	1.2758E-001	1.28E-001	-5.3729E-002
Eu-152	121.78	28.40	8.4978E-001	3.88E-001	1.4805E-001
	244.69	7.49	2.1039E+000		-5.2772E+000
	344.27	26.50	4.9068E-001		-5.6306E-001
	778.89	12.74	8.1440E-001		-1.3305E-001
	867.32	4.16	2.4702E+000		-1.6385E+000
	964.01	14.40	8.2090E-001		5.2181E-001
	1085.78	10.00	9.5630E-001		-4.3371E-001
	1112.02	13.30	7.2725E-001		-8.9156E-001
1407.95	20.70	3.8842E-001	1.9627E-001		
Eu-154	123.07	40.50	5.9157E-001	2.83E-001	4.0041E-001
	247.94	6.60	2.2360E+000		-1.1730E+000
	591.81	4.83	2.2724E+000		5.2719E-001
	723.30	19.70	6.0240E-001		-6.2031E-002
	756.87	4.33	2.3537E+000		8.1557E-001
	873.19	11.50	9.3307E-001		6.8366E-001
	996.32	10.30	9.3976E-001		-5.0008E-001
	1004.76	17.90	5.4185E-001		5.4023E-002
1274.45	35.50	2.8263E-001	-2.3297E-002		
Eu-155	86.54	30.90	1.4976E+000	1.49E+000	1.0421E+000
	105.31	20.70	1.4887E+000		-5.3253E-001
Am-241	59.54	35.90	3.8172E+000	3.82E+000	-4.4916E+000
Cm-243	228.19	10.56	1.5114E+000	1.08E+000	1.1666E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0788E+000	1.08E+000	-5.9969E-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 7/28/2006 4:04:59 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-10-01-129-

Sample Title: OOL-10-01-129-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 3:54:57 PM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

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

Filename: YEL7810
Log Number: OOL-10-01-129-
Title: OOL-10-01-129-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	308	301.12	75.30	1.21	1.40E+002	92.19	7.49E+002
2	2324-	2340	2328.99	582.32	1.59	8.58E+001	30.53	4.82E+001
3	2426-	2444	2435.22	608.88	1.33	1.70E+002	39.78	7.14E+001
4	3636-	3655	3642.87	910.82	0.99	1.05E+002	26.03	2.07E+001
5	5117-	5128	5122.15	1280.67	0.90	1.26E+001	11.42	8.43E+000
6	5829-	5855	5842.16	1460.69	1.88	4.90E+002	45.31	1.02E+001
7	7050-	7065	7058.43	1764.79	0.89	5.20E+001	17.09	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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Unit)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	1.13137E+001	1.39085E+000
TL-208	0.454	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.90128E-001	7.20649E-002
Bi-214	0.691	860.37	12.46		
		609.31*	46.30	6.95796E-001	1.84352E-001
		1120.29	15.10		
		1764.49*	15.80	8.85133E-001	3.04022E-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/Unit)	Wt mean Activity Uncertainty
K-40	1.000	1.131370E+001	1.390848E+000
TL-208	0.454	1.901276E-001	7.206493E-002
Bi-214	0.691	7.466976E-001	1.576354E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	75.30	2.3387E-001	65.70
4	910.82	1.7543E-001	24.73
5	1280.67	2.0952E-002	90.87

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:YEL7810

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	9.6571E-002	7.59E-002	-1.3656E-003
	1332.49	100.00	7.5900E-002		3.4250E-002
Nb-94	702.63	100.00	1.1754E-001	1.01E-001	1.1111E-002
	871.10	100.00	1.0050E-001		2.8344E-002
Ag-108m	79.20	7.10	6.8581E+000	1.31E-001	-2.2423E+000
	433.93	89.90	1.3314E-001		-4.9133E-002
	614.37	90.40	1.4550E-001		-3.7853E-002
	722.95	90.50	1.3067E-001		8.7944E-002
Sb-125	176.33	6.89	2.3457E+000	4.07E-001	-1.4952E+000
	427.89	29.33	4.0673E-001		-3.6494E-001
	463.38	10.35	1.2223E+000		1.3457E+000
	600.56	17.80	5.7864E-001		-8.7865E-002
	606.64	5.02	3.1876E+000		6.3578E+000
	635.90	11.32	9.3066E-001		7.9951E-002
Cs-134	563.23	8.38	1.2566E+000	1.26E-001	-1.4532E-001
	569.32	15.43	7.1333E-001		-6.7406E-001
	604.70	97.60	1.5392E-001		-3.7592E-002
	795.84	85.40	1.2626E-001		-6.0124E-003
	801.93	8.73	1.2522E+000		5.3701E-001
Cs-137	661.65	85.12	1.2180E-001	1.22E-001	-7.9825E-002
Eu-152	121.78	28.40	7.7764E-001	4.13E-001	-1.9549E-002
	244.69	7.49	1.9273E+000		-2.4701E+000
	344.27	26.50	4.7254E-001		-3.7384E-001
	778.89	12.74	7.5504E-001		-5.9012E-001
	867.32	4.16	2.4373E+000		-9.6748E-001
	964.01	14.40	8.2479E-001		5.8523E-001
	1085.78	10.00	9.8813E-001		-5.5071E-001
	1112.02	13.30	7.5976E-001		-1.2306E+000
1407.95	20.70	4.1290E-001	2.6337E-001		
Eu-154	123.07	40.50	5.3925E-001	2.53E-001	-1.5010E-001
	247.94	6.60	2.0388E+000		-1.5283E+000
	591.81	4.83	2.3361E+000		1.7091E-001
	723.30	19.70	6.0033E-001		3.4844E-001
	756.87	4.33	2.2858E+000		-2.2222E+000
	873.19	11.50	8.7868E-001		4.7980E-001
	996.32	10.30	1.0165E+000		-7.0188E-003
	1004.76	17.90	5.4195E-001		-6.7439E-002
1274.45	35.50	2.5275E-001	4.7154E-002		
Eu-155	86.54	30.90	1.2303E+000	1.23E+000	1.2398E+000
	105.31	20.70	1.3314E+000		1.9469E-001
Am-241	59.54	35.90	2.5236E+000	2.52E+000	1.6288E-001
Cm-243	228.19	10.56	1.4460E+000	9.63E-001	-2.0837E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	9.6257E-001	9.63E-001	1.5988E-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 7/28/2006 1:34:36 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-130-

Sample Title: OOL-10-01-130-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 1:24:32 PM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-130-
Title: OOL-10-01-130-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	332-	344	338.95	84.76	0.80	1.09E+002	82.69	6.36E+002
2	947-	961	954.01	238.54	2.06	1.93E+002	59.90	2.55E+002
3	1401-	1413	1406.83	351.76	1.00	8.42E+001	37.75	1.09E+002
4	2323-	2339	2330.26	582.64	1.07	1.05E+002	33.12	5.63E+001
5	2430-	2442	2435.56	608.96	1.56	9.33E+001	32.65	6.97E+001
6	3636-	3653	3643.00	910.85	1.42	8.90E+001	27.82	3.40E+001
7	3867-	3882	3874.00	968.61	1.46	5.59E+001	23.72	3.01E+001
8	5830-	5855	5842.71	1460.83	2.41	6.94E+002	54.57	1.93E+001
9	7054-	7067	7060.53	1765.31	0.70	2.37E+001	13.42	8.26E+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/Unit)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	1.60229E+001	1.80883E+000
TL-208	0.464	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.32162E-001	7.94080E-002
		860.37	12.46		
Pb-212	0.420	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.688	238.63*	44.60	5.95327E-001	2.07233E-001
		609.31*	46.30	3.82882E-001	1.42033E-001
		1120.29	15.10		
Ac-228	0.625	1764.49*	15.80	4.04190E-001	2.32030E-001
		338.32	11.40		
		911.07*	27.70	6.75007E-001	2.24934E-001
		969.11*	16.60	7.18161E-001	3.13928E-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/Unit)	Wt mean Activity Uncertainty
K-40	1.000	1.602293E+001	1.808832E+000
TL-208	0.464	2.321618E-001	7.940796E-002
Pb-212 @	0.420	5.953270E-001	2.072334E-001
Bi-214	0.688	3.886902E-001	1.211393E-001
Ac-228	0.625	6.896461E-001	1.828432E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.76	1.8238E-001	75.57
3	351.76	1.4036E-001	44.82

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:YEL7810

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	1.1296E-001	8.49E-002	-4.9639E-003
	1332.49	100.00	8.4878E-002		4.2471E-002
Nb-94	702.63	100.00	1.1085E-001	9.49E-002	-2.1947E-002
	871.10	100.00	9.4903E-002		-8.2020E-002
Ag-108m	79.20	7.10	7.0884E+000	1.30E-001	-1.4504E+001
	433.93	89.90	1.3543E-001		5.6767E-002
	614.37	90.40	1.3624E-001		-1.0390E-001
	722.95	90.50	1.3024E-001		2.5509E-003
Sb-125	176.33	6.89	2.5099E+000	4.06E-001	-8.2254E-002
	427.89	29.33	4.0585E-001		3.3521E-001
	463.38	10.35	1.1869E+000		5.5073E-001
	600.56	17.80	5.8086E-001		2.4387E-001
	606.64	5.02	2.9964E+000		5.1205E+000
	635.90	11.32	9.4832E-001		-7.5976E-001
Cs-134	563.23	8.38	1.3162E+000	1.28E-001	-1.7730E-001
	569.32	15.43	7.1104E-001		4.3864E-002
	604.70	97.60	1.4862E-001		-1.4015E-001
	795.84	85.40	1.2780E-001		-8.7386E-003
	801.93	8.73	1.1200E+000		-1.1077E+000
Cs-137	661.65	85.12	1.3939E-001	1.39E-001	1.2184E-001
Eu-152	121.78	28.40	8.0630E-001	3.97E-001	3.0678E-002
	244.69	7.49	2.0519E+000		-1.5691E+000
	344.27	26.50	4.9658E-001		-4.1647E-001
	778.89	12.74	7.8905E-001		-1.1578E+000
	867.32	4.16	2.3536E+000		-1.9329E+000
	964.01	14.40	9.4794E-001		1.7120E-001
	1085.78	10.00	9.9926E-001		-2.4922E-001
	1112.02	13.30	8.0801E-001		-1.4422E-001
1407.95	20.70	3.9701E-001	1.9509E-003		
Eu-154	123.07	40.50	5.5957E-001	2.47E-001	-5.8424E-002
	247.94	6.60	2.1316E+000		-1.7502E+000
	591.81	4.83	2.2766E+000		1.2530E+000
	723.30	19.70	6.0227E-001		1.4827E-001
	756.87	4.33	2.3503E+000		8.4800E-001
	873.19	11.50	8.4373E-001		-1.9535E-001
	996.32	10.30	1.0311E+000		-3.3371E-001
	1004.76	17.90	5.5108E-001		-3.3804E-001
1274.45	35.50	2.4679E-001	-5.2929E-003		
Eu-155	86.54	30.90	1.2865E+000	1.29E+000	-5.7110E-001
	105.31	20.70	1.4029E+000		-4.4601E-001
Am-241	59.54	35.90	2.7277E+000	2.73E+000	2.5930E+000
Cm-243	228.19	10.56	1.4485E+000	9.74E-001	-1.5260E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	9.7355E-001	9.74E-001	-9.7222E-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 7/28/2006 10:10:27 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-131-F

Sample Title: OOL-10-01-131-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 10:00:27 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: 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-10-01-131-F
Title: OOL-10-01-131-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2134-	2143	2138.58	534.60	0.55	1.48E+001	16.66	2.52E+001
2	5830-	5858	5842.65	1460.63	2.58	4.97E+002	47.69	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: 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	1.09116E+001	1.36973E+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	0.999	1.091160E+001	1.369728E+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	534.60	2.4625E-002	112.79

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: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	8.9954E-002	6.86E-002	-3.3713E-002
	1332.49	100.00	6.8620E-002		-3.0578E-002
Nb-94	702.63	100.00	1.0507E-001	8.55E-002	1.0773E-001
	871.10	100.00	8.5524E-002		3.5125E-002
Ag-108m	79.20	7.10	7.9993E+000	1.18E-001	-9.2411E+000
	433.93	89.90	1.1816E-001		-9.4404E-002
	614.37	90.40	1.4014E-001		-1.6264E-001
	722.95	90.50	1.2244E-001		6.7379E-002
Sb-125	176.33	6.89	2.4311E+000	3.95E-001	1.0050E+000
	427.89	29.33	3.9492E-001		-3.8567E-002
	463.38	10.35	1.0659E+000		6.4286E-001
	600.56	17.80	5.9733E-001		1.3922E-001
	606.64	5.02	2.8200E+000		2.5086E+000
	635.90	11.32	8.5923E-001		-2.0311E-001
Cs-134	563.23	8.38	1.3294E+000	1.05E-001	-4.6609E-001
	569.32	15.43	7.2669E-001		-3.1622E-001
	604.70	97.60	1.4629E-001		1.1308E-001
	795.84	85.40	1.0458E-001		-1.1015E-002
	801.93	8.73	1.0186E+000		1.2156E-001
Cs-137	661.65	85.12	1.2668E-001	1.27E-001	-5.9992E-004
Eu-152	121.78	28.40	7.9617E-001	3.61E-001	-5.6647E-002
	244.69	7.49	1.9302E+000		-4.0078E+000
	344.27	26.50	4.5078E-001		-3.2144E-001
	778.89	12.74	7.8705E-001		-7.0833E-001
	867.32	4.16	2.1817E+000		-6.6537E-001
	964.01	14.40	7.8612E-001		6.3880E-001
	1085.78	10.00	8.7698E-001		-5.5275E-001
	1112.02	13.30	7.1077E-001		-7.9342E-001
1407.95	20.70	3.6126E-001	-3.7145E-002		
Eu-154	123.07	40.50	5.5917E-001	2.68E-001	7.8440E-003
	247.94	6.60	2.0649E+000		-5.9570E-002
	591.81	4.83	2.0254E+000		-1.1171E+000
	723.30	19.70	5.6645E-001		4.1581E-001
	756.87	4.33	2.2413E+000		-8.0167E-001
	873.19	11.50	7.1974E-001		-4.2023E-001
	996.32	10.30	8.6172E-001		-3.6654E-002
	1004.76	17.90	4.6088E-001		3.5382E-001
	1274.45	35.50	2.6798E-001		4.2753E-002
Eu-155	86.54	30.90	1.4433E+000	1.43E+000	1.5132E+000
	105.31	20.70	1.4315E+000		-4.3817E-001
Am-241	59.54	35.90	3.7752E+000	3.78E+000	-1.4109E+000
Cm-243	228.19	10.56	1.4228E+000	9.34E-001	7.5223E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.3404E-001	9.34E-001	-7.8893E-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 7/28/2006 1:15:33 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-10-01-132-

Sample Title: OOL-10-01-132-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 1:05:30 PM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-132-
Title: OOL-10-01-132-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	946-	963	953.49	238.41	1.04	1.38E+002	70.76	3.58E+002
2	1169-	1187	1179.93	295.03	1.05	8.80E+001	49.27	1.61E+002
3	2031-	2048	2041.98	510.56	0.45	6.39E+001	39.08	1.01E+002
4	2324-	2340	2330.88	582.79	1.28	1.08E+002	36.24	7.47E+001
5	2427-	2443	2435.38	608.92	1.31	7.66E+001	36.42	8.54E+001
6	3633-	3652	3642.32	910.68	0.57	9.61E+001	31.92	4.79E+001
7	4475-	4488	4480.57	1120.26	1.08	4.40E+001	16.56	1.00E+001
8	5830-	5856	5842.89	1460.88	1.79	6.64E+002	53.11	1.64E+001
9	7053-	7066	7059.52	1765.06	0.66	2.79E+001	12.70	5.14E+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/Unit)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	1.53278E+001	1.74493E+000
TL-208	0.748	277.35	6.80		
		510.84*	21.60	5.24590E-001	3.31198E-001
		583.14*	84.20	2.40063E-001	8.62318E-002
		860.37	12.46		
Pb-212	0.419	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.26099E-001	2.28514E-001
Bi-214	0.994	609.31*	46.30	3.14276E-001	1.54361E-001
		1120.29*	15.10	6.42995E-001	2.51523E-001
		1764.49*	15.80	4.74194E-001	2.21286E-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/Unit)	Wt mean Activity Uncertainty
X	ANN	0.993		
	K-40	1.000	1.532776E+001	1.744935E+000
	TL-208	0.748	2.581259E-001	8.344967E-002
	Pb-212 @	0.419	4.260985E-001	2.285144E-001
	Bi-214	0.994	4.224869E-001	1.130850E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	295.03	1.4674E-001	55.96
6	910.68	1.6024E-001	33.20

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:YEL7810

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	1.0178E-001	7.93E-002	4.7789E-002
	1332.49	100.00	7.9293E-002		-1.8038E-002
Nb-94	702.63	100.00	1.1004E-001	9.80E-002	-6.1199E-002
	871.10	100.00	9.8000E-002		2.9930E-002
Ag-108m	79.20	7.10	6.8835E+000	1.34E-001	-1.9516E+001
	433.93	89.90	1.3458E-001		1.3904E-002
	614.37	90.40	1.4272E-001		2.7642E-002
	722.95	90.50	1.3401E-001		1.0808E-001
Sb-125	176.33	6.89	2.4907E+000	4.16E-001	1.3710E+000
	427.89	29.33	4.1627E-001		-5.4935E-002
	463.38	10.35	1.1608E+000		3.0623E-002
	600.56	17.80	5.8086E-001		-5.1958E-001
	606.64	5.02	2.8764E+000		3.1296E+000
	635.90	11.32	1.0222E+000		5.5803E-001
Cs-134	563.23	8.38	1.3369E+000	1.25E-001	-6.2635E-001
	569.32	15.43	6.8295E-001		-2.7069E-001
	604.70	97.60	1.3920E-001		-5.5170E-002
	795.84	85.40	1.2470E-001		-4.6880E-002
	801.93	8.73	1.1256E+000		-5.7855E-001
Cs-137	661.65	85.12	1.3410E-001	1.34E-001	7.9667E-002
Eu-152	121.78	28.40	8.2589E-001	2.98E-001	2.1884E-001
	244.69	7.49	2.0481E+000		-1.1155E+000
	344.27	26.50	5.0109E-001		1.4651E-002
	778.89	12.74	8.9909E-001		-3.9081E-001
	867.32	4.16	2.3291E+000		-3.3911E+000
	964.01	14.40	9.3215E-001		7.6679E-001
	1085.78	10.00	9.4810E-001		5.4738E-001
	1112.02	13.30	7.8025E-001		1.4307E-001
1407.95	20.70	2.9848E-001	-2.4947E-001		
Eu-154	123.07	40.50	5.7044E-001	2.34E-001	1.5678E-001
	247.94	6.60	2.1478E+000		-2.6770E+000
	591.81	4.83	2.2309E+000		-2.1728E-001
	723.30	19.70	6.1190E-001		1.8279E-001
	756.87	4.33	2.3818E+000		-2.0035E+000
	873.19	11.50	8.4818E-001		2.4035E-001
	996.32	10.30	1.0017E+000		1.3972E+000
	1004.76	17.90	5.3888E-001		5.4382E-001
1274.45	35.50	2.3440E-001	-1.4389E-003		
Eu-155	86.54	30.90	1.2903E+000	1.29E+000	8.6827E-001
	105.31	20.70	1.3820E+000		4.1081E-002
Am-241	59.54	35.90	2.6344E+000	2.63E+000	3.8311E-001
Cm-243	228.19	10.56	1.4787E+000	9.72E-001	-6.9802E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	9.7233E-001	9.72E-001	-2.5674E-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 7/28/2006 1:50:36 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-133-

Sample Title: OOL-10-01-133-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 1:40:34 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-133-
Title: OOL-10-01-133-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	946-	963	953.18	238.33	1.08	1.25E+002	73.46	3.91E+002
2	1174-	1187	1180.82	295.25	0.88	8.82E+001	45.86	1.66E+002
3	1395-	1414	1406.55	351.69	1.70	1.92E+002	52.49	1.50E+002
4	2322-	2340	2330.00	582.57	0.58	8.44E+001	38.21	8.76E+001
5	2426-	2445	2435.36	608.91	1.11	2.02E+002	43.78	8.46E+001
6	3634-	3651	3642.44	910.71	0.36	9.22E+001	29.83	4.28E+001
7	5831-	5855	5842.66	1460.82	2.07	6.79E+002	54.83	2.50E+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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Unit)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	1.56836E+001	1.79334E+000
TL-208	0.462	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.87078E-001	8.81531E-002
Pb-212	0.418	860.37	12.46		
		74.81 @	10.70		
		77.11 @	18.00		
Bi-214	0.403	87.30 @	8.00		
		238.63*	44.60	3.86016E-001	2.34761E-001
		609.31*	46.30	8.30411E-001	2.06717E-001
PB-214	0.530	1120.29	15.10		
		1764.49	15.80		
		74.82 @	6.21		
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	6.74100E-001	3.68463E-001
		351.92*	37.20	7.96898E-001	2.55567E-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/Unit)	Wt mean Activity Uncertainty
K-40	1.000	1.568364E+001	1.793337E+000
TL-208	0.462	1.870780E-001	8.815306E-002
Pb-212 @	0.418	3.860157E-001	2.347609E-001
Bi-214	0.403	8.304106E-001	2.067167E-001
PB-214 @	0.530	7.570107E-001	2.099978E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
6	910.71	1.5365E-001	32.35

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:YEL7810

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	1.1396E-001	8.56E-002	4.2779E-002
	1332.49	100.00	8.5644E-002		-3.1343E-002
Nb-94	702.63	100.00	1.1405E-001	9.38E-002	-1.6403E-002
	871.10	100.00	9.3847E-002		-3.6175E-002
Ag-108m	79.20	7.10	7.4530E+000	1.34E-001	-1.6348E+001
	433.93	89.90	1.3656E-001		-2.3785E-002
	614.37	90.40	1.4307E-001		-2.4284E-002
	722.95	90.50	1.3443E-001		1.3593E-001
Sb-125	176.33	6.89	2.5551E+000	4.47E-001	-7.4904E-002
	427.89	29.33	4.4681E-001		1.0842E-002
	463.38	10.35	1.2123E+000		1.7245E+000
	600.56	17.80	6.3356E-001		-2.5980E-001
	606.64	5.02	3.4840E+000		9.5094E+000
	635.90	11.32	9.5528E-001		-8.7215E-001
Cs-134	563.23	8.38	1.3890E+000	1.29E-001	6.7517E-001
	569.32	15.43	7.6824E-001		6.4043E-002
	604.70	97.60	1.7153E-001		-6.8850E-002
	795.84	85.40	1.2882E-001		1.2877E-001
	801.93	8.73	1.1854E+000		-9.7328E-001
Cs-137	661.65	85.12	1.3677E-001	1.37E-001	-3.5094E-002
Eu-152	121.78	28.40	8.4441E-001	4.05E-001	-3.7262E-002
	244.69	7.49	2.0905E+000		-6.2463E-001
	344.27	26.50	5.0184E-001		-3.9505E-001
	778.89	12.74	8.2510E-001		-4.0888E-001
	867.32	4.16	2.1625E+000		-5.0105E+000
	964.01	14.40	9.4532E-001		9.9483E-001
	1085.78	10.00	1.0425E+000		-8.9246E-001
	1112.02	13.30	8.0019E-001		-1.6048E+000
1407.95	20.70	4.0504E-001	7.1601E-003		
Eu-154	123.07	40.50	5.8605E-001	2.51E-001	-1.6480E-002
	247.94	6.60	2.2204E+000		-9.2432E-001
	591.81	4.83	2.1920E+000		-1.4280E+000
	723.30	19.70	6.1949E-001		7.3983E-001
	756.87	4.33	2.5137E+000		2.9965E+000
	873.19	11.50	8.7439E-001		2.6574E-001
	996.32	10.30	9.8663E-001		-6.0607E-003
	1004.76	17.90	5.2319E-001		-2.0017E-002
	1274.45	35.50	2.5078E-001		9.1407E-002
	Eu-155	86.54	30.90		1.3311E+000
	105.31	20.70	1.4250E+000		2.3491E-001
Am-241	59.54	35.90	2.6902E+000	2.69E+000	1.9316E+000
Cm-243	228.19	10.56	1.5478E+000	1.04E+000	-1.4657E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	1.0358E+000	1.04E+000	-1.2523E-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 7/28/2006 9:55:07 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-10-01-134-F

Sample Title: OOL-10-01-134-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 9:45:07 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: 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-134-F
Title: OOL-10-01-134-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5828-	5856	5842.61	1460.62	2.42	4.97E+002	47.23	1.81E+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	1.09071E+001	1.36183E+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	0.999	1.090713E+001	1.361826E+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	1.0015E-001	7.90E-002	-3.0101E-002
	1332.49	100.00	7.9046E-002		1.6337E-002
Nb-94	702.63	100.00	1.0008E-001	8.72E-002	7.3861E-002
	871.10	100.00	8.7153E-002		-3.0128E-002
Ag-108m	79.20	7.10	8.4184E+000	1.16E-001	-1.7819E+001
	433.93	89.90	1.1617E-001		-4.9313E-002
	614.37	90.40	1.3237E-001		-1.3392E-001
	722.95	90.50	1.2114E-001		2.4434E-002
Sb-125	176.33	6.89	2.3978E+000	3.72E-001	-4.0046E-001
	427.89	29.33	3.7235E-001		-2.0343E-001
	463.38	10.35	1.1163E+000		1.2561E-001
	600.56	17.80	5.5670E-001		-2.6348E-001
	606.64	5.02	2.7255E+000		5.3272E+000
	635.90	11.32	8.7752E-001		-3.0827E-003
Cs-134	563.23	8.38	1.2929E+000	1.19E-001	2.1244E-001
	569.32	15.43	7.0463E-001		-4.8635E-001
	604.70	97.60	1.3500E-001		1.0882E-002
	795.84	85.40	1.1893E-001		8.1150E-002
	801.93	8.73	1.0360E+000		-1.1890E+000
Cs-137	661.65	85.12	1.0907E-001	1.09E-001	-8.5540E-002
Eu-152	121.78	28.40	8.3369E-001	3.40E-001	-2.1316E-002
	244.69	7.49	1.8909E+000		-4.0488E+000
	344.27	26.50	4.2938E-001		-3.4537E-001
	778.89	12.74	7.4032E-001		-5.2517E-001
	867.32	4.16	2.0542E+000		-4.8612E-001
	964.01	14.40	7.9496E-001		1.0063E+000
	1085.78	10.00	8.0231E-001		-7.8826E-001
	1112.02	13.30	7.5125E-001		-1.7213E-001
1407.95	20.70	3.4041E-001	1.6597E-001		
Eu-154	123.07	40.50	5.8089E-001	2.47E-001	4.0804E-001
	247.94	6.60	2.0117E+000		-1.4620E+000
	591.81	4.83	1.9415E+000		-1.7598E+000
	723.30	19.70	5.5458E-001		1.8777E-002
	756.87	4.33	2.2413E+000		8.6896E-001
	873.19	11.50	7.6748E-001		-9.0868E-001
	996.32	10.30	8.6716E-001		-2.9107E-002
	1004.76	17.90	4.6427E-001		-2.5072E-001
1274.45	35.50	2.4702E-001	-1.6379E-001		
Eu-155	86.54	30.90	1.4778E+000	1.48E+000	3.9864E-001
	105.31	20.70	1.4777E+000		1.5295E+000
Am-241	59.54	35.90	4.1353E+000	4.14E+000	3.5505E+000
Cm-243	228.19	10.56	1.4327E+000	9.41E-001	2.4915E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.4081E-001	9.41E-001	1.4084E-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 7/28/2006 12:57:32 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-135-

Sample Title: OOL-10-01-135-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 12:47:29 PM

Live Time: 600.0 seconds

Real Time: 601.0 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

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

Filename: YEL7810
Log Number: OOL-10-01-135-
Title: OOL-10-01-135-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	293-	308	299.63	74.93	1.19	1.65E+002	103.11	8.65E+002
2	947-	961	953.12	238.32	1.48	1.39E+002	58.82	2.64E+002
3	2323-	2340	2331.60	582.97	0.37	8.83E+001	31.78	5.37E+001
4	2426-	2445	2435.02	608.83	1.40	9.31E+001	38.37	8.09E+001
5	5830-	5855	5842.62	1460.81	1.73	6.12E+002	52.21	2.28E+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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Unit)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	1.41395E+001	1.66282E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.95776E-001	7.49426E-002
		860.37	12.46		
Pb-212	0.574	74.81* @	10.70	5.16808E+000	3.38346E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.28446E-001	1.93653E-001
Bi-214	0.402	609.31*	46.30	3.81817E-001	1.64286E-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/Unit)	Wt mean Activity Uncertainty
K-40	1.000	1.413955E+001	1.662823E+000
TL-208	0.469	1.957764E-001	7.494260E-002
Pb-212 @	0.574	4.284457E-001	1.936532E-001
Bi-214	0.402	3.818173E-001	1.642857E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	1.0456E-001	7.23E-002	8.7045E-002
	1332.49	100.00	7.2333E-002		-3.8581E-002
Nb-94	702.63	100.00	1.0415E-001	9.65E-002	-8.7620E-002
	871.10	100.00	9.6465E-002		-5.0142E-002
Ag-108m	79.20	7.10	6.9592E+000	1.25E-001	-6.5916E+000
	433.93	89.90	1.2510E-001		4.5644E-002
	614.37	90.40	1.4342E-001		1.1716E-004
	722.95	90.50	1.3109E-001		9.2439E-002
Sb-125	176.33	6.89	2.3832E+000	3.80E-001	-1.1614E+000
	427.89	29.33	3.8039E-001		1.0833E-002
	463.38	10.35	1.1206E+000		9.2024E-001
	600.56	17.80	6.0675E-001		5.6498E-002
	606.64	5.02	2.8315E+000		3.0875E+000
	635.90	11.32	9.7587E-001		-8.2321E-001
Cs-134	563.23	8.38	1.2609E+000	1.30E-001	-7.9681E-001
	569.32	15.43	7.2466E-001		2.9972E-003
	604.70	97.60	1.3890E-001		3.2105E-002
	795.84	85.40	1.2983E-001		3.6145E-002
	801.93	8.73	1.1532E+000		-5.5630E-001
Cs-137	661.65	85.12	1.3137E-001	1.31E-001	4.1811E-002
Eu-152	121.78	28.40	8.1710E-001	3.80E-001	1.6547E-001
	244.69	7.49	2.0257E+000		-1.6478E+000
	344.27	26.50	4.7571E-001		-3.4902E-001
	778.89	12.74	8.0005E-001		-6.7218E-001
	867.32	4.16	2.3658E+000		-4.2782E-001
	964.01	14.40	9.0245E-001		7.9590E-001
	1085.78	10.00	1.1188E+000		4.0102E-001
	1112.02	13.30	7.7620E-001		-3.9186E-001
1407.95	20.70	3.8040E-001	1.1348E-002		
Eu-154	123.07	40.50	5.6470E-001	2.62E-001	-2.8773E-002
	247.94	6.60	2.1822E+000		-2.3380E+000
	591.81	4.83	2.3065E+000		1.0763E+000
	723.30	19.70	6.0033E-001		3.8319E-001
	756.87	4.33	2.4739E+000		4.8891E-001
	873.19	11.50	8.4373E-001		-7.4508E-002
	996.32	10.30	7.8215E-001		1.4405E-001
	1004.76	17.90	5.1678E-001		4.4347E-002
1274.45	35.50	2.6235E-001	5.1056E-002		
Eu-155	86.54	30.90	1.2932E+000	1.29E+000	1.5703E+000
	105.31	20.70	1.4059E+000		8.5584E-001
Am-241	59.54	35.90	2.5544E+000	2.55E+000	1.4601E-001
Cm-243	228.19	10.56	1.4034E+000	9.61E-001	-3.7527E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	9.6134E-001	9.61E-001	1.9498E-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 7/28/2006 3:14:22 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-10-01-136-

Sample Title: OOL-10-01-136-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 3:04:20 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-136-
Title: OOL-10-01-136-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	309	300.72	75.20	1.51	1.58E+002	120.23	1.20E+003
2	943-	962	953.98	238.53	1.00	1.93E+002	78.05	3.97E+002
3	1174-	1185	1180.07	295.06	0.82	4.39E+001	43.20	1.75E+002
4	1396-	1414	1406.67	351.72	0.70	1.93E+002	51.74	1.49E+002
5	2035-	2053	2042.51	510.69	1.38	8.46E+001	42.63	1.14E+002
6	2323-	2339	2330.92	582.80	1.72	1.12E+002	39.37	9.33E+001
7	2423-	2445	2435.66	608.99	1.68	2.98E+002	46.94	7.13E+001
8	2902-	2914	2908.11	727.11	0.64	2.45E+001	25.21	5.35E+001
9	3633-	3653	3642.58	910.75	1.23	1.16E+002	31.38	3.88E+001
10	3866-	3882	3874.53	968.74	0.78	6.00E+001	27.14	4.20E+001
11	4469-	4485	4478.47	1119.74	0.97	5.43E+001	25.23	3.57E+001
12	5828-	5855	5842.29	1460.72	2.06	8.31E+002	58.63	1.41E+001
13	7050-	7067	7060.16	1765.22	0.33	4.32E+001	19.81	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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Unit)	Activity Uncertainty
ANN	0.997	511.00*	100.00	1.49897E-001	7.82260E-002
K-40	1.000	1460.81*	10.67	1.91920E+001	2.06106E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	6.93970E-001	3.66565E-001
		583.14*	84.20	2.47716E-001	9.30589E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	4.16255E-001	4.30672E-001
Pb-212	0.575	74.81* @	10.70	4.89111E+000	3.84425E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.96487E-001	2.58573E-001
Bi-214	0.992	609.31*	46.30	1.22129E+000	2.44376E-001
		1120.29*	15.10	7.93760E-001	3.78384E-001
		1764.49*	15.80	7.35089E-001	3.45105E-001
PB-214	0.614	74.82* @	6.21	8.42752E+000	6.65195E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.35854E-001	3.34928E-001
Ac-228	0.625	351.92*	37.20	8.00044E-001	2.53200E-001
		338.32	11.40		
		911.07*	27.70	8.81608E-001	2.58842E-001
		969.11*	16.60	7.70844E-001	3.57870E-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/Unit)	Wt mean Activity Uncertainty
ANN	0.997	9.639074E-002	8.074845E-002
K-40	1.000	1.919199E+001	2.061059E+000
TL-208	0.749	2.477162E-001	9.270806E-002
Bi-212	1.000	4.162551E-001	4.306724E-001
Pb-212 @	0.575	5.964870E-001	2.585731E-001
Bi-214	0.992	1.001265E+000	1.764300E-001
PB-214 @	0.614	6.312326E-001	2.019783E-001
Ac-228	0.625	8.435644E-001	2.097317E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	1.1396E-001	7.68E-002	-8.8306E-002
	1332.49	100.00	7.6764E-002		9.4484E-003
Nb-94	702.63	100.00	1.1716E-001	1.16E-001	5.4253E-002
	871.10	100.00	1.1603E-001		6.4154E-002
Ag-108m	79.20	7.10	7.9966E+000	1.38E-001	-7.9953E+000
	433.93	89.90	1.3796E-001		-1.0015E-001
	614.37	90.40	1.6422E-001		2.7313E-002
	722.95	90.50	1.4085E-001		-2.9081E-002
Sb-125	176.33	6.89	2.7362E+000	4.33E-001	2.9703E-001
	427.89	29.33	4.3305E-001		1.4546E-002
	463.38	10.35	1.3228E+000		5.2481E-001
	600.56	17.80	6.4751E-001		5.7652E-001
	606.64	5.02	3.7984E+000		1.3281E+001
	635.90	11.32	1.0414E+000		-7.8233E-002
Cs-134	563.23	8.38	1.3572E+000	1.32E-001	-1.8654E+000
	569.32	15.43	7.7455E-001		1.5109E-001
	604.70	97.60	1.8497E-001		-6.0513E-002
	795.84	85.40	1.3182E-001		-7.7307E-002
	801.93	8.73	1.3107E+000		-2.0030E-001
Cs-137	661.65	85.12	1.4573E-001	1.46E-001	3.2753E-002
Eu-152	121.78	28.40	8.8434E-001	4.05E-001	-5.9235E-002
	244.69	7.49	2.2177E+000		4.0950E-001
	344.27	26.50	5.1512E-001		-2.5297E-001
	778.89	12.74	8.2157E-001		-6.0347E-001
	867.32	4.16	2.7456E+000		-1.7615E+000
	964.01	14.40	9.5831E-001		-3.4789E-001
	1085.78	10.00	1.0103E+000		-4.8176E-001
	1112.02	13.30	7.9228E-001		-5.4176E-001
1407.95	20.70	4.0504E-001	5.8526E-003		
Eu-154	123.07	40.50	6.1606E-001	2.97E-001	5.1515E-001
	247.94	6.60	2.3692E+000		-2.2297E+000
	591.81	4.83	2.3940E+000		-2.1968E+000
	723.30	19.70	6.4532E-001		-2.6239E-001
	756.87	4.33	2.5528E+000		-8.4946E-001
	873.19	11.50	9.8328E-001		1.7804E-001
	996.32	10.30	1.1144E+000		4.5196E-001
	1004.76	17.90	5.5408E-001		1.1262E-001
1274.45	35.50	2.9747E-001	3.7259E-002		
Eu-155	86.54	30.90	1.4187E+000	1.42E+000	2.0698E+000
	105.31	20.70	1.5173E+000		-1.2195E-001
Am-241	59.54	35.90	3.2004E+000	3.20E+000	-1.3862E+000
Cm-243	228.19	10.56	1.6421E+000	1.04E+000	1.4989E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	1.0448E+000	1.04E+000	3.4932E-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 7/28/2006 9:41:48 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-10-01-137-F

Sample Title: OOL-10-01-137-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 9:31:47 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: 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-137-F
Title: OOL-10-01-137-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	945-	963	953.70	238.38	0.40	1.54E+002	61.65	2.47E+002
2	4547-	4558	4552.70	1138.14	0.63	1.50E+001	13.18	1.20E+001
3	5828-	5857	5842.55	1460.61	2.68	5.72E+002	50.36	1.86E+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	1.25647E+001	1.50235E+000
Pb-212	0.453	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.98022E-001	2.14148E-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	1.256472E+001	1.502346E+000
Pb-212 @	0.453	4.980223E-001	2.141483E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1138.14	2.5000E-002	87.85

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: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	8.6269E-002	7.44E-002	-8.2913E-002
	1332.49	100.00	7.4432E-002		3.2349E-002
Nb-94	702.63	100.00	9.7917E-002	8.93E-002	4.1114E-002
	871.10	100.00	8.9275E-002		5.6021E-004
Ag-108m	79.20	7.10	8.2251E+000	1.15E-001	-8.9832E+000
	433.93	89.90	1.1549E-001		-8.4707E-002
	614.37	90.40	1.3418E-001		-4.2949E-002
	722.95	90.50	1.1672E-001		1.0270E-001
Sb-125	176.33	6.89	2.4433E+000	3.79E-001	2.5594E-001
	427.89	29.33	3.7908E-001		3.2477E-002
	463.38	10.35	1.0219E+000		1.3713E-001
	600.56	17.80	5.4774E-001		2.1754E-001
	606.64	5.02	2.6275E+000		3.7971E+000
	635.90	11.32	8.7752E-001		1.0782E+000
Cs-134	563.23	8.38	1.2721E+000	1.14E-001	-4.7819E-001
	569.32	15.43	6.7949E-001		-6.9554E-002
	604.70	97.60	1.2690E-001		-2.8311E-002
	795.84	85.40	1.1417E-001		-2.6246E-002
	801.93	8.73	1.0417E+000		-4.8989E-001
Cs-137	661.65	85.12	1.2111E-001	1.21E-001	-6.1807E-003
Eu-152	121.78	28.40	7.7082E-001	3.49E-001	-6.0132E-001
	244.69	7.49	1.8887E+000		-3.8659E-001
	344.27	26.50	4.8669E-001		-6.1521E-003
	778.89	12.74	6.9422E-001		-2.6047E-001
	867.32	4.16	2.1443E+000		-8.1460E-001
	964.01	14.40	8.2935E-001		4.1465E-001
	1085.78	10.00	9.3437E-001		5.9378E-001
	1112.02	13.30	6.9387E-001		-1.5165E+000
1407.95	20.70	3.4892E-001	2.6401E-001		
Eu-154	123.07	40.50	5.4025E-001	2.05E-001	-1.8363E-001
	247.94	6.60	1.9981E+000		-2.9924E-001
	591.81	4.83	2.0418E+000		-1.1665E+000
	723.30	19.70	5.3627E-001		3.9523E-001
	756.87	4.33	2.2931E+000		-2.7998E-001
	873.19	11.50	7.8120E-001		-6.0352E-001
	996.32	10.30	8.8855E-001		7.2210E-001
	1004.76	17.90	5.0620E-001		1.5407E-001
1274.45	35.50	2.0479E-001	-1.6671E-001		
Eu-155	86.54	30.90	1.5126E+000	1.39E+000	2.2600E+000
	105.31	20.70	1.3949E+000		-6.2426E-001
Am-241	59.54	35.90	3.5601E+000	3.56E+000	-3.7562E+000
Cm-243	228.19	10.56	1.3599E+000	9.37E-001	8.2366E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.3675E-001	9.37E-001	2.1855E-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 7/28/2006 11:54:15 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-10-01-138-

Sample Title: OOL-10-01-138-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 11:44:13 AM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-138-
 Title: OOL-10-01-138-F-G
 Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	308	290.44	72.63	1.76	8.96E+001	60.60	6.71E+002
m	2	285-	308	299.86	74.99	1.76	3.89E+002	64.19	1.03E+003
	3	945-	959	953.18	238.33	1.21	1.51E+002	58.79	2.60E+002
	4	1400-	1415	1407.82	352.00	1.59	8.22E+001	43.17	1.33E+002
	5	2323-	2339	2330.60	582.72	1.79	1.23E+002	34.31	5.79E+001
	6	2428-	2445	2435.36	608.91	1.10	1.16E+002	33.01	5.16E+001
	7	3635-	3651	3641.87	910.57	1.41	9.83E+001	27.54	3.17E+001
	8	3867-	3883	3874.68	968.78	1.87	7.20E+001	24.43	2.60E+001
	9	5830-	5855	5842.57	1460.79	2.37	6.25E+002	52.23	1.97E+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/Unit)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	1.44422E+001	1.68005E+000
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.72860E-001	8.39641E-002
		860.37	12.46		
Pb-212	0.574	74.81* @	10.70	1.21506E+001	3.11313E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.66643E-001	1.95734E-001
Bi-214	0.403	609.31*	46.30	4.77399E-001	1.47662E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.623	338.32	11.40		
		911.07*	27.70	7.45805E-001	2.25933E-001
		969.11*	16.60	9.24889E-001	3.28529E-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/Unit)	Wt mean Activity Uncertainty
K-40	1.000	1.444225E+001	1.680053E+000
TL-208	0.466	2.728603E-001	8.396405E-002
Pb-212 @	0.574	4.666432E-001	1.957342E-001
Bi-214	0.403	4.773988E-001	1.476617E-001
Ac-228	0.623	8.033070E-001	1.861600E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.4933E-001	67.63
4	352.00	1.3702E-001	52.51

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	1.0510E-001	9.08E-002	5.9416E-002
	1332.49	100.00	9.0809E-002		6.6949E-002
Nb-94	702.63	100.00	1.0501E-001	9.38E-002	3.9057E-002
	871.10	100.00	9.3847E-002		3.8908E-002
Ag-108m	79.20	7.10	7.1105E+000	1.30E-001	-7.3611E+000
	433.93	89.90	1.3022E-001		1.2959E-001
	614.37	90.40	1.3363E-001		-1.2459E-002
	722.95	90.50	1.3235E-001		6.7585E-002
Sb-125	176.33	6.89	2.4308E+000	3.85E-001	7.3562E-001
	427.89	29.33	3.8506E-001		-4.0631E-001
	463.38	10.35	1.1661E+000		7.3790E-001
	600.56	17.80	6.3154E-001		3.9535E-002
	606.64	5.02	2.8653E+000		4.0446E+000
	635.90	11.32	9.1628E-001		8.8627E-002
Cs-134	563.23	8.38	1.3287E+000	1.20E-001	-3.4656E-001
	569.32	15.43	7.5112E-001		-1.1678E-001
	604.70	97.60	1.4251E-001		-7.6525E-002
	795.84	85.40	1.2044E-001		-4.3759E-002
	801.93	8.73	1.1586E+000		-1.5144E-001
Cs-137	661.65	85.12	1.2998E-001	1.30E-001	8.5127E-002
Eu-152	121.78	28.40	8.0020E-001	3.09E-001	-2.2062E-001
	244.69	7.49	2.0722E+000		-7.7213E-001
	344.27	26.50	4.7650E-001		-3.6433E-001
	778.89	12.74	8.0005E-001		-4.8222E-001
	867.32	4.16	2.2022E+000		-4.8068E+000
	964.01	14.40	8.9693E-001		-2.7889E-001
	1085.78	10.00	9.5393E-001		9.8976E-001
	1112.02	13.30	8.0019E-001		-7.3077E-001
1407.95	20.70	3.0937E-001	1.5667E-001		
Eu-154	123.07	40.50	5.5484E-001	2.37E-001	-1.7307E-001
	247.94	6.60	2.1639E+000		-5.6980E-001
	591.81	4.83	2.2991E+000		6.8494E-001
	723.30	19.70	6.0033E-001		2.2539E-001
	756.87	4.33	2.5038E+000		1.4187E+000
	873.19	11.50	8.2567E-001		-2.7670E-001
	996.32	10.30	9.2925E-001		1.6270E-001
	1004.76	17.90	5.5108E-001		-6.6288E-001
1274.45	35.50	2.3651E-001	1.2965E-001		
Eu-155	86.54	30.90	1.3471E+000	1.35E+000	2.3402E+000
	105.31	20.70	1.4177E+000		1.7211E-001
Am-241	59.54	35.90	2.6269E+000	2.63E+000	-3.7688E-001
Cm-243	228.19	10.56	1.4712E+000	9.94E-001	-4.3016E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	9.9394E-001	9.94E-001	-5.9681E-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 7/28/2006 2:06:25 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-139-

Sample Title: OOL-10-01-139-F-G

Description: SATULATED SOIL

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 1:56:23 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-139-
Title: OOL-10-01-139-F-G
Description: SATULATED SOIL

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	306	300.10	75.05	0.98	1.30E+002	88.59	8.00E+002
2	947-	962	954.01	238.54	1.24	1.69E+002	67.30	3.32E+002
3	1174-	1189	1181.08	295.31	0.98	1.39E+002	51.91	1.86E+002
4	1398-	1413	1406.60	351.70	1.40	2.81E+002	52.17	1.42E+002
5	2324-	2339	2330.76	582.76	1.21	1.09E+002	35.86	7.52E+001
6	2424-	2444	2435.26	608.89	1.71	3.02E+002	46.83	7.46E+001
7	3634-	3650	3642.56	910.74	1.77	7.31E+001	29.49	4.89E+001
8	3729-	3742	3735.02	933.86	0.39	1.80E+001	19.98	3.10E+001
9	3865-	3884	3873.44	968.47	0.27	5.45E+001	29.38	4.85E+001
10	5830-	5856	5842.20	1460.70	2.06	6.76E+002	54.98	2.60E+001
11	7050-	7069	7058.36	1764.77	1.33	7.25E+001	20.68	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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Unit)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	1.56146E+001	1.79194E+000
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.41326E-001	8.55039E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	4.04540E+000	2.87204E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.21797E-001	2.23396E-001
Bi-214	0.691	609.31*	46.30	1.24084E+000	2.45532E-001
		1120.29	15.10		
		1764.49*	15.80	1.23346E+000	3.73051E-001
PB-214	0.614	74.82* @	6.21	6.97034E+000	4.97441E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.06098E+000	4.35115E-001
		351.92*	37.20	1.16654E+000	2.91589E-001
Ac-228	0.622	338.32	11.40		
		911.07*	27.70	5.54245E-001	2.32645E-001
		969.11*	16.60	7.00136E-001	3.84457E-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/Unit)	Wt mean Activity Uncertainty
K-40	1.000	1.561463E+001	1.791942E+000
TL-208	0.466	2.413261E-001	8.550385E-002
Pb-212 @	0.576	5.217969E-001	2.233961E-001
Bi-214	0.691	1.238605E+000	2.050953E-001
PB-214 @	0.614	1.133826E+000	2.422276E-001
Ac-228	0.622	5.933485E-001	1.990396E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
8	933.86	3.0017E-002	110.95

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:YEL7810

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	1.0456E-001	8.64E-002	-6.7088E-002
	1332.49	100.00	8.6402E-002		3.9442E-003
Nb-94	702.63	100.00	1.1326E-001	9.90E-002	-1.3232E-001
	871.10	100.00	9.9010E-002		-6.3636E-002
Ag-108m	79.20	7.10	7.8360E+000	1.38E-001	-6.4749E+000
	433.93	89.90	1.3907E-001		1.0652E-001
	614.37	90.40	1.5707E-001		-1.3648E-001
	722.95	90.50	1.3848E-001		3.6383E-002
Sb-125	176.33	6.89	2.6164E+000	4.19E-001	-5.1299E-001
	427.89	29.33	4.1883E-001		-1.5031E-001
	463.38	10.35	1.2397E+000		-1.3495E-001
	600.56	17.80	6.2544E-001		6.5803E-001
	606.64	5.02	3.8358E+000		1.0755E+001
	635.90	11.32	1.0382E+000		-8.4127E-001
Cs-134	563.23	8.38	1.4047E+000	1.42E-001	9.8953E-001
	569.32	15.43	7.1561E-001		-2.6763E-001
	604.70	97.60	1.8745E-001		-6.9002E-003
	795.84	85.40	1.4178E-001		1.5682E-001
	801.93	8.73	1.2321E+000		1.2806E-001
Cs-137	661.65	85.12	1.4111E-001	1.41E-001	7.9861E-002
Eu-152	121.78	28.40	8.5442E-001	4.46E-001	-3.5561E-001
	244.69	7.49	2.2466E+000		9.7341E-001
	344.27	26.50	4.8043E-001		-6.0994E-001
	778.89	12.74	7.7035E-001		-6.5908E-001
	867.32	4.16	2.4373E+000		-2.7650E+000
	964.01	14.40	9.7366E-001		4.9813E-001
	1085.78	10.00	1.0157E+000		4.0650E-001
	1112.02	13.30	8.5706E-001		-6.3064E-001
1407.95	20.70	4.4644E-001	2.8657E-002		
Eu-154	123.07	40.50	5.9559E-001	2.82E-001	2.3185E-001
	247.94	6.60	2.2536E+000		-3.8909E+000
	591.81	4.83	2.3140E+000		-7.5690E-003
	723.30	19.70	6.4170E-001		2.4621E-001
	756.87	4.33	2.4129E+000		-9.8297E-001
	873.19	11.50	8.5702E-001		-6.7543E-001
	996.32	10.30	1.0066E+000		4.8039E-001
	1004.76	17.90	5.2637E-001		-2.8635E-001
1274.45	35.50	2.8224E-001	-2.1247E-001		
Eu-155	86.54	30.90	1.4013E+000	1.40E+000	1.2702E+000
	105.31	20.70	1.4808E+000		-4.2764E-001
Am-241	59.54	35.90	2.8303E+000	2.83E+000	-3.2944E-001
Cm-243	228.19	10.56	1.6094E+000	1.06E+000	7.0887E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	1.0594E+000	1.06E+000	4.5352E-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 7/28/2006 9:25:24 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-140-F

Sample Title: OOL-10-01-140-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 9:15:23 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: 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-10-01-140-F
Title: OOL-10-01-140-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5830-	5857	5842.38	1460.56	2.65	5.35E+002	49.54	2.48E+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	0.998	1460.81*	10.67	1.17472E+001	1.44470E+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	0.998	1.174725E+001	1.444695E+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	9.1147E-002	7.52E-002	7.2740E-002
	1332.49	100.00	7.5222E-002		-4.8509E-003
Nb-94	702.63	100.00	9.3895E-002	9.39E-002	5.7076E-002
	871.10	100.00	9.3865E-002		5.4939E-002
Ag-108m	79.20	7.10	8.1369E+000	1.20E-001	-7.8255E+000
	433.93	89.90	1.2044E-001		-8.6747E-002
	614.37	90.40	1.4117E-001		-7.2912E-002
	722.95	90.50	1.1984E-001		2.1245E-003
Sb-125	176.33	6.89	2.3978E+000	3.49E-001	-6.1115E-001
	427.89	29.33	3.4929E-001		-3.7316E-001
	463.38	10.35	1.0914E+000		4.0093E-001
	600.56	17.80	5.4999E-001		-4.8831E-001
	606.64	5.02	2.7704E+000		5.5555E+000
	635.90	11.32	8.7390E-001		-4.2460E-001
Cs-134	563.23	8.38	1.2076E+000	1.16E-001	-1.5660E+000
	569.32	15.43	7.2233E-001		2.5873E-001
	604.70	97.60	1.3650E-001		5.3087E-002
	795.84	85.40	1.1631E-001		8.9779E-002
Cs-137	801.93	8.73	1.1238E+000	1.15E-001	-3.6523E-001
	661.65	85.12	1.1526E-001		3.3760E-002
Eu-152	121.78	28.40	8.2380E-001	3.57E-001	-3.7741E-001
	244.69	7.49	1.9041E+000		-1.5363E+000
	344.27	26.50	4.3753E-001		-4.3904E-001
	778.89	12.74	7.0994E-001		2.7617E-001
	867.32	4.16	2.2545E+000		-1.6004E+000
	964.01	14.40	8.5147E-001		9.2636E-001
	1085.78	10.00	8.8878E-001		7.3998E-001
	1112.02	13.30	6.8091E-001		-1.5031E+000
1407.95	20.70	3.5720E-001	-2.5839E-001		
Eu-154	123.07	40.50	5.7187E-001	2.49E-001	1.6960E-001
	247.94	6.60	2.1116E+000		-4.8373E-002
	591.81	4.83	2.1680E+000		1.9011E-001
	723.30	19.70	5.4855E-001		-9.3637E-002
	756.87	4.33	2.1226E+000		-9.9618E-001
	873.19	11.50	8.1658E-001		-2.4739E-001
	996.32	10.30	8.5625E-001		8.1764E-001
	1004.76	17.90	4.9371E-001		-1.2149E-001
1274.45	35.50	2.4884E-001	5.7696E-002		
Eu-155	86.54	30.90	1.4857E+000	1.44E+000	2.3621E+000
	105.31	20.70	1.4404E+000		-7.9696E-001
Am-241	59.54	35.90	3.5317E+000	3.53E+000	-3.2465E+000
Cm-243	228.19	10.56	1.3703E+000	9.38E-001	6.6353E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.3811E-001	9.38E-001	7.4475E-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 7/28/2006 11:39:36 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-141-

Sample Title: OOL-10-01-141-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 11:29:34 AM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-141-
Title: OOL-10-01-141-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	944-	960	954.33	238.62	0.35	1.49E+002	58.73	2.39E+002
2	2426-	2443	2435.67	608.99	1.28	8.73E+001	29.49	4.27E+001
3	4474-	4485	4479.27	1119.94	0.36	2.97E+001	18.94	2.53E+001
4	5829-	5855	5842.71	1460.83	2.05	4.61E+002	44.10	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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Unit)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	1.06425E+001	1.33417E+000
Pb-212	0.420	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.58713E-001	1.95160E-001
Bi-214	0.708	609.31*	46.30	3.58136E-001	1.28803E-001
		1120.29*	15.10	4.34241E-001	2.80739E-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:YEL7810

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Unit)	Wt mean Activity Uncertainty
K-40	1.000	1.064255E+001	1.334172E+000
Pb-212 @	0.420	4.587126E-001	1.951599E-001
Bi-214	0.708	3.713698E-001	1.170695E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	9.0405E-002	7.50E-002	-1.6097E-002
	1332.49	100.00	7.5026E-002		-2.8012E-003
Nb-94	702.63	100.00	9.3139E-002	9.31E-002	-4.4723E-002
	871.10	100.00	9.4377E-002		-8.4006E-002
Ag-108m	79.20	7.10	6.4621E+000	1.17E-001	-1.7501E+001
	433.93	89.90	1.2355E-001		1.6991E-002
	614.37	90.40	1.1671E-001		2.7622E-002
	722.95	90.50	1.1722E-001		4.9178E-002
Sb-125	176.33	6.89	2.2161E+000	3.69E-001	1.5754E+000
	427.89	29.33	3.6891E-001		9.0475E-003
	463.38	10.35	1.0789E+000		1.2317E-001
	600.56	17.80	5.5369E-001		1.7905E-001
	606.64	5.02	2.6009E+000		3.6622E+000
	635.90	11.32	8.9796E-001		4.3446E-001
Cs-134	563.23	8.38	1.2075E+000	1.13E-001	-9.6808E-001
	569.32	15.43	6.9480E-001		5.8445E-001
	604.70	97.60	1.3329E-001		6.5196E-002
	795.84	85.40	1.1315E-001		2.2730E-002
	801.93	8.73	1.0740E+000		-1.4245E-001
Cs-137	661.65	85.12	1.1192E-001	1.12E-001	-1.2831E-001
Eu-152	121.78	28.40	7.7365E-001	3.54E-001	-6.1876E-002
	244.69	7.49	1.8108E+000		-2.4604E+000
	344.27	26.50	4.3951E-001		-2.8972E-001
	778.89	12.74	6.9018E-001		-4.0277E-001
	867.32	4.16	2.2411E+000		-1.1581E-002
	964.01	14.40	7.5862E-001		1.8420E-001
	1085.78	10.00	8.4902E-001		-7.7835E-001
	1112.02	13.30	6.6638E-001		-7.4606E-001
1407.95	20.70	3.5387E-001	-5.9362E-002		
Eu-154	123.07	40.50	5.3645E-001	2.39E-001	4.0195E-001
	247.94	6.60	2.0340E+000		1.5478E+000
	591.81	4.83	2.1038E+000		5.7522E-001
	723.30	19.70	5.4720E-001		4.7822E-001
	756.87	4.33	2.1853E+000		-1.0439E+000
	873.19	11.50	8.5702E-001		7.8741E-001
	996.32	10.30	9.2384E-001		3.7480E-001
	1004.76	17.90	4.9363E-001		-2.9489E-001
1274.45	35.50	2.3861E-001	1.6308E-002		
Eu-155	86.54	30.90	1.2172E+000	1.22E+000	1.2356E+000
	105.31	20.70	1.2982E+000		-7.3662E-001
Am-241	59.54	35.90	2.3848E+000	2.38E+000	2.5229E+000
Cm-243	228.19	10.56	1.2841E+000	8.60E-001	-1.2157E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	8.6004E-001	8.60E-001	-4.3272E-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 7/28/2006 2:29:06 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: YEL7810

Sample ID: OOL-10-01-142-

Sample Title: OOL-10-01-142-F-G

Description: SATULATED SOIL

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 2:19:04 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-142-
 Title: OOL-10-01-142-F-G
 Description: SATULATED SOIL

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	307	291.48	72.89	1.13	1.95E+002	43.60	7.95E+002
m	2	282-	307	300.13	75.05	1.13	2.78E+002	50.69	1.00E+003
	3	944-	960	953.51	238.41	1.24	1.17E+002	67.45	3.40E+002
	4	1172-	1187	1180.28	295.11	1.49	1.17E+002	53.77	2.12E+002
	5	1398-	1415	1406.30	351.62	1.57	2.48E+002	52.93	1.48E+002
	6	2322-	2341	2330.89	582.79	0.95	1.19E+002	37.58	7.04E+001
	7	2427-	2445	2435.05	608.84	1.81	3.22E+002	47.22	7.60E+001
	8	3065-	3078	3071.11	767.87	0.59	3.76E+001	21.51	2.94E+001
	9	3634-	3653	3643.50	910.98	0.43	8.85E+001	30.63	4.45E+001
	10	4472-	4490	4479.64	1120.03	1.05	9.37E+001	28.08	3.33E+001
	11	5830-	5855	5842.34	1460.74	2.27	6.11E+002	50.51	1.26E+001
	12	7049-	7068	7057.99	1764.68	1.90	8.20E+001	21.20	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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Unit)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	1.41210E+001	1.63343E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.62928E-001	9.00804E-002
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	8.66009E+000	2.31825E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.994	238.63*	44.60	3.60700E-001	2.15829E-001
		609.31*	46.30	1.32106E+000	2.53033E-001
		1120.29*	15.10	1.37030E+000	4.35597E-001
		1764.49*	15.80	1.39575E+000	3.86937E-001
PB-214	0.613	74.82* @	6.21	1.49216E+001	4.13867E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	8.96087E-001	4.37752E-001
		351.92*	37.20	1.03015E+000	2.79306E-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/Unit)	Wt mean Activity Uncertainty
K-40	1.000	1.412103E+001	1.633435E+000
TL-208	0.467	2.629278E-001	9.008038E-002
Pb-212 @	0.575	3.606999E-001	2.158286E-001
Bi-214	0.994	1.348566E+000	1.904569E-001
PB-214 @	0.613	9.913622E-001	2.354604E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.2515E-001	22.35
8	767.87	6.2600E-002	57.27
9	910.98	1.4749E-001	34.61

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:YEL7810

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	1.0726E-001	9.15E-002	8.3433E-002
	1332.49	100.00	9.1522E-002		6.1296E-002
Nb-94	702.63	100.00	1.0544E-001	1.05E-001	3.8494E-002
	871.10	100.00	1.0811E-001		3.6670E-002
Ag-108m	79.20	7.10	7.6878E+000	1.30E-001	-2.2171E+000
	433.93	89.90	1.2963E-001		5.8093E-004
	614.37	90.40	1.6723E-001		6.1771E-002
	722.95	90.50	1.3728E-001		1.2992E-001
Sb-125	176.33	6.89	2.4996E+000	4.21E-001	-1.3312E+000
	427.89	29.33	4.2053E-001		-1.0349E-002
	463.38	10.35	1.1582E+000		9.8864E-002
	600.56	17.80	6.7451E-001		2.8900E-001
	606.64	5.02	3.9939E+000		1.2245E+001
	635.90	11.32	1.0757E+000		4.6778E-001
Cs-134	563.23	8.38	1.3328E+000	1.29E-001	1.7574E-001
	569.32	15.43	7.0874E-001		2.8669E-001
	604.70	97.60	1.9555E-001		4.2608E-003
	795.84	85.40	1.2932E-001		5.0280E-002
	801.93	8.73	1.2472E+000		2.2341E-001
Cs-137	661.65	85.12	1.4281E-001	1.43E-001	1.3853E-001
Eu-152	121.78	28.40	8.4043E-001	3.76E-001	-7.9837E-002
	244.69	7.49	2.2039E+000		1.2669E-001
	344.27	26.50	5.0184E-001		-2.0402E-001
	778.89	12.74	7.9640E-001		-1.5769E-001
	867.32	4.16	2.4723E+000		-2.8799E+000
	964.01	14.40	8.8019E-001		2.7558E-001
	1085.78	10.00	1.0737E+000		7.7241E-001
	1112.02	13.30	8.1190E-001		-1.6144E+000
1407.95	20.70	3.7612E-001	1.3227E-001		
Eu-154	123.07	40.50	5.8434E-001	2.62E-001	1.2610E-001
	247.94	6.60	2.2514E+000		-6.8540E-002
	591.81	4.83	2.1762E+000		-1.9175E+000
	723.30	19.70	6.3070E-001		6.3358E-001
	756.87	4.33	2.2305E+000		-5.7752E-001
	873.19	11.50	8.9980E-001		1.5496E-001
	996.32	10.30	1.0116E+000		6.0996E-001
	1004.76	17.90	5.5408E-001		2.3069E-002
1274.45	35.50	2.6235E-001	5.1382E-002		
Eu-155	86.54	30.90	1.3824E+000	1.38E+000	2.4656E+000
	105.31	20.70	1.4385E+000		-2.2291E-001
Am-241	59.54	35.90	2.7477E+000	2.75E+000	-6.4364E-001
Cm-243	228.19	10.56	1.5620E+000	1.02E+000	2.5446E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	1.0174E+000	1.02E+000	-2.7285E-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 7/28/2006 9:13:08 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-143-F

Sample Title: OOL-10-01-143-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 9:03:07 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: 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-143-F
Title: OOL-10-01-143-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1400-	1409	1404.14	350.99	0.60	3.52E+001	31.22	8.98E+001
2	2426-	2447	2435.35	608.80	1.04	1.30E+002	37.53	6.31E+001
3	3632-	3652	3642.61	910.62	1.40	7.32E+001	29.51	4.18E+001
4	5830-	5858	5842.65	1460.63	2.83	5.41E+002	47.60	1.06E+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: 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	1.18839E+001	1.42036E+000
Bi-214	0.398	609.31*	46.30	5.22259E-001	1.64060E-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	0.999	1.188388E+001	1.420357E+000
Bi-214	0.398	5.222595E-001	1.640602E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	350.99	5.8660E-002	88.72
3	910.62	1.2194E-001	40.34

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	9.5197E-002	6.69E-002	1.4338E-002
	1332.49	100.00	6.6857E-002		-2.2441E-002
Nb-94	702.63	100.00	9.3437E-002	9.03E-002	-1.8501E-002
	871.10	100.00	9.0317E-002		5.4410E-002
Ag-108m	79.20	7.10	8.1980E+000	1.14E-001	-2.1222E+000
	433.93	89.90	1.1816E-001		-8.9486E-002
	614.37	90.40	1.4387E-001		-5.8631E-002
	722.95	90.50	1.1445E-001		7.6838E-002
Sb-125	176.33	6.89	2.4101E+000	3.60E-001	-9.2968E-001
	427.89	29.33	3.5951E-001		8.2244E-002
	463.38	10.35	1.0159E+000		-2.9689E-001
	600.56	17.80	5.9939E-001		-2.4950E-001
	606.64	5.02	2.8848E+000		5.1635E+000
	635.90	11.32	7.3504E-001		-2.4976E-001
Cs-134	563.23	8.38	1.1988E+000	1.12E-001	-6.2474E-001
	569.32	15.43	6.7246E-001		5.4154E-001
	604.70	97.60	1.4206E-001		-1.5352E-002
	795.84	85.40	1.1199E-001		5.6599E-002
Cs-137	801.93	8.73	1.0186E+000	1.16E-001	-1.7183E+000
	661.65	85.12	1.1576E-001		-1.9319E-002
Eu-152	121.78	28.40	8.1186E-001	3.53E-001	6.9370E-002
	244.69	7.49	1.8798E+000		-3.6545E+000
	344.27	26.50	4.4641E-001		-1.0627E-001
	778.89	12.74	7.5138E-001		-1.3547E-001
	867.32	4.16	1.9872E+000		-2.3777E+000
	964.01	14.40	8.1806E-001		8.3233E-001
	1085.78	10.00	9.0041E-001		3.4744E-001
	1112.02	13.30	6.9814E-001		-1.4126E+000
1407.95	20.70	3.5308E-001	-2.8817E-001		
Eu-154	123.07	40.50	5.5807E-001	2.14E-001	-2.2390E-001
	247.94	6.60	2.0224E+000		-1.7695E+000
	591.81	4.83	2.1372E+000		2.7689E-001
	723.30	19.70	5.2792E-001		4.2585E-001
	756.87	4.33	2.1226E+000		-4.4668E-001
	873.19	11.50	7.5819E-001		1.7477E-001
	996.32	10.30	8.6716E-001		-2.9779E-002
	1004.76	17.90	5.0620E-001		1.7846E-001
1274.45	35.50	2.1353E-001	-1.8084E-001		
Eu-155	86.54	30.90	1.4604E+000	1.45E+000	2.0661E+000
	105.31	20.70	1.4504E+000		1.1265E-001
Am-241	59.54	35.90	3.8017E+000	3.80E+000	1.2475E+000
Cm-243	228.19	10.56	1.3049E+000	9.27E-001	-3.4205E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.2722E-001	9.27E-001	7.3065E-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 7/28/2006 11:20:38 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-144-

Sample Title: OOL-10-01-144-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 11:10:35 AM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-144-
Title: OOL-10-01-144-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	948-	961	953.45	238.40	1.12	1.45E+002	53.13	2.11E+002
2	1398-	1415	1407.36	351.89	1.23	1.17E+002	41.65	1.03E+002
3	2324-	2337	2330.84	582.78	0.63	6.90E+001	26.64	4.20E+001
4	2390-	2400	2395.42	598.93	0.40	1.38E+001	16.31	2.32E+001
5	2427-	2441	2435.12	608.85	0.37	9.11E+001	28.72	4.29E+001
6	3392-	3403	3397.65	849.51	0.91	2.09E+001	13.98	1.11E+001
7	3635-	3652	3642.43	910.71	1.28	8.50E+001	25.00	2.40E+001
8	3869-	3880	3874.26	968.67	0.51	5.13E+001	19.16	1.77E+001
9	5830-	5856	5842.99	1460.90	2.62	4.87E+002	43.92	3.48E+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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Unit)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	1.12380E+001	1.36274E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.52947E-001	6.23334E-002
		860.37	12.46		
Pb-212	0.419	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.402	238.63*	44.60	4.48904E-001	1.78528E-001
		609.31*	46.30	3.73829E-001	1.26510E-001
		1120.29	15.10		
Ac-228	0.624	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	6.44687E-001	2.03649E-001
		969.11*	16.60	6.59582E-001	2.55620E-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/Unit)	Wt mean Activity Uncertainty
K-40	1.000	1.123799E+001	1.362741E+000
TL-208	0.467	1.529469E-001	6.233341E-002
Pb-212 @	0.419	4.489037E-001	1.785285E-001
Bi-214	0.402	3.738290E-001	1.265101E-001
Ac-228	0.624	6.504704E-001	1.592805E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.89	1.9538E-001	35.53
4	598.93	2.2995E-002	118.19
6	849.51	3.4779E-002	67.01

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:YEL7810

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	1.0065E-001	7.50E-002	-7.2114E-002
	1332.49	100.00	7.5026E-002		1.7307E-002
Nb-94	702.63	100.00	9.9264E-002	8.43E-002	-6.0317E-002
	871.10	100.00	8.4296E-002		-1.4710E-002
Ag-108m	79.20	7.10	6.7813E+000	1.08E-001	-1.4034E+001
	433.93	89.90	1.2541E-001		-6.1071E-002
	614.37	90.40	1.2263E-001		-1.3910E-001
	722.95	90.50	1.0779E-001		3.9379E-002
Sb-125	176.33	6.89	2.2818E+000	3.78E-001	9.0024E-001
	427.89	29.33	3.7850E-001		1.9148E-002
	463.38	10.35	1.0817E+000		-2.0385E-001
	600.56	17.80	5.3235E-001		-1.8166E-001
	606.64	5.02	2.5823E+000		3.2954E+000
	635.90	11.32	9.9268E-001		-5.3498E-003
Cs-134	563.23	8.38	1.2120E+000	1.17E-001	-7.3122E-001
	569.32	15.43	6.2012E-001		-2.3111E-001
	604.70	97.60	1.2742E-001		-8.0396E-002
	795.84	85.40	1.1658E-001		1.4009E-001
	801.93	8.73	1.1256E+000		4.7383E-001
Cs-137	661.65	85.12	1.2811E-001	1.28E-001	7.7738E-002
Eu-152	121.78	28.40	7.6627E-001	3.49E-001	4.1523E-001
	244.69	7.49	1.8973E+000		-1.5193E+000
	344.27	26.50	4.4632E-001		-4.3466E-001
	778.89	12.74	7.1524E-001		1.3389E-001
	867.32	4.16	2.0529E+000		-1.4362E+000
	964.01	14.40	8.0955E-001		-4.5989E-001
	1085.78	10.00	8.4241E-001		2.5626E-002
	1112.02	13.30	6.7114E-001		-1.0408E+000
1407.95	20.70	3.4924E-001	8.7789E-002		
Eu-154	123.07	40.50	5.2962E-001	2.28E-001	-2.3245E-001
	247.94	6.60	2.0630E+000		-1.2137E-001
	591.81	4.83	2.0287E+000		-4.2211E-001
	723.30	19.70	4.9282E-001		1.7216E-001
	756.87	4.33	2.1967E+000		-3.2949E-001
	873.19	11.50	7.4367E-001		1.8172E-001
	996.32	10.30	8.7933E-001		1.0596E-001
	1004.76	17.90	4.6203E-001		-9.7622E-002
1274.45	35.50	2.2793E-001	-8.2355E-002		
Eu-155	86.54	30.90	1.2088E+000	1.21E+000	3.0877E-001
	105.31	20.70	1.3325E+000		-2.4792E-001
Am-241	59.54	35.90	2.5314E+000	2.53E+000	8.4108E-001
Cm-243	228.19	10.56	1.3621E+000	8.61E-001	4.5103E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	8.6142E-001	8.61E-001	-3.8922E-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 7/28/2006 2:43:04 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-145-

Sample Title: OOL-10-01-145-F-G

Description: SATULATED SOIL

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 2:33:01 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-145-
 Title: OOL-10-01-145-F-G
 Description: SATULATED SOIL

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	308	299.88	74.99	0.68	1.94E+002	109.91	1.02E+003
2	944-	962	953.74	238.47	1.10	1.40E+002	72.67	3.66E+002
3	1171-	1187	1179.66	294.96	0.58	1.06E+002	53.49	2.04E+002
4	1398-	1417	1406.35	351.64	1.32	1.74E+002	55.50	1.75E+002
5	2322-	2339	2331.26	582.89	1.16	1.14E+002	36.97	7.41E+001
6	2423-	2443	2435.15	608.86	1.05	2.90E+002	45.78	7.19E+001
7	3188-	3199	3193.63	798.50	0.32	1.53E+001	18.58	2.97E+001
8	3635-	3651	3642.72	910.78	1.34	1.03E+002	27.93	3.07E+001
9	3866-	3882	3873.41	968.46	1.20	5.13E+001	26.29	4.07E+001
10	4471-	4487	4478.05	1119.63	1.37	6.97E+001	26.16	3.43E+001
11	5503-	5514	5508.72	1377.32	0.88	2.70E+001	12.70	6.00E+000
12	5828-	5855	5842.38	1460.75	2.12	6.78E+002	52.82	1.05E+001
13	7050-	7065	7058.54	1764.82	0.66	4.92E+001	17.36	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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Unit)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	1.56708E+001	1.76013E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.52572E-001	8.83388E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	6.06637E+000	3.63264E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.33140E-001	2.34482E-001
Bi-214	0.992	609.31*	46.30	1.19029E+000	2.38296E-001
		1120.29*	15.10	1.01867E+000	3.97481E-001
		1764.49*	15.80	8.37391E-001	3.07173E-001
PB-214	0.613	74.82* @	6.21	1.04525E+001	6.30496E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	8.08787E-001	4.30791E-001
		351.92*	37.20	7.22134E-001	2.60291E-001
Ac-228	0.622	338.32	11.40		
		911.07*	27.70	7.83912E-001	2.30317E-001
		969.11*	16.60	6.59012E-001	3.44765E-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/Unit)	Wt mean Activity Uncertainty
K-40	1.000	1.567084E+001	1.760126E+000
TL-208	0.468	2.525715E-001	8.833883E-002
Pb-212 @	0.576	4.331401E-001	2.344825E-001
Bi-214	0.992	1.050552E+000	1.701575E-001
PB-214 @	0.613	7.453086E-001	2.227824E-001
Ac-228	0.622	7.453713E-001	1.915138E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	798.50	2.5519E-002	121.33
11	1377.32	4.5000E-002	47.05

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:YEL7810

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	1.0008E-001	7.85E-002	-1.1496E-001
	1332.49	100.00	7.8460E-002		-5.1774E-002
Nb-94	702.63	100.00	1.0714E-001	1.01E-001	-1.5207E-001
	871.10	100.00	1.0050E-001		1.6421E-002
Ag-108m	79.20	7.10	7.5390E+000	1.30E-001	-6.8250E+000
	433.93	89.90	1.2963E-001		-7.1279E-002
	614.37	90.40	1.5644E-001		-9.2490E-002
	722.95	90.50	1.3193E-001		9.5262E-003
Sb-125	176.33	6.89	2.5187E+000	3.88E-001	-6.3962E-001
	427.89	29.33	3.8784E-001		-3.9615E-002
	463.38	10.35	1.2372E+000		-5.6888E-002
	600.56	17.80	5.7642E-001		-6.5393E-001
	606.64	5.02	3.7223E+000		1.0542E+001
	635.90	11.32	1.0222E+000		-1.2323E-002
Cs-134	563.23	8.38	1.4008E+000	1.36E-001	8.2148E-001
	569.32	15.43	7.6399E-001		-4.0064E-001
	604.70	97.60	1.8084E-001		-2.5718E-002
	795.84	85.40	1.3570E-001		6.7330E-002
Cs-137	801.93	8.73	1.3296E+000	1.43E-001	2.8928E-001
	661.65	85.12	1.4323E-001		3.8628E-002
Eu-152	121.78	28.40	8.4958E-001	4.09E-001	4.2391E-003
	244.69	7.49	2.1050E+000		3.4202E-003
	344.27	26.50	4.8896E-001		-1.7894E-001
	778.89	12.74	9.0230E-001		3.4296E-001
	867.32	4.16	2.3899E+000		-3.5624E-002
	964.01	14.40	9.1336E-001		1.9414E-001
	1085.78	10.00	1.0737E+000		6.0259E-001
	1112.02	13.30	7.3437E-001		-5.5124E-002
	1407.95	20.70	4.0899E-001		-1.1096E-001
	Eu-154	123.07	40.50		5.8240E-001
247.94		6.60	2.3164E+000	5.7649E-001	
591.81		4.83	2.3797E+000	-1.4602E+000	
723.30		19.70	6.0807E-001	1.0829E-001	
756.87		4.33	2.6851E+000	-1.9801E+000	
873.19		11.50	8.7008E-001	2.3085E-001	
996.32		10.30	9.5578E-001	-2.1256E-001	
1004.76		17.90	5.8608E-001	6.7786E-002	
1274.45	35.50	2.8224E-001	-1.0145E-001		
Eu-155	86.54	30.90	1.3929E+000	1.39E+000	1.5229E+000
	105.31	20.70	1.4543E+000		7.8771E-001
Am-241	59.54	35.90	2.7998E+000	2.80E+000	1.4829E-001
Cm-243	228.19	10.56	1.5299E+000	1.02E+000	3.5331E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	1.0162E+000	1.02E+000	-5.4473E-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 7/31/2006 8:02:52 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-146-F-

Sample Title: OOL-10-01-146-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 7:52:49 AM

Live Time: 600.0 seconds

Real Time: 601.1 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-10-01-146-F-
Title: OOL-10-01-146-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2321-	2341	2329.44	582.32	1.39	8.88E+001	35.98	6.83E+001
2	2425-	2447	2435.24	608.77	1.11	1.48E+002	35.05	4.46E+001
3	3634-	3652	3642.15	910.50	0.31	6.96E+001	27.42	3.64E+001
4	3868-	3882	3875.26	968.78	0.76	3.48E+001	22.43	3.32E+001
5	4473-	4486	4478.79	1119.66	0.29	3.33E+001	19.29	2.27E+001
6	5829-	5856	5840.85	1460.18	2.68	6.02E+002	49.07	6.11E+000
7	7049-	7064	7057.21	1764.28	0.53	3.19E+001	16.28	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
K-40	0.987	1460.81*	10.67	1.32102E+001	1.51778E+000
TL-208	0.457	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.93410E-001	8.23616E-002
		860.37	12.46		
Bi-214	0.991	609.31*	46.30	5.96866E-001	1.58986E-001
		1120.29*	15.10	4.71065E-001	2.77494E-001
		1764.49*	15.80	5.17514E-001	2.69268E-001
Ac-228	0.630	338.32	11.40		
		911.07*	27.70	5.10936E-001	2.09618E-001
		969.11*	16.60	4.32991E-001	2.82422E-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	0.987	1.321017E+001	1.517784E+000
TL-208	0.457	1.934102E-001	8.236161E-002
Bi-214	0.991	5.557427E-001	1.227749E-001
Ac-228	0.630	4.832493E-001	1.683211E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	8.4361E-002	7.68E-002	1.8294E-002
	1332.49	100.00	7.6776E-002		3.5987E-002
Nb-94	702.63	100.00	1.0261E-001	9.13E-002	4.2338E-002
	871.10	100.00	9.1345E-002		2.1150E-002
Ag-108m	79.20	7.10	8.3622E+000	1.09E-001	-1.7080E+001
	433.93	89.90	1.2076E-001		-1.0209E-001
	614.37	90.40	1.3667E-001		-2.6853E-002
	722.95	90.50	1.0926E-001		2.7092E-002
Sb-125	176.33	6.89	2.5519E+000	3.84E-001	1.8624E+000
	427.89	29.33	3.8381E-001		1.4870E-001
	463.38	10.35	1.0515E+000		-8.2477E-001
	600.56	17.80	6.1759E-001		-2.2093E-001
	606.64	5.02	2.8954E+000		6.1471E+000
	635.90	11.32	9.3014E-001		4.6442E-001
Cs-134	563.23	8.38	1.2637E+000	1.09E-001	-5.5773E-001
	569.32	15.43	7.1795E-001		-1.1180E-001
	604.70	97.60	1.4657E-001		-5.2079E-002
	795.84	85.40	1.0920E-001		-4.8687E-002
	801.93	8.73	1.0587E+000		1.5335E-001
Cs-137	661.65	85.12	1.2159E-001	1.22E-001	3.2626E-002
Eu-152	121.78	28.40	8.2648E-001	3.69E-001	-3.5993E-001
	244.69	7.49	1.9410E+000		-3.8528E+000
	344.27	26.50	4.5596E-001		-1.2761E-002
	778.89	12.74	7.5138E-001		-2.2107E-001
	867.32	4.16	2.2305E+000		-1.5845E+000
	964.01	14.40	8.6500E-001		-3.9686E-001
	1085.78	10.00	9.8298E-001		-2.9737E-001
	1112.02	13.30	7.0238E-001		-6.8893E-001
1407.95	20.70	3.6924E-001	-2.7145E-003		
Eu-154	123.07	40.50	5.8062E-001	2.52E-001	3.8868E-001
	247.94	6.60	2.1345E+000		-7.3952E-001
	591.81	4.83	2.1984E+000		1.2735E-001
	723.30	19.70	4.9751E-001		8.6826E-002
	756.87	4.33	2.3537E+000		5.6222E-001
	873.19	11.50	7.9910E-001		2.0152E-001
	996.32	10.30	9.0423E-001		-2.7760E-001
	1004.76	17.90	5.1838E-001		-9.5929E-002
1274.45	35.50	2.5244E-001	-1.3645E-002		
Eu-155	86.54	30.90	1.4924E+000	1.49E+000	1.7110E+000
	105.31	20.70	1.4850E+000		7.6229E-001
Am-241	59.54	35.90	4.3502E+000	4.35E+000	4.7619E+000
Cm-243	228.19	10.56	1.3554E+000	9.74E-001	-1.0763E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.7393E-001	9.74E-001	5.0956E-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 7/28/2006 11:04:08 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-147-

Sample Title: OOL-10-01-147-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 10:54:04 AM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-147-
Title: OOL-10-01-147-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2323-	2339	2331.05	582.83	1.72	9.81E+001	32.56	5.69E+001
2	2428-	2442	2434.80	608.77	1.35	9.91E+001	30.38	4.89E+001
3	2900-	2911	2906.05	726.60	0.45	2.61E+001	17.41	2.09E+001
4	3636-	3650	3642.96	910.84	1.29	6.31E+001	21.28	1.89E+001
5	5830-	5856	5843.25	1460.97	1.85	5.15E+002	46.90	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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Unit)	Activity Uncertainty
K-40	0.999	1460.81*	10.67	1.18881E+001	1.44920E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.17522E-001	7.75514E-002
		860.37	12.46		
Bi-212	0.988	727.17*	11.80	4.43739E-001	3.00060E-001
Bi-214	0.400	609.31*	46.30	4.06535E-001	1.34325E-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/Unit)	Wt mean Activity Uncertainty
K-40	0.999	1.188811E+001	1.449195E+000
TL-208	0.468	2.175222E-001	7.755138E-002
Bi-212	0.988	4.437393E-001	3.000596E-001
Bi-214	0.400	4.065355E-001	1.343247E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.84	1.0519E-001	33.72

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:YEL7810

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	8.9116E-002	6.95E-002	-3.9992E-002
	1332.49	100.00	6.9526E-002		-8.8990E-002
Nb-94	702.63	100.00	9.1167E-002	9.00E-002	-4.0209E-002
	871.10	100.00	9.0045E-002		5.8504E-002
Ag-108m	79.20	7.10	6.9214E+000	1.11E-001	-1.7651E+001
	433.93	89.90	1.1068E-001		2.7494E-002
	614.37	90.40	1.2263E-001		-1.2996E-001
	722.95	90.50	1.1285E-001		-1.4919E-002
Sb-125	176.33	6.89	2.3236E+000	3.45E-001	-4.7354E-001
	427.89	29.33	3.4477E-001		8.3963E-002
	463.38	10.35	1.1342E+000		3.0858E-001
	600.56	17.80	5.7195E-001		1.4890E-001
	606.64	5.02	2.7858E+000		4.0686E+000
	635.90	11.32	9.4130E-001		-1.3371E-001
Cs-134	563.23	8.38	1.3204E+000	1.15E-001	6.0036E-001
	569.32	15.43	6.3321E-001		-4.1872E-001
	604.70	97.60	1.4102E-001		-6.4005E-003
	795.84	85.40	1.1488E-001		-8.3688E-002
	801.93	8.73	1.0563E+000		-8.8274E-001
Cs-137	661.65	85.12	1.2763E-001	1.28E-001	1.5751E-001
Eu-152	121.78	28.40	7.6796E-001	3.20E-001	-2.5212E-001
	244.69	7.49	1.8973E+000		1.3948E-001
	344.27	26.50	4.4547E-001		-6.8393E-001
	778.89	12.74	7.9273E-001		1.0482E-001
	867.32	4.16	2.1357E+000		-2.4192E+000
	964.01	14.40	8.1569E-001		7.3531E-001
	1085.78	10.00	9.4810E-001		2.6843E-001
	1112.02	13.30	6.3196E-001		-1.8605E-001
1407.95	20.70	3.1986E-001	9.8658E-002		
Eu-154	123.07	40.50	5.4134E-001	2.47E-001	2.1528E-001
	247.94	6.60	1.9669E+000		-1.6361E+000
	591.81	4.83	1.9944E+000		6.5140E-001
	723.30	19.70	5.1621E-001		-3.0552E-001
	756.87	4.33	2.4026E+000		1.4779E-001
	873.19	11.50	7.6381E-001		6.0485E-001
	996.32	10.30	8.3830E-001		-1.0690E+000
	1004.76	17.90	5.5108E-001		2.8850E-001
1274.45	35.50	2.4679E-001	2.0802E-001		
Eu-155	86.54	30.90	1.2685E+000	1.27E+000	1.6214E+000
	105.31	20.70	1.3345E+000		5.6592E-001
Am-241	59.54	35.90	2.6580E+000	2.66E+000	-9.8894E-001
Cm-243	228.19	10.56	1.3362E+000	8.84E-001	6.2297E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	8.8448E-001	8.84E-001	5.0921E-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 7/28/2006 2:57:40 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-148-

Sample Title: OOL-10-01-148-F-G

Description: SATULATED SOIL

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 2:47:37 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-148-
Title: OOL-10-01-148-F-G
Description: SATULATED SOIL

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	306	300.21	75.08	0.44	1.73E+002	96.69	8.59E+002
2	946-	960	953.73	238.47	1.68	2.10E+002	61.60	2.70E+002
3	1396-	1412	1406.98	351.79	0.70	1.44E+002	48.25	1.48E+002
4	2323-	2339	2330.90	582.79	1.73	1.39E+002	38.55	7.95E+001
5	2426-	2442	2435.04	608.83	1.95	1.74E+002	41.08	8.48E+001
6	3636-	3651	3643.53	910.98	1.25	9.72E+001	26.79	2.98E+001
7	3865-	3883	3873.97	968.60	1.33	6.27E+001	28.49	4.33E+001
8	4471-	4485	4477.95	1119.61	0.81	5.53E+001	24.19	3.37E+001
9	5829-	5855	5842.51	1460.78	2.13	6.80E+002	53.26	1.35E+001
10	7051-	7066	7057.43	1764.54	0.77	5.54E+001	15.14	1.61E+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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Unit)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	1.56958E+001	1.76868E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.07141E-001	9.43802E-002
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	5.38095E+000	3.18899E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.992	238.63*	44.60	6.47829E-001	2.15666E-001
		609.31*	46.30	7.14556E-001	1.90139E-001
		1120.29*	15.10	8.08487E-001	3.63823E-001
Ac-228	0.625	1764.49*	15.80	9.42781E-001	2.74456E-001
		338.32	11.40		
		911.07*	27.70	7.37203E-001	2.20242E-001
		969.11*	16.60	8.06025E-001	3.75636E-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/Unit)	Wt mean Activity Uncertainty
K-40	1.000	1.569580E+001	1.768677E+000
TL-208	0.467	3.071410E-001	9.438023E-002
Pb-212 @	0.575	6.478294E-001	2.156656E-001
Bi-214	0.992	7.916729E-001	1.436055E-001
Ac-228	0.625	7.548093E-001	1.899930E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.79	2.4018E-001	33.48

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	1.0401E-001	9.22E-002	5.5710E-002
	1332.49	100.00	9.2228E-002		-7.0572E-003
Nb-94	702.63	100.00	1.1830E-001	1.11E-001	-4.7340E-002
	871.10	100.00	1.1126E-001		5.1709E-002
Ag-108m	79.20	7.10	7.7622E+000	1.29E-001	-2.5314E+000
	433.93	89.90	1.3429E-001		-1.2914E-001
	614.37	90.40	1.5255E-001		-1.9044E-001
	722.95	90.50	1.2939E-001		3.2897E-002
Sb-125	176.33	6.89	2.5838E+000	4.48E-001	2.8265E-001
	427.89	29.33	4.4840E-001		9.3432E-002
	463.38	10.35	1.2736E+000		9.0418E-001
	600.56	17.80	5.8526E-001		-5.1643E-001
	606.64	5.02	3.3582E+000		8.1712E+000
	635.90	11.32	9.7925E-001		4.3531E-001
Cs-134	563.23	8.38	1.4468E+000	1.34E-001	4.2881E-001
	569.32	15.43	7.5328E-001		5.7438E-001
	604.70	97.60	1.6168E-001		-7.3494E-002
	795.84	85.40	1.3377E-001		5.6762E-002
Cs-137	801.93	8.73	1.3249E+000	1.43E-001	3.3382E-001
	661.65	85.12	1.4281E-001		3.6976E-002
Eu-152	121.78	28.40	8.4867E-001	4.21E-001	2.5408E-001
	244.69	7.49	2.1409E+000		-1.6425E+000
	344.27	26.50	4.8819E-001		-3.8356E-001
	778.89	12.74	8.3560E-001		-1.0995E+000
	867.32	4.16	2.6614E+000		-5.8303E-001
	964.01	14.40	9.4270E-001		6.7973E-002
	1085.78	10.00	1.0737E+000		-4.6536E-002
	1112.02	13.30	8.1190E-001		-5.7814E-001
1407.95	20.70	4.2061E-001	2.4082E-001		
Eu-154	123.07	40.50	5.9073E-001	2.86E-001	2.3925E-001
	247.94	6.60	2.2971E+000		1.5318E+000
	591.81	4.83	2.3725E+000		1.4028E+000
	723.30	19.70	5.9642E-001		2.1987E-001
	756.87	4.33	2.3818E+000		-2.1319E+000
	873.19	11.50	9.5631E-001		1.3548E-001
	996.32	10.30	1.0359E+000		-5.9150E-001
	1004.76	17.90	5.7177E-001		-5.7445E-001
1274.45	35.50	2.8570E-001	-3.0922E-002		
Eu-155	86.54	30.90	1.3766E+000	1.38E+000	7.3029E-001
	105.31	20.70	1.4601E+000		-6.8844E-001
Am-241	59.54	35.90	2.9079E+000	2.91E+000	-1.8761E+000
Cm-243	228.19	10.56	1.5239E+000	1.01E+000	1.2891E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	1.0139E+000	1.01E+000	-5.4450E-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 7/31/2006 8:17:10 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-149-F-

Sample Title: OOL-10-01-149-F-G

Description: 50% Satulated soil

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 8:07:08 AM

Live Time: 600.0 seconds

Real Time: 601.1 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-10-01-149-F-
Title: OOL-10-01-149-F-G
Description: 50% Satulated soil

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 7 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.987	511.00*	100.00	9.52738E-002	6.65323E-002
K-40	0.985	1460.81*	10.67	1.78296E+001	1.92149E+000
Pb-212	0.453	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Ac-228	0.625	238.63*	44.60	5.20955E-001	2.48833E-001
		338.32	11.40		
		911.07*	27.70	7.61880E-001	2.63878E-001
		969.11*	16.60	7.41678E-001	3.09090E-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	0.987	9.527380E-002	6.653232E-002
K-40	0.985	1.782959E+001	1.921491E+000
Pb-212 @	0.453	5.209549E-001	2.488331E-001
Ac-228	0.625	7.533635E-001	2.006899E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	305.01	4.4688E-002	114.96
7	1763.17	4.9145E-002	48.52

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: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	8.41E-002	3.1698E-003
	1332.49	100.00	8.4085E-002		3.3052E-002
Nb-94	702.63	100.00	1.1438E-001	1.06E-001	4.5622E-002
	871.10	100.00	1.0551E-001		1.4299E-001
Ag-108m	79.20	7.10	9.5386E+000	1.33E-001	-1.0162E+001
	433.93	89.90	1.3326E-001		-3.6847E-002
	614.37	90.40	1.4943E-001		-5.9908E-002
	722.95	90.50	1.3349E-001		6.4529E-002
Sb-125	176.33	6.89	2.8301E+000	4.15E-001	-8.5024E-002
	427.89	29.33	4.1536E-001		-5.0706E-002
	463.38	10.35	1.1486E+000		3.0015E-001
	600.56	17.80	6.9776E-001		6.4414E-002
	606.64	5.02	2.8954E+000		2.6830E+000
	635.90	11.32	1.0146E+000		1.5699E-001
Cs-134	563.23	8.38	1.3648E+000	1.25E-001	-6.3396E-001
	569.32	15.43	7.3959E-001		-1.2116E-001
	604.70	97.60	1.4959E-001		1.6965E-001
	795.84	85.40	1.2545E-001		4.4670E-002
	801.93	8.73	1.2896E+000		4.9142E-001
Cs-137	661.65	85.12	1.3200E-001	1.32E-001	1.0827E-002
Eu-152	121.78	28.40	9.0014E-001	3.73E-001	3.7135E-001
	244.69	7.49	2.1721E+000		-6.3090E-001
	344.27	26.50	5.0866E-001		-6.0741E-001
	778.89	12.74	9.1529E-001		2.8382E-001
	867.32	4.16	2.3932E+000		-3.6962E+000
	964.01	14.40	9.1701E-001		-1.5875E-001
	1085.78	10.00	1.0292E+000		3.4367E-001
	1112.02	13.30	7.9327E-001		-6.5742E-001
	1407.95	20.70	3.7316E-001		-1.4451E-001
Eu-154	123.07	40.50	6.1635E-001	2.58E-001	-2.9638E-001
	247.94	6.60	2.3811E+000		-6.6920E-001
	591.81	4.83	2.4473E+000		2.1850E-001
	723.30	19.70	6.1510E-001		3.2692E-001
	756.87	4.33	2.4511E+000		-6.4065E-001
	873.19	11.50	8.8286E-001		-8.7366E-002
	996.32	10.30	9.4472E-001		4.1621E-001
	1004.76	17.90	5.8584E-001		1.0141E-001
	1274.45	35.50	2.5773E-001		-2.1704E-001
Eu-155	86.54	30.90	1.6759E+000	1.60E+000	1.5915E+000
	105.31	20.70	1.5968E+000		1.2586E+000
Am-241	59.54	35.90	4.0987E+000	4.10E+000	-4.8200E-001
Cm-243	228.19	10.56	1.5288E+000	1.06E+000	-3.3429E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0622E+000	1.06E+000	6.6876E-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 7/28/2006 10:37:33 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-150-

Sample Title: OOL-10-01-150-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 10:27:30 AM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

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

Filename: YEL7810
Log Number: OOL-10-01-150-
Title: OOL-10-01-150-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	307	299.38	74.87	0.42	1.25E+002	82.74	6.48E+002
2	1398-	1414	1406.94	351.78	0.91	1.11E+002	40.37	1.00E+002
3	2324-	2343	2331.79	583.02	1.60	1.22E+002	34.08	5.17E+001
4	2427-	2443	2435.61	608.97	0.87	9.75E+001	31.99	5.35E+001
5	3636-	3651	3643.83	911.06	0.95	4.92E+001	25.91	4.18E+001
6	3867-	3883	3874.44	968.72	0.67	5.54E+001	22.58	2.46E+001
7	5829-	5857	5843.76	1461.09	2.17	5.53E+002	48.15	1.09E+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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Unit)	Activity Uncertainty
K-40	0.997	1460.81*	10.67	1.27770E+001	1.51898E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.71120E-001	8.34066E-002
Bi-214	0.404	860.37	12.46		
		609.31*	46.30	3.99985E-001	1.40180E-001
		1120.29	15.10		
Ac-228	0.627	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	3.73298E-001	2.01246E-001
		969.11*	16.60	7.11661E-001	2.99495E-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/Unit)	Wt mean Activity Uncertainty
K-40	0.997	1.277703E+001	1.518975E+000
TL-208	0.469	2.711205E-001	8.340661E-002
Bi-214	0.404	3.999849E-001	1.401801E-001
Ac-228	0.627	4.785516E-001	1.670383E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	74.87	2.0814E-001	66.26
2	351.78	1.8493E-001	36.39

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:YEL7810

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	9.3542E-002	7.59E-002	-4.3279E-002
	1332.49	100.00	7.5900E-002		-3.6524E-002
Nb-94	702.63	100.00	1.0544E-001	8.89E-002	5.8830E-002
	871.10	100.00	8.8927E-002		8.3104E-003
Ag-108m	79.20	7.10	6.8556E+000	1.25E-001	-3.6432E+000
	433.93	89.90	1.2693E-001		6.4419E-002
	614.37	90.40	1.2547E-001		-1.5199E-001
	722.95	90.50	1.2853E-001		1.5472E-002
Sb-125	176.33	6.89	2.4017E+000	3.84E-001	1.9608E+000
	427.89	29.33	3.8413E-001		-2.2846E-001
	463.38	10.35	1.1096E+000		-7.9595E-001
	600.56	17.80	5.9395E-001		-5.3394E-001
	606.64	5.02	2.8372E+000		4.5406E+000
	635.90	11.32	9.1628E-001		-2.4838E-001
Cs-134	563.23	8.38	1.2389E+000	1.14E-001	1.6596E+000
	569.32	15.43	6.8295E-001		5.2296E-001
	604.70	97.60	1.4042E-001		-2.7602E-002
	795.84	85.40	1.1373E-001		-1.1509E-002
	801.93	8.73	1.0197E+000		-3.2146E-001
Cs-137	661.65	85.12	1.2280E-001	1.23E-001	-5.5621E-002
Eu-152	121.78	28.40	8.1553E-001	3.93E-001	8.4244E-003
	244.69	7.49	1.8730E+000		-4.6848E+000
	344.27	26.50	4.5135E-001		-3.6142E-003
	778.89	12.74	7.9273E-001		-7.9327E-002
	867.32	4.16	2.0669E+000		-1.2472E+000
	964.01	14.40	8.7453E-001		-1.4943E-001
	1085.78	10.00	8.7492E-001		3.8347E-002
	1112.02	13.30	6.2687E-001		-5.3109E-001
1407.95	20.70	3.9293E-001	2.0484E-001		
Eu-154	123.07	40.50	5.7176E-001	2.43E-001	5.4807E-001
	247.94	6.60	2.0822E+000		2.8005E-001
	591.81	4.83	2.1604E+000		4.6148E-001
	723.30	19.70	5.8652E-001		1.0826E-001
	756.87	4.33	2.4538E+000		2.4644E+000
	873.19	11.50	7.9775E-001		-6.2912E-002
	996.32	10.30	8.4429E-001		-3.4203E-001
	1004.76	17.90	5.3578E-001		-2.3869E-001
1274.45	35.50	2.4274E-001	-1.8294E-002		
Eu-155	86.54	30.90	1.2570E+000	1.26E+000	1.1146E+000
	105.31	20.70	1.3825E+000		6.5941E-001
Am-241	59.54	35.90	2.5112E+000	2.51E+000	-2.0016E+000
Cm-243	228.19	10.56	1.3729E+000	9.55E-001	6.3976E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	9.5518E-001	9.55E-001	2.5396E-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 7/28/2006 8:36:39 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-151-

Sample Title: OOL-10-01-151-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 8:26:37 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: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-151-
 Title: OOL-10-01-151-F-G
 Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	332-	345	337.20	84.32	1.02	8.48E+001	91.38	7.56E+002
2	780-	788	783.09	195.81	0.52	3.44E+001	40.37	1.82E+002
3	945-	962	953.05	238.30	1.35	1.95E+002	69.30	3.23E+002
4	1399-	1417	1406.32	351.63	0.94	7.61E+001	50.06	1.70E+002
5	2321-	2340	2329.01	582.32	1.50	1.48E+002	36.33	5.61E+001
6	2424-	2445	2433.87	608.54	1.43	1.26E+002	36.44	5.80E+001
7	3632-	3651	3640.73	910.28	0.42	1.03E+002	27.67	2.79E+001
M 8	3850-	3879	3855.35	963.94	1.47	1.80E+001	12.10	2.32E+001
m 9	3850-	3879	3870.48	967.73	1.47	5.76E+001	18.29	3.15E+001
10	5824-	5851	5838.50	1459.78	1.96	6.66E+002	53.59	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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Unit)	Activity Uncertainty
K-40	0.963	1460.81*	10.67	1.53826E+001	1.75569E+000
TL-208	0.454	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.27892E-001	9.11558E-002
		860.37	12.46		
Pb-212	0.418	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.394	238.63*	44.60	6.02528E-001	2.33891E-001
		609.31*	46.30	5.16820E-001	1.62468E-001
		1120.29	15.10		
Ac-228	0.597	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	7.82273E-001	2.28456E-001
		969.11*	16.60	7.40112E-001	2.47468E-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/Unit)	Wt mean Activity Uncertainty
K-40	0.963	1.538255E+001	1.755691E+000
TL-208	0.454	3.278917E-001	9.115576E-002
Pb-212 @	0.418	6.025277E-001	2.338909E-001
Bi-214	0.394	5.168200E-001	1.624676E-001
Ac-228	0.597	7.628743E-001	1.678623E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.32	1.4126E-001	107.82
2	195.81	5.7402E-002	117.21
4	351.63	1.2691E-001	65.75
M 8	963.94	2.9997E-002	67.22

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:YEL7810

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	9.7754E-002	7.59E-002	-1.3957E-002
	1332.49	100.00	7.5900E-002		-6.9209E-002
Nb-94	702.63	100.00	1.1677E-001	9.38E-002	3.1427E-002
	871.10	100.00	9.3847E-002		1.2383E-001
Ag-108m	79.20	7.10	7.5851E+000	1.25E-001	-1.3943E+001
	433.93	89.90	1.2479E-001		1.5983E-002
	614.37	90.40	1.3174E-001		9.6691E-002
	722.95	90.50	1.2939E-001		1.5149E-001
Sb-125	176.33	6.89	2.5026E+000	3.83E-001	1.6748E+000
	427.89	29.33	3.8320E-001		-2.7412E-001
	463.38	10.35	1.1069E+000		8.8179E-002
	600.56	17.80	6.0886E-001		1.3212E-001
	606.64	5.02	2.8541E+000		5.3993E+000
	635.90	11.32	9.6906E-001		-1.9205E-001
Cs-134	563.23	8.38	1.2120E+000	1.25E-001	4.3581E-001
	569.32	15.43	6.4856E-001		3.5519E-001
	604.70	97.60	1.4428E-001		1.0146E-002
	795.84	85.40	1.2470E-001		-6.9601E-003
	801.93	8.73	1.1907E+000		1.1876E-001
Cs-137	661.65	85.12	1.3633E-001	1.36E-001	6.9960E-002
Eu-152	121.78	28.40	8.3767E-001	3.45E-001	-2.9318E-001
	244.69	7.49	2.0759E+000		-8.7952E-001
	344.27	26.50	4.9733E-001		-5.7964E-001
	778.89	12.74	7.5116E-001		-2.2516E-001
	867.32	4.16	2.2152E+000		-1.0254E+000
	964.01	14.40	9.0519E-001		-1.7012E-001
	1085.78	10.00	1.0582E+000		3.0928E-002
	1112.02	13.30	8.3103E-001		-1.5393E+000
1407.95	20.70	3.4453E-001	-1.6760E-001		
Eu-154	123.07	40.50	5.7700E-001	2.30E-001	-1.2042E-001
	247.94	6.60	2.1776E+000		3.2601E-001
	591.81	4.83	2.2538E+000		7.6656E-001
	723.30	19.70	5.9050E-001		5.4314E-001
	756.87	4.33	2.2967E+000		-5.3832E-001
	873.19	11.50	7.6381E-001		-6.1107E-001
	996.32	10.30	9.2925E-001		2.3482E-002
	1004.76	17.90	5.6594E-001		1.3864E-001
1274.45	35.50	2.3011E-001	7.6081E-002		
Eu-155	86.54	30.90	1.3471E+000	1.35E+000	1.1143E-001
	105.31	20.70	1.3910E+000		-2.2815E-002
Am-241	59.54	35.90	2.7830E+000	2.78E+000	-8.5758E-001
Cm-243	228.19	10.56	1.4599E+000	1.04E+000	-2.0109E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	1.0426E+000	1.04E+000	4.0693E-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 7/28/2006 7:27:37 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-152-F

Sample Title: OOL-10-01-152-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 7:17:35 PM

Live Time: 600.0 seconds

Real Time: 601.0 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-152-F
Title: OOL-10-01-152-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	948-	962	952.07	237.97	0.44	2.03E+002	66.70	3.24E+002
2	2324-	2342	2332.81	583.16	0.57	1.30E+002	38.33	7.48E+001
3	2424-	2448	2435.97	608.95	2.22	2.32E+002	46.02	7.71E+001
4	3634-	3653	3644.36	911.05	1.23	8.80E+001	33.25	5.70E+001
5	5828-	5858	5842.65	1460.63	2.89	8.52E+002	59.68	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	0.999	1460.81*	10.67	1.86912E+001	2.00153E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.83771E-001	9.13752E-002
		860.37	12.46		
Pb-212	0.446	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.55997E-001	2.38934E-001
Bi-214	0.400	609.31*	46.30	9.32522E-001	2.17837E-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	0.999	1.869120E+001	2.001525E+000
TL-208	0.472	2.837712E-001	9.137521E-002
Pb-212 @	0.446	6.559967E-001	2.389343E-001
Bi-214	0.400	9.325216E-001	2.178372E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	911.05	1.4668E-001	37.78

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	1.1458E-001	8.41E-002	-4.4468E-002
	1332.49	100.00	8.4085E-002		-1.2635E-002
Nb-94	702.63	100.00	1.0866E-001	1.01E-001	-1.1463E-001
	871.10	100.00	1.0148E-001		-1.0503E-002
Ag-108m	79.20	7.10	9.4979E+000	1.30E-001	-2.0539E+001
	433.93	89.90	1.3866E-001		-2.3289E-001
	614.37	90.40	1.7066E-001		-5.4779E-002
	722.95	90.50	1.2992E-001		8.2944E-002
Sb-125	176.33	6.89	2.8136E+000	4.62E-001	1.1078E+000
	427.89	29.33	4.6200E-001		1.0183E-001
	463.38	10.35	1.2908E+000		-1.4872E-001
	600.56	17.80	6.6727E-001		8.8421E-002
	606.64	5.02	3.4997E+000		-8.6591E-001
	635.90	11.32	1.0778E+000		6.9100E-001
Cs-134	563.23	8.38	1.4980E+000	1.33E-001	1.5066E-001
	569.32	15.43	7.4807E-001		-1.3133E+000
	604.70	97.60	1.7481E-001		5.7408E-002
	795.84	85.40	1.3349E-001		1.0838E-001
	801.93	8.73	1.2145E+000		-1.1777E+000
Cs-137	661.65	85.12	1.4832E-001	1.48E-001	4.7958E-002
Eu-152	121.78	28.40	9.6227E-001	4.10E-001	3.1569E-001
	244.69	7.49	2.3113E+000		-2.5299E+000
	344.27	26.50	5.0558E-001		-1.0969E+000
	778.89	12.74	8.2442E-001		-5.7666E-001
	867.32	4.16	2.5865E+000		-1.0167E+000
	964.01	14.40	8.8880E-001		1.8024E-001
	1085.78	10.00	1.0922E+000		5.6052E-001
	1112.02	13.30	8.4702E-001		-3.7686E-001
	1407.95	20.70	4.1016E-001		3.0848E-001
Eu-154	123.07	40.50	6.5778E-001	2.92E-001	-2.9721E-001
	247.94	6.60	2.4371E+000		-6.3091E-001
	591.81	4.83	2.4270E+000		-3.4373E-001
	723.30	19.70	5.9872E-001		4.3332E-001
	756.87	4.33	2.7132E+000		-1.5461E-001
	873.19	11.50	8.5041E-001		-4.4684E-001
	996.32	10.30	9.8816E-001		-1.9280E-001
	1004.76	17.90	5.8053E-001		-5.0832E-001
	1274.45	35.50	2.9195E-001		1.3243E-001
Eu-155	86.54	30.90	1.6938E+000	1.69E+000	1.2687E+000
	105.31	20.70	1.7000E+000		7.9029E-002
Am-241	59.54	35.90	4.6762E+000	4.68E+000	3.8055E+000
Cm-243	228.19	10.56	1.6164E+000	1.10E+000	-1.1530E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1031E+000	1.10E+000	-2.1937E-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 7/28/2006 10:24:48 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-153-

Sample Title: OOL-10-01-153-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 10:14:45 AM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

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

Filename: YEL7810
Log Number: OOL-10-01-153-
Title: OOL-10-01-153-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	295-	307	298.80	74.72	1.30	1.85E+002	87.89	6.91E+002
2	943-	963	953.79	238.48	0.62	1.59E+002	68.53	2.92E+002
3	1399-	1416	1406.43	351.66	1.41	9.28E+001	44.14	1.27E+002
4	2324-	2340	2330.96	582.81	0.48	1.03E+002	30.79	4.61E+001
5	2428-	2442	2435.86	609.04	0.82	1.07E+002	31.79	5.44E+001
6	3634-	3653	3642.21	910.65	0.43	8.15E+001	29.45	4.05E+001
7	5829-	5857	5843.57	1461.05	1.74	5.83E+002	49.33	1.09E+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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Unit)	Activity Uncertainty
K-40	0.998	1460.81*	10.67	1.34699E+001	1.57731E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.28261E-001	7.44543E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	5.85484E+000	3.00300E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.92038E-001	2.25263E-001
Bi-214	0.405	609.31*	46.30	4.37431E-001	1.41128E-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/Unit)	Wt mean Activity Uncertainty
K-40	0.998	1.346988E+001	1.577311E+000
TL-208	0.467	2.282611E-001	7.445427E-002
Pb-212 @	0.576	4.920379E-001	2.252627E-001
Bi-214	0.405	4.374312E-001	1.411276E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.66	1.5473E-001	47.54
6	910.65	1.3582E-001	36.14

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:YEL7810

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	9.0405E-002	7.68E-002	-6.5850E-002
	1332.49	100.00	7.6764E-002		-2.4183E-002
Nb-94	702.63	100.00	1.0587E-001	8.25E-002	-2.2245E-002
	871.10	100.00	8.2487E-002		-5.2754E-002
Ag-108m	79.20	7.10	7.0091E+000	1.17E-001	-1.4989E+000
	433.93	89.90	1.1714E-001		-4.5194E-002
	614.37	90.40	1.2981E-001		-2.0304E-001
	722.95	90.50	1.2981E-001		1.3304E-001
Sb-125	176.33	6.89	2.1976E+000	3.68E-001	-2.0987E+000
	427.89	29.33	3.6794E-001		1.6896E-001
	463.38	10.35	1.1369E+000		1.1445E-002
	600.56	17.80	5.6970E-001		-5.2500E-001
	606.64	5.02	2.8258E+000		4.7214E+000
	635.90	11.32	9.1264E-001		-6.1258E-001
Cs-134	563.23	8.38	1.2566E+000	1.20E-001	4.3072E-001
	569.32	15.43	6.6352E-001		1.7562E-003
	604.70	97.60	1.3859E-001		-8.7583E-002
	795.84	85.40	1.1990E-001		7.4693E-002
	801.93	8.73	1.1367E+000		-2.2004E-001
Cs-137	661.65	85.12	1.2476E-001	1.25E-001	4.8079E-002
Eu-152	121.78	28.40	7.7797E-001	3.72E-001	-5.1957E-001
	244.69	7.49	1.9704E+000		-5.7375E-001
	344.27	26.50	4.2109E-001		-6.4535E-001
	778.89	12.74	7.7035E-001		-4.3709E-001
	867.32	4.16	1.9956E+000		-2.9125E+000
	964.01	14.40	8.6021E-001		4.4452E-001
	1085.78	10.00	9.0618E-001		-8.5696E-001
	1112.02	13.30	6.9443E-001		-9.9940E-002
1407.95	20.70	3.7179E-001	3.8522E-001		
Eu-154	123.07	40.50	5.4110E-001	2.39E-001	-4.1726E-001
	247.94	6.60	2.1176E+000		-6.7237E-001
	591.81	4.83	2.1202E+000		1.2348E+000
	723.30	19.70	5.9838E-001		6.8291E-001
	756.87	4.33	2.5528E+000		1.0523E+000
	873.19	11.50	7.2818E-001		1.1525E-001
	996.32	10.30	8.9068E-001		9.0700E-001
	1004.76	17.90	5.2637E-001		-1.6490E-001
1274.45	35.50	2.3861E-001	-2.6462E-001		
Eu-155	86.54	30.90	1.2553E+000	1.26E+000	1.2414E+000
	105.31	20.70	1.3870E+000		5.7504E-001
Am-241	59.54	35.90	2.5773E+000	2.58E+000	4.1885E-001
Cm-243	228.19	10.56	1.3702E+000	9.33E-001	-2.5155E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	9.3265E-001	9.33E-001	-6.4982E-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 7/28/2006 8:19:23 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: YEL7810

Sample ID: OOL-10-01-154-

Sample Title: OOL-10-01-154-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 8:09:19 AM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-154-
Title: OOL-10-01-154-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	308	300.21	75.07	0.65	4.09E+002	120.65	1.04E+003
2	946-	960	952.86	238.25	0.90	1.52E+002	62.79	3.04E+002
3	1397-	1415	1405.89	351.52	1.09	1.28E+002	49.02	1.46E+002
4	2323-	2339	2329.48	582.44	1.22	1.27E+002	37.78	7.59E+001
5	2424-	2444	2434.06	608.59	1.64	1.50E+002	37.23	5.79E+001
6	3633-	3651	3642.10	910.63	1.36	1.15E+002	29.25	3.22E+001
7	3865-	3880	3871.64	968.02	0.68	4.05E+001	25.92	4.45E+001
8	5827-	5852	5839.17	1459.95	2.06	6.98E+002	55.22	2.25E+001
9	7046-	7059	7052.21	1763.23	1.19	3.48E+001	17.21	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/Unit)	Activity Uncertainty
K-40	0.974	1460.81*	10.67	1.61288E+001	1.82521E+000
TL-208	0.458	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.81789E-001	9.14355E-002
		860.37	12.46		
Pb-212	0.573	74.81* @	10.70	1.27424E+001	4.50994E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.70071E-001	2.07403E-001
Bi-214	0.673	609.31*	46.30	6.15597E-001	1.70529E-001
		1120.29	15.10		
		1764.49*	15.80	5.91353E-001	2.98652E-001
Ac-228	0.612	338.32	11.40		
		911.07*	27.70	8.71288E-001	2.43515E-001
		969.11*	16.60	5.19660E-001	3.37337E-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/Unit)	Wt mean Activity Uncertainty
K-40	0.974	1.612883E+001	1.825210E+000
TL-208	0.458	2.817894E-001	9.143549E-002
Pb-212 @	0.573	4.700713E-001	2.074033E-001
Bi-214	0.673	6.096359E-001	1.480884E-001
Ac-228	0.612	7.508262E-001	1.974452E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.52	2.1363E-001	38.24

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:YEL7810

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	1.0937E-001	9.08E-002	1.9422E-002
	1332.49	100.00	9.0809E-002		3.2128E-002
Nb-94	702.63	100.00	1.0881E-001	8.84E-002	4.2126E-002
	871.10	100.00	8.8362E-002		3.0183E-002
Ag-108m	79.20	7.10	7.7240E+000	1.28E-001	-3.4034E+000
	433.93	89.90	1.3600E-001		1.0055E-001
	614.37	90.40	1.2786E-001		-8.2524E-002
	722.95	90.50	1.3927E-001		1.1317E-001
Sb-125	176.33	6.89	2.4774E+000	4.05E-001	1.1050E+000
	427.89	29.33	4.0497E-001		5.8211E-002
	463.38	10.35	1.1765E+000		-2.7641E-001
	600.56	17.80	6.1096E-001		1.1633E-001
	606.64	5.02	2.9696E+000		1.6968E+000
	635.90	11.32	9.3422E-001		-3.7167E-001
Cs-134	563.23	8.38	1.4008E+000	1.20E-001	8.4052E-001
	569.32	15.43	7.4460E-001		-5.0819E-001
	604.70	97.60	1.5447E-001		-1.3995E-002
	795.84	85.40	1.1990E-001		-5.3782E-002
	801.93	8.73	1.1477E+000		-9.8454E-001
Cs-137	661.65	85.12	1.3410E-001	1.34E-001	6.0629E-002
Eu-152	121.78	28.40	8.5261E-001	4.09E-001	8.9996E-002
	244.69	7.49	2.1212E+000		-1.8453E+000
	344.27	26.50	4.8199E-001		-4.9973E-001
	778.89	12.74	8.3907E-001		-1.0143E-001
	867.32	4.16	1.9956E+000		-1.5580E+000
	964.01	14.40	9.0792E-001		-1.0664E-001
	1085.78	10.00	9.7119E-001		-7.2585E-002
	1112.02	13.30	7.9228E-001		-9.9776E-001
1407.95	20.70	4.0899E-001	1.1839E-001		
Eu-154	123.07	40.50	5.9412E-001	2.64E-001	3.2981E-001
	247.94	6.60	2.2711E+000		-4.5499E-001
	591.81	4.83	2.2231E+000		-2.6080E-001
	723.30	19.70	6.3622E-001		3.1480E-001
	756.87	4.33	2.5818E+000		7.3781E-001
	873.19	11.50	7.8822E-001		-3.0780E-001
	996.32	10.30	1.0736E+000		-1.3031E+000
	1004.76	17.90	6.3994E-001		7.7048E-002
1274.45	35.50	2.6422E-001	1.4677E-002		
Eu-155	86.54	30.90	1.3878E+000	1.39E+000	9.8138E-001
	105.31	20.70	1.4667E+000		-4.9007E-002
Am-241	59.54	35.90	3.2053E+000	3.21E+000	-1.2675E+000
Cm-243	228.19	10.56	1.4824E+000	1.00E+000	-2.0208E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	1.0046E+000	1.00E+000	-8.8257E-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 7/28/2006 6:57:43 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-10-01-155-F

Sample Title: OOL-10-01-155-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 6:47:41 PM

Live Time: 600.0 seconds

Real Time: 601.0 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-155-F
Title: OOL-10-01-155-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2425-	2447	2435.37	608.80	0.94	2.10E+002	48.87	1.06E+002
2	5828-	5858	5843.02	1460.72	3.01	6.76E+002	53.05	1.16E+001
3	7050-	7065	7058.12	1764.50	0.43	4.72E+001	16.57	7.80E+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	1.000	1460.81*	10.67	1.48487E+001	1.67377E+000
Bi-214	0.690	609.31*	46.30	8.43144E-001	2.22294E-001
		1120.29	15.10		
		1764.49*	15.80	7.66374E-001	2.79714E-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	1.000	1.484870E+001	1.673770E+000
Bi-214	0.690	8.134272E-001	1.740297E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.1128E-001	8.34E-002	-3.4643E-002
	1332.49	100.00	8.3385E-002		1.5085E-002
Nb-94	702.63	100.00	1.0467E-001	9.39E-002	-5.7373E-002
	871.10	100.00	9.3865E-002		-1.8128E-002
Ag-108m	79.20	7.10	9.5618E+000	1.31E-001	-1.6972E+001
	433.93	89.90	1.3122E-001		9.3293E-002
	614.37	90.40	1.7752E-001		-1.1095E-001
	722.95	90.50	1.3310E-001		4.7238E-002
Sb-125	176.33	6.89	2.7079E+000	4.45E-001	-2.1282E-001
	427.89	29.33	4.4460E-001		5.7667E-002
	463.38	10.35	1.2453E+000		1.0696E+000
	600.56	17.80	6.6174E-001		6.1110E-001
	606.64	5.02	3.5775E+000		9.2357E+000
	635.90	11.32	9.8623E-001		-2.8468E-001
Cs-134	563.23	8.38	1.4256E+000	1.20E-001	5.7480E-001
	569.32	15.43	7.3317E-001		-7.9354E-001
	604.70	97.60	1.7341E-001		6.4139E-002
	795.84	85.40	1.2046E-001		-3.9299E-002
	801.93	8.73	1.1901E+000		3.2553E-001
Cs-137	661.65	85.12	1.3330E-001	1.33E-001	1.6500E-002
Eu-152	121.78	28.40	9.0398E-001	4.24E-001	5.3478E-001
	244.69	7.49	2.2363E+000		-5.0038E+000
	344.27	26.50	5.3190E-001		-1.9961E-001
	778.89	12.74	7.6943E-001		-7.1679E-001
	867.32	4.16	2.4594E+000		-5.4111E-001
	964.01	14.40	9.1449E-001		5.7643E-001
	1085.78	10.00	1.0140E+000		5.1284E-001
	1112.02	13.30	7.8205E-001		-3.9380E-001
	1407.95	20.70	4.2398E-001		4.1226E-001
Eu-154	123.07	40.50	6.2349E-001	2.63E-001	2.9200E-001
	247.94	6.60	2.3924E+000		-4.6106E-001
	591.81	4.83	2.3511E+000		-1.2311E-001
	723.30	19.70	6.1510E-001		5.0490E-001
	756.87	4.33	2.3834E+000		-2.2136E+000
	873.19	11.50	7.9020E-001		-3.6730E-001
	996.32	10.30	1.0297E+000		6.2170E-001
	1004.76	17.90	5.8053E-001		4.6302E-001
	1274.45	35.50	2.6291E-001		-1.0296E-001
Eu-155	86.54	30.90	1.6943E+000	1.62E+000	1.8914E+000
	105.31	20.70	1.6226E+000		3.6751E-001
Am-241	59.54	35.90	4.2293E+000	4.23E+000	6.9579E-001
Cm-243	228.19	10.56	1.5719E+000	1.15E+000	1.0470E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1458E+000	1.15E+000	9.9279E-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 7/28/2006 10:11:07 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-10-01-156-

Sample Title: OOL-10-01-156-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 10:01:04 AM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-156-
 Title: OOL-10-01-156-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	1396-	1417	1407.13	351.83	0.95	1.47E+002	47.69	1.18E+002
2	1847-	1856	1851.57	462.95	0.32	2.52E+001	22.46	4.68E+001
3	2030-	2050	2041.40	510.41	1.08	8.94E+001	42.75	1.07E+002
4	2323-	2339	2330.11	582.60	1.83	8.87E+001	31.00	5.13E+001
5	2427-	2444	2436.34	609.16	0.96	1.25E+002	36.69	6.94E+001
6	3634-	3653	3643.14	910.89	0.55	8.10E+001	28.43	3.70E+001
7	4475-	4487	4480.21	1120.17	0.78	2.16E+001	19.04	2.74E+001
8	5831-	5857	5843.31	1460.98	1.82	6.12E+002	49.97	9.31E+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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Unit)	Activity Uncertainty
ANN	0.988	511.00*	100.00	1.58383E-001	7.87288E-002
K-40	0.999	1460.81*	10.67	1.41297E+001	1.62517E+000
TL-208	0.743	277.35	6.80		
		510.84*	21.60	7.33254E-001	3.69372E-001
		583.14*	84.20	1.96726E-001	7.33437E-002
		860.37	12.46		
Bi-214	0.711	609.31*	46.30	5.11211E-001	1.63182E-001
		1120.29*	15.10	3.16480E-001	2.80356E-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:YEL7810

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Unit)	Wt mean Activity Uncertainty
ANN	0.988	1.158901E-001	8.029499E-002
K-40	0.999	1.412973E+001	1.625172E+000
TL-208	0.743	1.967257E-001	7.306296E-002
Bi-214	0.711	4.619339E-001	1.410315E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.83	2.4478E-001	32.47
2	462.95	4.1968E-002	89.19
6	910.89	1.3494E-001	35.11

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:YEL7810

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	1.0122E-001	8.17E-002	1.3232E-002
	1332.49	100.00	8.1737E-002		-7.0109E-002
Nb-94	702.63	100.00	1.0152E-001	1.01E-001	-2.0301E-002
	871.10	100.00	1.0100E-001		-4.2298E-002
Ag-108m	79.20	7.10	7.3136E+000	1.27E-001	-1.3808E+001
	433.93	89.90	1.2963E-001		-4.3464E-002
	614.37	90.40	1.4890E-001		-7.8097E-002
	722.95	90.50	1.2679E-001		-3.4643E-002
Sb-125	176.33	6.89	2.4967E+000	3.84E-001	2.2504E+000
	427.89	29.33	3.8413E-001		-3.5855E-003
	463.38	10.35	1.1843E+000		1.0499E+000
	600.56	17.80	6.1721E-001		1.9143E-001
	606.64	5.02	2.9964E+000		3.7913E+000
	635.90	11.32	9.7925E-001		-5.2493E-001
Cs-134	563.23	8.38	1.2300E+000	1.22E-001	-6.3921E-001
	569.32	15.43	6.9948E-001		3.0397E-001
	604.70	97.60	1.4805E-001		-6.6116E-002
	795.84	85.40	1.2206E-001		6.9924E-002
	801.93	8.73	1.2321E+000		6.8319E-001
Cs-137	661.65	85.12	1.2811E-001	1.28E-001	1.1097E-002
Eu-152	121.78	28.40	8.3180E-001	3.40E-001	-1.1018E-001
	244.69	7.49	1.9839E+000		-1.4693E+000
	344.27	26.50	4.5716E-001		-3.4559E-001
	778.89	12.74	8.1088E-001		-3.5820E-001
	867.32	4.16	2.4491E+000		-2.0589E+000
	964.01	14.40	8.8019E-001		9.3546E-001
	1085.78	10.00	8.9382E-001		-3.5894E-001
	1112.02	13.30	6.9899E-001		-7.0281E-001
1407.95	20.70	3.3975E-001	-2.4709E-001		
Eu-154	123.07	40.50	5.7873E-001	2.21E-001	3.2767E-001
	247.94	6.60	2.2271E+000		-4.6767E-002
	591.81	4.83	2.2076E+000		2.4911E-001
	723.30	19.70	5.8652E-001		-1.1430E-001
	756.87	4.33	2.5431E+000		1.1662E-002
	873.19	11.50	8.7008E-001		1.2512E-001
	996.32	10.30	9.0742E-001		-3.2207E-001
	1004.76	17.90	5.2000E-001		-4.2419E-001
1274.45	35.50	2.2125E-001	-1.2024E-001		
Eu-155	86.54	30.90	1.3206E+000	1.32E+000	2.8431E-001
	105.31	20.70	1.4453E+000		2.3141E-002
Am-241	59.54	35.90	2.6858E+000	2.69E+000	8.7666E-001
Cm-243	228.19	10.56	1.4599E+000	9.65E-001	1.0143E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	9.6502E-001	9.65E-001	7.3460E-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 7/28/2006 8:51:44 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: YEL7810

Sample ID: OOL-10-01-157-

Sample Title: OOL-10-01-157-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 8:41:42 AM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-157-
Title: OOL-10-01-157-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	292-	308	299.88	74.99	1.27	3.05E+002	118.08	1.06E+003
M	2	948-	971	954.24	238.60	1.70	2.38E+002	38.19	2.84E+002
m	3	948-	971	965.56	241.43	1.70	4.91E+001	26.99	3.83E+002
	4	1396-	1415	1406.15	351.59	0.41	1.22E+002	50.68	1.56E+002
	5	2322-	2334	2329.57	582.46	1.34	1.08E+002	33.92	7.29E+001
	6	2423-	2440	2434.32	608.65	0.85	1.08E+002	35.76	6.89E+001
	7	3220-	3231	3225.39	806.44	1.56	1.26E+001	16.25	2.24E+001
	8	3866-	3880	3871.61	968.01	0.42	7.34E+001	23.80	2.56E+001
	9	5824-	5852	5838.90	1459.88	2.25	7.82E+002	57.15	1.46E+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/Unit)	Activity Uncertainty
K-40	0.969	1460.81*	10.67	1.80672E+001	1.97006E+000
TL-208	0.459	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.39688E-001	8.14247E-002
Pb-212	0.576	860.37	12.46		
		74.81* @	10.70	9.51333E+000	4.13206E+000
		77.11 @	18.00		
Bi-214	0.397	87.30 @	8.00		
		238.63*	44.60	7.35501E-001	1.64963E-001
		609.31*	46.30	4.43609E-001	1.56547E-001
PB-214	0.378	1120.29	15.10		
		1764.49	15.80		
		74.82* @	6.21	1.63917E+001	7.21841E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98*	7.49	9.06336E-001	5.20413E-001
		295.21	19.20		
		351.92*	37.20	5.06219E-001	2.26939E-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/Unit)	Wt mean Activity Uncertainty
K-40	0.969	1.806722E+001	1.970057E+000
TL-208	0.459	2.396884E-001	8.142470E-002
Pb-212 @	0.576	7.355015E-001	1.649630E-001
Bi-214	0.397	4.436090E-001	1.565474E-001
PB-214 @	0.378	5.701493E-001	2.080209E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	806.44	2.1060E-002	128.58
8	968.01	1.2227E-001	32.44

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:YEL7810

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	1.1194E-001	8.64E-002	7.5966E-002
	1332.49	100.00	8.6402E-002		6.4957E-002
Nb-94	702.63	100.00	1.1561E-001	9.49E-002	4.6597E-002
	871.10	100.00	9.4903E-002		-3.6040E-002
Ag-108m	79.20	7.10	7.6628E+000	1.21E-001	-4.1884E+000
	433.93	89.90	1.3314E-001		-5.7967E-002
	614.37	90.40	1.4201E-001		-1.2726E-001
	722.95	90.50	1.2142E-001		1.0857E-001
Sb-125	176.33	6.89	2.6009E+000	4.08E-001	-3.5383E-001
	427.89	29.33	4.0848E-001		-1.0176E-001
	463.38	10.35	1.2495E+000		-2.8829E-001
	600.56	17.80	6.4553E-001		6.5793E-002
	606.64	5.02	2.9857E+000		4.2555E+000
	635.90	11.32	1.0414E+000		-2.9282E-001
Cs-134	563.23	8.38	1.3410E+000	1.39E-001	-8.2978E-001
	569.32	15.43	7.0644E-001		5.2963E-002
	604.70	97.60	1.4918E-001		-1.4245E-002
	795.84	85.40	1.3854E-001		5.4016E-002
Cs-137	801.93	8.73	1.3012E+000	1.39E-001	-3.2114E-002
	661.65	85.12	1.3939E-001		-2.1770E-002
Eu-152	121.78	28.40	8.6342E-001	3.93E-001	-3.0521E-001
	244.69	7.49	2.1140E+000		-2.1626E-001
	344.27	26.50	4.7174E-001		-7.8399E-001
	778.89	12.74	8.0368E-001		-9.1333E-001
	867.32	4.16	2.2022E+000		-3.0988E+000
	964.01	14.40	9.7112E-001		-7.5569E-001
	1085.78	10.00	9.8252E-001		5.4400E-001
	1112.02	13.30	8.1190E-001		-1.3635E+000
1407.95	20.70	3.9293E-001	1.8090E-002		
Eu-154	123.07	40.50	5.9706E-001	2.92E-001	3.4096E-002
	247.94	6.60	2.3398E+000		1.9684E+000
	591.81	4.83	2.3869E+000		-3.8064E-001
	723.30	19.70	5.5783E-001		3.8169E-001
	756.87	4.33	2.7845E+000		7.3424E-001
	873.19	11.50	8.4818E-001		-3.8022E-002
	996.32	10.30	8.9068E-001		1.0422E-002
	1004.76	17.90	5.8324E-001		-2.4080E-001
1274.45	35.50	2.9249E-001	-3.6289E-001		
Eu-155	86.54	30.90	1.3997E+000	1.40E+000	1.2143E+000
	105.31	20.70	1.5227E+000		-1.4482E+000
Am-241	59.54	35.90	2.8012E+000	2.80E+000	-1.9083E+000
Cm-243	228.19	10.56	1.5667E+000	1.05E+000	-1.3770E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	1.0459E+000	1.05E+000	3.7177E-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 7/28/2006 10:42:15 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-158-F

Sample Title: OOL-10-01-158-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 10:32:12 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-158-F
 Title: OOL-10-01-158-F-G
 Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	305	290.81	72.79	0.92	1.50E+002	41.11	5.66E+002
m	2	286-	305	299.90	75.06	0.92	2.32E+002	46.97	7.74E+002
	3	332-	343	339.05	84.85	0.47	1.55E+002	80.53	6.10E+002
	4	947-	960	953.93	238.58	1.06	1.98E+002	57.62	2.38E+002
	5	1174-	1188	1180.35	295.19	0.58	6.30E+001	45.07	1.60E+002
	6	1346-	1356	1351.62	338.01	0.93	3.87E+001	33.36	1.03E+002
	7	1396-	1415	1406.20	351.65	1.13	1.67E+002	46.16	1.10E+002
	8	2031-	2049	2039.07	509.88	1.04	7.21E+001	37.14	8.39E+001
	9	2324-	2336	2330.02	582.62	0.92	1.12E+002	34.09	7.24E+001
	10	2427-	2440	2433.78	608.57	1.26	1.14E+002	30.01	4.37E+001
	11	3632-	3650	3641.73	910.57	1.02	8.30E+001	28.50	3.80E+001
	12	3849-	3861	3855.34	963.98	1.16	1.58E+001	18.86	2.82E+001
	13	4468-	4483	4475.47	1119.02	0.61	3.79E+001	20.05	2.21E+001
	14	5826-	5852	5839.54	1460.05	1.70	6.50E+002	53.24	2.01E+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: 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	0.953	511.00*	100.00	1.23020E-001	6.55232E-002
K-40	0.978	1460.81*	10.67	1.37815E+001	1.58730E+000
TL-208	0.740	277.35	6.80		
		510.84*	21.60	5.69537E-001	3.06893E-001
		583.14*	84.20	2.35976E-001	7.83602E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	7.53674E+000	2.12584E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.682	238.63*	44.60	6.18795E-001	2.04210E-001
		609.31*	46.30	4.45788E-001	1.29276E-001
		1120.29*	15.10	5.21155E-001	2.81195E-001
PB-214	0.618	1764.49	15.80		
		74.82* @	6.21	1.29860E+001	3.78225E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
Ac-228	0.534	295.21*	19.20	4.80865E-001	3.53196E-001
		351.92*	37.20	6.84594E-001	2.21464E-001
		338.32*	11.40	5.13633E-001	4.50121E-001
		911.07*	27.70	5.96069E-001	2.15854E-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: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	0.953	7.204923E-002	6.765367E-002
K-40	0.978	1.378149E+001	1.587299E+000
TL-208	0.740	2.359757E-001	7.798195E-002
Pb-212 @	0.580	6.187952E-001	2.042097E-001
Bi-214	0.682	4.589382E-001	1.174574E-001
PB-214 @	0.618	6.270993E-001	1.876299E-001
Ac-228	0.534	5.806565E-001	1.946315E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.4966E-001	27.44
3	84.85	2.5888E-001	51.85
12	963.98	2.6297E-002	119.52

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	1.0276E-001	7.59E-002	-8.4733E-004
	1332.49	100.00	7.5880E-002		9.1842E-003
Nb-94	702.63	100.00	9.2071E-002	9.21E-002	-7.3850E-002
	871.10	100.00	9.2299E-002		2.1958E-002
Ag-108m	79.20	7.10	6.6679E+000	1.17E-001	-3.8775E+000
	433.93	89.90	1.1986E-001		8.6287E-002
	614.37	90.40	1.1765E-001		-9.8604E-002
	722.95	90.50	1.1692E-001		-6.9857E-003
Sb-125	176.33	6.89	2.1605E+000	3.77E-001	-1.4642E+000
	427.89	29.33	3.7678E-001		4.9583E-002
	463.38	10.35	1.1057E+000		3.7227E-002
	600.56	17.80	5.8531E-001		6.7563E-002
	606.64	5.02	2.6706E+000		2.3591E+000
	635.90	11.32	8.6467E-001		-3.6183E-001
Cs-134	563.23	8.38	1.2056E+000	1.19E-001	1.4713E+000
	569.32	15.43	6.5928E-001		1.8425E-001
	604.70	97.60	1.3861E-001		-4.0543E-002
	795.84	85.40	1.1945E-001		-2.3278E-002
	801.93	8.73	9.9365E-001		-7.9650E-001
Cs-137	661.65	85.12	1.1411E-001	1.14E-001	-1.9605E-002
Eu-152	121.78	28.40	7.6088E-001	3.53E-001	-2.1727E-001
	244.69	7.49	1.8533E+000		7.4391E-001
	344.27	26.50	4.3918E-001		3.4796E-001
	778.89	12.74	6.3650E-001		-4.3127E-001
	867.32	4.16	2.2397E+000		-9.6305E-002
	964.01	14.40	8.6826E-001		1.0031E+000
	1085.78	10.00	9.3582E-001		-5.9801E-001
	1112.02	13.30	6.6207E-001		2.6552E-001
1407.95	20.70	3.5337E-001	-1.2866E-001		
Eu-154	123.07	40.50	5.3451E-001	2.77E-001	-1.7971E-003
	247.94	6.60	1.9354E+000		2.3377E-001
	591.81	4.83	2.1103E+000		6.8344E-001
	723.30	19.70	5.4299E-001		1.6179E-001
	756.87	4.33	2.2325E+000		-3.0725E+000
	873.19	11.50	7.8171E-001		7.4618E-003
	996.32	10.30	8.3556E-001		-1.9079E-001
	1004.76	17.90	5.2015E-001		1.5584E-001
1274.45	35.50	2.7710E-001	1.2771E-001		
Eu-155	86.54	30.90	1.2880E+000	1.23E+000	-1.4096E-001
	105.31	20.70	1.2311E+000		-2.5452E-001
Am-241	59.54	35.90	2.3709E+000	2.37E+000	-6.9826E-001
Cm-243	228.19	10.56	1.2954E+000	9.00E-001	-3.7890E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.0030E-001	9.00E-001	8.6051E-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 7/28/2006 9:56:44 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: YEL7810

Sample ID: OOL-10-01-159-

Sample Title: OOL-10-01-159-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 9:46:42 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: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-159-
Title: OOL-10-01-159-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	309	301.14	75.31	1.28	2.26E+002	95.76	7.76E+002
2	333-	345	339.40	84.87	0.53	1.23E+002	84.65	6.59E+002
3	944-	962	954.83	238.75	0.81	2.03E+002	66.33	2.78E+002
4	1172-	1185	1179.94	295.03	0.70	4.52E+001	41.54	1.47E+002
5	1399-	1415	1406.65	351.71	0.75	6.82E+001	45.05	1.47E+002
6	2324-	2341	2331.52	582.95	1.38	1.15E+002	30.32	3.80E+001
7	2426-	2445	2435.31	608.90	0.62	1.17E+002	35.57	6.08E+001
8	3638-	3655	3643.16	910.89	0.87	7.62E+001	26.97	3.48E+001
9	3867-	3882	3874.56	968.75	0.75	5.09E+001	25.23	3.81E+001
10	5831-	5855	5843.27	1460.97	2.27	6.74E+002	54.19	2.19E+001
11	7051-	7064	7057.43	1764.54	0.29	3.47E+001	13.87	5.27E+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/Unit)	Activity Uncertainty
K-40	0.999	1460.81*	10.67	1.55721E+001	1.77654E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.55111E-001	7.49861E-002
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	6.95502E+000	3.25212E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.25917E-001	2.27214E-001
Bi-214	0.692	609.31*	46.30	4.81018E-001	1.57513E-001
		1120.29	15.10		
		1764.49*	15.80	5.91149E-001	2.43289E-001
PB-214	0.613	74.82* @	6.21	1.19837E+001	5.67062E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.45302E-001	3.22674E-001
		351.92*	37.20	2.83557E-001	1.93109E-001
Ac-228	0.626	338.32	11.40		
		911.07*	27.70	5.78059E-001	2.15159E-001
		969.11*	16.60	6.54352E-001	3.31361E-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/Unit)	Wt mean Activity Uncertainty
K-40	0.999	1.557213E+001	1.776543E+000
TL-208	0.469	2.551112E-001	7.498612E-002
Pb-212 @	0.575	6.259168E-001	2.272145E-001
Bi-214	0.692	5.135463E-001	1.322206E-001
PB-214 @	0.613	2.998399E-001	1.657015E-001
Ac-228	0.626	6.006855E-001	1.804548E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.87	2.0457E-001	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/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	1.0346E-001	7.85E-002	-2.7899E-003
	1332.49	100.00	7.8460E-002		-3.3426E-002
Nb-94	702.63	100.00	1.0415E-001	9.85E-002	-4.1752E-002
	871.10	100.00	9.8507E-002		4.4744E-002
Ag-108m	79.20	7.10	7.2610E+000	1.28E-001	-6.2221E+000
	433.93	89.90	1.3796E-001		2.7264E-002
	614.37	90.40	1.3771E-001		9.6898E-002
	722.95	90.50	1.2766E-001		2.2100E-001
Sb-125	176.33	6.89	2.3817E+000	4.04E-001	-3.0394E+000
	427.89	29.33	4.0408E-001		-1.6082E-001
	463.38	10.35	1.1152E+000		8.0865E-002
	600.56	17.80	5.5831E-001		-3.1242E-001
	606.64	5.02	2.8202E+000		5.0745E+000
	635.90	11.32	1.0414E+000		9.6794E-001
Cs-134	563.23	8.38	1.2782E+000	1.35E-001	-6.0169E-001
	569.32	15.43	7.1788E-001		1.5228E-001
	604.70	97.60	1.3951E-001		-1.1171E-001
	795.84	85.40	1.3522E-001		1.3208E-001
	801.93	8.73	1.2012E+000		-3.7649E-001
Cs-137	661.65	85.12	1.2998E-001	1.30E-001	2.1332E-002
Eu-152	121.78	28.40	8.1426E-001	3.67E-001	6.6168E-002
	244.69	7.49	1.9253E+000		-4.0270E-001
	344.27	26.50	4.7808E-001		-1.9371E-001
	778.89	12.74	7.3939E-001		-1.5316E+000
	867.32	4.16	2.4607E+000		6.3350E-001
	964.01	14.40	8.9969E-001		1.6272E-001
	1085.78	10.00	1.0372E+000		-5.1554E-001
	1112.02	13.30	7.3437E-001		-8.1551E-001
1407.95	20.70	3.6740E-001	2.8678E-001		
Eu-154	123.07	40.50	5.6581E-001	2.37E-001	2.8152E-001
	247.94	6.60	2.0941E+000		-5.7006E-001
	591.81	4.83	2.1683E+000		1.6493E+000
	723.30	19.70	5.8251E-001		8.9035E-001
	756.87	4.33	2.3608E+000		1.6899E-001
	873.19	11.50	8.3475E-001		-5.5223E-001
	996.32	10.30	9.9668E-001		5.6922E-001
	1004.76	17.90	5.8324E-001		-7.1737E-002
1274.45	35.50	2.3651E-001	-2.4073E-001		
Eu-155	86.54	30.90	1.3259E+000	1.33E+000	1.9242E+000
	105.31	20.70	1.4303E+000		6.1887E-001
Am-241	59.54	35.90	2.6844E+000	2.68E+000	-1.0247E-001
Cm-243	228.19	10.56	1.4060E+000	9.56E-001	-5.2151E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	9.5642E-001	9.56E-001	-4.4625E-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 7/28/2006 9:43:03 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-01-160-

Sample Title: OOL-10-01-160-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 9:33:01 AM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-160-
Title: OOL-10-01-160-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 10 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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/Unit)	Activity Uncertainty
ANN	0.995	511.00*	100.00	1.83225E-001	7.32991E-002
K-40	1.000	1460.81*	10.67	1.65632E+001	1.84287E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	8.48262E-001	3.46346E-001
		583.14*	84.20	3.54470E-001	1.06841E-001
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	6.44044E+000	3.50874E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.992	238.63*	44.60	7.18883E-001	2.41843E-001
		609.31*	46.30	5.31987E-001	1.71396E-001
		1120.29*	15.10	7.61302E-001	3.65811E-001
		1764.49*	15.80	7.15724E-001	2.58711E-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/Unit)	Wt mean Activity Uncertainty
ANN	0.995	1.066590E-001	7.680564E-002
K-40	1.000	1.656316E+001	1.842866E+000
TL-208	0.751	3.544705E-001	1.062145E-001
Pb-212 @	0.576	7.188826E-001	2.418429E-001
Bi-214	0.992	6.109673E-001	1.330918E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.0333E-001	41.97
7	910.85	1.9424E-001	24.67

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:YEL7810

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	1.1092E-001	8.25E-002	5.5776E-002
	1332.49	100.00	8.2534E-002		-3.3684E-002
Nb-94	702.63	100.00	1.1326E-001	1.08E-001	1.1253E-002
	871.10	100.00	1.0811E-001		-1.1678E-002
Ag-108m	79.20	7.10	7.7847E+000	1.36E-001	-5.9464E+000
	433.93	89.90	1.3628E-001		1.6525E-002
	614.37	90.40	1.3587E-001		5.2972E-002
	722.95	90.50	1.3927E-001		1.9955E-001
Sb-125	176.33	6.89	2.5536E+000	4.13E-001	-6.1595E-001
	427.89	29.33	4.1282E-001		3.4492E-002
	463.38	10.35	1.1817E+000		-4.6810E-003
	600.56	17.80	6.0252E-001		1.2511E-001
	606.64	5.02	2.9750E+000		-1.2413E-001
	635.90	11.32	9.9932E-001		-6.1669E-001
Cs-134	563.23	8.38	1.3811E+000	1.33E-001	4.0714E-001
	569.32	15.43	7.3359E-001		-3.1083E-001
	604.70	97.60	1.4458E-001		4.1325E-003
	795.84	85.40	1.3329E-001		1.3461E-002
Cs-137	801.93	8.73	1.2867E+000	1.32E-001	-3.4368E-001
	661.65	85.12	1.3183E-001		-2.2165E-002
Eu-152	121.78	28.40	8.7203E-001	3.72E-001	1.4169E-001
	244.69	7.49	2.1194E+000		-1.4341E+000
	344.27	26.50	4.6613E-001		-9.5666E-001
	778.89	12.74	8.6629E-001		-1.0251E+000
	867.32	4.16	2.6073E+000		-1.5294E+000
	964.01	14.40	9.0792E-001		3.8790E-001
	1085.78	10.00	1.1188E+000		8.1304E-001
	1112.02	13.30	7.8025E-001		-7.3845E-001
	1407.95	20.70	3.7179E-001		1.6162E-001
	Eu-154	123.07	40.50		6.0374E-001
247.94		6.60	2.2338E+000	-5.8538E-001	
591.81		4.83	2.3507E+000	2.3334E-001	
723.30		19.70	6.3622E-001	6.1288E-001	
756.87		4.33	2.5235E+000	-9.8458E-002	
873.19		11.50	9.6797E-001	2.7159E-002	
996.32		10.30	8.9068E-001	-1.1468E+000	
1004.76		17.90	6.0277E-001	-2.1517E-001	
1274.45		35.50	2.5855E-001	-2.1609E-001	
Eu-155		86.54	30.90	1.4191E+000	1.42E+000
	105.31	20.70	1.5168E+000	-1.1696E+000	
Am-241	59.54	35.90	2.9835E+000	2.98E+000	-3.1532E-001
Cm-243	228.19	10.56	1.4923E+000	1.05E+000	-1.6277E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	1.0471E+000	1.05E+000	1.3704E-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 7/28/2006 3:48:24 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-161-F

Sample Title: OOL-10-01-161-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 3:38:22 PM

Live Time: 600.0 seconds

Real Time: 601.1 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-161-F
Title: OOL-10-01-161-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	3632-	3655	3642.83	910.67	0.41	1.15E+002	33.70	4.50E+001
2	4477-	4491	4483.40	1120.82	1.03	5.45E+001	22.94	2.85E+001
3	5830-	5859	5843.97	1460.96	2.69	6.96E+002	55.53	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: 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	1.52685E+001	1.73614E+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	0.999	1.526853E+001	1.736139E+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	910.67	1.9166E-001	29.30
2	1120.82	9.0793E-002	42.11

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: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	1.0536E-001	9.39E-002	-2.4693E-003
	1332.49	100.00	9.3915E-002		5.2265E-002
Nb-94	702.63	100.00	1.0748E-001	1.06E-001	3.1867E-002
	871.10	100.00	1.0595E-001		-1.0527E-001
Ag-108m	79.20	7.10	9.3450E+000	1.28E-001	-1.1542E+001
	433.93	89.90	1.4439E-001		-1.1395E-001
	614.37	90.40	1.6954E-001		-1.1336E-001
	722.95	90.50	1.2788E-001		-3.0909E-002
Sb-125	176.33	6.89	2.8390E+000	4.29E-001	3.2153E+000
	427.89	29.33	4.2898E-001		4.8681E-002
	463.38	10.35	1.2742E+000		1.3546E-001
	600.56	17.80	7.0992E-001		-3.9935E-001
	606.64	5.02	3.4335E+000		6.1702E+000
	635.90	11.32	9.9579E-001		-3.2114E-001
Cs-134	563.23	8.38	1.2679E+000	1.25E-001	-1.3936E-001
	569.32	15.43	7.5227E-001		-2.2491E-001
	604.70	97.60	1.7177E-001		7.3687E-002
	795.84	85.40	1.2496E-001		6.0664E-002
Cs-137	801.93	8.73	1.2242E+000	1.25E-001	-2.0643E-001
	661.65	85.12	1.2485E-001		-4.7917E-002
Eu-152	121.78	28.40	9.0398E-001	4.21E-001	4.6489E-001
	244.69	7.49	2.2677E+000		-3.8165E+000
	344.27	26.50	5.1476E-001		-4.3738E-001
	778.89	12.74	8.4406E-001		-7.1657E-001
	867.32	4.16	2.5865E+000		-4.9996E-001
	964.01	14.40	9.2455E-001		7.0560E-001
	1085.78	10.00	1.0191E+000		-1.6976E+000
	1112.02	13.30	7.6296E-001		-7.6976E-001
1407.95	20.70	4.2057E-001	-1.6236E-001		
Eu-154	123.07	40.50	6.2763E-001	2.54E-001	1.1841E-001
	247.94	6.60	2.3561E+000		-1.7423E+000
	591.81	4.83	2.6164E+000		7.5772E-001
	723.30	19.70	5.9502E-001		-1.4192E-001
	756.87	4.33	2.3033E+000		2.9430E-002
	873.19	11.50	9.6623E-001		-2.9217E-002
	996.32	10.30	8.8855E-001		-4.6383E-001
Eu-155	1004.76	17.90	5.6155E-001	1.66E+000	-8.5391E-002
	1274.45	35.50	2.5421E-001		2.7277E-002
	86.54	30.90	1.6810E+000		1.3186E+000
Am-241	105.31	20.70	1.6596E+000	4.60E+000	-1.3762E-001
	59.54	35.90	4.5951E+000		-5.1913E+000
Cm-243	228.19	10.56	1.5899E+000	1.10E+000	4.8799E-001

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	5.1784E-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 7/31/2006 9:43:58 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-10-01-162-F-

Sample Title: OOL-10-01-162-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 9:33:56 AM

Live Time: 600.0 seconds

Real Time: 600.9 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-162-F-
Title: OOL-10-01-162-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2322-	2340	2331.75	582.90	0.54	8.89E+001	39.48	9.31E+001
2	2424-	2444	2436.76	609.15	1.92	1.25E+002	41.17	8.66E+001
3	3631-	3653	3640.72	910.14	0.61	1.06E+002	32.86	4.40E+001
4	5827-	5856	5840.75	1460.16	2.86	6.65E+002	53.56	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	0.986	1460.81*	10.67	1.46003E+001	1.66704E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.93739E-001	8.96950E-002
Bi-214	0.402	860.37	12.46		
		609.31*	46.30	5.04147E-001	1.76851E-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	0.986	1.460026E+001	1.667035E+000
TL-208	0.470	1.937392E-001	8.969504E-002
Bi-214	0.402	5.041469E-001	1.768508E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.14	1.7668E-001	31.00

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: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	9.6878E-002	8.20E-002	-1.0437E-001
	1332.49	100.00	8.1966E-002		2.7609E-002
Nb-94	702.63	100.00	1.1137E-001	8.72E-002	1.0673E-002
	871.10	100.00	8.7153E-002		-1.4736E-002
Ag-108m	79.20	7.10	8.7542E+000	1.29E-001	-2.5726E+001
	433.93	89.90	1.2943E-001		-6.9547E-002
	614.37	90.40	1.5755E-001		-1.3916E-002
	722.95	90.50	1.3112E-001		1.1500E-001
Sb-125	176.33	6.89	2.7235E+000	4.24E-001	1.4849E+000
	427.89	29.33	4.2393E-001		-1.0452E-001
	463.38	10.35	1.1566E+000		1.0912E+000
	600.56	17.80	6.1359E-001		-6.4543E-001
	606.64	5.02	3.0506E+000		6.1025E+000
	635.90	11.32	9.2673E-001		-3.1073E-001
Cs-134	563.23	8.38	1.3133E+000	1.20E-001	-4.2641E-001
	569.32	15.43	7.4807E-001		2.1774E-001
	604.70	97.60	1.5334E-001		-9.9567E-002
	795.84	85.40	1.2046E-001		6.7086E-003
Cs-137	801.93	8.73	1.1185E+000	1.40E-001	4.0324E-001
	661.65	85.12	1.3959E-001		-3.9335E-002
Eu-152	121.78	28.40	8.8534E-001	3.53E-001	-3.2713E-002
	244.69	7.49	2.0900E+000		-2.5592E+000
	344.27	26.50	4.9465E-001		-7.4621E-001
	778.89	12.74	8.6008E-001		-8.8545E-002
	867.32	4.16	2.3134E+000		-9.6117E-002
	964.01	14.40	9.6132E-001		1.4372E+000
	1085.78	10.00	9.7770E-001		-1.2606E+000
	1112.02	13.30	7.7827E-001		-1.1555E+000
1407.95	20.70	3.5308E-001	2.7513E-001		
Eu-154	123.07	40.50	6.1237E-001	2.73E-001	5.3409E-002
	247.94	6.60	2.2505E+000		-3.1752E-001
	591.81	4.83	2.1449E+000		-2.6665E+000
	723.30	19.70	6.0423E-001		7.6694E-001
	756.87	4.33	2.4126E+000		-2.1069E+000
	873.19	11.50	7.4878E-001		2.2342E-001
	996.32	10.30	1.0608E+000		6.6251E-001
Eu-155	1004.76	17.90	6.0911E-001	1.60E+000	2.1042E-001
	1274.45	35.50	2.7296E-001		-3.6195E-002
	86.54	30.90	1.6017E+000		3.8831E-001
Am-241	105.31	20.70	1.6052E+000	3.94E+000	3.4613E-001
	59.54	35.90	3.9446E+000		-8.0562E-001
Cm-243	228.19	10.56	1.5101E+000	1.03E+000	2.1440E-002

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	3.8813E-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 7/28/2006 3:30:59 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-10-01-163-

Sample Title: OOL-10-01-163-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 3:20:57 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-163-
 Title: OOL-10-01-163-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	282-	308	291.35	72.86	1.68	2.43E+002	60.87	9.50E+002
m	2	282-	308	299.85	74.99	1.69	4.25E+002	65.51	1.34E+003
	3	947-	959	954.11	238.57	1.10	1.77E+002	55.74	2.40E+002
	4	1343-	1357	1351.89	338.02	0.95	6.61E+001	41.76	1.35E+002
	5	1398-	1413	1406.52	351.68	0.39	1.05E+002	46.69	1.54E+002
	6	1755-	1764	1759.68	439.98	0.86	2.03E+001	22.35	4.87E+001
	7	2321-	2342	2330.78	582.77	0.70	1.20E+002	39.59	7.65E+001
	8	2426-	2446	2434.93	608.81	1.53	1.63E+002	42.71	8.48E+001
	9	3633-	3649	3641.84	910.56	1.14	1.04E+002	30.13	4.25E+001
	10	3868-	3881	3875.17	968.90	0.57	3.26E+001	22.66	3.64E+001
	11	4469-	4488	4480.13	1120.15	0.60	7.97E+001	25.20	2.43E+001
	12	5830-	5856	5842.38	1460.75	1.64	6.50E+002	53.73	2.34E+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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Unit)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	1.50047E+001	1.73666E+000
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.67126E-001	9.44166E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	1.32812E+001	3.31117E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.45557E-001	1.92250E-001
Bi-214	0.706	609.31*	46.30	6.69367E-001	1.93669E-001
		1120.29*	15.10	1.16505E+000	3.88683E-001
		1764.49	15.80		
Ac-228	0.994	338.32*	11.40	8.85149E-001	5.76597E-001
		911.07*	27.70	7.85226E-001	2.45826E-001
		969.11*	16.60	4.18301E-001	2.94421E-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/Unit)	Wt mean Activity Uncertainty
K-40	1.000	1.500466E+001	1.736664E+000
TL-208	0.466	2.671259E-001	9.441659E-002
Pb-212 @	0.576	5.455565E-001	1.922500E-001
Bi-214	0.706	7.679548E-001	1.733429E-001
Ac-228	0.994	6.587508E-001	1.793396E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	4.0446E-001	25.08
5	351.68	1.7488E-001	44.50
6	439.98	3.3883E-002	109.93

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:YEL7810

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Co-60	1173.22	100.00	1.1194E-001	8.01E-002	-7.9190E-002
	1332.49	100.00	8.0117E-002		3.2623E-002
Nb-94	702.63	100.00	1.1980E-001	1.07E-001	8.1675E-002
	871.10	100.00	1.0672E-001		-5.4028E-002
Ag-108m	79.20	7.10	7.9332E+000	1.30E-001	7.0307E-001
	433.93	89.90	1.3372E-001		4.4430E-002
	614.37	90.40	1.4272E-001		-3.1452E-002
	722.95	90.50	1.3024E-001		-3.7215E-002
Sb-125	176.33	6.89	2.5594E+000	4.01E-001	-1.3027E+000
	427.89	29.33	4.0053E-001		-2.9618E-001
	463.38	10.35	1.1342E+000		2.0340E-001
	600.56	17.80	6.3757E-001		-1.7504E-001
	606.64	5.02	3.2668E+000		-3.3311E-002
	635.90	11.32	1.0190E+000		-1.1068E-001
Cs-134	563.23	8.38	1.3851E+000	1.29E-001	5.4020E-001
	569.32	15.43	7.3359E-001		-1.9421E-001
	604.70	97.60	1.6194E-001		-1.1633E-002
	795.84	85.40	1.2932E-001		4.9428E-002
Cs-137	801.93	8.73	1.2270E+000	1.31E-001	-1.3456E+000
	661.65	85.12	1.3137E-001		4.9717E-002
Eu-152	121.78	28.40	8.4806E-001	3.58E-001	-1.0034E-001
	244.69	7.49	2.1266E+000		-1.4226E+000
	344.27	26.50	4.8355E-001		-4.8041E-001
	778.89	12.74	8.2157E-001		-4.3185E-001
	867.32	4.16	2.3658E+000		-1.9164E+000
	964.01	14.40	8.6597E-001		-1.5706E-001
	1085.78	10.00	1.0425E+000		-2.4563E-002
	1112.02	13.30	8.1576E-001		1.6317E-001
1407.95	20.70	3.5844E-001	-6.8605E-002		
Eu-154	123.07	40.50	5.9391E-001	2.91E-001	4.5390E-001
	247.94	6.60	2.2070E+000		-1.3040E+000
	591.81	4.83	2.2231E+000		9.3534E-001
	723.30	19.70	5.9445E-001		-2.5133E-001
	756.87	4.33	2.7398E+000		9.7406E-001
	873.19	11.50	9.8328E-001		8.4122E-001
	996.32	10.30	9.5578E-001		-2.8018E-001
	1004.76	17.90	5.7177E-001		3.9757E-001
1274.45	35.50	2.9081E-001	-1.4435E-002		
Eu-155	86.54	30.90	1.3952E+000	1.40E+000	1.2029E+000
	105.31	20.70	1.4892E+000		-5.8460E-001
Am-241	59.54	35.90	3.0030E+000	3.00E+000	-1.8032E+000
Cm-243	228.19	10.56	1.5299E+000	1.05E+000	-9.2877E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Unit)	Nuclide MDA (pCi/Unit)	Activity (pCi/Unit)
Cm-243	277.60	14.00	1.0549E+000	1.05E+000	2.1419E-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 7/28/2006 3:01:59 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-164-F

Sample Title: OOL-10-01-164-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 2:51:58 PM

Live Time: 600.0 seconds

Real Time: 601.1 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-164-F
Title: OOL-10-01-164-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1396-	1414	1407.46	351.82	1.05	1.99E+002	52.00	1.49E+002
2	2322-	2343	2332.69	583.13	2.03	1.51E+002	40.53	7.38E+001
3	2427-	2449	2437.00	609.21	2.14	2.44E+002	44.63	7.15E+001
4	3865-	3882	3873.88	968.43	1.37	6.68E+001	31.36	5.82E+001
5	5829-	5859	5844.29	1461.04	2.79	7.83E+002	58.03	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	0.998	1460.81*	10.67	1.71831E+001	1.88639E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.29670E-001	9.82431E-002
Bi-214	0.403	860.37	12.46		
		609.31*	46.30	9.83234E-001	2.16545E-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	0.998	1.718314E+001	1.886385E+000
TL-208	0.472	3.296702E-001	9.824313E-002
Bi-214	0.403	9.832344E-001	2.165446E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.82	3.3084E-001	26.19
4	968.43	1.1141E-001	46.92

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	1.0485E-001	9.45E-002	-6.5096E-003
	1332.49	100.00	9.4531E-002		5.0045E-002
Nb-94	702.63	100.00	1.1288E-001	1.06E-001	4.8768E-002
	871.10	100.00	1.0595E-001		5.2918E-002
Ag-108m	79.20	7.10	9.8188E+000	1.38E-001	-1.0409E+001
	433.93	89.90	1.3894E-001		1.0455E-001
	614.37	90.40	1.8359E-001		9.8926E-002
	722.95	90.50	1.3811E-001		3.5172E-002
Sb-125	176.33	6.89	2.8789E+000	4.26E-001	4.2300E-001
	427.89	29.33	4.2562E-001		-1.3012E-001
	463.38	10.35	1.2766E+000		1.5406E-003
	600.56	17.80	6.8000E-001		2.9973E-001
	606.64	5.02	3.5388E+000		-1.4693E+000
	635.90	11.32	1.0177E+000		4.6591E-001
Cs-134	563.23	8.38	1.5155E+000	1.30E-001	4.9677E-001
	569.32	15.43	8.2025E-001		1.0521E-001
	604.70	97.60	1.7550E-001		-1.2193E-002
	795.84	85.40	1.3024E-001		-2.0371E-002
	801.93	8.73	1.2805E+000		4.9335E-001
Cs-137	661.65	85.12	1.2937E-001	1.29E-001	-4.0181E-003
Eu-152	121.78	28.40	9.4180E-001	4.10E-001	5.4604E-001
	244.69	7.49	2.1855E+000		-5.9716E+000
	344.27	26.50	5.3918E-001		-9.0028E-001
	778.89	12.74	8.4082E-001		-1.7323E+000
	867.32	4.16	2.4702E+000		-3.1069E+000
	964.01	14.40	9.8505E-001		-5.2432E-001
	1085.78	10.00	9.9862E-001		-6.6707E-001
	1112.02	13.30	8.2596E-001		-7.7701E-001
1407.95	20.70	4.1016E-001	1.0283E-001		
Eu-154	123.07	40.50	6.5196E-001	2.73E-001	4.5087E-002
	247.94	6.60	2.3284E+000		-9.7510E-001
	591.81	4.83	2.4406E+000		-2.5978E-001
	723.30	19.70	6.4313E-001		2.3168E-001
	756.87	4.33	2.4890E+000		1.5254E+000
	873.19	11.50	9.5164E-001		9.7984E-001
	996.32	10.30	1.0068E+000		1.4234E-001
	1004.76	17.90	5.4185E-001		-2.8383E-001
	1274.45	35.50	2.7296E-001		-2.4631E-001
	86.54	30.90	1.7093E+000		1.70E+000
105.31	20.70	1.6995E+000		1.6050E-001	
Am-241	59.54	35.90	4.2746E+000	4.27E+000	-2.8051E-001
Cm-243	228.19	10.56	1.5912E+000	1.10E+000	-1.6858E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0962E+000	1.10E+000	-7.0804E-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 7/31/2006 8:32:16 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-165-F-

Sample Title: OOL-10-01-165-F-G

Description: 50% Satulated soil

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 8:22:14 AM

Live Time: 600.0 seconds

Real Time: 601.1 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-10-01-165-F-
Title: OOL-10-01-165-F-G
Description: 50% Satulated soil

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	307	298.62	74.61	1.32	2.33E+002	98.51	8.30E+002
2	1396-	1415	1405.66	351.37	0.74	1.22E+002	53.40	1.77E+002
3	2321-	2342	2330.29	582.53	1.52	1.32E+002	45.07	1.03E+002
4	2424-	2446	2434.11	608.49	0.57	1.68E+002	40.43	6.62E+001
5	3866-	3884	3872.90	968.19	0.52	5.19E+001	27.62	4.21E+001
6	5826-	5856	5841.28	1460.29	2.64	7.84E+002	57.37	1.52E+001
7	7053-	7067	7060.78	1765.17	0.50	3.36E+001	17.10	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: 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	1.72032E+001	1.87769E+000
TL-208	0.463	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.87004E-001	1.05113E-001
Bi-214	0.678	860.37	12.46		
		609.31*	46.30	6.74701E-001	1.82566E-001
		1120.29	15.10		
		1764.49*	15.80	5.44894E-001	2.83026E-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	0.991	1.720324E+001	1.877688E+000
TL-208	0.463	2.870044E-001	1.051134E-001
Bi-214	0.678	6.365594E-001	1.534175E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	74.61	3.8839E-001	42.27
2	351.37	2.0300E-001	43.84
5	968.19	8.6489E-002	53.22

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: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	1.0174E-001	8.27E-002	6.7786E-002
	1332.49	100.00	8.2679E-002		4.2960E-002
Nb-94	702.63	100.00	1.1060E-001	1.06E-001	-6.2668E-002
	871.10	100.00	1.0551E-001		8.1074E-002
Ag-108m	79.20	7.10	9.7197E+000	1.29E-001	-7.3251E+000
	433.93	89.90	1.4115E-001		4.6725E-003
	614.37	90.40	1.5996E-001		-2.2198E-002
	722.95	90.50	1.2911E-001		5.4299E-003
Sb-125	176.33	6.89	2.7482E+000	4.14E-001	-7.5372E-001
	427.89	29.33	4.1362E-001		4.0323E-002
	463.38	10.35	1.2206E+000		9.5927E-001
	600.56	17.80	6.4674E-001		-5.3854E-003
	606.64	5.02	3.1398E+000		6.0229E+000
	635.90	11.32	9.3354E-001		-5.5030E-001
Cs-134	563.23	8.38	1.4909E+000	1.37E-001	1.3393E+000
	569.32	15.43	8.1256E-001		4.6059E-001
	604.70	97.60	1.5413E-001		-4.0765E-002
	795.84	85.40	1.3665E-001		8.0944E-002
Cs-137	801.93	8.73	1.2242E+000	1.32E-001	-7.2130E-001
	661.65	85.12	1.3244E-001		3.6534E-002
Eu-152	121.78	28.40	9.1367E-001	4.10E-001	4.8294E-002
	244.69	7.49	2.3292E+000		-2.4502E+000
	344.27	26.50	5.3117E-001		-3.6583E-001
	778.89	12.74	8.3757E-001		-1.1210E+000
	867.32	4.16	2.5025E+000		3.6285E-002
	964.01	14.40	9.2205E-001		-1.6769E-001
	1085.78	10.00	9.0041E-001		-7.6183E-002
	1112.02	13.30	8.0065E-001		-1.3567E+000
1407.95	20.70	4.1016E-001	-3.3349E-002		
Eu-154	123.07	40.50	6.3537E-001	2.59E-001	-1.8791E-002
	247.94	6.60	2.4327E+000		4.1143E-001
	591.81	4.83	2.4202E+000		-1.8778E+000
	723.30	19.70	5.9502E-001		2.7079E-001
	756.87	4.33	2.4890E+000		2.8030E+000
	873.19	11.50	9.1793E-001		-2.6965E-001
	996.32	10.30	1.0431E+000		-5.2642E-002
	1004.76	17.90	5.8319E-001		5.5707E-001
1274.45	35.50	2.5947E-001	-7.0602E-002		
Eu-155	86.54	30.90	1.8053E+000	1.66E+000	2.7328E+000
	105.31	20.70	1.6552E+000		7.4942E-001
Am-241	59.54	35.90	4.6132E+000	4.61E+000	-4.3912E+000
Cm-243	228.19	10.56	1.6114E+000	1.10E+000	-2.5264E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0974E+000	1.10E+000	-3.0033E-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 7/31/2006 8:49:40 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-166-F-

Sample Title: OOL-10-01-166-F-G

Description: 50% Satulated soil

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 8:39:37 AM

Live Time: 600.0 seconds

Real Time: 601.1 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-166-F-
Title: OOL-10-01-166-F-G
Description: 50% Satulated soil

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2321-	2342	2332.54	583.10	0.83	1.27E+002	42.65	9.24E+001
2	2425-	2446	2433.93	608.44	0.43	1.21E+002	40.11	7.80E+001
3	3634-	3653	3642.97	910.71	0.35	9.04E+001	34.31	6.16E+001
4	5824-	5855	5840.45	1460.08	2.96	8.12E+002	59.26	2.02E+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: 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	0.983	1460.81*	10.67	1.78157E+001	1.94215E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.75987E-001	9.96788E-002
Bi-214	0.388	860.37	12.46		
		609.31*	46.30	4.86395E-001	1.72045E-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	0.983	1.781571E+001	1.942149E+000
TL-208	0.472	2.759865E-001	9.967885E-002
Bi-214	0.388	4.863948E-001	1.720454E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.71	1.5070E-001	37.95

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	1.0787E-001	8.41E-002	-5.0921E-003
	1332.49	100.00	8.4085E-002		-8.8373E-002
Nb-94	702.63	100.00	1.1288E-001	1.04E-001	4.7412E-002
	871.10	100.00	1.0374E-001		-2.7156E-002
Ag-108m	79.20	7.10	9.5473E+000	1.35E-001	-1.8627E+001
	433.93	89.90	1.3528E-001		-2.4878E-002
	614.37	90.40	1.4651E-001		-7.8726E-002
	722.95	90.50	1.3620E-001		-2.5476E-003
Sb-125	176.33	6.89	2.7666E+000	4.15E-001	4.4358E-001
	427.89	29.33	4.1536E-001		2.3510E-001
	463.38	10.35	1.2330E+000		7.1676E-001
	600.56	17.80	6.2550E-001		-5.3093E-002
	606.64	5.02	2.9946E+000		4.6792E+000
	635.90	11.32	9.7334E-001		-4.1689E-001
Cs-134	563.23	8.38	1.3687E+000	1.25E-001	8.5850E-001
	569.32	15.43	7.5227E-001		-2.3424E-001
	604.70	97.60	1.4986E-001		-2.3346E-002
	795.84	85.40	1.2496E-001		-2.1226E-003
Cs-137	801.93	8.73	1.1801E+000	1.49E-001	-1.4523E-001
	661.65	85.12	1.4908E-001		1.1844E-001
Eu-152	121.78	28.40	9.1504E-001	3.92E-001	-1.9316E-003
	244.69	7.49	2.1836E+000		-2.6955E+000
	344.27	26.50	4.9858E-001		-7.6305E-001
	778.89	12.74	8.4082E-001		-4.5000E-003
	867.32	4.16	2.4485E+000		-2.5587E+000
	964.01	14.40	9.4679E-001		6.5470E-001
	1085.78	10.00	1.0292E+000		5.6847E-001
	1112.02	13.30	8.0797E-001		-1.2186E+000
1407.95	20.70	3.9213E-001	2.2789E-001		
Eu-154	123.07	40.50	6.3561E-001	3.07E-001	-2.0435E-001
	247.94	6.60	2.3469E+000		-4.1724E-001
	591.81	4.83	2.3581E+000		-9.6493E-001
	723.30	19.70	6.3103E-001		4.1736E-001
	756.87	4.33	2.5901E+000		-2.1977E+000
	873.19	11.50	8.9863E-001		-5.5881E-001
	996.32	10.30	9.7868E-001		3.5489E-001
	1004.76	17.90	5.9630E-001		2.6064E-001
1274.45	35.50	3.0683E-001	7.0564E-002		
Eu-155	86.54	30.90	1.6304E+000	1.63E+000	1.7374E+000
	105.31	20.70	1.6705E+000		1.9090E-001
Am-241	59.54	35.90	4.2174E+000	4.22E+000	-9.6701E-001
Cm-243	228.19	10.56	1.5809E+000	1.10E+000	-1.1020E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0974E+000	1.10E+000	1.3062E+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 7/28/2006 2:47:32 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-167-F

Sample Title: OOL-10-01-167-F-G

Description: Satulated Soil

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 2:37:30 PM

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-10-01-167-F
Title: OOL-10-01-167-F-G
Description: Satulated Soil

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 7 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.68728E+001	1.86166E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.22054E-001	1.04081E-001
Bi-214	0.681	860.37	12.46		
		609.31*	46.30	9.48028E-001	2.25614E-001
		1120.29	15.10		
Ac-228	0.635	1764.49*	15.80	7.34769E-001	3.16885E-001
		338.32	11.40		
		911.07*	27.70	6.39091E-001	2.45659E-001
		969.11*	16.60	9.51928E-001	3.85297E-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	0.996	1.687284E+001	1.861662E+000
TL-208	0.471	3.220543E-001	1.040810E-001
Bi-214	0.681	8.762895E-001	1.837906E-001
Ac-228	0.635	7.295079E-001	2.071387E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	75.13	5.4967E-001	37.68

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	1.1914E-001	9.27E-002	8.9746E-002
	1332.49	100.00	9.2669E-002		7.3639E-003
Nb-94	702.63	100.00	1.1946E-001	1.13E-001	1.7641E-002
	871.10	100.00	1.1313E-001		4.5168E-002
Ag-108m	79.20	7.10	1.0225E+001	1.43E-001	-1.5886E+000
	433.93	89.90	1.4305E-001		-7.8221E-004
	614.37	90.40	1.7912E-001		-3.6579E-002
	722.95	90.50	1.4366E-001		1.1719E-001
Sb-125	176.33	6.89	3.0052E+000	4.31E-001	7.8815E-002
	427.89	29.33	4.3065E-001		-1.2322E-001
	463.38	10.35	1.2955E+000		1.8642E-002
	600.56	17.80	6.6910E-001		-4.1578E-001
	606.64	5.02	3.6493E+000		-1.1767E+000
	635.90	11.32	1.0602E+000		-1.3558E-001
Cs-134	563.23	8.38	1.4909E+000	1.35E-001	6.5971E-001
	569.32	15.43	8.1449E-001		-3.1343E-002
	604.70	97.60	1.7914E-001		-9.2860E-002
	795.84	85.40	1.3485E-001		-7.7900E-002
	801.93	8.73	1.3032E+000		-1.1300E+000
Cs-137	661.65	85.12	1.5136E-001	1.51E-001	1.8816E-001
Eu-152	121.78	28.40	9.6293E-001	4.44E-001	-3.5011E-001
	244.69	7.49	2.3943E+000		-3.6114E+000
	344.27	26.50	5.3483E-001		-5.3455E-001
	778.89	12.74	9.1529E-001		-1.0106E+000
	867.32	4.16	2.7560E+000		-6.9778E-001
	964.01	14.40	1.0059E+000		3.8822E-002
	1085.78	10.00	9.9862E-001		5.9500E-001
	1112.02	13.30	8.5048E-001		-2.3417E+000
1407.95	20.70	4.4386E-001	2.2198E-001		
Eu-154	123.07	40.50	6.7358E-001	3.08E-001	3.8782E-001
	247.94	6.60	2.5241E+000		-7.7784E-001
	591.81	4.83	2.4202E+000		-1.6702E+000
	723.30	19.70	6.6169E-001		6.6963E-001
	756.87	4.33	2.7557E+000		1.3733E+000
	873.19	11.50	9.7702E-001		3.4608E-001
	996.32	10.30	1.0022E+000		-2.6889E-002
	1004.76	17.90	5.8584E-001		-3.3402E-001
1274.45	35.50	3.0828E-001	3.1753E-001		
Eu-155	86.54	30.90	1.7535E+000	1.75E+000	1.4766E+000
	105.31	20.70	1.7493E+000		1.9657E-001
Am-241	59.54	35.90	4.6367E+000	4.64E+000	-2.2837E-001
Cm-243	228.19	10.56	1.7161E+000	1.14E+000	5.7157E-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	-6.7413E-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 7/28/2006 10:18:11 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-10-01-168-F

Sample Title: OOL-10-01-168-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 10:08:09 PM

Live Time: 600.0 seconds

Real Time: 601.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-168-F
 Title: OOL-10-01-168-F-G
 Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	304	299.67	75.01	1.01	2.00E+002	74.02	5.71E+002
2	945-	960	953.08	238.37	1.22	2.04E+002	63.04	2.75E+002
3	1174-	1185	1180.08	295.12	1.05	3.21E+001	39.15	1.45E+002
4	1346-	1357	1351.33	337.94	0.31	3.89E+001	35.30	1.13E+002
5	1397-	1413	1405.60	351.51	1.21	1.08E+002	44.21	1.28E+002
6	2205-	2214	2209.74	552.55	0.69	1.48E+001	18.92	3.42E+001
7	2320-	2337	2329.67	582.54	1.22	1.15E+002	37.36	7.64E+001
8	2423-	2440	2433.59	608.52	1.20	1.11E+002	36.96	7.54E+001
9	3172-	3181	3176.74	794.32	0.75	2.15E+001	15.30	1.75E+001
10	3432-	3442	3437.87	859.60	0.50	1.35E+001	16.52	2.35E+001
11	3633-	3650	3642.12	910.67	1.61	1.14E+002	28.98	3.18E+001
12	3865-	3879	3872.04	968.15	0.43	4.33E+001	23.04	3.27E+001
13	5827-	5851	5839.25	1459.98	1.85	7.22E+002	55.42	1.88E+001
14	7048-	7061	7054.44	1763.80	1.03	3.40E+001	14.30	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
K-40	0.974	1460.81*	10.67	1.53159E+001	1.70849E+000
TL-208	0.611	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.42217E-001	8.50622E-002
		860.37*	12.46	2.12954E-001	2.61744E-001
Pb-212	0.579	74.81* @	10.70	6.52145E+000	2.73185E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.36801E-001	2.20473E-001
Bi-214	0.677	609.31*	46.30	4.31188E-001	1.53594E-001
		1120.29	15.10		
		1764.49*	15.80	5.30069E-001	2.29211E-001
PB-214	0.617	74.82* @	6.21	1.12366E+001	4.77720E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	2.44454E-001	3.01390E-001
		351.92*	37.20	4.44738E-001	1.96169E-001
Ac-228	0.985	338.32*	11.40	5.15926E-001	4.75467E-001
		911.07*	27.70	8.20192E-001	2.28573E-001
		969.11*	16.60	5.25039E-001	2.85078E-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	0.974	1.531585E+001	1.708488E+000
TL-208	0.611	2.394214E-001	8.089746E-002
Pb-212 @	0.579	6.368007E-001	2.204725E-001
Bi-214	0.677	4.618301E-001	1.275956E-001
PB-214 @	0.617	3.851377E-001	1.644107E-001
Ac-228	0.985	6.814162E-001	1.669717E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
6	552.55	2.4728E-002	127.50
9	794.32	3.5833E-002	71.17

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: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	1.0470E-001	7.51E-002	2.3211E-002
	1332.49	100.00	7.5146E-002		2.6626E-002
Nb-94	702.63	100.00	1.0125E-001	9.47E-002	-5.3939E-002
	871.10	100.00	9.4682E-002		1.1355E-002
Ag-108m	79.20	7.10	6.9097E+000	1.18E-001	-7.9621E+000
	433.93	89.90	1.2641E-001		-3.2530E-002
	614.37	90.40	1.2331E-001		-1.5139E-001
	722.95	90.50	1.1776E-001		1.3589E-003
Sb-125	176.33	6.89	2.2902E+000	3.87E-001	-3.7184E-001
	427.89	29.33	3.8748E-001		6.7258E-003
	463.38	10.35	1.0659E+000		-1.3768E-002
	600.56	17.80	5.6721E-001		1.0455E-001
	606.64	5.02	2.7926E+000		3.5952E+000
	635.90	11.32	8.8511E-001		-1.5747E-001
Cs-134	563.23	8.38	1.3905E+000	1.21E-001	1.3497E+000
	569.32	15.43	7.2582E-001		1.0679E-002
	604.70	97.60	1.4053E-001		-2.1180E-002
	795.84	85.40	1.2139E-001		8.5977E-002
	801.93	8.73	1.1463E+000		6.4770E-001
Cs-137	661.65	85.12	1.3410E-001	1.34E-001	7.0780E-002
Eu-152	121.78	28.40	7.8616E-001	3.49E-001	-1.3725E-001
	244.69	7.49	2.0042E+000		1.7066E+000
	344.27	26.50	4.4668E-001		1.6613E-001
	778.89	12.74	7.3223E-001		-2.2566E-001
	867.32	4.16	2.3075E+000		3.7853E-001
	964.01	14.40	8.4501E-001		-1.7096E-001
	1085.78	10.00	9.9167E-001		8.7545E-001
	1112.02	13.30	7.7132E-001		-4.2422E-001
1407.95	20.70	3.4948E-001	-5.9383E-001		
Eu-154	123.07	40.50	5.4763E-001	2.48E-001	2.1179E-001
	247.94	6.60	2.0592E+000		-1.0843E+000
	591.81	4.83	2.1397E+000		-2.3154E-001
	723.30	19.70	5.5255E-001		2.6111E-001
	756.87	4.33	2.3204E+000		-4.4439E-001
	873.19	11.50	8.0722E-001		3.7203E-001
	996.32	10.30	9.5037E-001		2.6352E-001
	1004.76	17.90	5.2862E-001		3.5828E-001
1274.45	35.50	2.4821E-001	2.8349E-002		
Eu-155	86.54	30.90	1.3265E+000	1.33E+000	9.8852E-001
	105.31	20.70	1.3506E+000		-1.2896E-002
Am-241	59.54	35.90	2.5485E+000	2.55E+000	8.0129E-001
Cm-243	228.19	10.56	1.3468E+000	9.75E-001	-3.8415E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.7487E-001	9.75E-001	-9.1025E-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 7/28/2006 10:03:21 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-169-F

Sample Title: OOL-10-01-169-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 9:53:18 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-169-F
Title: OOL-10-01-169-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	284-	306	291.19	72.88	0.90	1.55E+002	42.95	7.29E+002
m	2	284-	306	299.72	75.02	0.91	2.73E+002	50.47	8.74E+002
	3	332-	344	339.09	84.86	0.53	1.41E+002	90.57	7.53E+002
	4	945-	960	952.83	238.30	1.01	2.40E+002	62.98	2.64E+002
	5	1398-	1414	1405.28	351.42	1.22	1.40E+002	44.74	1.22E+002
	6	2320-	2337	2329.53	582.50	0.94	1.23E+002	36.76	7.00E+001
	7	2424-	2443	2434.33	608.70	1.74	9.19E+001	38.74	8.51E+001
	8	3632-	3651	3640.86	910.35	1.54	1.31E+002	29.01	2.50E+001
	9	3865-	3881	3870.93	967.88	2.08	7.36E+001	27.93	4.14E+001
	10	5827-	5852	5839.43	1460.03	1.75	8.20E+002	60.66	3.25E+001
	11	7048-	7062	7055.24	1764.00	0.76	3.70E+001	16.23	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: 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	0.977	1460.81*	10.67	1.73783E+001	1.90638E+000
TL-208	0.461	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.60125E-001	8.47864E-002
		860.37	12.46		
Pb-212	0.578	74.81* @	10.70	8.90411E+000	2.39874E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.685	238.63*	44.60	7.48056E-001	2.28724E-001
		609.31*	46.30	3.58314E-001	1.57392E-001
		1120.29	15.10		
Ac-228	0.608	1764.49*	15.80	5.77032E-001	2.59584E-001
		338.32	11.40		
		911.07*	27.70	9.40737E-001	2.34849E-001
		969.11*	16.60	8.93076E-001	3.51708E-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	0.977	1.737835E+001	1.906380E+000
TL-208	0.461	2.601251E-001	8.478642E-002
Pb-212 @	0.578	7.480565E-001	2.287237E-001
Bi-214	0.685	4.171065E-001	1.345854E-001
Ac-228	0.608	9.260396E-001	1.953093E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.5770E-001	27.77
3	84.86	2.3479E-001	64.29
5	351.42	2.3367E-001	31.91

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	1.0661E-001	8.01E-002	1.6670E-002
	1332.49	100.00	8.0126E-002		-5.1576E-003
Nb-94	702.63	100.00	1.0741E-001	9.56E-002	8.9184E-003
	871.10	100.00	9.5618E-002		7.0894E-002
Ag-108m	79.20	7.10	7.1857E+000	1.22E-001	-2.5080E+000
	433.93	89.90	1.2583E-001		-8.6448E-002
	614.37	90.40	1.2294E-001		-4.9239E-002
	722.95	90.50	1.2190E-001		-5.4305E-002
Sb-125	176.33	6.89	2.2766E+000	3.92E-001	-1.0986E+000
	427.89	29.33	3.9185E-001		-6.2705E-002
	463.38	10.35	1.1616E+000		5.9610E-001
	600.56	17.80	5.6721E-001		-1.4392E-001
	606.64	5.02	2.6651E+000		2.5960E+000
	635.90	11.32	8.9847E-001		2.6774E-001
Cs-134	563.23	8.38	1.3505E+000	1.19E-001	6.1271E-001
	569.32	15.43	6.7711E-001		-1.7494E-001
	604.70	97.60	1.3582E-001		-1.4683E-002
	795.84	85.40	1.1945E-001		4.2195E-002
	801.93	8.73	1.1463E+000		3.0186E-001
Cs-137	661.65	85.12	1.3490E-001	1.35E-001	1.1317E-001
Eu-152	121.78	28.40	8.1672E-001	3.86E-001	5.2681E-001
	244.69	7.49	2.0003E+000		9.3242E-001
	344.27	26.50	4.4253E-001		-1.2931E-001
	778.89	12.74	7.7710E-001		9.2586E-003
	867.32	4.16	2.2166E+000		2.9336E-001
	964.01	14.40	9.7816E-001		-3.4916E-002
	1085.78	10.00	9.8177E-001		1.5455E-001
	1112.02	13.30	8.0312E-001		-5.7560E-001
	1407.95	20.70	3.8642E-001		1.2973E-001
Eu-154	123.07	40.50	5.6518E-001	2.66E-001	3.3829E-001
	247.94	6.60	2.1194E+000		1.9737E-001
	591.81	4.83	2.2113E+000		1.2225E+000
	723.30	19.70	5.6379E-001		-2.9212E-002
	756.87	4.33	2.3204E+000		-1.2572E+000
	873.19	11.50	8.2784E-001		9.7583E-002
	996.32	10.30	9.3149E-001		-2.7946E-001
	1004.76	17.90	5.4783E-001		-6.0352E-002
	1274.45	35.50	2.6626E-001		9.1812E-002
Eu-155	86.54	30.90	1.3427E+000	1.34E+000	4.5298E-001
	105.31	20.70	1.3478E+000		-3.9574E-001
Am-241	59.54	35.90	2.7048E+000	2.70E+000	-2.8970E-001
Cm-243	228.19	10.56	1.4138E+000	9.48E-001	5.0610E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.4777E-001	9.48E-001	4.5158E-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 7/28/2006 2:30:11 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-10-01-170-F

Sample Title: OOL-10-01-170-F-G

Description: Satulated Soil

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 2:20:09 PM

Live Time: 600.0 seconds

Real Time: 601.1 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-10-01-170-F
Title: OOL-10-01-170-F-G
Description: Satulated Soil

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1171-	1190	1180.22	295.01	1.11	1.55E+002	59.05	2.15E+002
2	1396-	1417	1407.45	351.82	0.84	2.64E+002	57.63	1.60E+002
3	2424-	2447	2437.07	609.23	2.32	3.29E+002	51.30	8.93E+001
4	3869-	3886	3878.39	969.56	0.96	7.18E+001	27.67	3.92E+001
5	4473-	4493	4481.98	1120.46	1.33	9.96E+001	30.00	3.74E+001
6	5828-	5859	5844.04	1460.98	1.88	7.40E+002	58.78	3.19E+001
7	7050-	7067	7058.69	1764.64	0.66	5.30E+001	19.81	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	0.999	1460.81*	10.67	1.62478E+001	1.84267E+000
Bi-214	1.000	609.31*	46.30	1.32209E+000	2.62834E-001
		1120.29*	15.10	1.41012E+000	4.50170E-001
		1764.49*	15.80	8.60044E-001	3.32994E-001
PB-214	0.555	74.82 @	6.21		
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.22319E+000	5.08853E-001
		351.92*	37.20	1.11790E+000	3.07200E-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	1.624777E+001	1.842669E+000
Bi-214	1.000	1.190794E+000	1.875527E-001
PB-214 @	0.555	1.146021E+000	2.629902E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	969.56	1.1966E-001	38.54

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: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	1.0637E-001	8.05E-002	-5.7088E-002
	1332.49	100.00	8.0520E-002		-4.0137E-002
Nb-94	702.63	100.00	1.1251E-001	1.08E-001	-2.0966E-002
	871.10	100.00	1.0769E-001		-8.4252E-003
Ag-108m	79.20	7.10	9.7679E+000	1.36E-001	-1.7704E+001
	433.93	89.90	1.3642E-001		1.3362E-001
	614.37	90.40	2.0043E-001		-1.0099E-001
	722.95	90.50	1.3811E-001		3.8657E-003
Sb-125	176.33	6.89	2.9670E+000	4.25E-001	8.5053E-001
	427.89	29.33	4.2477E-001		2.7450E-002
	463.38	10.35	1.2379E+000		-4.2303E-002
	600.56	17.80	6.7275E-001		-5.0275E-002
	606.64	5.02	3.9850E+000		1.2951E+001
	635.90	11.32	9.8943E-001		-4.1887E-001
Cs-134	563.23	8.38	1.4767E+000	1.33E-001	-4.1897E-002
	569.32	15.43	7.8101E-001		-5.8433E-001
	604.70	97.60	1.9155E-001		4.4980E-002
	795.84	85.40	1.3257E-001		-4.7400E-002
	801.93	8.73	1.1999E+000		-1.2740E+000
Cs-137	661.65	85.12	1.4677E-001	1.47E-001	1.5745E-001
Eu-152	121.78	28.40	9.5308E-001	4.07E-001	-5.2584E-001
	244.69	7.49	2.3734E+000		-3.1906E+000
	344.27	26.50	5.1703E-001		-7.0746E-001
	778.89	12.74	8.4082E-001		-4.5982E-001
	867.32	4.16	2.6375E+000		-2.3400E-001
	964.01	14.40	9.6850E-001		-5.8096E-001
	1085.78	10.00	1.0292E+000		5.8197E-001
	1112.02	13.30	8.7091E-001		-7.0785E-002
1407.95	20.70	4.0662E-001	1.1394E-001		
Eu-154	123.07	40.50	6.6515E-001	2.61E-001	3.8721E-002
	247.94	6.60	2.4504E+000		-3.1885E-001
	591.81	4.83	2.5203E+000		8.0925E-001
	723.30	19.70	6.4655E-001		7.1633E-001
	756.87	4.33	2.4796E+000		-4.5591E-001
	873.19	11.50	9.4796E-001		-7.9199E-001
	996.32	10.30	8.9381E-001		-6.6360E-002
	1004.76	17.90	5.8053E-001		3.1790E-001
1274.45	35.50	2.6120E-001	-6.0742E-002		
Eu-155	86.54	30.90	1.7460E+000	1.73E+000	2.4434E+000
	105.31	20.70	1.7259E+000		7.1237E-001
Am-241	59.54	35.90	4.5842E+000	4.58E+000	-8.8524E-001
Cm-243	228.19	10.56	1.6900E+000	1.16E+000	-6.2317E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1633E+000	1.16E+000	6.8762E-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 7/28/2006 9:35:35 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-10-01-171-F

Sample Title: OOL-10-01-171-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 9:25:32 PM

Live Time: 600.0 seconds

Real Time: 601.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-171-F
 Title: OOL-10-01-171-F-G
 Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	303	291.37	72.93	1.03	1.63E+002	42.69	7.56E+002
m	2	284-	303	299.42	74.94	1.03	2.80E+002	49.31	7.72E+002
	3	332-	343	339.06	84.85	0.79	1.15E+002	84.54	6.97E+002
	4	944-	958	953.28	238.42	1.13	2.14E+002	61.43	2.67E+002
	5	1346-	1358	1350.96	337.84	1.05	4.18E+001	38.87	1.33E+002
	6	1396-	1412	1405.53	351.49	0.66	1.11E+002	48.66	1.62E+002
	7	2029-	2049	2039.03	509.87	1.11	1.28E+002	42.71	9.57E+001
	8	2322-	2337	2329.11	582.40	1.24	1.28E+002	34.87	6.28E+001
	9	2427-	2440	2433.54	608.50	1.64	1.06E+002	34.61	7.18E+001
	10	3632-	3648	3640.77	910.33	0.97	1.34E+002	29.98	3.19E+001
	11	3863-	3881	3872.71	968.32	0.67	7.88E+001	28.77	4.02E+001
	12	5826-	5852	5839.35	1460.01	1.66	8.47E+002	58.01	6.62E+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	0.952	511.00*	100.00	2.18843E-001	7.86918E-002
K-40	0.976	1460.81*	10.67	1.79695E+001	1.90521E+000
TL-208	0.732	277.35	6.80		
		510.84*	21.60	1.01316E+000	3.73592E-001
		583.14*	84.20	2.70994E-001	8.17411E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	9.15851E+000	2.41308E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.387	238.63*	44.60	6.66516E-001	2.18214E-001
		609.31*	46.30	4.14126E-001	1.44276E-001
		1120.29	15.10		
Ac-228	0.981	1764.49	15.80		
		338.32*	11.40	5.55352E-001	5.23246E-001
		911.07*	27.70	9.62871E-001	2.42187E-001
		969.11*	16.60	9.56088E-001	3.63371E-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	0.952	1.603079E-001	8.062565E-002
K-40	0.976	1.796949E+001	1.905212E+000
TL-208	0.732	2.709945E-001	8.126264E-002
Pb-212 @	0.580	6.665164E-001	2.182137E-001
Bi-214	0.387	4.141255E-001	1.442764E-001
Ac-228	0.981	9.084117E-001	1.880611E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.7145E-001	26.21
3	84.85	1.9214E-001	73.33
6	351.49	1.8579E-001	43.65

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	1.0518E-001	7.87E-002	-3.2128E-002
	1332.49	100.00	7.8738E-002		-2.2572E-002
Nb-94	702.63	100.00	1.0005E-001	9.42E-002	9.9602E-003
	871.10	100.00	9.4211E-002		1.1182E-002
Ag-108m	79.20	7.10	7.0436E+000	1.20E-001	-8.7557E+000
	433.93	89.90	1.2017E-001		-9.6702E-003
	614.37	90.40	1.2478E-001		-1.1090E-001
	722.95	90.50	1.2511E-001		9.9693E-003
Sb-125	176.33	6.89	2.2919E+000	3.82E-001	-1.8933E+000
	427.89	29.33	3.8217E-001		1.6699E-001
	463.38	10.35	1.1566E+000		2.9788E-001
	600.56	17.80	5.9512E-001		4.1366E-002
	606.64	5.02	2.9092E+000		5.0852E+000
	635.90	11.32	9.5304E-001		-4.7469E-001
Cs-134	563.23	8.38	1.3431E+000	1.25E-001	6.0093E-001
	569.32	15.43	7.0927E-001		-6.5999E-001
	604.70	97.60	1.4534E-001		-8.6876E-002
	795.84	85.40	1.2517E-001		9.8943E-003
	801.93	8.73	1.1657E+000		5.0728E-001
Cs-137	661.65	85.12	1.3490E-001	1.35E-001	8.1689E-003
Eu-152	121.78	28.40	7.8405E-001	3.38E-001	-3.0770E-001
	244.69	7.49	1.8927E+000		-3.4289E-001
	344.27	26.50	4.3495E-001		-2.1377E-001
	778.89	12.74	7.7710E-001		1.1316E-001
	867.32	4.16	2.3075E+000		1.9711E-001
	964.01	14.40	9.2491E-001		2.1315E-001
	1085.78	10.00	9.5140E-001		2.2984E-001
	1112.02	13.30	7.3429E-001		-1.4560E+000
1407.95	20.70	3.3754E-001	-1.0202E-001		
Eu-154	123.07	40.50	5.4419E-001	2.52E-001	-3.0490E-001
	247.94	6.60	2.0787E+000		4.0377E-001
	591.81	4.83	2.0730E+000		-1.8415E+000
	723.30	19.70	5.7843E-001		2.7105E-001
	756.87	4.33	2.2915E+000		8.7202E-001
	873.19	11.50	8.6753E-001		7.3055E-001
	996.32	10.30	8.8742E-001		-2.3230E-001
	1004.76	17.90	5.2015E-001		5.5135E-002
1274.45	35.50	2.5160E-001	-3.2287E-002		
Eu-155	86.54	30.90	1.3418E+000	1.34E+000	2.6838E-001
	105.31	20.70	1.3361E+000		5.2183E-001
Am-241	59.54	35.90	2.5752E+000	2.58E+000	-5.1351E-001
Cm-243	228.19	10.56	1.4204E+000	9.68E-001	-6.9908E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.6756E-001	9.68E-001	3.4742E-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 7/28/2006 9:48:05 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-10-01-172-F

Sample Title: OOL-10-01-172-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 9:38:02 PM

Live Time: 600.0 seconds

Real Time: 601.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-172-F
Title: OOL-10-01-172-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 9 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.981	1460.81*	10.67	1.78030E+001	1.90184E+000
TL-208	0.463	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.18796E-001	8.06513E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	1.01186E+001	2.60068E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.23544E-001	2.20051E-001
Bi-214	0.388	609.31*	46.30	4.53223E-001	1.53942E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.616	338.32	11.40		
		911.07*	27.70	8.61775E-001	2.42970E-001
		969.11*	16.60	9.67612E-001	3.52772E-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	0.981	1.780301E+001	1.901840E+000
TL-208	0.463	2.187963E-001	8.065126E-002
Pb-212 @	0.580	6.235442E-001	2.200511E-001
Bi-214	0.388	4.532229E-001	1.539421E-001
Ac-228	0.616	8.958273E-001	2.001010E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	72.65	2.8657E-001	25.78
4	351.55	2.2173E-001	31.70

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: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	1.0614E-001	8.41E-002	3.6601E-003
	1332.49	100.00	8.4142E-002		3.5189E-002
Nb-94	702.63	100.00	1.0244E-001	9.61E-002	4.2095E-002
	871.10	100.00	9.6082E-002		-3.9561E-002
Ag-108m	79.20	7.10	7.3457E+000	1.16E-001	9.1074E-001
	433.93	89.90	1.2756E-001		6.2367E-002
	614.37	90.40	1.1648E-001		-8.0848E-002
	722.95	90.50	1.3752E-001		8.7179E-002
Sb-125	176.33	6.89	2.3290E+000	3.71E-001	-3.2346E-001
	427.89	29.33	3.7131E-001		-6.1811E-002
	463.38	10.35	1.1289E+000		-7.6450E-002
	600.56	17.80	6.5426E-001		-4.2011E-001
	606.64	5.02	2.8843E+000		4.3364E+000
	635.90	11.32	9.2778E-001		-7.6421E-001
Cs-134	563.23	8.38	1.2425E+000	1.15E-001	-1.3717E+000
	569.32	15.43	7.2172E-001		1.9399E-001
	604.70	97.60	1.4820E-001		3.8873E-002
	795.84	85.40	1.1547E-001		3.1159E-002
	801.93	8.73	1.1414E+000		7.4958E-001
Cs-137	661.65	85.12	1.2667E-001	1.27E-001	-3.8605E-002
Eu-152	121.78	28.40	8.1807E-001	3.76E-001	-2.7102E-001
	244.69	7.49	1.8762E+000		-2.5768E-001
	344.27	26.50	4.2810E-001		-6.7439E-003
	778.89	12.74	7.7710E-001		-4.0343E-001
	867.32	4.16	2.3406E+000		-3.1634E-001
	964.01	14.40	9.3440E-001		3.1756E-002
	1085.78	10.00	1.0303E+000		-1.7661E-001
	1112.02	13.30	7.4185E-001		-3.2691E-001
1407.95	20.70	3.7576E-001	-5.3770E-002		
Eu-154	123.07	40.50	5.7037E-001	2.52E-001	-1.8345E-001
	247.94	6.60	2.0738E+000		1.1773E-001
	591.81	4.83	2.2737E+000		-4.1170E-001
	723.30	19.70	6.2851E-001		3.1467E-001
	756.87	4.33	2.5909E+000		1.0665E+000
	873.19	11.50	8.3594E-001		-2.8074E-001
	996.32	10.30	9.6428E-001		2.3948E-001
	1004.76	17.90	5.5849E-001		3.8568E-003
1274.45	35.50	2.5160E-001	1.1620E-001		
Eu-155	86.54	30.90	1.3587E+000	1.36E+000	9.9739E-001
	105.31	20.70	1.3866E+000		3.7078E-001
Am-241	59.54	35.90	2.5852E+000	2.59E+000	-1.1924E+000
Cm-243	228.19	10.56	1.4840E+000	9.79E-001	1.0321E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.7851E-001	9.79E-001	-6.3916E-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 7/28/2006 2:15:16 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-173-F

Sample Title: OOL-10-01-173-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 2:05:15 PM

Live Time: 600.0 seconds

Real Time: 601.1 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-173-F
Title: OOL-10-01-173-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	1397-	1415	1408.82	352.16	2.14	2.64E+002	55.47	1.59E+002
2	2425-	2448	2435.97	608.95	1.92	2.68E+002	48.58	8.66E+001
3	5829-	5859	5844.22	1461.02	2.31	6.79E+002	54.52	1.95E+001
4	7051-	7070	7060.18	1765.02	0.36	6.40E+001	17.69	5.00E+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	0.999	1460.81*	10.67	1.48963E+001	1.69922E+000
Bi-214	0.690	609.31*	46.30	1.07944E+000	2.36333E-001
		1120.29	15.10		
		1764.49*	15.80	1.03930E+000	3.05550E-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	1.489631E+001	1.699224E+000
Bi-214	0.690	1.064415E+000	1.869395E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	352.16	4.3948E-001	21.03

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: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	1.1128E-001	9.01E-002	9.2808E-003
	1332.49	100.00	9.0121E-002		2.2408E-002
Nb-94	702.63	100.00	1.0866E-001	1.05E-001	-1.4489E-002
	871.10	100.00	1.0463E-001		5.4295E-002
Ag-108m	79.20	7.10	1.0033E+001	1.30E-001	-1.3009E+001
	433.93	89.90	1.4115E-001		-6.1694E-002
	614.37	90.40	1.8514E-001		-1.1310E-002
	722.95	90.50	1.3032E-001		5.5345E-002
Sb-125	176.33	6.89	2.9168E+000	4.49E-001	3.9753E-001
	427.89	29.33	4.4941E-001		-2.1056E-001
	463.38	10.35	1.2256E+000		1.1332E+000
	600.56	17.80	6.6543E-001		1.5048E-001
	606.64	5.02	3.6909E+000		1.8897E-001
	635.90	11.32	1.0208E+000		1.1237E+000
Cs-134	563.23	8.38	1.5085E+000	1.38E-001	4.3060E-001
	569.32	15.43	7.6678E-001		-8.7762E-001
	604.70	97.60	1.7846E-001		1.1702E-002
	795.84	85.40	1.3754E-001		-2.7143E-002
	801.93	8.73	1.2759E+000		-7.1872E-001
Cs-137	661.65	85.12	1.3330E-001	1.33E-001	1.1748E-001
Eu-152	121.78	28.40	9.5143E-001	4.31E-001	-1.4707E-001
	244.69	7.49	2.2659E+000		-4.0073E+000
	344.27	26.50	5.2970E-001		-7.6861E-001
	778.89	12.74	8.4729E-001		-2.4772E-001
	867.32	4.16	2.3479E+000		2.5749E-001
	964.01	14.40	9.6850E-001		3.6706E-001
	1085.78	10.00	1.0588E+000		6.6141E-002
	1112.02	13.30	7.8205E-001		-1.4807E+000
1407.95	20.70	4.3072E-001	1.1830E-001		
Eu-154	123.07	40.50	6.6538E-001	2.68E-001	-1.2792E-001
	247.94	6.60	2.3969E+000		-3.7650E+000
	591.81	4.83	2.4406E+000		7.7691E-001
	723.30	19.70	6.0969E-001		6.5410E-001
	756.87	4.33	2.5263E+000		1.7517E+000
	873.19	11.50	9.3307E-001		4.9599E-001
	996.32	10.30	9.9287E-001		6.2213E-001
	1004.76	17.90	5.8319E-001		3.3631E-001
	1274.45	35.50	2.6798E-001		-9.4792E-002
	Eu-155	86.54	30.90		1.7562E+000
	105.31	20.70	1.7952E+000		3.2701E-002
Am-241	59.54	35.90	4.5512E+000	4.55E+000	1.3919E+000
Cm-243	228.19	10.56	1.6202E+000	1.16E+000	2.2000E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1600E+000	1.16E+000	1.8629E-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 7/28/2006 9:07:18 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-174-F

Sample Title: OOL-10-01-174-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 8:57:15 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-174-F
Title: OOL-10-01-174-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	304	299.74	75.02	0.69	1.46E+002	80.82	6.81E+002
2	911-	922	917.42	229.45	0.55	3.65E+001	43.42	1.81E+002
3	946-	960	953.44	238.46	1.13	2.31E+002	59.76	2.41E+002
4	1401-	1412	1405.28	351.43	0.84	9.46E+001	33.60	7.84E+001
5	2324-	2336	2329.17	582.41	0.99	1.03E+002	30.82	5.39E+001
6	2426-	2442	2433.78	608.56	1.21	1.27E+002	33.41	5.25E+001
7	3632-	3649	3640.90	910.36	1.48	1.17E+002	28.96	3.12E+001
8	5826-	5851	5839.43	1460.03	1.70	6.96E+002	55.24	2.30E+001
9	7048-	7061	7054.17	1763.73	0.94	4.70E+001	13.44	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	0.977	1460.81*	10.67	1.47603E+001	1.67348E+000
TL-208	0.458	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.18000E-001	7.10865E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	4.75674E+000	2.79469E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.19523E-001	2.17828E-001
Bi-214	0.678	609.31*	46.30	4.93404E-001	1.43770E-001
		1120.29	15.10		
		1764.49*	15.80	7.32730E-001	2.21922E-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	0.977	1.476031E+001	1.673484E+000
TL-208	0.458	2.180004E-001	7.108652E-002
Pb-212 @	0.580	7.195226E-001	2.178283E-001
Bi-214	0.678	5.641546E-001	1.206620E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	229.45	6.0814E-002	118.99
4	351.43	1.5761E-001	35.53
7	910.36	1.9466E-001	24.79

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: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	9.9774E-002	7.80E-002	2.8430E-002
	1332.49	100.00	7.8034E-002		1.4158E-003
Nb-94	702.63	100.00	1.0085E-001	9.47E-002	3.2882E-003
	871.10	100.00	9.4682E-002		-5.3332E-002
Ag-108m	79.20	7.10	6.9974E+000	1.13E-001	-7.9516E+000
	433.93	89.90	1.1925E-001		-2.7846E-002
	614.37	90.40	1.1331E-001		-1.3458E-002
	722.95	90.50	1.1776E-001		8.2140E-002
Sb-125	176.33	6.89	2.2158E+000	3.57E-001	9.0290E-001
	427.89	29.33	3.5726E-001		1.4291E-001
	463.38	10.35	1.0926E+000		6.6350E-001
	600.56	17.80	5.9122E-001		-1.2218E-001
	606.64	5.02	2.7874E+000		4.5022E+000
	635.90	11.32	8.6467E-001		-4.6143E-002
Cs-134	563.23	8.38	1.2625E+000	1.13E-001	7.2592E-002
	569.32	15.43	6.5018E-001		-6.3217E-001
	604.70	97.60	1.4269E-001		-5.7834E-002
	795.84	85.40	1.1291E-001		1.1121E-002
	801.93	8.73	1.0381E+000		-1.7562E-001
Cs-137	661.65	85.12	1.3330E-001	1.33E-001	-1.1402E-002
Eu-152	121.78	28.40	7.5688E-001	3.61E-001	3.1836E-001
	244.69	7.49	1.8044E+000		-8.0747E-001
	344.27	26.50	4.5969E-001		1.8009E-001
	778.89	12.74	7.9365E-001		-1.1431E-001
	867.32	4.16	2.3296E+000		9.2126E-001
	964.01	14.40	8.9335E-001		7.1523E-001
	1085.78	10.00	9.8673E-001		1.2058E-001
	1112.02	13.30	7.1891E-001		-6.7481E-001
1407.95	20.70	3.6100E-001	-7.8455E-002		
Eu-154	123.07	40.50	5.1771E-001	2.65E-001	-1.9870E-001
	247.94	6.60	2.0346E+000		2.3435E-001
	591.81	4.83	2.1758E+000		1.2256E+000
	723.30	19.70	5.3717E-001		2.3339E-002
	756.87	4.33	2.3957E+000		9.2601E-001
	873.19	11.50	8.2376E-001		8.1202E-004
	996.32	10.30	8.8238E-001		7.9658E-001
	1004.76	17.90	5.1730E-001		3.6600E-002
1274.45	35.50	2.6467E-001	8.6113E-002		
Eu-155	86.54	30.90	1.3127E+000	1.31E+000	1.5166E+000
	105.31	20.70	1.3316E+000		6.1652E-001
Am-241	59.54	35.90	2.5869E+000	2.59E+000	5.4040E-001
Cm-243	228.19	10.56	1.3705E+000	9.17E-001	-9.7485E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.1727E-001	9.17E-001	3.9602E-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 7/28/2006 8:54:33 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-175-F

Sample Title: OOL-10-01-175-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 8:44:31 PM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-175-F
Title: OOL-10-01-175-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	305	299.40	74.94	0.71	1.19E+002	97.13	9.31E+002
2	332-	344	338.90	84.81	0.74	9.82E+001	95.39	8.46E+002
3	945-	959	953.45	238.46	0.80	2.22E+002	62.11	2.72E+002
4	1173-	1187	1178.22	294.66	0.88	7.60E+001	46.31	1.65E+002
5	1345-	1358	1351.30	337.93	0.84	7.87E+001	39.42	1.18E+002
6	1401-	1414	1405.56	351.49	1.35	1.09E+002	41.83	1.24E+002
7	2033-	2051	2041.20	510.41	1.34	1.18E+002	39.90	8.75E+001
8	2321-	2337	2329.95	582.61	1.08	1.41E+002	36.85	6.80E+001
9	2427-	2443	2433.46	608.49	0.85	1.56E+002	35.74	5.35E+001
10	3635-	3650	3640.88	910.36	1.01	1.01E+002	28.09	3.47E+001
11	3849-	3880	3871.97	968.13	0.71	9.92E+001	36.75	5.08E+001
12	4472-	4487	4478.14	1119.69	0.38	5.29E+001	20.47	1.81E+001
13	5827-	5853	5839.32	1460.00	1.80	8.18E+002	57.78	1.09E+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: 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	0.987	511.00*	100.00	2.02220E-001	7.34170E-002
K-40	0.975	1460.81*	10.67	1.73475E+001	1.86387E+000
TL-208	0.744	277.35	6.80		
		510.84*	21.60	9.36204E-001	3.48387E-001
		583.14*	84.20	2.98137E-001	8.70652E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.90487E+000	3.26810E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.689	238.63*	44.60	6.92599E-001	2.22052E-001
		609.31*	46.30	6.06326E-001	1.58111E-001
		1120.29*	15.10	7.27025E-001	2.91984E-001
PB-214	0.614	1764.49	15.80		
		74.82* @	6.21	6.72820E+000	5.65217E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
Ac-228	0.978	295.21*	19.20	5.79435E-001	3.66265E-001
		351.92*	37.20	4.47791E-001	1.87377E-001
		338.32*	11.40	1.04504E+000	5.48308E-001
		911.07*	27.70	7.27731E-001	2.18434E-001
		969.11*	16.60	1.20352E+000	4.63570E-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	0.987	1.378224E-001	7.575830E-002
K-40	0.975	1.734748E+001	1.863866E+000
TL-208	0.744	2.981372E-001	8.652140E-002
Pb-212 @	0.580	6.925990E-001	2.220517E-001
Bi-214	0.689	6.336939E-001	1.390352E-001
PB-214 @	0.614	4.750980E-001	1.668145E-001
Ac-228	0.978	8.407125E-001	1.858939E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.81	1.6367E-001	97.14

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: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	9.8244E-002	7.44E-002	-1.8368E-001
	1332.49	100.00	7.4406E-002		-4.0482E-002
Nb-94	702.63	100.00	1.0399E-001	8.98E-002	3.5510E-002
	871.10	100.00	8.9849E-002		-2.0282E-002
Ag-108m	79.20	7.10	7.3612E+000	1.27E-001	-1.6983E+000
	433.93	89.90	1.2698E-001		-4.0436E-002
	614.37	90.40	1.2977E-001		3.7154E-002
	722.95	90.50	1.3240E-001		8.0827E-002
Sb-125	176.33	6.89	2.2936E+000	3.91E-001	4.9183E-002
	427.89	29.33	3.9098E-001		3.5521E-002
	463.38	10.35	1.1213E+000		-2.0963E-001
	600.56	17.80	5.7934E-001		5.5987E-003
	606.64	5.02	2.9241E+000		4.1762E+000
	635.90	11.32	9.4992E-001		3.4327E-002
Cs-134	563.23	8.38	1.3130E+000	1.17E-001	8.7889E-003
	569.32	15.43	6.5018E-001		-7.0340E-001
	604.70	97.60	1.4586E-001		-9.6587E-003
	795.84	85.40	1.1698E-001		-2.4342E-002
	801.93	8.73	1.0859E+000		3.2234E-002
Cs-137	661.65	85.12	1.3044E-001	1.30E-001	7.1591E-002
Eu-152	121.78	28.40	7.9417E-001	3.90E-001	4.1119E-003
	244.69	7.49	1.9333E+000		3.9086E-001
	344.27	26.50	4.5323E-001		-3.6628E-002
	778.89	12.74	7.7038E-001		-1.3625E-001
	867.32	4.16	2.1216E+000		-2.6047E+000
	964.01	14.40	8.8590E-001		-3.9091E-002
	1085.78	10.00	8.9287E-001		2.8626E-001
	1112.02	13.30	7.3429E-001		-4.0975E-001
	1407.95	20.70	3.8991E-001		-4.7508E-001
Eu-154	123.07	40.50	5.5201E-001	2.68E-001	2.7517E-001
	247.94	6.60	2.0469E+000		-2.4248E-001
	591.81	4.83	2.0655E+000		6.5222E-001
	723.30	19.70	6.1512E-001		5.8795E-001
	756.87	4.33	2.2524E+000		4.5481E-001
	873.19	11.50	8.1553E-001		2.5473E-001
	996.32	10.30	9.8701E-001		4.2802E-001
	1004.76	17.90	5.3968E-001		-2.8545E-001
	1274.45	35.50	2.6784E-001		-1.6722E-001
Eu-155	86.54	30.90	1.3788E+000	1.38E+000	5.7245E-001
	105.31	20.70	1.3958E+000		-1.2252E-001
Am-241	59.54	35.90	2.6164E+000	2.62E+000	-1.6741E-001
Cm-243	228.19	10.56	1.4454E+000	9.61E-001	6.2187E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.6142E-001	9.61E-001	3.8665E-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 7/28/2006 7:22:32 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-10-01-176-F

Sample Title: OOL-10-01-176-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 7:12:30 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-176-F
 Title: OOL-10-01-176-F-G
 Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	296-	303	299.85	75.05	0.96	1.39E+002	63.90	4.59E+002
M	2	944-	972	953.18	238.39	1.14	1.89E+002	31.71	1.97E+002
m	3	944-	972	967.59	242.00	1.14	4.90E+001	22.51	1.70E+002
	4	1174-	1186	1179.65	295.01	0.93	1.28E+002	36.83	8.41E+001
	5	1396-	1415	1406.06	351.62	1.22	1.67E+002	46.45	1.13E+002
	6	2324-	2337	2329.68	582.54	1.32	9.25E+001	29.14	4.65E+001
	7	2427-	2441	2433.75	608.56	1.49	2.13E+002	36.63	4.70E+001
	8	2901-	2910	2905.16	726.42	0.55	2.42E+001	17.11	2.28E+001
	9	3631-	3650	3641.71	910.57	0.47	8.58E+001	27.61	3.22E+001
	10	3866-	3878	3871.37	967.99	0.83	4.18E+001	22.53	3.42E+001
	11	4469-	4485	4477.11	1119.43	1.03	5.57E+001	21.19	1.93E+001
	12	4944-	4955	4949.44	1237.52	0.55	1.80E+001	17.31	2.40E+001
	13	5828-	5851	5839.86	1460.14	2.25	4.66E+002	43.92	8.99E+000
	14	7049-	7064	7055.17	1763.98	0.83	5.13E+001	16.18	5.67E+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	0.983	1460.81*	10.67	9.88261E+000	1.22787E+000
TL-208	0.463	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.95476E-001	6.66610E-002
		860.37	12.46		
Bi-212	0.978	727.17*	11.80	3.88911E-001	2.78322E-001
Pb-212	0.579	74.81* @	10.70	4.53236E+000	2.26240E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.88047E-001	1.35201E-001
Bi-214	0.979	609.31*	46.30	8.30377E-001	1.75688E-001
		1120.29*	15.10	7.66612E-001	3.02588E-001
		1764.49*	15.80	8.00338E-001	2.64574E-001
PB-214	0.775	74.82* @	6.21	7.80938E+000	3.93919E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98*	7.49	9.13733E-001	4.46125E-001
		295.21*	19.20	9.75376E-001	3.25351E-001
Ac-228	0.616	351.92*	37.20	6.87716E-001	2.22732E-001
		338.32	11.40		
		911.07*	27.70	6.16168E-001	2.10564E-001
		969.11*	16.60	5.06894E-001	2.78573E-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	0.983	9.882611E+000	1.227870E+000
TL-208	0.463	1.954764E-001	6.666098E-002
Bi-212	0.978	3.889112E-001	2.783218E-001
Pb-212 @	0.579	5.880470E-001	1.352011E-001
Bi-214	0.979	8.108377E-001	1.317554E-001
PB-214 @	0.775	7.989861E-001	1.699344E-001
Ac-228	0.616	5.764360E-001	1.679770E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
12	1237.52	3.0000E-002	96.19

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	8.7313E-002	7.37E-002	1.6208E-002
	1332.49	100.00	7.3657E-002		5.5015E-002
Nb-94	702.63	100.00	9.4241E-002	8.37E-002	1.2858E-001
	871.10	100.00	8.3656E-002		-5.5660E-002
Ag-108m	79.20	7.10	6.6994E+000	1.08E-001	-5.7669E+000
	433.93	89.90	1.1486E-001		-6.9268E-002
	614.37	90.40	1.1290E-001		-1.1109E-001
	722.95	90.50	1.0761E-001		-5.4845E-003
Sb-125	176.33	6.89	2.0682E+000	3.47E-001	3.5545E-001
	427.89	29.33	3.4657E-001		2.7520E-001
	463.38	10.35	9.3282E-001		1.2329E-001
	600.56	17.80	5.3561E-001		8.9622E-002
	606.64	5.02	3.1704E+000		9.0502E+000
	635.90	11.32	7.7336E-001		-2.5938E-001
Cs-134	563.23	8.38	1.1589E+000	1.13E-001	-9.0452E-001
	569.32	15.43	6.1961E-001		1.6551E-001
	604.70	97.60	1.5936E-001		-6.3121E-002
	795.84	85.40	1.1291E-001		7.0674E-002
	801.93	8.73	1.1064E+000		6.2652E-001
Cs-137	661.65	85.12	1.0416E-001	1.04E-001	2.3175E-004
Eu-152	121.78	28.40	7.1261E-001	3.53E-001	-7.8997E-001
	244.69	7.49	1.7340E+000		4.2359E-001
	344.27	26.50	3.9483E-001		1.8068E-001
	778.89	12.74	6.7652E-001		1.3956E-001
	867.32	4.16	1.9961E+000		-4.3347E+000
	964.01	14.40	7.9637E-001		-4.1868E-001
	1085.78	10.00	8.2993E-001		1.2897E-001
	1112.02	13.30	6.3160E-001		2.4488E-001
1407.95	20.70	3.5337E-001	-3.4637E-001		
Eu-154	123.07	40.50	5.0566E-001	2.17E-001	1.1678E-001
	247.94	6.60	1.8932E+000		2.9962E-001
	591.81	4.83	2.0427E+000		3.5223E-001
	723.30	19.70	4.9227E-001		2.0938E-002
	756.87	4.33	2.0880E+000		4.2003E-001
	873.19	11.50	7.6862E-001		2.9768E-001
	996.32	10.30	7.9711E-001		2.4673E-002
	1004.76	17.90	4.9082E-001		-3.3837E-001
1274.45	35.50	2.1715E-001	-3.9952E-001		
Eu-155	86.54	30.90	1.2450E+000	1.22E+000	1.0867E+000
	105.31	20.70	1.2152E+000		-4.5835E-001
Am-241	59.54	35.90	2.3564E+000	2.36E+000	-1.3212E+000
Cm-243	228.19	10.56	1.2448E+000	8.36E-001	-3.4393E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	8.3600E-001	8.36E-001	-2.0924E-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 7:19:52 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: GRN7780

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-01-176-F-R

Sample ID: OOL-10-01-176-F

Sample Title: OOL-10-01-176-F-G

Description: SANDBAGS

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 10:27:37 AM

Live Time: 600.0 seconds

Real Time: 600.8 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-01-176-F-R
Log Number: OOL-10-01-176-F
Title: OOL-10-01-176-F-G
Description: SANDBAGS

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2903-	2915	2908.28	727.03	0.72	1.51E+001	18.93	2.89E+001
2	3632-	3652	3641.77	910.41	0.47	1.00E+002	26.42	2.26E+001
3	5828-	5855	5840.24	1460.03	2.45	5.21E+002	52.41	4.39E+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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-01-176-F-R

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	0.980	1460.81*	10.67	1.14366E+001	1.47660E+000
Bi-212	0.999	727.17*	11.80	2.49398E-001	3.13825E-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-10-01-176-F-R

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	0.980	1.143659E+001	1.476599E+000
Bi-212	0.999	2.493984E-001	3.138252E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.41	1.6734E-001	26.32

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:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-01-176-F-R

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	1.0174E-001	8.41E-002	3.2231E-002
	1332.49	100.00	8.4085E-002		6.3863E-002
Nb-94	702.63	100.00	1.0385E-001	9.24E-002	4.5540E-002
	871.10	100.00	9.2362E-002		-2.4171E-002
Ag-108m	79.20	7.10	8.6875E+000	1.17E-001	-2.0799E+001
	433.93	89.90	1.2011E-001		-4.0153E-002
	614.37	90.40	1.4185E-001		-1.3451E-001
	722.95	90.50	1.1717E-001		-2.1762E-002
Sb-125	176.33	6.89	2.5552E+000	3.62E-001	-3.8176E-001
	427.89	29.33	3.6151E-001		-1.0855E-001
	463.38	10.35	1.1163E+000		7.7888E-001
	600.56	17.80	6.1759E-001		-3.7976E-002
	606.64	5.02	2.8848E+000		2.6335E+000
	635.90	11.32	8.8831E-001		4.3926E-001
Cs-134	563.23	8.38	1.2468E+000	1.18E-001	1.4241E+000
	569.32	15.43	6.6297E-001		-1.2180E+000
	604.70	97.60	1.4822E-001		1.5695E-001
	795.84	85.40	1.1789E-001		3.9667E-002
Cs-137	801.93	8.73	1.1079E+000	1.13E-001	-6.8768E-001
	661.65	85.12	1.1273E-001		-1.1866E-001
Eu-152	121.78	28.40	8.6665E-001	3.57E-001	-1.1626E-001
	244.69	7.49	1.9150E+000		-4.6318E+000
	344.27	26.50	4.5424E-001		-5.6186E-001
	778.89	12.74	7.4402E-001		1.1363E-001
	867.32	4.16	2.2664E+000		-6.7732E-001
	964.01	14.40	8.2935E-001		3.1876E-001
	1085.78	10.00	8.6502E-001		-8.1273E-001
	1112.02	13.30	6.7211E-001		-6.8314E-001
1407.95	20.70	3.5720E-001	-3.0570E-002		
Eu-154	123.07	40.50	6.0711E-001	2.36E-001	4.5706E-001
	247.94	6.60	2.0517E+000		-1.7842E+000
	591.81	4.83	2.1216E+000		-1.6605E+000
	723.30	19.70	5.2369E-001		3.4688E-002
	756.87	4.33	2.4126E+000		-2.2359E+000
	873.19	11.50	8.0351E-001		-6.6262E-001
	996.32	10.30	8.7256E-001		7.6128E-001
	1004.76	17.90	5.1233E-001		1.7195E-001
1274.45	35.50	2.3579E-001	-4.1575E-002		
Eu-155	86.54	30.90	1.5435E+000	1.54E+000	1.2438E+000
	105.31	20.70	1.5727E+000		2.7828E-001
Am-241	59.54	35.90	3.7057E+000	3.71E+000	4.2436E-002
Cm-243	228.19	10.56	1.4185E+000	1.02E+000	6.7191E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0172E+000	1.02E+000	2.4580E-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 7/28/2006 8:25:24 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-177-F

Sample Title: OOL-10-01-177-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 8:15:21 PM

Live Time: 600.0 seconds

Real Time: 601.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-177-F
Title: OOL-10-01-177-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 11 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.964	511.00*	100.00	2.10360E-001	7.44052E-002
K-40	0.980	1460.81*	10.67	1.66094E+001	1.79244E+000
TL-208	0.738	277.35	6.80		
		510.84*	21.60	9.73888E-001	3.53531E-001
		583.14*	84.20	2.31332E-001	8.06382E-002
		860.37	12.46		
Pb-212	0.579	74.81* @	10.70	5.80189E+000	2.97118E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.977	238.63*	44.60	6.49681E-001	2.05012E-001
		609.31*	46.30	5.45649E-001	1.63488E-001
		1120.29*	15.10	4.77196E-001	3.06678E-001
Ac-228	0.614	1764.49*	15.80	6.88568E-001	2.25664E-001
		338.32	11.40		
		911.07*	27.70	7.31306E-001	2.58834E-001
		969.11*	16.60	4.97637E-001	3.41812E-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	0.964	1.603921E-001	7.639938E-002
K-40	0.980	1.660942E+001	1.792444E+000
TL-208	0.738	2.313322E-001	8.028498E-002
Pb-212 @	0.579	6.496809E-001	2.050119E-001
Bi-214	0.977	5.763612E-001	1.215516E-001
Ac-228	0.614	6.461477E-001	2.063476E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.47	1.8611E-001	36.33

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: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	9.2950E-002	7.51E-002	-8.6692E-002
	1332.49	100.00	7.5146E-002		1.9002E-002
Nb-94	702.63	100.00	1.0085E-001	1.00E-001	2.3718E-002
	871.10	100.00	1.0016E-001		2.3846E-002
Ag-108m	79.20	7.10	7.0490E+000	1.21E-001	-7.1121E+000
	433.93	89.90	1.2318E-001		-6.7141E-002
	614.37	90.40	1.2108E-001		-9.3325E-002
	722.95	90.50	1.2109E-001		1.6052E-001
Sb-125	176.33	6.89	2.2298E+000	3.67E-001	-6.4270E-001
	427.89	29.33	3.6669E-001		2.8417E-002
	463.38	10.35	1.1591E+000		9.3930E-001
	600.56	17.80	5.6311E-001		-1.6470E-001
	606.64	5.02	2.9731E+000		5.9981E+000
	635.90	11.32	8.9847E-001		1.8979E-001
Cs-134	563.23	8.38	1.3688E+000	1.19E-001	1.3256E+000
	569.32	15.43	7.1966E-001		1.7964E-001
	604.70	97.60	1.4717E-001		-6.5136E-002
	795.84	85.40	1.1945E-001		1.0097E-001
	801.93	8.73	1.0436E+000		-5.9231E-001
Cs-137	661.65	85.12	1.3167E-001	1.32E-001	1.3707E-002
Eu-152	121.78	28.40	7.9348E-001	4.07E-001	-2.7670E-002
	244.69	7.49	1.9192E+000		-1.2695E+000
	344.27	26.50	4.2464E-001		-5.8823E-003
	778.89	12.74	7.6359E-001		-4.9210E-001
	867.32	4.16	2.3624E+000		-3.0790E-001
	964.01	14.40	8.9582E-001		1.8127E-001
	1085.78	10.00	8.7619E-001		-5.6162E-001
	1112.02	13.30	7.4560E-001		-3.0125E-001
1407.95	20.70	4.0686E-001	2.7111E-001		
Eu-154	123.07	40.50	5.5007E-001	2.48E-001	1.3388E-001
	247.94	6.60	2.1123E+000		3.2752E-001
	591.81	4.83	2.2531E+000		2.0890E+000
	723.30	19.70	5.5444E-001		7.3311E-001
	756.87	4.33	2.2325E+000		1.8519E-001
	873.19	11.50	8.4793E-001		4.0746E-001
	996.32	10.30	8.6707E-001		-1.7636E+000
	1004.76	17.90	5.5584E-001		5.2493E-001
1274.45	35.50	2.4821E-001	-1.3561E-001		
Eu-155	86.54	30.90	1.2871E+000	1.29E+000	3.7211E-002
	105.31	20.70	1.3866E+000		6.1383E-001
Am-241	59.54	35.90	2.5918E+000	2.59E+000	6.8049E-001
Cm-243	228.19	10.56	1.4297E+000	9.29E-001	7.9963E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.2883E-001	9.29E-001	-4.4099E-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 7/28/2006 8:29:46 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-10-01-178-F

Sample Title: OOL-10-01-178-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 8:29:39 PM

Live Time: 5.6 seconds

Real Time: 5.7 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\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: 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
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

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

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

? = nuclide is part of an undetermined 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: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	1.6418E+000	6.25E-001	2.2310E-001
	1332.49	100.00	6.2516E-001		0.0000E+000
Nb-94	702.63	100.00	5.4091E-001	5.41E-001	0.0000E+000
	871.10	100.00	5.6719E-001		0.0000E+000
Ag-108m	79.20	7.10	8.0339E+001	5.19E-001	-1.9933E+001
	433.93	89.90	5.1888E-001		0.0000E+000
	614.37	90.40	1.5681E+000		-1.3851E+000
	722.95	90.50	6.0147E-001		0.0000E+000
Sb-125	176.33	6.89	2.9974E+001	4.66E+000	-1.0979E+001
	427.89	29.33	6.2986E+000		0.0000E+000
	463.38	10.35	1.5794E+001		-1.1268E+001
	600.56	17.80	1.1566E+001		-4.8349E+000
	606.64	5.02	5.0106E+001		1.9110E+001
	635.90	11.32	4.6560E+000		0.0000E+000
Cs-134	563.23	8.38	1.6453E+001	2.23E+000	-7.8255E+000
	569.32	15.43	3.2972E+000		0.0000E+000
	604.70	97.60	2.5745E+000		9.8190E-001
	795.84	85.40	2.2341E+000		4.8118E-001
Cs-137	801.93	8.73	6.3795E+000	1.71E+000	0.0000E+000
	661.65	85.12	1.7053E+000		2.3174E-001
Eu-152	121.78	28.40	9.6476E+000	4.49E+000	1.0034E+000
	244.69	7.49	2.3876E+001		7.9509E+000
	344.27	26.50	4.4903E+000		6.1020E-001
	778.89	12.74	1.1812E+001		-1.0433E+001
	867.32	4.16	1.3621E+001		0.0000E+000
	964.01	14.40	1.0944E+001		1.4872E+000
	1085.78	10.00	5.9406E+000		0.0000E+000
	1112.02	13.30	1.7857E+001		-6.0824E+000
	1407.95	20.70	1.0624E+001		2.2881E+000
	Eu-154	123.07	40.50		6.7264E+000
247.94		6.60	2.9667E+001	9.0519E-001	
591.81		4.83	3.6596E+001	7.8821E+000	
723.30		19.70	2.7634E+000	0.0000E+000	
756.87		4.33	4.3578E+001	9.3857E+000	
873.19		11.50	4.9347E+000	0.0000E+000	
996.32		10.30	5.6651E+000	0.0000E+000	
1004.76		17.90	1.1206E+001	2.4135E+000	
Eu-155	1274.45	35.50	5.9698E+000	1.53E+001	1.2858E+000
	86.54	30.90	1.7846E+001		1.3587E+000
Am-241	105.31	20.70	1.5278E+001	2.74E+001	-8.5734E+000
	59.54	35.90	2.7440E+001		1.0465E+001
Cm-243	228.19	10.56	1.0201E+001	1.02E+001	-4.8518E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.4374E+001	1.02E+001	3.1248E+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 7/28/2006 4:23:03 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-179-F

Sample Title: OOL-10-01-179-F-G

Description: security concrete brock--drain p

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 4:13:00 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-179-F
 Title: OOL-10-01-179-F-G
 Description: security concrete brock--drain pipe

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	296-	312	299.55	74.98	0.79	2.24E+002	47.29	5.24E+002
m	2	296-	312	307.59	76.99	0.80	6.47E+001	35.95	6.25E+002
	3	949-	961	953.93	238.58	1.06	1.22E+002	50.77	2.03E+002
	4	1398-	1414	1405.98	351.60	0.85	1.49E+002	42.43	1.02E+002
	5	2324-	2337	2330.06	582.63	0.99	6.79E+001	28.53	5.21E+001
	6	2426-	2445	2434.47	608.74	1.32	1.65E+002	37.33	5.63E+001
	7	3633-	3651	3641.80	910.59	2.09	8.78E+001	29.76	4.12E+001
	8	5828-	5852	5841.03	1460.43	1.72	4.86E+002	44.37	6.39E+000
	9	7048-	7063	7056.14	1764.22	1.13	6.20E+001	17.58	5.96E+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	0.994	1460.81*	10.67	1.02991E+001	1.25734E+000
TL-208	0.465	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.43626E-001	6.31606E-002
		860.37	12.46		
Pb-212	0.853	74.81* @	10.70	7.32901E+000	2.10917E+000
		77.11* @	18.00	1.15943E+000	6.82699E-001
		87.30 @	8.00		
Bi-214	0.687	238.63*	44.60	3.79124E-001	1.69133E-001
		609.31*	46.30	6.42185E-001	1.65690E-001
		1120.29	15.10		
PB-214	0.370	1764.49*	15.80	9.67389E-001	2.90605E-001
		74.82* @	6.21	1.26281E+001	3.74800E+000
		77.11* @	10.50	1.98759E+000	1.17971E+000
		87.30 @	4.67		
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	6.10878E-001	2.01963E-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	0.994	1.029906E+001	1.257338E+000
TL-208	0.465	1.436259E-001	6.316064E-002
Pb-212 @	0.853	3.791245E-001	1.691328E-001
Bi-214	0.687	7.219667E-001	1.439381E-001
PB-214 @	0.370	6.108784E-001	1.989729E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.59	1.4638E-001	33.88

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: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	9.6688E-002	7.06E-002	-6.1047E-002
	1332.49	100.00	7.0574E-002		1.8644E-002
Nb-94	702.63	100.00	9.6777E-002	8.42E-002	-6.1153E-003
	871.10	100.00	8.4191E-002		-3.3321E-002
Ag-108m	79.20	7.10	6.7278E+000	1.07E-001	1.5782E-002
	433.93	89.90	1.0962E-001		-3.4246E-002
	614.37	90.40	1.1411E-001		5.9994E-002
	722.95	90.50	1.0715E-001		7.4910E-002
Sb-125	176.33	6.89	2.0049E+000	3.26E-001	-2.9676E+000
	427.89	29.33	3.2620E-001		-3.1675E-001
	463.38	10.35	9.8715E-001		4.7564E-001
	600.56	17.80	4.6814E-001		-2.4356E-001
	606.64	5.02	2.8439E+000		-8.0578E-001
	635.90	11.32	8.0378E-001		2.4617E-001
Cs-134	563.23	8.38	1.0871E+000	1.02E-001	-2.4170E-001
	569.32	15.43	5.9497E-001		-5.2190E-001
	604.70	97.60	1.4161E-001		-6.6395E-002
	795.84	85.40	1.0198E-001		-7.1300E-002
	801.93	8.73	1.0050E+000		9.5647E-001
Cs-137	661.65	85.12	1.0775E-001	1.08E-001	6.3734E-002
Eu-152	121.78	28.40	7.1028E-001	3.25E-001	4.6585E-003
	244.69	7.49	1.6908E+000		-9.6580E-001
	344.27	26.50	4.0684E-001		7.5214E-002
	778.89	12.74	6.3650E-001		-9.8858E-002
	867.32	4.16	1.9961E+000		-8.9639E-001
	964.01	14.40	8.1836E-001		1.3589E+000
	1085.78	10.00	7.5483E-001		1.3958E-001
	1112.02	13.30	6.3160E-001		-1.7879E-001
1407.95	20.70	3.2511E-001	-1.2889E-001		
Eu-154	123.07	40.50	4.9413E-001	2.25E-001	-6.5875E-002
	247.94	6.60	1.8528E+000		1.5210E+000
	591.81	4.83	1.9805E+000		1.1565E+000
	723.30	19.70	4.9227E-001		3.0317E-001
	756.87	4.33	1.9780E+000		-3.9016E-001
	873.19	11.50	7.2783E-001		-8.6648E-001
	996.32	10.30	7.8575E-001		-3.0733E-001
	1004.76	17.90	4.5622E-001		-3.4799E-001
1274.45	35.50	2.2487E-001	-2.4807E-001		
Eu-155	86.54	30.90	1.2520E+000	1.25E+000	2.3061E+000
	105.31	20.70	1.2534E+000		1.8415E-001
Am-241	59.54	35.90	2.4032E+000	2.40E+000	1.8389E-001
Cm-243	228.19	10.56	1.2218E+000	8.50E-001	4.6279E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	8.5010E-001	8.50E-001	-4.5975E-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 7/28/2006 7:06:43 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-180-F

Sample Title: OOL-10-01-180-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 6:56:40 PM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-180-F
Title: OOL-10-01-180-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	304	300.05	75.10	0.78	1.95E+002	85.97	7.67E+002
2	948-	959	953.48	238.47	0.84	1.44E+002	55.25	2.55E+002
3	1174-	1185	1179.01	294.85	0.71	8.58E+001	43.78	1.64E+002
4	1397-	1415	1405.66	351.52	1.12	1.66E+002	53.33	1.69E+002
5	2032-	2050	2040.26	510.18	0.83	1.01E+002	44.57	1.23E+002
6	2323-	2335	2329.51	582.50	1.18	1.02E+002	32.69	6.68E+001
7	2426-	2441	2433.75	608.56	1.36	2.29E+002	41.35	7.20E+001
8	3633-	3649	3640.78	910.33	1.40	1.05E+002	29.70	3.99E+001
9	3864-	3877	3871.11	967.92	1.51	5.45E+001	21.64	2.45E+001
10	4469-	4486	4477.20	1119.45	1.45	4.76E+001	26.78	4.24E+001
11	5827-	5852	5839.75	1460.11	1.77	8.21E+002	57.58	9.82E+000
12	7049-	7064	7055.56	1764.08	1.50	4.64E+001	15.57	5.64E+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	0.974	511.00*	100.00	1.71876E-001	7.95423E-002
K-40	0.981	1460.81*	10.67	1.74144E+001	1.86523E+000
TL-208	0.739	277.35	6.80		
		510.84*	21.60	7.95723E-001	3.73941E-001
		583.14*	84.20	2.16102E-001	7.46214E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	6.33073E+000	3.05691E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.980	238.63*	44.60	4.48407E-001	1.86077E-001
		609.31*	46.30	8.92917E-001	1.95196E-001
		1120.29*	15.10	6.54051E-001	3.74802E-001
		1764.49*	15.80	7.22826E-001	2.53212E-001
PB-214	0.616	74.82* @	6.21	1.09080E+001	5.32633E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	6.54418E-001	3.51534E-001
Ac-228	0.608	351.92*	37.20	6.80647E-001	2.46818E-001
		338.32	11.40		
		911.07*	27.70	7.54877E-001	2.30309E-001
		969.11*	16.60	6.61476E-001	2.71645E-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	0.974	1.251983E-001	8.114471E-002
K-40	0.981	1.741442E+001	1.865227E+000
TL-208	0.739	2.161016E-001	7.428838E-002
Pb-212 @	0.580	4.484073E-001	1.860773E-001
Bi-214	0.980	8.040049E-001	1.429140E-001
PB-214 @	0.616	6.719862E-001	2.020000E-001
Ac-228	0.608	7.158162E-001	1.756694E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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: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	1.0661E-001	6.82E-002	6.1641E-003
	1332.49	100.00	6.8162E-002		-2.9717E-003
Nb-94	702.63	100.00	1.1287E-001	1.05E-001	7.3750E-002
	871.10	100.00	1.0491E-001		6.3574E-003
Ag-108m	79.20	7.10	7.5755E+000	1.24E-001	-8.3854E+000
	433.93	89.90	1.3261E-001		1.8568E-003
	614.37	90.40	1.3046E-001		-5.8941E-002
	722.95	90.50	1.2432E-001		4.9033E-002
Sb-125	176.33	6.89	2.2919E+000	3.88E-001	-1.8225E+000
	427.89	29.33	3.8836E-001		3.0525E-001
	463.38	10.35	1.1083E+000		-9.1931E-001
	600.56	17.80	6.1799E-001		7.4580E-002
	606.64	5.02	3.4278E+000		5.9927E+000
	635.90	11.32	9.4992E-001		-2.0217E-002
Cs-134	563.23	8.38	1.3092E+000	1.17E-001	2.7127E-001
	569.32	15.43	7.0085E-001		1.3458E-001
	604.70	97.60	1.7526E-001		3.7617E-002
	795.84	85.40	1.1748E-001		7.0956E-002
	801.93	8.73	1.1013E+000		5.4652E-001
Cs-137	661.65	85.12	1.2322E-001	1.23E-001	1.4737E-001
Eu-152	121.78	28.40	8.2610E-001	3.83E-001	-5.2008E-002
	244.69	7.49	2.0425E+000		5.7535E-001
	344.27	26.50	4.6130E-001		-3.1419E-001
	778.89	12.74	7.6699E-001		-2.8142E-001
	867.32	4.16	2.5894E+000		-1.4832E+000
	964.01	14.40	8.9087E-001		4.3499E-001
	1085.78	10.00	9.4105E-001		1.7249E-001
	1112.02	13.30	7.9617E-001		-1.8357E-001
1407.95	20.70	3.8290E-001	-1.7056E-001		
Eu-154	123.07	40.50	5.7597E-001	2.65E-001	3.1207E-001
	247.94	6.60	2.1194E+000		-1.3554E-001
	591.81	4.83	2.2042E+000		6.4674E-001
	723.30	19.70	5.8023E-001		3.2048E-001
	756.87	4.33	2.3771E+000		7.9777E-001
	873.19	11.50	8.6365E-001		-4.0610E-001
	996.32	10.30	9.5037E-001		3.5899E-001
	1004.76	17.90	5.2862E-001		2.8165E-001
1274.45	35.50	2.6467E-001	-2.6535E-002		
Eu-155	86.54	30.90	1.4015E+000	1.40E+000	1.6889E+000
	105.31	20.70	1.4086E+000		4.1648E-001
Am-241	59.54	35.90	2.6246E+000	2.62E+000	-2.2838E+000
Cm-243	228.19	10.56	1.4218E+000	9.55E-001	1.7094E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.5524E-001	9.55E-001	2.6408E-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 7/28/2006 6:53:58 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-181-F

Sample Title: OOL-10-01-181-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 6:43:55 PM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-181-F
Title: OOL-10-01-181-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	305	300.10	75.11	0.56	1.81E+002	94.91	9.05E+002
2	935-	959	953.21	238.40	0.95	1.53E+002	94.61	5.27E+002
3	1175-	1186	1178.91	294.83	1.15	1.05E+002	43.85	1.55E+002
4	1343-	1357	1351.81	338.06	1.13	3.70E+001	42.76	1.51E+002
5	1396-	1412	1405.37	351.45	1.13	2.11E+002	50.44	1.45E+002
6	2034-	2050	2039.96	510.10	1.26	8.77E+001	37.80	8.93E+001
7	2322-	2335	2329.89	582.59	0.36	1.14E+002	33.43	6.45E+001
8	2425-	2443	2433.66	608.53	1.40	2.96E+002	42.48	5.15E+001
9	3630-	3650	3641.25	910.45	1.61	1.18E+002	32.23	4.19E+001
10	3865-	3882	3872.08	968.16	1.20	7.20E+001	27.14	3.60E+001
11	4470-	4487	4478.17	1119.69	0.72	6.39E+001	29.78	5.01E+001
12	5503-	5514	5508.62	1377.32	0.32	2.42E+001	12.22	5.82E+000
13	5827-	5852	5839.96	1460.16	1.81	8.12E+002	59.10	2.28E+001
14	7047-	7064	7056.46	1764.30	1.11	7.13E+001	18.91	6.72E+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	0.970	511.00*	100.00	1.49592E-001	6.76171E-002
K-40	0.984	1460.81*	10.67	1.72247E+001	1.87496E+000
TL-208	0.741	277.35	6.80		
		510.84*	21.60	6.92554E-001	3.18111E-001
		583.14*	84.20	2.40038E-001	7.72928E-002
		860.37	12.46		
Pb-212	0.579	74.81* @	10.70	5.87377E+000	3.29049E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.983	238.63*	44.60	4.76760E-001	3.04344E-001
		609.31*	46.30	1.15602E+000	2.18464E-001
		1120.29*	15.10	8.78267E-001	4.20063E-001
PB-214	0.615	1764.49*	15.80	1.11145E+000	3.15146E-001
		74.82* @	6.21	1.01207E+001	5.71700E+000
		77.11 @	10.50		
		87.30 @	4.67		
Ac-228	0.982	241.98	7.49		
		295.21*	19.20	7.97261E-001	3.60262E-001
		351.92*	37.20	8.64419E-001	2.52548E-001
		338.32*	11.40	4.91733E-001	5.72814E-001
		911.07*	27.70	8.48299E-001	2.51210E-001
		969.11*	16.60	8.73922E-001	3.41951E-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	0.970	9.774342E-002	6.962726E-002
K-40	0.984	1.722470E+001	1.874961E+000
TL-208	0.741	2.400383E-001	7.689596E-002
Pb-212 @	0.579	4.767602E-001	3.043439E-001
Bi-214	0.983	1.100885E+000	1.650950E-001
PB-214 @	0.615	8.422907E-001	2.067969E-001
Ac-228	0.982	8.166884E-001	1.908798E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
12	1377.32	4.0306E-002	50.53

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: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	1.1345E-001	8.92E-002	-1.2295E-002
	1332.49	100.00	8.9197E-002		3.6918E-002
Nb-94	702.63	100.00	1.1216E-001	1.01E-001	8.0342E-002
	871.10	100.00	1.0060E-001		6.8303E-002
Ag-108m	79.20	7.10	7.6829E+000	1.26E-001	-2.7367E+000
	433.93	89.90	1.2813E-001		6.1625E-003
	614.37	90.40	1.2622E-001		-2.2034E-002
	722.95	90.50	1.3015E-001		1.0157E-001
Sb-125	176.33	6.89	2.3705E+000	4.17E-001	-1.9349E-002
	427.89	29.33	4.1707E-001		5.0569E-002
	463.38	10.35	1.2265E+000		7.4791E-001
	600.56	17.80	6.3276E-001		2.8549E-002
	606.64	5.02	3.5635E+000		9.4053E+000
	635.90	11.32	1.0045E+000		2.7091E-001
Cs-134	563.23	8.38	1.4048E+000	1.30E-001	9.9831E-002
	569.32	15.43	7.4795E-001		-1.0867E-001
	604.70	97.60	1.8495E-001		5.3589E-002
	795.84	85.40	1.3018E-001		1.3809E-001
Cs-137	801.93	8.73	1.2265E+000	1.38E-001	-2.5917E-001
	661.65	85.12	1.3805E-001		7.0179E-002
Eu-152	121.78	28.40	8.3931E-001	3.68E-001	-5.6170E-001
	244.69	7.49	2.0406E+000		-4.2010E-001
	344.27	26.50	4.6685E-001		-1.5964E-002
	778.89	12.74	8.4431E-001		-1.7391E-002
	867.32	4.16	2.4579E+000		3.8403E-001
	964.01	14.40	9.3911E-001		-1.8734E-001
	1085.78	10.00	9.5140E-001		-4.4474E-002
	1112.02	13.30	7.7851E-001		-4.3921E-001
1407.95	20.70	3.6846E-001	-1.0760E-001		
Eu-154	123.07	40.50	5.9064E-001	2.90E-001	2.3159E-001
	247.94	6.60	2.1099E+000		-1.6870E+000
	591.81	4.83	2.2873E+000		1.6136E+000
	723.30	19.70	6.0315E-001		6.3722E-001
	756.87	4.33	2.6078E+000		1.5872E+000
	873.19	11.50	8.4395E-001		-1.2479E-001
	996.32	10.30	8.9741E-001		-1.8145E-001
	1004.76	17.90	5.6894E-001		-2.9166E-001
1274.45	35.50	2.9040E-001	5.1016E-002		
Eu-155	86.54	30.90	1.4333E+000	1.42E+000	2.4080E+000
	105.31	20.70	1.4234E+000		5.3401E-001
Am-241	59.54	35.90	2.7472E+000	2.75E+000	-5.5444E-001
Cm-243	228.19	10.56	1.4979E+000	9.66E-001	7.4961E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.6633E-001	9.66E-001	-9.5863E-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 7/28/2006 3:25:18 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-182-F

Sample Title: OOL-10-01-182-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 3:15:16 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-182-F
 Title: OOL-10-01-182-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	296-	304	300.10	75.11	0.99	2.12E+002	77.67	6.36E+002
2	944-	958	953.30	238.42	1.36	1.66E+002	62.81	2.99E+002
3	1173-	1184	1179.24	294.91	0.99	8.55E+001	38.98	1.23E+002
4	1348-	1357	1352.03	338.11	0.47	3.04E+001	31.08	9.56E+001
5	1399-	1412	1405.80	351.55	1.69	1.37E+002	43.49	1.29E+002
6	1845-	1854	1849.52	462.49	0.91	2.62E+001	22.54	4.68E+001
7	2323-	2337	2329.56	582.51	1.32	1.27E+002	34.74	6.52E+001
8	2426-	2441	2434.50	608.74	1.41	1.73E+002	37.91	6.72E+001
9	2902-	2913	2906.25	726.69	0.82	2.45E+001	19.82	3.05E+001
10	3633-	3651	3641.86	910.60	1.21	8.43E+001	30.46	4.57E+001
11	3865-	3883	3873.79	968.59	0.43	6.77E+001	26.84	3.53E+001
12	4471-	4488	4479.19	1119.95	1.09	6.22E+001	21.13	1.68E+001
13	5829-	5854	5841.03	1460.43	1.82	6.64E+002	52.29	1.19E+001
14	7049-	7064	7056.89	1764.41	0.50	5.22E+001	16.34	5.84E+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: 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	0.994	1460.81*	10.67	1.40843E+001	1.59068E+000
TL-208	0.462	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.68121E-001	8.13412E-002
		860.37	12.46		
Bi-212	0.991	727.17*	11.80	3.93623E-001	3.21347E-001
Pb-212	0.580	74.81* @	10.70	6.87381E+000	2.85969E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.16227E-001	2.11933E-001
Bi-214	0.992	609.31*	46.30	6.73678E-001	1.69542E-001
		1120.29*	15.10	8.55750E-001	3.04525E-001
		1764.49*	15.80	8.13240E-001	2.67511E-001
PB-214	0.617	74.82* @	6.21	1.18438E+001	5.00177E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	6.52083E-001	3.16882E-001
		351.92*	37.20	5.62525E-001	2.01832E-001
Ac-228	0.992	338.32*	11.40	4.03001E-001	4.17432E-001
		911.07*	27.70	6.05396E-001	2.29573E-001
		969.11*	16.60	8.21351E-001	3.37030E-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	0.994	1.408430E+001	1.590684E+000
TL-208	0.462	2.681211E-001	8.134120E-002
Bi-212	0.991	3.936227E-001	3.213470E-001
Pb-212 @	0.580	5.162273E-001	2.119326E-001
Bi-214	0.992	7.394006E-001	1.295899E-001
PB-214 @	0.617	5.883713E-001	1.702342E-001
Ac-228	0.992	6.274650E-001	1.727310E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
6	462.49	4.3596E-002	86.18

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: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	9.4034E-002	8.98E-002	4.5524E-002
	1332.49	100.00	8.9807E-002		6.3961E-002
Nb-94	702.63	100.00	9.8837E-002	8.83E-002	1.4587E-002
	871.10	100.00	8.8344E-002		2.0051E-002
Ag-108m	79.20	7.10	7.3974E+000	1.15E-001	-8.6281E+000
	433.93	89.90	1.1486E-001		-1.2912E-001
	614.37	90.40	1.3219E-001		-1.3346E-001
	722.95	90.50	1.2550E-001		-4.2352E-002
Sb-125	176.33	6.89	2.3223E+000	4.05E-001	-3.3287E-001
	427.89	29.33	4.0466E-001		2.4125E-001
	463.38	10.35	1.0820E+000		3.8236E-001
	600.56	17.80	5.6721E-001		2.2961E-001
	606.64	5.02	3.1930E+000		7.9761E+000
	635.90	11.32	8.8847E-001		7.2782E-002
Cs-134	563.23	8.38	1.3761E+000	1.20E-001	9.5050E-001
	569.32	15.43	7.1760E-001		4.3872E-001
	604.70	97.60	1.5597E-001		1.6713E-002
	795.84	85.40	1.1994E-001		9.7319E-002
Cs-137	801.93	8.73	1.0859E+000	1.28E-001	-3.6196E-001
	661.65	85.12	1.2836E-001		-1.1630E-001
Eu-152	121.78	28.40	8.2610E-001	3.79E-001	2.7836E-001
	244.69	7.49	1.8865E+000		-1.3452E+000
	344.27	26.50	4.3069E-001		-3.2436E-001
	778.89	12.74	7.9692E-001		3.5184E-001
	867.32	4.16	2.2397E+000		6.7864E-001
	964.01	14.40	9.1773E-001		1.1715E-001
	1085.78	10.00	9.5653E-001		-5.1244E-001
	1112.02	13.30	6.5781E-001		-4.4061E-001
1407.95	20.70	3.7935E-001	-1.9812E-001		
Eu-154	123.07	40.50	5.7550E-001	2.25E-001	3.2513E-001
	247.94	6.60	2.0738E+000		3.6210E-001
	591.81	4.83	1.9487E+000		-4.5429E-001
	723.30	19.70	5.7116E-001		-2.2860E-001
	756.87	4.33	2.2622E+000		5.9896E-002
	873.19	11.50	7.5078E-001		9.3401E-002
	996.32	10.30	9.9149E-001		3.3333E-001
	1004.76	17.90	4.9383E-001		-2.8204E-001
1274.45	35.50	2.2487E-001	-9.1772E-002		
Eu-155	86.54	30.90	1.3557E+000	1.36E+000	1.7678E+000
	105.31	20.70	1.3660E+000		1.0801E-001
Am-241	59.54	35.90	2.5719E+000	2.57E+000	-2.2025E-001
Cm-243	228.19	10.56	1.3412E+000	9.00E-001	-1.8975E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.0030E-001	9.00E-001	4.2297E-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 7/28/2006 3:40:15 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-10-01-183-F

Sample Title: OOL-10-01-183-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 3:30:13 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-183-F
Title: OOL-10-01-183-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Rows 1-13 with peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.995	1460.81*	10.67	1.33383E+001	1.55305E+000
TL-208	0.462	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.36760E-001	7.27987E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	6.73606E+000	2.80652E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.50065E-001	2.00781E-001
Bi-214	0.991	609.31*	46.30	7.91365E-001	1.68890E-001
		1120.29*	15.10	3.63858E-001	3.29081E-001
		1764.49*	15.80	5.87172E-001	2.73005E-001
		74.82* @	6.21	1.16064E+001	4.90856E+000
PB-214	0.615	77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	6.55377E-001	3.28163E-001
		351.92*	37.20	6.31094E-001	2.06413E-001
		911.07*	27.70	5.60180E-001	2.20575E-001
Ac-228	0.622	338.32	11.40		
		911.07*	27.70	5.60180E-001	2.20575E-001
		969.11*	16.60	7.14381E-001	2.25918E-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	0.995	1.333825E+001	1.553046E+000
TL-208	0.462	2.367601E-001	7.279867E-002
Pb-212 @	0.580	5.500654E-001	2.007809E-001
Bi-214	0.991	6.754864E-001	1.316364E-001
PB-214 @	0.615	6.379780E-001	1.747232E-001
Ac-228	0.622	6.354358E-001	1.578253E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.6521E-001	87.25
M 9	964.07	3.0504E-002	64.03

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: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	1.0078E-001	7.21E-002	-3.5321E-003
	1332.49	100.00	7.2133E-002		-3.9721E-002
Nb-94	702.63	100.00	1.0890E-001	9.13E-002	-4.3776E-003
	871.10	100.00	9.1327E-002		-8.1794E-002
Ag-108m	79.20	7.10	6.9783E+000	1.24E-001	-1.1789E+001
	433.93	89.90	1.2756E-001		1.4552E-002
	614.37	90.40	1.2441E-001		3.4310E-003
	722.95	90.50	1.3015E-001		7.0362E-002
Sb-125	176.33	6.89	2.2680E+000	4.01E-001	4.8165E-001
	427.89	29.33	4.0129E-001		-1.8540E-001
	463.38	10.35	1.1238E+000		1.0643E+000
	600.56	17.80	5.5059E-001		-1.2624E-001
	606.64	5.02	3.0593E+000		8.3435E+000
	635.90	11.32	8.6811E-001		-7.5120E-001
Cs-134	563.23	8.38	1.3168E+000	1.12E-001	1.7523E-001
	569.32	15.43	7.3395E-001		5.4296E-001
	604.70	97.60	1.5670E-001		-8.1658E-002
	795.84	85.40	1.1239E-001		4.9865E-002
	801.93	8.73	9.9933E-001		-2.1426E-001
Cs-137	661.65	85.12	1.2190E-001	1.22E-001	3.9053E-002
Eu-152	121.78	28.40	8.1874E-001	3.90E-001	2.2327E-001
	244.69	7.49	1.9009E+000		4.3377E-001
	344.27	26.50	4.2202E-001		-2.2154E-001
	778.89	12.74	7.5674E-001		4.1380E-001
	867.32	4.16	2.2397E+000		-4.9554E-001
	964.01	14.40	8.2106E-001		-4.2114E-002
	1085.78	10.00	9.8177E-001		1.5200E-002
	1112.02	13.30	6.9515E-001		-6.2262E-001
1407.95	20.70	3.8991E-001	5.1133E-002		
Eu-154	123.07	40.50	5.6990E-001	2.52E-001	5.6087E-001
	247.94	6.60	2.0370E+000		-9.7425E-002
	591.81	4.83	2.1177E+000		5.5305E-001
	723.30	19.70	5.9269E-001		1.3415E-001
	756.87	4.33	2.4864E+000		1.1541E+000
	873.19	11.50	8.2784E-001		1.4865E-002
	996.32	10.30	9.6887E-001		2.2951E-001
	1004.76	17.90	5.1443E-001		-4.7198E-001
1274.45	35.50	2.5160E-001	-1.4780E-001		
Eu-155	86.54	30.90	1.3479E+000	1.31E+000	-5.9322E-002
	105.31	20.70	1.3129E+000		-7.8110E-001
Am-241	59.54	35.90	2.6441E+000	2.64E+000	-6.4557E-002
Cm-243	228.19	10.56	1.4257E+000	9.21E-001	1.9879E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.2114E-001	9.21E-001	-6.5171E-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 7/28/2006 4:00:10 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-184-F

Sample Title: OOL-10-01-184-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 3:50:08 PM

Live Time: 600.0 seconds

Real Time: 601.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-184-F
Title: OOL-10-01-184-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	306	299.61	74.99	0.86	2.54E+002	99.01	9.12E+002
2	945-	962	953.77	238.54	1.01	2.56E+002	70.56	3.20E+002
3	1173-	1186	1178.91	294.83	0.97	8.34E+001	47.28	1.81E+002
4	1346-	1355	1351.31	337.93	1.15	5.21E+001	30.87	8.69E+001
5	1398-	1413	1406.27	351.67	1.08	1.43E+002	45.74	1.34E+002
6	2323-	2338	2330.22	582.67	0.95	1.34E+002	37.56	7.76E+001
7	2428-	2442	2434.40	608.72	1.40	2.44E+002	38.29	4.79E+001
8	3634-	3650	3641.24	910.45	1.48	1.18E+002	30.15	3.80E+001
9	3864-	3881	3872.73	968.32	1.77	7.89E+001	27.91	3.81E+001
10	5624-	5635	5629.52	1407.55	0.34	1.52E+001	13.23	1.08E+001
11	5829-	5855	5841.18	1460.47	1.99	8.51E+002	59.76	1.88E+001
12	7049-	7063	7056.63	1764.35	0.84	4.57E+001	16.02	7.34E+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: 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	0.995	1460.81*	10.67	1.80525E+001	1.93463E+000
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.84274E-001	8.76337E-002
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	8.28642E+000	3.61686E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.99546E-001	2.53249E-001
Bi-214	0.687	609.31*	46.30	9.51808E-001	1.89866E-001
		1120.29	15.10		
		1764.49*	15.80	7.11884E-001	2.59686E-001
PB-214	0.617	74.82* @	6.21	1.42777E+001	6.31755E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	6.36244E-001	3.76081E-001
		351.92*	37.20	5.88010E-001	2.12037E-001
Ac-228	0.984	338.32*	11.40	6.91183E-001	4.23906E-001
		911.07*	27.70	8.47492E-001	2.37500E-001
		969.11*	16.60	9.57260E-001	3.53387E-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	0.995	1.805255E+001	1.934634E+000
TL-208	0.466	2.842739E-001	8.763371E-002
Pb-212 @	0.581	7.995457E-001	2.532486E-001
Bi-214	0.687	8.682305E-001	1.532695E-001
PB-214 @	0.617	5.996445E-001	1.847028E-001
Ac-228	0.984	8.477836E-001	1.787397E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
10	1407.55	2.5272E-002	87.22

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	1.0614E-001	7.06E-002	9.5213E-002
	1332.49	100.00	7.0574E-002		-8.5064E-002
Nb-94	702.63	100.00	1.0553E-001	9.61E-002	1.7416E-002
	871.10	100.00	9.6082E-002		6.6497E-003
Ag-108m	79.20	7.10	7.4051E+000	1.19E-001	-2.2402E+000
	433.93	89.90	1.2583E-001		5.2500E-002
	614.37	90.40	1.3756E-001		-4.5330E-002
	722.95	90.50	1.1902E-001		2.0640E-002
Sb-125	176.33	6.89	2.4096E+000	3.59E-001	2.1768E+000
	427.89	29.33	3.5916E-001		-2.3038E-001
	463.38	10.35	1.1640E+000		1.0433E+000
	600.56	17.80	5.9122E-001		-3.1649E-001
	606.64	5.02	3.3771E+000		8.9748E+000
	635.90	11.32	8.5426E-001		5.5865E-001
Cs-134	563.23	8.38	1.3319E+000	1.28E-001	-5.1751E-001
	569.32	15.43	7.4198E-001		2.5188E-001
	604.70	97.60	1.6682E-001		-1.6157E-001
	795.84	85.40	1.2838E-001		9.4173E-002
	801.93	8.73	1.1265E+000		-6.9091E-001
Cs-137	661.65	85.12	1.2836E-001	1.28E-001	6.0297E-002
Eu-152	121.78	28.40	8.3108E-001	4.23E-001	-2.1256E-001
	244.69	7.49	1.9171E+000		-5.0968E-001
	344.27	26.50	4.5648E-001		-1.4313E-001
	778.89	12.74	7.8376E-001		6.4865E-002
	867.32	4.16	2.3075E+000		-2.8327E+000
	964.01	14.40	9.4379E-001		1.1396E-001
	1085.78	10.00	1.0160E+000		-1.8201E-001
	1112.02	13.30	7.3429E-001		-1.0066E+000
1407.95	20.70	4.2308E-001	3.7240E-001		
Eu-154	123.07	40.50	5.8059E-001	2.45E-001	8.3265E-002
	247.94	6.60	2.1099E+000		1.2894E-001
	591.81	4.83	2.2392E+000		-2.5150E-001
	723.30	19.70	5.4299E-001		5.2259E-002
	756.87	4.33	2.3299E+000		1.3538E-001
	873.19	11.50	8.1966E-001		-4.0780E-001
	996.32	10.30	1.0309E+000		5.0316E-001
	1004.76	17.90	5.4241E-001		1.3329E-001
1274.45	35.50	2.4478E-001	-1.8054E-001		
Eu-155	86.54	30.90	1.4148E+000	1.41E+000	1.6805E+000
	105.31	20.70	1.4296E+000		4.2657E-001
Am-241	59.54	35.90	2.7627E+000	2.76E+000	-2.4753E-001
Cm-243	228.19	10.56	1.4098E+000	9.87E-001	-8.4982E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.8693E-001	9.87E-001	4.2592E-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 7/31/2006 8:13:12 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: BRN7722

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-01-185-F-G

Sample ID: OOL-10-01-185-F

Sample Title: OOL-10-01-185-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 1:35:56 PM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-185-F-G

Log Number: OOL-10-01-185-F

Title: OOL-10-01-185-F-G

Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	305	300.07	75.11	0.83	1.11E+002	78.68	6.26E+002
2	947-	958	953.84	238.56	0.71	5.52E+001	42.06	1.62E+002
3	1376-	1385	1381.20	345.40	0.35	1.87E+001	21.79	4.63E+001
4	1400-	1410	1406.27	351.67	1.41	1.08E+002	30.95	5.94E+001
5	2325-	2339	2330.47	582.74	0.42	8.32E+001	27.34	3.68E+001
6	2428-	2442	2434.80	608.82	1.37	1.28E+002	27.65	2.49E+001
7	3636-	3649	3642.00	910.64	1.23	4.05E+001	18.50	1.75E+001
8	4474-	4486	4479.18	1119.94	0.41	3.04E+001	17.20	1.76E+001
9	5829-	5853	5841.55	1460.56	1.62	4.37E+002	42.68	9.14E+000
10	7051-	7065	7058.27	1764.76	0.43	3.53E+001	14.12	5.70E+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-10-01-185-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	9.26549E+000	1.17558E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.75935E-001	6.21839E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.61101E+000	2.65222E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.72113E-001	1.33909E-001
Bi-214	0.993	609.31*	46.30	4.99549E-001	1.24160E-001
		1120.29*	15.10	4.17870E-001	2.40722E-001
		1764.49*	15.80	5.50547E-001	2.27024E-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-10-01-185-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	9.265488E+000	1.175581E+000
TL-208	0.468	1.759345E-001	6.218389E-002
Pb-212 @	0.580	1.721132E-001	1.339086E-001
Bi-214	0.993	4.954117E-001	9.924436E-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
3	345.40	3.1218E-002	116.32
4	351.67	1.7939E-001	28.75
7	910.64	6.7500E-002	45.68

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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-01-185-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	8.6138E-002	7.73E-002	6.5536E-002
	1332.49	100.00	7.7323E-002		4.2162E-002
Nb-94	702.63	100.00	8.5211E-002	8.04E-002	5.2494E-002
	871.10	100.00	8.0368E-002		-4.5316E-002
Ag-108m	79.20	7.10	6.2846E+000	9.90E-002	-4.4985E+000
	433.93	89.90	9.9014E-002		-7.3478E-002
	614.37	90.40	1.0047E-001		-5.9670E-002
	722.95	90.50	1.0383E-001		-1.0447E-003
Sb-125	176.33	6.89	1.9048E+000	3.16E-001	-2.5046E-002
	427.89	29.33	3.1550E-001		-2.6620E-001
	463.38	10.35	8.6154E-001		-2.3982E-002
	600.56	17.80	5.2685E-001		6.6719E-002
	606.64	5.02	2.5596E+000		2.8921E+000
	635.90	11.32	7.2935E-001		-5.9239E-002
Cs-134	563.23	8.38	1.0298E+000	9.16E-002	-2.7699E-001
	569.32	15.43	5.6123E-001		-9.3856E-002
	604.70	97.60	1.3123E-001		-7.1112E-002
	795.84	85.40	9.1605E-002		-1.8847E-004
	801.93	8.73	8.9762E-001		3.4500E-001
Cs-137	661.65	85.12	1.0364E-001	1.04E-001	7.0809E-002
Eu-152	121.78	28.40	7.0678E-001	3.03E-001	8.5352E-002
	244.69	7.49	1.5713E+000		-7.8668E-001
	344.27	26.50	3.6246E-001		2.2014E-001
	778.89	12.74	6.3235E-001		-9.4088E-002
	867.32	4.16	1.9568E+000		-3.6636E-001
	964.01	14.40	7.6213E-001		8.9351E-001
	1085.78	10.00	6.6309E-001		9.2604E-002
	1112.02	13.30	5.8994E-001		-3.0858E-001
1407.95	20.70	3.0316E-001	1.0261E-001		
Eu-154	123.07	40.50	4.9004E-001	1.75E-001	2.3143E-001
	247.94	6.60	1.6988E+000		5.8498E-002
	591.81	4.83	1.8153E+000		-9.3737E-002
	723.30	19.70	4.8364E-001		1.6488E-001
	756.87	4.33	1.9204E+000		4.2437E-001
	873.19	11.50	7.2783E-001		2.8002E-001
	996.32	10.30	7.8575E-001		-2.1140E-002
	1004.76	17.90	4.6593E-001		-2.8359E-002
1274.45	35.50	1.7541E-001	-7.5160E-002		
Eu-155	86.54	30.90	1.1935E+000	1.19E+000	1.1326E+000
	105.31	20.70	1.2201E+000		-1.5371E+000
Am-241	59.54	35.90	2.2598E+000	2.26E+000	1.1910E-001
Cm-243	228.19	10.56	1.1433E+000	7.55E-001	8.3664E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	7.5512E-001	7.55E-001	-2.4207E-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 7/31/2006 10:56:42 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-185-F

Sample Title: OOL-10-01-185-F-R

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 10:46:40 AM

Live Time: 600.0 seconds

Real Time: 600.8 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-185-F
Title: OOL-10-01-185-F-R
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2322-	2340	2331.36	582.80	0.43	7.39E+001	29.91	4.71E+001
2	3866-	3881	3873.86	968.43	0.36	4.30E+001	19.93	2.00E+001
3	5827-	5854	5840.40	1460.07	2.64	3.61E+002	39.47	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: 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	7.91986E+000	1.07778E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.61107E-001	6.85018E-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: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	7.919863E+000	1.077777E+000
TL-208	0.469	1.611068E-001	6.850185E-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	968.43	7.1667E-002	46.35

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	9.5761E-002	7.12E-002	1.5759E-002
	1332.49	100.00	7.1174E-002		1.3229E-002
Nb-94	702.63	100.00	9.0160E-002	8.87E-002	-3.4956E-002
	871.10	100.00	8.8750E-002		7.9614E-003
Ag-108m	79.20	7.10	8.5621E+000	1.08E-001	-1.6648E+001
	433.93	89.90	1.1914E-001		6.8338E-003
	614.37	90.40	1.3945E-001		-1.1194E-001
	722.95	90.50	1.0780E-001		9.5521E-002
Sb-125	176.33	6.89	2.5050E+000	3.37E-001	7.3167E-001
	427.89	29.33	3.3660E-001		-1.3164E-001
	463.38	10.35	1.0038E+000		8.1799E-001
	600.56	17.80	5.7202E-001		1.4058E-001
	606.64	5.02	2.7760E+000		4.0128E+000
	635.90	11.32	8.3671E-001		3.2719E-001
Cs-134	563.23	8.38	1.1853E+000	9.91E-002	2.3271E-001
	569.32	15.43	6.5818E-001		5.2796E-001
	604.70	97.60	1.3799E-001		7.4936E-002
	795.84	85.40	9.9094E-002		2.8910E-002
	801.93	8.73	9.2668E-001		-1.6827E-001
Cs-137	661.65	85.12	1.0306E-001	1.03E-001	-1.2806E-003
Eu-152	121.78	28.40	8.8498E-001	3.57E-001	3.0696E-001
	244.69	7.49	1.8371E+000		-6.1714E-001
	344.27	26.50	4.5682E-001		-5.7893E-002
	778.89	12.74	7.3285E-001		1.5331E-001
	867.32	4.16	2.1940E+000		-3.8531E-001
	964.01	14.40	7.7416E-001		-3.1228E-002
	1085.78	10.00	7.7570E-001		-3.7511E-001
	1112.02	13.30	6.3091E-001		-1.0234E+000
1407.95	20.70	3.5720E-001	-8.1983E-003		
Eu-154	123.07	40.50	6.0937E-001	2.30E-001	-2.5905E-002
	247.94	6.60	1.9598E+000		-1.1346E+000
	591.81	4.83	2.0499E+000		9.3403E-001
	723.30	19.70	4.8617E-001		3.4875E-001
	756.87	4.33	2.3236E+000		3.9667E-001
	873.19	11.50	7.8571E-001		3.6361E-001
	996.32	10.30	8.3398E-001		-1.6572E-001
	1004.76	17.90	4.5746E-001		8.2988E-002
1274.45	35.50	2.2995E-001	7.9460E-002		
Eu-155	86.54	30.90	1.5585E+000	1.54E+000	1.4523E+000
	105.31	20.70	1.5431E+000		9.4569E-002
Am-241	59.54	35.90	3.5601E+000	3.56E+000	-2.1115E+000
Cm-243	228.19	10.56	1.4026E+000	8.89E-001	2.8468E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.8945E-001	8.89E-001	-9.0845E-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 7/31/2006 11:10:59 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-10-01-185-F

Sample Title: OOL-10-01-185-F-S

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 11:00:57 AM

Live Time: 600.0 seconds

Real Time: 600.8 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-185-F
Title: OOL-10-01-185-F-S
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	1405.47	351.33	1.31	9.54E+001	37.10	8.66E+001
2	3064-	3075	3069.06	767.23	0.44	1.40E+001	15.10	1.80E+001
3	3865-	3880	3873.11	968.24	1.34	4.38E+001	20.20	2.03E+001
4	5829-	5855	5841.41	1460.32	2.10	3.88E+002	43.36	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	0.992	1460.81*	10.67	8.50853E+000	1.17486E+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	0.992	8.508528E+000	1.174863E+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	351.33	1.5899E-001	38.89
2	767.23	2.3333E-002	107.83
3	968.24	7.2917E-002	46.17

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: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	8.5002E-002	7.36E-002	-9.5659E-003
	1332.49	100.00	7.3632E-002		4.7804E-002
Nb-94	702.63	100.00	8.9201E-002	8.92E-002	-1.3792E-001
	871.10	100.00	8.9275E-002		2.5304E-002
Ag-108m	79.20	7.10	8.8267E+000	1.10E-001	-1.0904E+001
	433.93	89.90	1.0997E-001		-1.3372E-001
	614.37	90.40	1.3345E-001		-1.4081E-001
	722.95	90.50	1.1807E-001		3.1148E-002
Sb-125	176.33	6.89	2.5651E+000	3.52E-001	1.1319E+000
	427.89	29.33	3.5239E-001		-9.3136E-002
	463.38	10.35	9.6321E-001		-3.8701E-001
	600.56	17.80	5.5224E-001		-4.6434E-001
	606.64	5.02	2.7593E+000		5.9736E+000
	635.90	11.32	8.0169E-001		-1.2903E-001
Cs-134	563.23	8.38	1.2032E+000	1.09E-001	7.2467E-001
	569.32	15.43	6.7949E-001		1.4327E-001
	604.70	97.60	1.3591E-001		1.2843E-002
	795.84	85.40	1.0864E-001		4.4513E-002
Cs-137	801.93	8.73	1.0245E+000	1.21E-001	1.7969E-001
	661.65	85.12	1.2064E-001		9.2908E-002
Eu-152	121.78	28.40	8.7569E-001	3.27E-001	3.6224E-001
	244.69	7.49	1.9688E+000		-8.1800E-001
	344.27	26.50	4.2663E-001		-5.8631E-001
	778.89	12.74	6.8621E-001		5.5689E-002
	867.32	4.16	2.2426E+000		-3.7495E-001
	964.01	14.40	7.4651E-001		5.8964E-001
	1085.78	10.00	8.7698E-001		1.0796E+000
	1112.02	13.30	6.1652E-001		-1.0606E+000
1407.95	20.70	3.2720E-001	2.0843E-001		
Eu-154	123.07	40.50	6.0510E-001	2.18E-001	-1.6485E-001
	247.94	6.60	2.0464E+000		-8.4515E-001
	591.81	4.83	1.7797E+000		-2.2154E+000
	723.30	19.70	5.4652E-001		1.6419E-001
	756.87	4.33	1.9845E+000		-1.7165E-001
	873.19	11.50	7.6285E-001		-4.0622E-002
	996.32	10.30	8.2831E-001		4.7777E-001
	1004.76	17.90	4.6764E-001		-2.0796E-001
1274.45	35.50	2.1776E-001	8.6115E-002		
Eu-155	86.54	30.90	1.5620E+000	1.55E+000	1.1970E+000
	105.31	20.70	1.5490E+000		-1.5180E-001
Am-241	59.54	35.90	3.6509E+000	3.65E+000	-4.5443E-001
Cm-243	228.19	10.56	1.4113E+000	9.39E-001	6.1698E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.3946E-001	9.39E-001	-9.4013E-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 7/31/2006 8:13:48 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: BRN7722

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-01-186-F-G

Sample ID: OOL-10-01-186-F

Sample Title: OOL-10-01-186-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 1:50:48 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-186-F-G

Log Number: OOL-10-01-186-F

Title: OOL-10-01-186-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	286-	305	291.02	72.84	0.93	1.35E+002	40.30	5.64E+002
m	2	286-	305	299.53	74.97	0.93	2.65E+002	49.05	8.66E+002
	3	948-	958	954.36	238.69	0.70	9.05E+001	44.88	1.82E+002
	4	1171-	1186	1179.99	295.10	0.72	5.24E+001	45.49	1.60E+002
	5	1347-	1357	1351.92	338.08	0.39	3.89E+001	27.96	6.81E+001
	6	1399-	1414	1405.94	351.59	1.07	1.97E+002	42.74	9.29E+001
	7	1553-	1561	1556.85	389.32	0.45	2.93E+001	21.18	4.07E+001
	8	2324-	2336	2330.67	582.79	0.51	4.95E+001	28.87	6.35E+001
	9	2428-	2444	2434.74	608.80	1.21	2.21E+002	38.77	5.35E+001
	10	4945-	4957	4950.83	1237.86	1.52	2.46E+001	14.84	1.24E+001
	11	5830-	5854	5841.61	1460.57	1.88	4.04E+002	42.24	1.50E+001
	12	7048-	7065	7056.70	1764.37	0.44	6.25E+001	17.21	4.50E+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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-01-186-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	8.56881E+000	1.13303E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.04582E-001	6.25448E-002
Pb-212	0.581	860.37	12.46		
		74.81* @	10.70	8.65656E+000	2.33373E+000
		77.11 @	18.00		
Bi-214	0.689	87.30 @	8.00		
		238.63*	44.60	2.82292E-001	1.46803E-001
		609.31*	46.30	8.60017E-001	1.84623E-001
PB-214	0.618	1120.29	15.10		
		1764.49*	15.80	9.74533E-001	2.85528E-001
		74.82* @	6.21	1.49155E+001	4.16430E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.99873E-001	3.53430E-001
		351.92*	37.20	8.09613E-001	2.21655E-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-10-01-186-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	8.568807E+000	1.133034E+000
TL-208	0.469	1.045819E-001	6.254478E-002
Pb-212 @	0.581	2.822921E-001	1.468025E-001
Bi-214	0.689	8.937798E-001	1.550361E-001
PB-214 @	0.618	6.939470E-001	1.877813E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.2521E-001	29.83
5	338.08	6.4786E-002	71.92
7	389.32	4.8869E-002	72.23
10	1237.86	4.1002E-002	60.33

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:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-01-186-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	9.5636E-002	6.98E-002	5.5704E-002
	1332.49	100.00	6.9780E-002		2.6304E-002
Nb-94	702.63	100.00	9.3811E-002	8.31E-002	1.9346E-002
	871.10	100.00	8.3118E-002		-9.1679E-002
Ag-108m	79.20	7.10	7.0382E+000	1.13E-001	-3.4358E+000
	433.93	89.90	1.1422E-001		1.5008E-002
	614.37	90.40	1.2257E-001		-5.0791E-002
	722.95	90.50	1.1303E-001		9.1713E-002
Sb-125	176.33	6.89	2.1695E+000	3.43E-001	1.1933E+000
	427.89	29.33	3.4260E-001		-9.0574E-002
	463.38	10.35	9.6039E-001		-7.8468E-002
	600.56	17.80	5.4423E-001		-5.4462E-002
	606.64	5.02	3.1885E+000		8.6215E+000
	635.90	11.32	8.7835E-001		1.1539E-002
Cs-134	563.23	8.38	1.1325E+000	1.11E-001	-1.4043E-001
	569.32	15.43	6.6826E-001		5.1453E-001
	604.70	97.60	1.5670E-001		-1.3508E-001
	795.84	85.40	1.1082E-001		6.8395E-002
Cs-137	801.93	8.73	9.6474E-001	1.16E-001	1.1634E-001
	661.65	85.12	1.1599E-001		1.3144E-001
Eu-152	121.78	28.40	7.9625E-001	3.33E-001	5.7159E-001
	244.69	7.49	1.8491E+000		-5.3347E-002
	344.27	26.50	3.9576E-001		5.4654E-002
	778.89	12.74	7.3932E-001		2.4373E-001
	867.32	4.16	1.9831E+000		-4.5168E-001
	964.01	14.40	7.2002E-001		1.4806E-001
	1085.78	10.00	8.7619E-001		-1.9088E-001
	1112.02	13.30	6.2260E-001		-1.5206E+000
1407.95	20.70	3.3345E-001	-1.7206E-001		
Eu-154	123.07	40.50	5.4958E-001	2.36E-001	1.3449E-001
	247.94	6.60	1.9433E+000		5.8385E-001
	591.81	4.83	1.9567E+000		-7.5944E-001
	723.30	19.70	5.2131E-001		4.4006E-001
	756.87	4.33	2.2915E+000		1.9529E+000
	873.19	11.50	7.4625E-001		2.5178E-001
	996.32	10.30	7.8000E-001		2.2303E-001
	1004.76	17.90	4.7854E-001		2.1864E-001
1274.45	35.50	2.3595E-001	-5.0499E-002		
Eu-155	86.54	30.90	1.3238E+000	1.26E+000	1.3842E+000
	105.31	20.70	1.2612E+000		-6.5785E-001
Am-241	59.54	35.90	2.4228E+000	2.42E+000	5.2381E-001
Cm-243	228.19	10.56	1.2983E+000	8.56E-001	-1.1816E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	8.5567E-001	8.56E-001	7.9372E-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 7/31/2006 11:39:06 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-186-F-

Sample Title: OOL-10-01-186-F-R

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 11:29:05 AM

Live Time: 600.0 seconds

Real Time: 600.8 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-10-01-186-F-
Title: OOL-10-01-186-F-R
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	944-	959	954.61	238.61	1.21	1.17E+002	56.86	2.40E+002
2	1400-	1416	1405.01	351.21	1.02	1.19E+002	38.10	7.99E+001
3	3634-	3651	3640.85	910.18	1.54	7.02E+001	24.03	2.48E+001
4	4472-	4484	4478.08	1119.48	0.93	3.17E+001	16.47	1.43E+001
5	5827-	5852	5839.28	1459.79	1.76	4.02E+002	41.88	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: 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	0.966	1460.81*	10.67	8.82467E+000	1.16407E+000
Pb-212	0.454	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.78925E-001	1.93302E-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	0.966	8.824671E+000	1.164069E+000
Pb-212 @	0.454	3.789247E-001	1.933019E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.21	1.9857E-001	31.98
3	910.18	1.1702E-001	34.22
4	1119.48	5.2790E-002	51.99

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: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	8.3715E-002	8.05E-002	-7.0381E-002
	1332.49	100.00	8.0520E-002		2.1848E-002
Nb-94	702.63	100.00	9.6596E-002	8.50E-002	-3.3924E-002
	871.10	100.00	8.4974E-002		-1.5590E-002
Ag-108m	79.20	7.10	9.1474E+000	1.24E-001	-1.9199E+001
	433.93	89.90	1.2455E-001		-2.4712E-002
	614.37	90.40	1.3237E-001		-8.9395E-002
	722.95	90.50	1.2372E-001		1.5116E-001
Sb-125	176.33	6.89	2.5684E+000	3.91E-001	1.6743E+000
	427.89	29.33	3.9125E-001		4.2962E-001
	463.38	10.35	1.0249E+000		7.5049E-001
	600.56	17.80	6.0144E-001		-4.1384E-001
	606.64	5.02	2.7815E+000		5.4549E+000
	635.90	11.32	8.5179E-001		-2.6275E-001
Cs-134	563.23	8.38	1.2425E+000	1.11E-001	3.2607E-001
	569.32	15.43	6.7482E-001		5.8319E-001
	604.70	97.60	1.3887E-001		8.5069E-002
	795.84	85.40	1.1089E-001		5.1759E-002
	801.93	8.73	1.1025E+000		-4.6174E-001
Cs-137	661.65	85.12	1.1822E-001	1.18E-001	9.2276E-002
Eu-152	121.78	28.40	8.7676E-001	3.53E-001	-8.4865E-001
	244.69	7.49	1.9410E+000		2.4040E-002
	344.27	26.50	4.4110E-001		3.8854E-002
	778.89	12.74	7.3659E-001		-1.5483E-002
	867.32	4.16	2.0542E+000		-2.1345E+000
	964.01	14.40	7.6506E-001		8.5631E-001
	1085.78	10.00	8.5897E-001		-6.1643E-001
	1112.02	13.30	6.4031E-001		-7.4354E-001
1407.95	20.70	3.5308E-001	2.7513E-001		
Eu-154	123.07	40.50	6.0686E-001	2.07E-001	3.2025E-003
	247.94	6.60	1.9763E+000		-1.6860E+000
	591.81	4.83	2.0580E+000		-1.4369E-001
	723.30	19.70	5.6055E-001		2.2690E-001
	756.87	4.33	2.1665E+000		7.7183E-001
	873.19	11.50	7.5350E-001		4.5560E-001
	996.32	10.30	8.3960E-001		-1.1552E-001
	1004.76	17.90	4.6427E-001		2.9941E-001
1274.45	35.50	2.0701E-001	4.9821E-002		
Eu-155	86.54	30.90	1.6380E+000	1.64E+000	2.1572E+000
	105.31	20.70	1.6634E+000		1.6297E+000
Am-241	59.54	35.90	3.9275E+000	3.93E+000	-2.6774E+000
Cm-243	228.19	10.56	1.4342E+000	9.38E-001	-5.7698E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.3811E-001	9.38E-001	-7.1233E-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 8/2/2006 6:18:42 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: GRN7780

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-01-186-F-S

Sample ID: OOL-10-01-186-F

Sample Title: OOL-10-01-186-F-S

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 11:42:30 AM

Live Time: 4.0 seconds

Real Time: 4.0 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

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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-01-186-F-S

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams	Activity) Uncertainty
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* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
I N T E R 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-10-01-186-F-S

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:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-01-186-F-S

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	8.7919E-001	8.79E-001	0.0000E+000
	1332.49	100.00	9.1184E-001		0.0000E+000
Nb-94	702.63	100.00	2.7017E+000	8.20E-001	5.8189E-001
	871.10	100.00	8.1964E-001		0.0000E+000
Ag-108m	79.20	7.10	8.1278E+001	7.54E-001	-6.8582E+001
	433.93	89.90	7.5448E-001		0.0000E+000
	614.37	90.40	2.2858E+000		3.1062E-001
	722.95	90.50	2.3784E+000		3.2321E-001
Sb-125	176.33	6.89	3.8585E+001	2.30E+000	1.4716E+001
	427.89	29.33	2.3020E+000		0.0000E+000
	463.38	10.35	2.2976E+001		4.9486E+000
	600.56	17.80	4.2373E+000		0.0000E+000
	606.64	5.02	1.5074E+001		0.0000E+000
	635.90	11.32	2.3295E+001		5.0173E+000
	795.84	85.40	2.5662E+000		3.4873E-001
Cs-134	563.23	8.38	2.3968E+001	7.75E-001	3.2571E+000
	569.32	15.43	1.3063E+001		1.7751E+000
	604.70	97.60	7.7452E-001		0.0000E+000
Cs-137	661.65	85.12	9.1457E-001	9.15E-001	0.0000E+000
	795.84	85.40	2.5662E+000		3.4873E-001
	801.93	8.73	2.5139E+001		3.4162E+000
Eu-152	121.78	28.40	1.0543E+001	4.52E+000	-5.2271E+000
	244.69	7.49	2.7052E+001		5.8265E+000
	344.27	26.50	8.2528E+000		1.7775E+000
	778.89	12.74	1.7133E+001		2.3282E+000
	867.32	4.16	5.3537E+001		7.2752E+000
	964.01	14.40	1.5836E+001		2.1519E+000
	1085.78	10.00	8.6293E+000		0.0000E+000
	1112.02	13.30	1.7746E+001		2.4115E+000
	1407.95	20.70	4.5235E+000		0.0000E+000
	Eu-154	123.07	40.50		7.3425E+000
247.94		6.60	3.0791E+001	-1.2434E+000	
591.81		4.83	1.5541E+001	0.0000E+000	
723.30		19.70	1.0927E+001	-1.3735E+001	
756.87		4.33	5.0139E+001	6.8135E+000	
873.19		11.50	7.1305E+000	0.0000E+000	
996.32		10.30	2.8160E+001	6.0651E+000	
1004.76		17.90	1.6237E+001	3.4971E+000	
Eu-155	1274.45	35.50	2.5360E+000	1.36E+001	0.0000E+000
	86.54	30.90	1.3598E+001		3.7896E+000
	105.31	20.70	1.7893E+001		2.9345E+000
Am-241	59.54	35.90	7.5162E+001	7.52E+001	1.5540E+001
Cm-243	228.19	10.56	1.8890E+001	1.89E+001	4.0686E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.9257E+001	1.89E+001	6.4128E+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 7/31/2006 8:14:34 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: BRN7722

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-01-187-F-G

Sample ID: OOL-10-01-187-F

Sample Title: OOL-10-01-187-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 2:17:20 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-187-F-G

Log Number: OOL-10-01-187-F

Title: OOL-10-01-187-F-G

Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	291.41	72.94	0.90	1.70E+002	46.43	8.87E+002
m	2	284-	305	299.79	75.04	0.90	3.22E+002	54.32	1.01E+003
M	3	945-	971	953.53	238.48	0.95	1.86E+002	34.11	2.38E+002
m	4	945-	971	965.24	241.41	0.96	7.25E+001	26.29	2.12E+002
	5	1173-	1187	1179.06	294.87	1.12	1.51E+002	46.52	1.43E+002
	6	1397-	1413	1405.93	351.59	1.13	2.15E+002	49.08	1.32E+002
	7	2324-	2337	2330.44	582.73	1.10	1.27E+002	33.61	6.06E+001
	8	2427-	2444	2434.73	608.80	1.68	2.80E+002	44.92	7.57E+001
	9	3492-	3501	3496.19	874.18	0.49	1.57E+001	13.83	1.43E+001
	10	3632-	3651	3642.06	910.65	1.30	9.52E+001	34.20	5.98E+001
	11	3866-	3880	3872.40	968.24	0.94	4.33E+001	23.29	3.38E+001
	12	4472-	4488	4477.72	1119.58	0.97	6.68E+001	25.68	3.32E+001
	13	5503-	5515	5509.13	1377.45	0.71	2.39E+001	13.27	8.05E+000
	14	5830-	5853	5841.23	1460.48	1.68	6.96E+002	55.80	2.91E+001
	15	7047-	7067	7056.84	1764.40	0.87	9.19E+001	20.61	5.14E+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-10-01-187-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	0.996	1460.81*	10.67	1.47586E+001	1.68177E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.69430E-001	7.92570E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	1.04850E+001	2.71196E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.81112E-001	1.40052E-001
Bi-214	0.990	609.31*	46.30	1.09295E+000	2.20942E-001
		1120.29*	15.10	9.18819E-001	3.66486E-001
		1764.49*	15.80	1.43227E+000	3.51797E-001
PB-214	0.773	74.82* @	6.21	1.80659E+001	4.85333E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98*	7.49	1.34984E+000	5.38471E-001
		295.21*	19.20	1.15381E+000	4.04417E-001
		351.92*	37.20	8.84462E-001	2.49979E-001
Ac-228	0.623	338.32	11.40		
		911.07*	27.70	6.83790E-001	2.57897E-001
		969.11*	16.60	5.24969E-001	2.88009E-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-10-01-187-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	0.996	1.475862E+001	1.681772E+000
TL-208	0.468	2.694303E-001	7.925700E-002
Pb-212 @	0.580	5.811123E-001	1.400521E-001
Bi-214	0.990	1.133085E+000	1.666417E-001
PB-214 @	0.773	1.011657E+000	1.977746E-001
Ac-228	0.623	6.131136E-001	1.921278E-001

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	2.8397E-001	27.25
9	874.18	2.6125E-002	88.20
13	1377.45	3.9909E-002	55.43

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-10-01-187-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	1.0078E-001	8.61E-002	-2.5470E-002
	1332.49	100.00	8.6075E-002		3.8521E-002
Nb-94	702.63	100.00	1.0005E-001	9.79E-002	3.0414E-002
	871.10	100.00	9.7916E-002		6.7462E-002
Ag-108m	79.20	7.10	7.7520E+000	1.24E-001	-4.1929E+000
	433.93	89.90	1.2407E-001		-1.4776E-002
	614.37	90.40	1.3919E-001		-2.4042E-002
	722.95	90.50	1.2668E-001		8.7486E-002
Sb-125	176.33	6.89	2.4544E+000	3.99E-001	-1.1996E-001
	427.89	29.33	3.9874E-001		1.5616E-001
	463.38	10.35	1.1135E+000		-6.7766E-001
	600.56	17.80	6.4001E-001		9.0108E-002
	606.64	5.02	3.6353E+000		9.8123E+000
	635.90	11.32	9.5304E-001		6.8489E-002
Cs-134	563.23	8.38	1.3797E+000	1.25E-001	9.4479E-001
	569.32	15.43	7.2786E-001		-5.6362E-001
	604.70	97.60	1.8248E-001		-6.2644E-002
	795.84	85.40	1.2517E-001		6.8823E-002
	801.93	8.73	1.0910E+000		-4.1169E-001
Cs-137	661.65	85.12	1.3450E-001	1.34E-001	-2.8617E-002
Eu-152	121.78	28.40	8.4909E-001	4.13E-001	3.5867E-001
	244.69	7.49	2.0368E+000		1.8859E-001
	344.27	26.50	4.4336E-001		-3.8270E-001
	778.89	12.74	7.8376E-001		-1.3104E+000
	867.32	4.16	2.1697E+000		-2.0469E+000
	964.01	14.40	8.8340E-001		2.4461E-001
	1085.78	10.00	9.5653E-001		3.6113E-001
	1112.02	13.30	6.9111E-001		-6.7684E-002
1407.95	20.70	4.1343E-001	1.8532E-001		
Eu-154	123.07	40.50	5.9492E-001	2.60E-001	3.0623E-001
	247.94	6.60	2.1872E+000		-4.8394E-001
	591.81	4.83	2.1901E+000		-1.7335E+000
	723.30	19.70	5.8023E-001		4.9542E-001
	756.87	4.33	2.3489E+000		1.0922E+000
	873.19	11.50	8.2376E-001		-4.1519E-001
	996.32	10.30	1.0521E+000		-2.9481E-001
	1004.76	17.90	5.9423E-001		3.1300E-001
1274.45	35.50	2.5985E-001	-5.7308E-002		
Eu-155	86.54	30.90	1.4596E+000	1.45E+000	1.5041E+000
	105.31	20.70	1.4519E+000		6.6632E-002
Am-241	59.54	35.90	2.8269E+000	2.83E+000	-2.6122E-001
Cm-243	228.19	10.56	1.4480E+000	1.04E+000	-1.4663E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.0406E+000	1.04E+000	1.3776E+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 7/28/2006 11:51:17 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-188-F-

Sample Title: OOL-10-01-188-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 11:41:21 AM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

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

Filename: BRN7722
Log Number: OOL-10-01-188-F-
Title: OOL-10-01-188-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	306	299.70	75.01	0.89	1.33E+002	79.86	6.35E+002
2	949-	960	953.67	238.51	1.01	9.42E+001	43.78	1.59E+002
3	1399-	1413	1405.88	351.57	0.62	8.79E+001	34.66	7.81E+001
4	2324-	2338	2330.15	582.66	0.77	6.27E+001	29.21	5.53E+001
5	2427-	2442	2434.10	608.65	0.80	7.93E+001	30.02	5.17E+001
6	4471-	4487	4479.54	1120.04	0.54	4.37E+001	21.16	2.33E+001
7	5829-	5852	5841.73	1460.60	1.88	3.55E+002	40.45	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: 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	7.53365E+000	1.05270E+000
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.32560E-001	6.41311E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	4.35308E+000	2.74037E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.93797E-001	1.44098E-001
Bi-214	0.696	609.31*	46.30	3.09316E-001	1.23097E-001
		1120.29*	15.10	6.00905E-001	2.97948E-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: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	7.533654E+000	1.052701E+000
TL-208	0.466	1.325597E-001	6.413114E-002
Pb-212 @	0.580	2.937967E-001	1.440982E-001
Bi-214	0.696	3.518315E-001	1.137700E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.57	1.4656E-001	39.42

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	8.4946E-002	7.37E-002	7.4330E-002
	1332.49	100.00	7.3657E-002		3.3443E-002
Nb-94	702.63	100.00	9.0296E-002	7.98E-002	6.1339E-002
	871.10	100.00	7.9806E-002		-3.5778E-002
Ag-108m	79.20	7.10	6.5466E+000	9.79E-002	1.3076E+000
	433.93	89.90	9.7886E-002		-1.6178E-002
	614.37	90.40	1.0752E-001		1.6359E-002
	722.95	90.50	9.7877E-002		4.0034E-002
Sb-125	176.33	6.89	1.9150E+000	2.92E-001	6.2460E-001
	427.89	29.33	2.9168E-001		6.4049E-002
	463.38	10.35	8.4790E-001		1.4044E-001
	600.56	17.80	4.4499E-001		-8.9314E-001
	606.64	5.02	2.3892E+000		3.7432E+000
	635.90	11.32	7.1262E-001		1.6174E-002
Cs-134	563.23	8.38	1.0493E+000	9.35E-002	-9.8413E-001
	569.32	15.43	6.0247E-001		2.0044E-001
	604.70	97.60	1.2055E-001		1.3339E-002
	795.84	85.40	9.3526E-002		4.0143E-002
Cs-137	801.93	8.73	8.8483E-001	9.13E-002	4.0547E-001
	661.65	85.12	9.1298E-002		-5.1069E-002
Eu-152	121.78	28.40	7.2679E-001	2.69E-001	6.0572E-001
	244.69	7.49	1.5812E+000		6.9314E-001
	344.27	26.50	3.5729E-001		-1.9443E-001
	778.89	12.74	6.2396E-001		1.2524E-001
	867.32	4.16	1.9301E+000		-1.0454E+000
	964.01	14.40	6.8501E-001		4.7651E-001
	1085.78	10.00	6.9992E-001		-7.6697E-001
	1112.02	13.30	6.1346E-001		-2.1849E-001
	1407.95	20.70	2.6906E-001		-4.4769E-002
	Eu-154	123.07	40.50		5.0033E-001
247.94		6.60	1.6988E+000	-4.4149E-001	
591.81		4.83	1.7891E+000	-6.5959E-001	
723.30		19.70	4.4733E-001	2.1679E-002	
756.87		4.33	1.9204E+000	-1.9796E+000	
873.19		11.50	6.8941E-001	-3.3954E-001	
996.32		10.30	6.9419E-001	8.3867E-001	
1004.76		17.90	3.9636E-001	2.0501E-001	
Eu-155	1274.45	35.50	2.0705E-001	1.22E+000	-1.7177E-001
	86.54	30.90	1.2193E+000		1.9802E+000
Am-241	105.31	20.70	1.2922E+000	2.29E+000	1.0148E+000
	59.54	35.90	2.2937E+000		-3.6992E-001
Cm-243	228.19	10.56	1.1614E+000	7.74E-001	2.9614E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	7.7385E-001	7.74E-001	4.8578E-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 7/28/2006 11:36:46 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-10-01-189-F-

Sample Title: OOL-10-01-189-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 11:26:42 AM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-189-F-
 Title: OOL-10-01-189-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	285-	305	291.03	72.85	1.02	1.12E+002	38.38	6.03E+002
m	2	285-	305	299.73	75.02	1.03	2.70E+002	46.70	7.63E+002
	3	332-	345	339.56	84.98	0.80	1.02E+002	89.51	7.19E+002
	4	948-	959	953.84	238.56	1.09	9.99E+001	43.41	1.56E+002
	5	1397-	1413	1406.38	351.70	1.56	9.50E+001	40.18	1.04E+002
	6	2325-	2337	2330.55	582.76	0.70	6.19E+001	24.97	3.81E+001
	7	2425-	2442	2434.32	608.70	1.36	8.89E+001	35.26	7.21E+001
	8	3634-	3652	3641.23	910.45	0.99	6.57E+001	25.04	2.73E+001
	9	5831-	5852	5841.77	1460.61	2.34	3.86E+002	40.88	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: 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	8.17884E+000	1.09104E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.30832E-001	5.54886E-002
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	8.79273E+000	2.29959E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.11557E-001	1.43931E-001
Bi-214	0.394	609.31*	46.30	3.46679E-001	1.43982E-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	0.999	8.178836E+000	1.091043E+000
TL-208	0.468	1.308316E-001	5.548863E-002
Pb-212 @	0.581	3.115571E-001	1.439306E-001
Bi-214	0.394	3.466794E-001	1.439825E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.8709E-001	34.19
3	84.98	1.6939E-001	88.07
5	351.70	1.5838E-001	42.28
8	910.45	1.0949E-001	38.11

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	7.7378E-002	7.29E-002	-6.6779E-002
	1332.49	100.00	7.2899E-002		1.1080E-002
Nb-94	702.63	100.00	9.3379E-002	8.63E-002	-1.4277E-003
	871.10	100.00	8.6294E-002		4.4104E-002
Ag-108m	79.20	7.10	6.5291E+000	1.03E-001	-6.9849E+000
	433.93	89.90	1.0793E-001		-1.3972E-002
	614.37	90.40	1.0709E-001		-5.1358E-002
	722.95	90.50	1.0287E-001		1.6192E-002
Sb-125	176.33	6.89	2.0320E+000	3.48E-001	6.0033E-001
	427.89	29.33	3.4756E-001		6.2550E-002
	463.38	10.35	9.1077E-001		8.8404E-002
	600.56	17.80	5.1567E-001		-2.5571E-001
	606.64	5.02	2.6046E+000		5.3850E+000
	635.90	11.32	7.5369E-001		-1.6701E-001
Cs-134	563.23	8.38	1.0825E+000	1.01E-001	-1.1966E+000
	569.32	15.43	5.8991E-001		2.5078E-001
	604.70	97.60	1.2646E-001		-3.9908E-002
	795.84	85.40	1.0140E-001		3.4792E-002
	801.93	8.73	9.9365E-001		1.1357E+000
Cs-137	661.65	85.12	1.1171E-001	1.12E-001	-5.1611E-003
Eu-152	121.78	28.40	7.6772E-001	3.25E-001	7.1948E-002
	244.69	7.49	1.5960E+000		-1.1286E+000
	344.27	26.50	3.6958E-001		-1.0462E-001
	778.89	12.74	7.0681E-001		-2.7054E-001
	867.32	4.16	2.0219E+000		-5.3407E-001
	964.01	14.40	7.1065E-001		2.3765E-001
	1085.78	10.00	8.5915E-001		2.0931E-001
	1112.02	13.30	5.8994E-001		2.8430E-001
1407.95	20.70	3.2511E-001	-7.1437E-002		
Eu-154	123.07	40.50	5.3276E-001	1.80E-001	3.2694E-002
	247.94	6.60	1.7690E+000		-1.9613E+000
	591.81	4.83	1.8325E+000		-1.2908E+000
	723.30	19.70	4.7261E-001		5.5964E-002
	756.87	4.33	1.9666E+000		-8.7613E-001
	873.19	11.50	7.8602E-001		2.0485E-001
	996.32	10.30	8.4090E-001		4.9131E-002
	1004.76	17.90	4.0762E-001		3.5977E-002
1274.45	35.50	1.8030E-001	-6.7762E-002		
Eu-155	86.54	30.90	1.2241E+000	1.22E+000	-3.8878E-001
	105.31	20.70	1.2606E+000		-5.2315E-001
Am-241	59.54	35.90	2.3582E+000	2.36E+000	-1.0249E+000
Cm-243	228.19	10.56	1.2218E+000	7.60E-001	-4.2111E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	7.5985E-001	7.60E-001	-6.1968E-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 7/28/2006 11:19:28 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-190-F-

Sample Title: OOL-10-01-190-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 11:09:24 AM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-190-F-
Title: OOL-10-01-190-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-	306	290.97	72.83	0.96	2.18E+002	47.46	8.25E+002
m	2	284-	306	299.56	74.98	0.96	3.30E+002	54.29	1.06E+003
	3	949-	960	954.00	238.60	0.78	1.69E+002	54.60	2.40E+002
	4	1171-	1189	1180.11	295.13	0.76	1.05E+002	52.93	1.85E+002
	5	1398-	1414	1405.74	351.54	1.35	1.07E+002	46.17	1.40E+002
	6	2324-	2337	2330.58	582.76	0.70	1.43E+002	33.41	5.30E+001
	7	2428-	2445	2435.13	608.90	1.07	1.16E+002	35.68	6.63E+001
	8	3171-	3182	3177.17	794.42	1.09	2.65E+001	20.10	3.15E+001
	9	3631-	3652	3641.16	910.43	1.34	1.41E+002	32.95	3.66E+001
	10	3865-	3880	3872.94	968.38	1.02	5.09E+001	24.83	3.61E+001
	11	4471-	4485	4477.94	1119.64	0.60	3.31E+001	20.78	2.69E+001
	12	5828-	5855	5840.99	1460.42	1.92	7.01E+002	55.05	2.01E+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: 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	0.994	1460.81*	10.67	1.48653E+001	1.67674E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.02327E-001	8.08822E-002
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	1.07682E+001	2.75645E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.27796E-001	1.89341E-001
Bi-214	0.700	609.31*	46.30	4.51216E-001	1.49832E-001
		1120.29*	15.10	4.55254E-001	2.89931E-001
		1764.49	15.80		
PB-214	0.617	74.82* @	6.21	1.85539E+001	4.93673E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	8.04068E-001	4.25815E-001
		351.92*	37.20	4.39237E-001	2.03329E-001
Ac-228	0.621	338.32	11.40		
		911.07*	27.70	1.01554E+000	2.63938E-001
		969.11*	16.60	6.17243E-001	3.08263E-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	0.994	1.486531E+001	1.676736E+000
TL-208	0.468	3.023274E-001	8.088221E-002
Pb-212 @	0.581	5.277957E-001	1.893409E-001
Bi-214	0.700	4.520673E-001	1.331086E-001
PB-214 @	0.617	5.069772E-001	1.834838E-001
Ac-228	0.621	8.470626E-001	2.004890E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.6341E-001	21.77
8	794.42	4.4246E-002	75.72

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	9.7209E-002	7.59E-002	-4.0043E-002
	1332.49	100.00	7.5880E-002		3.5753E-002
Nb-94	702.63	100.00	1.0779E-001	9.61E-002	4.0031E-002
	871.10	100.00	9.6082E-002		-3.9908E-002
Ag-108m	79.20	7.10	7.6680E+000	1.23E-001	-2.6518E+000
	433.93	89.90	1.2927E-001		2.3616E-002
	614.37	90.40	1.2331E-001		5.2296E-002
	722.95	90.50	1.2271E-001		-6.1780E-003
Sb-125	176.33	6.89	2.3407E+000	3.88E-001	3.0492E-001
	427.89	29.33	3.8836E-001		-2.2403E-001
	463.38	10.35	1.0820E+000		-3.0668E-001
	600.56	17.80	5.7734E-001		-3.2923E-001
	606.64	5.02	2.7560E+000		-1.2644E+000
	635.90	11.32	9.4365E-001		3.5362E-001
Cs-134	563.23	8.38	1.3578E+000	1.19E-001	5.4911E-001
	569.32	15.43	7.3596E-001		2.2532E-001
	604.70	97.60	1.3778E-001		-3.5788E-002
	795.84	85.40	1.1896E-001		3.3550E-002
	801.93	8.73	1.0489E+000		3.4566E-002
Cs-137	661.65	85.12	1.2366E-001	1.24E-001	-5.2866E-002
Eu-152	121.78	28.40	8.5586E-001	3.90E-001	-4.5287E-001
	244.69	7.49	1.9313E+000		-1.1570E-001
	344.27	26.50	4.5079E-001		-3.5990E-002
	778.89	12.74	7.3932E-001		-2.2354E-001
	867.32	4.16	2.4265E+000		-2.7109E-001
	964.01	14.40	8.7586E-001		9.0064E-002
	1085.78	10.00	9.1462E-001		-6.9053E-001
	1112.02	13.30	7.5305E-001		-1.2929E-001
1407.95	20.70	3.8991E-001	1.8292E-001		
Eu-154	123.07	40.50	5.9582E-001	2.57E-001	3.0963E-001
	247.94	6.60	2.0859E+000		-6.3213E-001
	591.81	4.83	2.2113E+000		-3.9867E-001
	723.30	19.70	5.5820E-001		2.2048E-001
	756.87	4.33	2.5305E+000		3.5730E-001
	873.19	11.50	8.2376E-001		-7.6836E-001
	996.32	10.30	9.2670E-001		4.1851E-001
	1004.76	17.90	4.9683E-001		-5.4101E-002
1274.45	35.50	2.5658E-001	-2.3903E-002		
Eu-155	86.54	30.90	1.4731E+000	1.43E+000	1.7031E+000
	105.31	20.70	1.4307E+000		-2.5697E-001
Am-241	59.54	35.90	2.7174E+000	2.72E+000	-7.3210E-001
Cm-243	228.19	10.56	1.3923E+000	9.00E-001	2.5514E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.0030E-001	9.00E-001	-2.1153E-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 7/28/2006 10:34:29 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-191-F-

Sample Title: OOL-10-01-191-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 10:24:26 AM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-191-F-
Title: OOL-10-01-191-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 10 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	8.83412E+000	1.14955E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.50252E-001	6.02382E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.35624E+000	2.52238E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.40829E-001	1.62312E-001
Bi-214	0.689	609.31*	46.30	3.90055E-001	1.21692E-001
		1120.29	15.10		
		1764.49*	15.80	4.21945E-001	2.15300E-001
PB-214	0.617	74.82* @	6.21	5.78290E+000	4.36635E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.12270E-001	2.65058E-001
		351.92*	37.20	5.68471E-001	1.89916E-001
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	6.62795E-001	2.00053E-001
		969.11*	16.60	3.65454E-001	2.14644E-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	8.834119E+000	1.149547E+000
TL-208	0.468	1.502522E-001	6.023824E-002
Pb-212 @	0.580	3.408285E-001	1.623116E-001
Bi-214	0.689	3.977761E-001	1.059404E-001
PB-214 @	0.617	5.154834E-001	1.543786E-001
Ac-228	0.631	5.245737E-001	1.463455E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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: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	8.3124E-002	7.66E-002	1.8408E-002
	1332.49	100.00	7.6605E-002		4.1294E-002
Nb-94	702.63	100.00	8.7561E-002	7.87E-002	-2.5641E-002
	871.10	100.00	7.8669E-002		-2.9061E-002
Ag-108m	79.20	7.10	6.4821E+000	9.72E-002	-2.0385E+000
	433.93	89.90	1.1422E-001		3.3806E-002
	614.37	90.40	9.7212E-002		-7.0043E-002
	722.95	90.50	1.0527E-001		5.1084E-002
Sb-125	176.33	6.89	2.0049E+000	3.39E-001	8.5467E-001
	427.89	29.33	3.3858E-001		-6.0070E-002
	463.38	10.35	9.3282E-001		3.2275E-001
	600.56	17.80	5.1340E-001		1.0430E-002
	606.64	5.02	2.4553E+000		4.3471E+000
	635.90	11.32	6.9111E-001		-4.1374E-001
Cs-134	563.23	8.38	1.1191E+000	1.04E-001	-6.0958E-002
	569.32	15.43	6.3391E-001		4.2698E-001
	604.70	97.60	1.2338E-001		3.5947E-002
	795.84	85.40	1.0427E-001		-1.4843E-002
	801.93	8.73	9.0394E-001		-3.3092E-001
Cs-137	661.65	85.12	1.0468E-001	1.05E-001	8.3741E-002
Eu-152	121.78	28.40	7.4588E-001	3.08E-001	6.4443E-001
	244.69	7.49	1.6298E+000		4.6376E-001
	344.27	26.50	3.6451E-001		-2.7522E-002
	778.89	12.74	6.8805E-001		5.0590E-003
	867.32	4.16	1.9166E+000		2.0583E+000
	964.01	14.40	6.6171E-001		9.0140E-002
	1085.78	10.00	6.7063E-001		-3.6264E-001
	1112.02	13.30	5.7533E-001		-4.4657E-001
1407.95	20.70	3.0769E-001	-2.3997E-001		
Eu-154	123.07	40.50	5.1225E-001	2.21E-001	8.4832E-002
	247.94	6.60	1.7690E+000		-1.8981E-001
	591.81	4.83	1.7625E+000		2.4010E-001
	723.30	19.70	4.7705E-001		1.3999E-001
	756.87	4.33	1.8609E+000		-1.7605E+000
	873.19	11.50	6.8941E-001		-6.5950E-001
	996.32	10.30	7.6249E-001		5.9701E-001
	1004.76	17.90	3.9636E-001		-4.5316E-002
1274.45	35.50	2.2105E-001	-5.4188E-002		
Eu-155	86.54	30.90	1.2312E+000	1.21E+000	9.0018E-001
	105.31	20.70	1.2053E+000		-9.3273E-001
Am-241	59.54	35.90	2.3582E+000	2.36E+000	-4.8139E-001
Cm-243	228.19	10.56	1.1614E+000	7.75E-001	-6.8897E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	7.7539E-001	7.75E-001	-6.5668E-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 7/28/2006 10:48:42 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-192-F-

Sample Title: OOL-10-01-192-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 10:38:38 AM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-192-F-
Title: OOL-10-01-192-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-	305	300.15	75.13	0.77	1.25E+002	80.34	6.49E+002
2	947-	961	953.42	238.45	0.88	8.28E+001	50.73	2.03E+002
3	1400-	1412	1405.98	351.60	0.81	8.02E+001	32.64	7.48E+001
4	2322-	2336	2331.04	582.88	0.90	6.28E+001	27.02	4.43E+001
5	2426-	2444	2435.41	608.97	0.40	9.72E+001	31.92	4.98E+001
6	3635-	3651	3642.66	910.80	0.40	5.91E+001	23.35	2.59E+001
7	3868-	3881	3873.73	968.57	0.87	2.73E+001	15.14	1.17E+001
8	5830-	5854	5841.69	1460.59	1.50	3.32E+002	37.66	9.18E+000
9	7051-	7064	7057.90	1764.66	0.67	2.65E+001	14.59	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: 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	7.03787E+000	9.81189E-001
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.32701E-001	5.97065E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	4.07292E+000	2.72738E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.58349E-001	1.63283E-001
Bi-214	0.692	609.31*	46.30	3.79002E-001	1.32973E-001
		1120.29	15.10		
		1764.49*	15.80	4.13233E-001	2.31194E-001
Ac-228	0.630	338.32	11.40		
		911.07*	27.70	4.24220E-001	1.74632E-001
		969.11*	16.60	3.31485E-001	1.87095E-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	7.037870E+000	9.811887E-001
TL-208	0.470	1.327014E-001	5.970646E-002
Pb-212 @	0.580	2.583490E-001	1.632830E-001
Bi-214	0.692	3.875108E-001	1.152675E-001
Ac-228	0.630	3.810441E-001	1.276623E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.60	1.3369E-001	40.69

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	7.3978E-002	7.21E-002	2.0865E-003
	1332.49	100.00	7.2133E-002		9.2168E-003
Nb-94	702.63	100.00	8.1800E-002	8.18E-002	-2.8057E-002
	871.10	100.00	8.3118E-002		2.2740E-002
Ag-108m	79.20	7.10	6.5408E+000	9.10E-002	-2.3051E+000
	433.93	89.90	9.5201E-002		2.4885E-002
	614.37	90.40	1.1209E-001		-7.3107E-002
	722.95	90.50	9.0957E-002		-2.6883E-002
Sb-125	176.33	6.89	2.0281E+000	3.10E-001	2.7674E-001
	427.89	29.33	3.1000E-001		-1.3970E-001
	463.38	10.35	8.7162E-001		-7.4415E-001
	600.56	17.80	5.1567E-001		-1.4024E-004
	606.64	5.02	2.5080E+000		4.8108E+000
	635.90	11.32	6.9547E-001		-7.6663E-001
Cs-134	563.23	8.38	1.0298E+000	9.85E-002	-3.6562E-001
	569.32	15.43	5.3935E-001		-2.3889E-001
	604.70	97.60	1.2150E-001		-5.1966E-002
	795.84	85.40	9.8454E-002		-2.1830E-002
	801.93	8.73	9.4694E-001		-3.0388E-001
Cs-137	661.65	85.12	1.0151E-001	1.02E-001	-5.1736E-002
Eu-152	121.78	28.40	7.5323E-001	3.46E-001	5.1965E-003
	244.69	7.49	1.6512E+000		2.7766E-001
	344.27	26.50	3.8339E-001		-4.5208E-002
	778.89	12.74	5.6145E-001		2.5835E-001
	867.32	4.16	1.9961E+000		-3.1939E-001
	964.01	14.40	6.4800E-001		1.5457E-001
	1085.78	10.00	7.3476E-001		1.9903E-001
	1112.02	13.30	6.0417E-001		-1.9361E-001
	1407.95	20.70	3.4555E-001		1.4518E-001
	Eu-154	123.07	40.50		5.2312E-001
247.94		6.60	1.7459E+000	5.8129E-001	
591.81		4.83	1.9487E+000	-9.7929E-001	
723.30		19.70	4.2295E-001	-1.7467E-002	
756.87		4.33	1.8730E+000	-1.0454E-001	
873.19		11.50	7.3248E-001	2.1676E-001	
996.32		10.30	8.0272E-001	-3.5988E-001	
1004.76		17.90	4.6271E-001	9.3585E-002	
1274.45		35.50	2.1115E-001	-4.7841E-002	
Eu-155		86.54	30.90	1.2487E+000	1.23E+000
	105.31	20.70	1.2274E+000	-4.0127E-001	
Am-241	59.54	35.90	2.3979E+000	2.40E+000	3.9110E-001
Cm-243	228.19	10.56	1.2584E+000	7.24E-001	1.0047E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	7.2444E-001	7.24E-001	-1.7787E-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 7/28/2006 11:03:11 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-193-F-

Sample Title: OOL-10-01-193-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 10:53:08 AM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-193-F-
Title: OOL-10-01-193-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	300.07	75.11	1.06	2.42E+002	105.48	1.05E+003
2	948-	960	953.32	238.43	1.34	2.09E+002	59.18	2.64E+002
3	1397-	1414	1405.96	351.60	1.14	1.55E+002	46.38	1.24E+002
4	2322-	2340	2329.91	582.60	1.21	1.55E+002	39.27	7.33E+001
5	2428-	2442	2434.66	608.79	1.58	1.24E+002	34.28	6.33E+001
6	3635-	3651	3642.23	910.70	1.21	9.83E+001	31.60	5.17E+001
7	3866-	3881	3872.53	968.27	0.74	5.92E+001	22.93	2.58E+001
8	4473-	4486	4478.99	1119.90	1.36	4.44E+001	20.25	2.26E+001
9	5830-	5854	5841.54	1460.56	1.94	6.98E+002	54.85	2.11E+001
10	7051-	7065	7058.04	1764.70	1.23	3.60E+001	13.64	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	1.48018E+001	1.67021E+000
TL-208	0.464	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.27163E-001	9.33383E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	7.86689E+000	3.75753E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.52612E-001	2.11007E-001
Bi-214	0.992	609.31*	46.30	4.82527E-001	1.46319E-001
		1120.29*	15.10	6.11359E-001	2.85941E-001
		1764.49*	15.80	5.61379E-001	2.20021E-001
Ac-228	0.624	338.32	11.40		
		911.07*	27.70	7.06327E-001	2.41048E-001
		969.11*	16.60	7.19111E-001	2.88367E-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	1.480178E+001	1.670210E+000
TL-208	0.464	3.271627E-001	9.333833E-002
Pb-212 @	0.580	6.526121E-001	2.110074E-001
Bi-214	0.992	5.227866E-001	1.120863E-001
Ac-228	0.624	7.115851E-001	1.849438E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.60	2.5819E-001	29.94

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: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	9.7209E-002	8.92E-002	-1.7516E-003
	1332.49	100.00	8.9197E-002		9.3524E-002
Nb-94	702.63	100.00	1.0553E-001	9.70E-002	-1.1880E-001
	871.10	100.00	9.7003E-002		-2.6411E-002
Ag-108m	79.20	7.10	8.0176E+000	1.26E-001	-5.2048E+000
	433.93	89.90	1.2554E-001		-5.5745E-002
	614.37	90.40	1.3011E-001		6.5737E-003
	722.95	90.50	1.3203E-001		-2.1508E-002
Sb-125	176.33	6.89	2.4176E+000	3.96E-001	-2.3598E-001
	427.89	29.33	3.9617E-001		-3.6713E-001
	463.38	10.35	1.1714E+000		8.6610E-001
	600.56	17.80	5.9512E-001		-1.9947E-001
	606.64	5.02	2.8943E+000		5.6299E+000
	635.90	11.32	1.0075E+000		-9.9582E-002
Cs-134	563.23	8.38	1.3652E+000	1.24E-001	4.7626E-001
	569.32	15.43	7.3596E-001		-1.0609E-001
	604.70	97.60	1.4612E-001		-8.3126E-002
	795.84	85.40	1.2423E-001		9.8414E-002
Cs-137	801.93	8.73	1.1315E+000	1.23E-001	1.3748E-001
	661.65	85.12	1.2278E-001		-6.5192E-002
Eu-152	121.78	28.40	8.8149E-001	3.46E-001	2.7608E-001
	244.69	7.49	2.0119E+000		3.0229E-001
	344.27	26.50	4.5405E-001		3.2382E-001
	778.89	12.74	7.4284E-001		-6.6580E-001
	867.32	4.16	2.4579E+000		-1.9698E-001
	964.01	14.40	9.1291E-001		4.2396E-001
	1085.78	10.00	9.3582E-001		6.4893E-001
	1112.02	13.30	6.7883E-001		-7.1759E-001
1407.95	20.70	3.4555E-001	1.3980E-001		
Eu-154	123.07	40.50	6.1459E-001	2.66E-001	3.2464E-001
	247.94	6.60	2.1454E+000		-4.6786E-002
	591.81	4.83	2.3673E+000		1.1623E+000
	723.30	19.70	6.2186E-001		2.1458E-001
	756.87	4.33	2.4049E+000		-1.2730E+000
	873.19	11.50	8.7140E-001		3.9342E-001
	996.32	10.30	9.2670E-001		2.8027E-001
	1004.76	17.90	5.4241E-001		-6.6915E-002
1274.45	35.50	2.6626E-001	-6.7544E-002		
Eu-155	86.54	30.90	1.4885E+000	1.49E+000	1.2804E+000
	105.31	20.70	1.5000E+000		8.3437E-001
Am-241	59.54	35.90	2.7642E+000	2.76E+000	-2.1325E+000
Cm-243	228.19	10.56	1.4738E+000	9.79E-001	-1.0462E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.7851E-001	9.79E-001	1.6431E-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 7/28/2006 9:53:53 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-194-F-

Sample Title: OOL-10-01-194-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 9:43:51 AM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-194-F-
Title: OOL-10-01-194-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	300.25	75.15	0.93	1.81E+002	85.42	6.79E+002
2	950-	959	953.07	238.36	0.84	9.94E+001	38.49	1.26E+002
3	1400-	1412	1406.17	351.65	1.07	6.39E+001	34.57	9.31E+001
4	2428-	2442	2435.43	608.98	1.59	1.16E+002	26.27	2.23E+001
5	3636-	3648	3642.31	910.72	0.73	3.93E+001	20.75	2.77E+001
6	3864-	3880	3872.50	968.27	0.36	4.14E+001	24.16	3.46E+001
7	5830-	5852	5841.54	1460.56	1.56	4.16E+002	41.04	5.75E+000
8	7050-	7063	7056.36	1764.28	0.31	2.38E+001	13.99	9.16E+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: 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	8.82845E+000	1.12638E+000
Pb-212	0.579	74.81* @	10.70	5.85779E+000	2.99852E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60		
Bi-214	0.692	609.31*	46.30	3.09847E-001	1.29484E-001
		1120.29	15.10	4.51235E-001	1.16572E-001
		1764.49*	15.80	3.71732E-001	2.21254E-001
Ac-228	0.624	338.32	11.40	2.82529E-001	1.52528E-001
		911.07*	27.70		
		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: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	8.828448E+000	1.126382E+000
Pb-212 @	0.579	3.098467E-001	1.294836E-001
Bi-214	0.692	4.339604E-001	1.031334E-001
Ac-228	0.624	3.282516E-001	1.357751E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.0642E-001	54.14

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: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	8.6138E-002	7.29E-002	2.8921E-002
	1332.49	100.00	7.2899E-002		4.0175E-002
Nb-94	702.63	100.00	9.8837E-002	8.04E-002	6.2860E-002
	871.10	100.00	8.0368E-002		-9.8513E-004
Ag-108m	79.20	7.10	6.4467E+000	9.94E-002	-6.7249E+000
	433.93	89.90	1.1062E-001		9.7023E-002
	614.37	90.40	1.1128E-001		-2.7747E-002
	722.95	90.50	9.9402E-002		-5.9142E-003
Sb-125	176.33	6.89	1.9931E+000	3.17E-001	1.5404E+000
	427.89	29.33	3.1659E-001		4.0004E-002
	463.38	10.35	9.1077E-001		8.0116E-002
	600.56	17.80	5.0654E-001		1.0944E-001
	606.64	5.02	2.4013E+000		2.1927E+000
	635.90	11.32	7.4970E-001		-8.7485E-002
Cs-134	563.23	8.38	1.0778E+000	1.03E-001	2.4391E-001
	569.32	15.43	6.0495E-001		-6.8203E-002
	604.70	97.60	1.2118E-001		-4.5466E-002
	795.84	85.40	1.0313E-001		1.3257E-002
	801.93	8.73	1.0050E+000		6.2782E-001
Cs-137	661.65	85.12	1.0151E-001	1.02E-001	-1.4125E-001
Eu-152	121.78	28.40	7.3546E-001	2.94E-001	-1.1101E-001
	244.69	7.49	1.5513E+000		-1.1452E+000
	344.27	26.50	3.7158E-001		-1.9694E-001
	778.89	12.74	6.9562E-001		2.6015E-004
	867.32	4.16	1.9301E+000		2.1469E-001
	964.01	14.40	7.7372E-001		3.0879E-001
	1085.78	10.00	8.1186E-001		5.5201E-001
	1112.02	13.30	5.8512E-001		-3.9331E-001
1407.95	20.70	2.9386E-001	1.2223E-001		
Eu-154	123.07	40.50	5.1120E-001	2.19E-001	7.1763E-002
	247.94	6.60	1.6988E+000		2.9057E-001
	591.81	4.83	1.8066E+000		7.1143E-001
	723.30	19.70	4.6130E-001		-9.8645E-002
	756.87	4.33	2.2125E+000		1.6625E+000
	873.19	11.50	6.9433E-001		9.2722E-002
	996.32	10.30	7.2609E-001		-4.5754E-001
	1004.76	17.90	4.3952E-001		2.8076E-001
1274.45	35.50	2.1911E-001	-6.7752E-002		
Eu-155	86.54	30.90	1.2459E+000	1.25E+000	9.9219E-001
	105.31	20.70	1.2558E+000		1.8038E-001
Am-241	59.54	35.90	2.3290E+000	2.33E+000	2.7282E-001
Cm-243	228.19	10.56	1.1646E+000	7.86E-001	-1.8494E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	7.8608E-001	7.86E-001	1.1028E-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 7/28/2006 10:06:41 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-195-F-

Sample Title: OOL-10-01-195-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 9:56:38 AM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-195-F-
Title: OOL-10-01-195-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	299.95	75.08	0.71	1.45E+002	91.47	8.05E+002
2	949-	961	953.09	238.37	1.28	1.36E+002	47.58	1.70E+002
3	1400-	1414	1405.70	351.53	0.91	1.30E+002	37.77	8.36E+001
4	2322-	2338	2330.47	582.74	0.57	8.89E+001	28.26	3.81E+001
5	2429-	2444	2434.54	608.75	1.22	1.17E+002	28.77	3.20E+001
6	3635-	3649	3642.31	910.72	1.04	6.48E+001	21.72	2.02E+001
7	3867-	3880	3873.54	968.53	0.53	4.40E+001	19.81	2.10E+001
8	4472-	4484	4478.63	1119.81	0.67	2.75E+001	13.09	6.50E+000
9	5830-	5853	5841.32	1460.50	1.54	3.42E+002	38.17	9.19E+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: 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	7.24940E+000	9.99977E-001
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.87991E-001	6.45819E-002
		860.37	12.46		
Pb-212	0.579	74.81* @	10.70	4.71664E+000	3.11553E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.24326E-001	1.62580E-001
Bi-214	0.698	609.31*	46.30	4.56254E-001	1.25493E-001
		1120.29*	15.10	3.78244E-001	1.84416E-001
		1764.49	15.80		
Ac-228	0.628	338.32	11.40		
		911.07*	27.70	4.65338E-001	1.64928E-001
		969.11*	16.60	5.33545E-001	2.46874E-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	0.996	7.249397E+000	9.999767E-001
TL-208	0.468	1.879910E-001	6.458194E-002
Pb-212 @	0.579	4.243264E-001	1.625801E-001
Bi-214	0.698	4.315635E-001	1.037500E-001
Ac-228	0.628	4.863859E-001	1.371400E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.53	2.1738E-001	28.96

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: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	8.7894E-002	6.73E-002	5.8019E-002
	1332.49	100.00	6.7337E-002		-2.7307E-002
Nb-94	702.63	100.00	8.8940E-002	8.20E-002	2.7781E-002
	871.10	100.00	8.2030E-002		4.9257E-003
Ag-108m	79.20	7.10	6.6965E+000	9.71E-002	-3.7567E+000
	433.93	89.90	9.7127E-002		-4.2413E-002
	614.37	90.40	1.0580E-001		-3.6759E-002
	722.95	90.50	1.0527E-001		7.9932E-002
Sb-125	176.33	6.89	1.9931E+000	2.96E-001	-9.6379E-001
	427.89	29.33	2.9638E-001		-5.0205E-002
	463.38	10.35	8.9468E-001		-2.8379E-001
	600.56	17.80	4.9958E-001		-2.7344E-001
	606.64	5.02	2.4964E+000		3.6822E+000
	635.90	11.32	8.1854E-001		6.1902E-001
Cs-134	563.23	8.38	1.0541E+000	1.07E-001	1.2560E-001
	569.32	15.43	5.9748E-001		1.7973E-001
	604.70	97.60	1.2493E-001		-9.8901E-002
	795.84	85.40	1.0705E-001		7.5651E-002
	801.93	8.73	9.5291E-001		1.7669E-001
Cs-137	661.65	85.12	1.1220E-001	1.12E-001	4.2320E-002
Eu-152	121.78	28.40	7.6665E-001	2.99E-001	-1.3375E-002
	244.69	7.49	1.6839E+000		-1.3714E-001
	344.27	26.50	3.8047E-001		-2.8219E-002
	778.89	12.74	6.6872E-001		4.3378E-001
	867.32	4.16	2.0090E+000		-9.5022E-001
	964.01	14.40	7.1691E-001		7.9856E-002
	1085.78	10.00	7.8073E-001		1.1377E-001
	1112.02	13.30	5.3958E-001		8.9992E-002
1407.95	20.70	2.9855E-001	-1.1551E-001		
Eu-154	123.07	40.50	5.2771E-001	2.17E-001	3.1346E-001
	247.94	6.60	1.7974E+000		1.1241E+000
	591.81	4.83	2.0196E+000		6.3515E-001
	723.30	19.70	4.8145E-001		4.1037E-001
	756.87	4.33	1.7994E+000		-4.0129E-001
	873.19	11.50	7.2783E-001		1.9026E-001
	996.32	10.30	7.2609E-001		2.4708E-001
	1004.76	17.90	4.6271E-001		3.6482E-001
1274.45	35.50	2.1715E-001	1.6367E-001		
Eu-155	86.54	30.90	1.3051E+000	1.31E+000	1.0019E+000
	105.31	20.70	1.3055E+000		5.6733E-001
Am-241	59.54	35.90	2.4228E+000	2.42E+000	9.3770E-001
Cm-243	228.19	10.56	1.2748E+000	8.03E-001	9.7034E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	8.0258E-001	8.03E-001	3.0706E-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 7/28/2006 10:20:20 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-195-F-

Sample Title: OOL-10-01-196-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 10:10:17 AM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-195-F-
Title: OOL-10-01-196-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It contains 12 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.995	1460.81*	10.67	1.43754E+001	1.65144E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.63553E-001	8.29490E-002
		860.37	12.46		
Bi-212	0.989	727.17*	11.80	6.07650E-001	3.63664E-001
Pb-212	0.580	74.81* @	10.70	6.53802E+000	3.68747E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.686	238.63*	44.60	6.71635E-001	2.50660E-001
		609.31*	46.30	4.93281E-001	1.48999E-001
		1120.29	15.10		
Ac-228	0.992	1764.49*	15.80	6.50670E-001	2.47837E-001
		338.32*	11.40	5.40168E-001	5.19791E-001
		911.07*	27.70	7.43255E-001	2.29874E-001
		969.11*	16.60	9.56411E-001	3.58984E-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	0.995	1.437542E+001	1.651440E+000
TL-208	0.467	1.635531E-001	8.294905E-002
Bi-212	0.989	6.076505E-001	3.636641E-001
Pb-212 @	0.580	6.716348E-001	2.506603E-001
Bi-214	0.686	5.350652E-001	1.276978E-001
Ac-228	0.992	7.729526E-001	1.814128E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.0785E-001	64.63
5	351.47	2.2239E-001	34.14

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: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	8.35E-002	7.8889E-002
	1332.49	100.00	8.3487E-002		9.5883E-003
Nb-94	702.63	100.00	1.0438E-001	9.75E-002	5.5113E-002
	871.10	100.00	9.7461E-002		5.4797E-002
Ag-108m	79.20	7.10	8.0342E+000	1.13E-001	-4.7698E+000
	433.93	89.90	1.1325E-001		-6.0989E-002
	614.37	90.40	1.2550E-001		-1.6591E-002
	722.95	90.50	1.2707E-001		-5.6731E-002
Sb-125	176.33	6.89	2.4765E+000	3.84E-001	-1.1090E+000
	427.89	29.33	3.8395E-001		4.3961E-003
	463.38	10.35	1.0357E+000		-3.3353E-001
	600.56	17.80	5.6925E-001		-1.4124E-002
	606.64	5.02	2.7136E+000		3.6207E+000
	635.90	11.32	8.9182E-001		1.6422E-001
Cs-134	563.23	8.38	1.3505E+000	1.21E-001	7.0092E-001
	569.32	15.43	7.2786E-001		7.0329E-002
	604.70	97.60	1.3525E-001		3.8677E-003
	795.84	85.40	1.2139E-001		1.2483E-001
Cs-137	801.93	8.73	1.0807E+000	1.25E-001	1.4450E-001
	661.65	85.12	1.2453E-001		-2.4169E-003
Eu-152	121.78	28.40	8.9817E-001	3.65E-001	4.9784E-001
	244.69	7.49	1.9769E+000		4.3543E-001
	344.27	26.50	4.6527E-001		2.9140E-001
	778.89	12.74	7.9037E-001		-5.5290E-002
	867.32	4.16	2.3185E+000		-1.1458E+000
	964.01	14.40	9.2013E-001		2.5443E-001
	1085.78	10.00	8.8735E-001		-1.3702E-001
	1112.02	13.30	6.9515E-001		-1.8553E-001
1407.95	20.70	3.6475E-001	7.3604E-002		
Eu-154	123.07	40.50	6.2236E-001	2.55E-001	-2.4886E-001
	247.94	6.60	2.1641E+000		8.7457E-001
	591.81	4.83	2.1686E+000		-2.0870E+000
	723.30	19.70	5.7843E-001		-6.3399E-002
	756.87	4.33	2.4595E+000		1.4373E+000
	873.19	11.50	8.7140E-001		2.3506E-001
	996.32	10.30	9.7799E-001		1.6284E-001
	1004.76	17.90	5.2862E-001		-5.7547E-002
1274.45	35.50	2.5493E-001	-2.7630E-001		
Eu-155	86.54	30.90	1.5173E+000	1.52E+000	1.1562E+000
	105.31	20.70	1.5369E+000		1.8203E-001
Am-241	59.54	35.90	2.8147E+000	2.81E+000	-2.5272E+000
Cm-243	228.19	10.56	1.5104E+000	9.54E-001	6.5293E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.5400E-001	9.54E-001	-4.4976E-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 7/28/2006 9:38:05 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-197-F-

Sample Title: OOL-10-01-197-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 9:28:03 AM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-197-F-
 Title: OOL-10-01-197-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	291.08	72.86	1.00	1.52E+002	43.16	7.13E+002
m	2	285-	306	299.85	75.05	1.01	3.11E+002	50.18	8.40E+002
	3	332-	341	338.97	84.83	0.71	1.09E+002	74.38	5.89E+002
	4	947-	960	953.51	238.48	1.07	1.44E+002	53.63	2.17E+002
	5	1400-	1412	1405.47	351.47	1.42	7.25E+001	35.14	9.35E+001
	6	2030-	2048	2040.77	510.31	0.43	8.31E+001	38.99	9.19E+001
	7	2325-	2337	2330.92	582.85	0.67	5.93E+001	27.28	5.07E+001
	8	2428-	2442	2435.28	608.94	1.35	1.17E+002	31.25	4.76E+001
	9	3635-	3650	3641.92	910.62	0.35	9.14E+001	28.09	3.56E+001
	10	3867-	3880	3873.46	968.51	0.92	3.83E+001	20.27	2.47E+001
	11	5828-	5854	5841.78	1460.62	1.84	5.36E+002	48.41	1.69E+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	0.982	511.00*	100.00	1.41852E-001	6.92614E-002
K-40	0.999	1460.81*	10.67	1.13710E+001	1.37904E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	6.56720E-001	3.25109E-001
		583.14*	84.20	1.25341E-001	5.99553E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	1.01252E+001	2.57072E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.399	238.63*	44.60	4.48690E-001	1.81428E-001
		609.31*	46.30	4.57787E-001	1.34272E-001
		1120.29	15.10		
Ac-228	0.627	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	6.56187E-001	2.15446E-001
		969.11*	16.60	4.65028E-001	2.50793E-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	0.982	1.147780E-001	7.045623E-002
K-40	0.999	1.137102E+001	1.379041E+000
TL-208	0.749	1.253408E-001	5.981602E-002
Pb-212 @	0.580	4.486899E-001	1.814281E-001
Bi-214	0.399	4.577873E-001	1.342721E-001
Ac-228	0.627	5.750169E-001	1.634238E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.5295E-001	28.44
3	84.83	1.8171E-001	68.22
5	351.47	1.2089E-001	48.44

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	1.0227E-001	8.01E-002	7.7071E-002
	1332.49	100.00	8.0126E-002		1.3633E-002
Nb-94	702.63	100.00	9.7192E-002	9.65E-002	4.4685E-002
	871.10	100.00	9.6544E-002		4.4868E-002
Ag-108m	79.20	7.10	7.1538E+000	1.13E-001	-1.2300E+000
	433.93	89.90	1.1739E-001		-3.3510E-002
	614.37	90.40	1.1957E-001		-4.5313E-002
	722.95	90.50	1.1259E-001		5.7798E-002
Sb-125	176.33	6.89	2.1803E+000	3.69E-001	-8.0226E-002
	427.89	29.33	3.6855E-001		-8.2500E-003
	463.38	10.35	1.0847E+000		1.3258E+000
	600.56	17.80	5.6925E-001		3.6639E-003
	606.64	5.02	2.6433E+000		4.6944E+000
	635.90	11.32	8.1487E-001		-1.7791E-002
Cs-134	563.23	8.38	1.2221E+000	1.13E-001	-9.5538E-002
	569.32	15.43	7.0296E-001		5.4021E-001
	604.70	97.60	1.3440E-001		-7.5969E-002
	795.84	85.40	1.1291E-001		8.1070E-002
	801.93	8.73	1.0702E+000		6.4866E-001
Cs-137	661.65	85.12	1.2710E-001	1.27E-001	1.3283E-001
Eu-152	121.78	28.40	8.0894E-001	3.29E-001	6.3717E-001
	244.69	7.49	1.7979E+000		9.6133E-001
	344.27	26.50	4.0684E-001		-2.3158E-001
	778.89	12.74	7.4284E-001		-6.9405E-002
	867.32	4.16	2.3839E+000		7.0975E-001
	964.01	14.40	7.5626E-001		-2.5742E-001
	1085.78	10.00	8.5915E-001		-1.2020E-001
	1112.02	13.30	7.1501E-001		-2.1862E-001
1407.95	20.70	3.2931E-001	-1.7072E-001		
Eu-154	123.07	40.50	5.5876E-001	2.46E-001	1.3057E-001
	247.94	6.60	1.9145E+000		-2.1624E+000
	591.81	4.83	2.1324E+000		2.6498E-001
	723.30	19.70	5.1930E-001		2.7677E-001
	756.87	4.33	2.1408E+000		-6.8216E-003
	873.19	11.50	8.2376E-001		-6.6637E-001
	996.32	10.30	9.5037E-001		-4.5764E-002
	1004.76	17.90	5.0863E-001		3.6175E-002
1274.45	35.50	2.4650E-001	8.1108E-002		
Eu-155	86.54	30.90	1.3635E+000	1.36E+000	-3.1778E-001
	105.31	20.70	1.3654E+000		-3.8891E-001
Am-241	59.54	35.90	2.5619E+000	2.56E+000	6.3003E-001
Cm-243	228.19	10.56	1.2925E+000	8.43E-001	-2.2125E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	8.4308E-001	8.43E-001	1.3460E-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 7/28/2006 8:55:42 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-198-F-

Sample Title: OOL-10-01-198-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 8:45:39 AM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-198-F-
Title: OOL-10-01-198-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	300.21	75.14	0.77	2.16E+002	91.44	8.65E+002
2	949-	959	954.43	238.71	1.00	1.86E+002	52.75	2.26E+002
3	1350-	1360	1353.69	338.53	1.18	4.34E+001	35.16	1.15E+002
4	1402-	1413	1406.82	351.81	0.69	1.07E+002	36.45	9.49E+001
5	2324-	2339	2333.59	583.51	1.15	1.23E+002	35.76	6.98E+001
6	2427-	2447	2437.30	609.45	1.46	1.25E+002	36.80	6.27E+001
7	3636-	3657	3645.07	911.41	1.00	1.34E+002	32.34	3.61E+001
8	3871-	3886	3876.99	969.39	0.78	4.90E+001	25.55	4.00E+001
9	4228-	4239	4233.74	1058.58	0.40	1.40E+001	14.07	1.50E+001
10	5835-	5860	5847.71	1462.10	1.82	6.72E+002	54.19	2.21E+001
11	7058-	7071	7064.25	1766.25	0.34	2.10E+001	15.12	1.40E+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	0.938	1460.81*	10.67	1.42565E+001	1.62933E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.60631E-001	8.29000E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	7.00975E+000	3.26921E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.78935E-001	1.87913E-001
Bi-214	0.671	609.31*	46.30	4.88873E-001	1.55669E-001
		1120.29	15.10		
		1764.49*	15.80	3.27600E-001	2.38166E-001
Ac-228	0.997	338.32*	11.40	5.76261E-001	4.75582E-001
		911.07*	27.70	9.61604E-001	2.57285E-001
		969.11*	16.60	5.94910E-001	3.16402E-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	0.938	1.425646E+001	1.629334E+000
TL-208	0.468	2.606313E-001	8.289998E-002
Pb-212 @	0.580	5.789354E-001	1.879132E-001
Bi-214	0.671	4.405982E-001	1.303042E-001
Ac-228	0.997	7.797897E-001	1.840619E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.81	1.7843E-001	34.05
9	1058.58	2.3333E-002	100.50

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: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	1.0422E-001	8.35E-002	2.8713E-002
	1332.49	100.00	8.3487E-002		1.3343E-003
Nb-94	702.63	100.00	9.6359E-002	9.52E-002	-7.5806E-002
	871.10	100.00	9.5151E-002		-3.2181E-002
Ag-108m	79.20	7.10	7.9842E+000	1.15E-001	-7.4130E+000
	433.93	89.90	1.1518E-001		1.3909E-002
	614.37	90.40	1.4080E-001		-1.9879E-002
	722.95	90.50	1.2312E-001		3.0410E-002
Sb-125	176.33	6.89	2.3998E+000	3.85E-001	-7.6804E-002
	427.89	29.33	3.8484E-001		4.6428E-002
	463.38	10.35	1.1187E+000		6.2430E-001
	600.56	17.80	5.7533E-001		-9.5121E-001
	606.64	5.02	2.7822E+000		3.5160E-001
	635.90	11.32	8.5426E-001		3.0758E-001
Cs-134	563.23	8.38	1.3652E+000	1.19E-001	-2.2036E-001
	569.32	15.43	7.0085E-001		3.2311E-001
	604.70	97.60	1.2676E-001		-5.2936E-003
	795.84	85.40	1.1945E-001		6.6886E-002
	801.93	8.73	1.0962E+000		-8.9257E-001
Cs-137	661.65	85.12	1.3410E-001	1.34E-001	1.2428E-001
Eu-152	121.78	28.40	9.0122E-001	3.65E-001	3.1334E-001
	244.69	7.49	2.0003E+000		-3.2544E-001
	344.27	26.50	4.6050E-001		-5.7359E-003
	778.89	12.74	7.6699E-001		6.4865E-003
	867.32	4.16	2.2050E+000		-1.1119E+000
	964.01	14.40	8.3445E-001		5.9871E-001
	1085.78	10.00	9.0381E-001		-3.4975E-001
	1112.02	13.30	7.3048E-001		5.7448E-001
1407.95	20.70	3.6475E-001	2.5881E-001		
Eu-154	123.07	40.50	6.2643E-001	2.68E-001	6.9755E-002
	247.94	6.60	2.1711E+000		-1.7018E-001
	591.81	4.83	2.3210E+000		1.6445E+000
	723.30	19.70	5.6193E-001		2.8291E-001
	756.87	4.33	2.4775E+000		3.5775E-001
	873.19	11.50	8.5975E-001		-1.4224E-001
	996.32	10.30	8.8238E-001		2.0519E-001
	1004.76	17.90	5.1443E-001		-3.0982E-001
1274.45	35.50	2.6784E-001	1.8511E-001		
Eu-155	86.54	30.90	1.5230E+000	1.51E+000	2.4434E+000
	105.31	20.70	1.5114E+000		-6.0141E-001
Am-241	59.54	35.90	2.7980E+000	2.80E+000	-1.9739E-001
Cm-243	228.19	10.56	1.3608E+000	9.56E-001	-9.8458E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.5648E-001	9.56E-001	3.3000E-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 7/28/2006 8:26:03 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-199-F-

Sample Title: OOL-10-01-199-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 8:16:00 AM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-199-F-
Title: OOL-10-01-199-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	291.41	72.94	1.07	2.47E+002	52.46	1.07E+003
m	2	284-	306	299.52	74.97	1.07	3.84E+002	59.18	1.39E+003
	3	947-	962	954.22	238.65	1.09	2.17E+002	71.92	3.68E+002
	4	1176-	1187	1179.48	294.97	0.95	5.41E+001	39.57	1.39E+002
	5	1397-	1414	1406.82	351.81	0.43	1.30E+002	52.79	1.83E+002
	6	2039-	2053	2043.30	510.94	0.35	9.70E+001	39.41	1.05E+002
	7	2326-	2339	2332.85	583.33	0.98	1.38E+002	33.98	5.92E+001
	8	2429-	2445	2436.75	609.31	1.52	1.39E+002	37.43	7.23E+001
	9	2903-	2915	2910.02	727.63	1.39	2.30E+001	23.74	4.70E+001
	10	3637-	3655	3645.82	911.59	1.51	1.38E+002	34.92	5.26E+001
	11	3870-	3885	3876.74	969.33	0.62	7.72E+001	25.31	2.98E+001
	12	5834-	5860	5847.45	1462.03	1.98	8.30E+002	59.40	2.03E+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: 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	1.65686E-001	7.09332E-002
K-40	0.944	1460.81*	10.67	1.76066E+001	1.90273E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	7.67066E-001	3.34316E-001
		583.14*	84.20	2.91572E-001	8.12742E-002
		860.37	12.46		
Bi-212	0.992	727.17*	11.80	3.68795E-001	3.83376E-001
Pb-212	0.581	74.81* @	10.70	1.25512E+001	3.12892E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.75526E-001	2.48067E-001
Bi-214	0.402	609.31*	46.30	5.41227E-001	1.60508E-001
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.619	74.82* @	6.21	2.16261E+001	5.61514E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.12561E-001	3.09681E-001
Ac-228	0.629	351.92*	37.20	5.33251E-001	2.34443E-001
		338.32	11.40		
		911.07*	27.70	9.94220E-001	2.75680E-001
		969.11*	16.60	9.36916E-001	3.22616E-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	1.027067E-001	7.304444E-002
K-40	0.944	1.760658E+001	1.902734E+000
TL-208	0.752	2.915716E-001	8.071682E-002
Bi-212	0.992	3.687948E-001	3.833761E-001
Pb-212 @	0.581	6.755257E-001	2.480666E-001
Bi-214	0.402	5.412273E-001	1.605078E-001
PB-214 @	0.619	4.892809E-001	1.869204E-001
Ac-228	0.629	9.700360E-001	2.095836E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	4.1122E-001	21.26

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: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	1.0708E-001	9.10E-002	-4.7672E-002
	1332.49	100.00	9.1015E-002		3.0227E-002
Nb-94	702.63	100.00	1.0741E-001	9.79E-002	5.1792E-002
	871.10	100.00	9.7916E-002		-3.1046E-002
Ag-108m	79.20	7.10	8.1680E+000	1.27E-001	-6.2394E+000
	433.93	89.90	1.3426E-001		1.8835E-002
	614.37	90.40	1.5100E-001		-8.0916E-002
	722.95	90.50	1.2707E-001		8.4980E-003
Sb-125	176.33	6.89	2.5247E+000	3.96E-001	1.9926E+000
	427.89	29.33	3.9617E-001		-1.9752E-001
	463.38	10.35	1.1541E+000		2.6782E-001
	600.56	17.80	6.5602E-001		1.3885E-001
	606.64	5.02	3.0069E+000		2.3577E-001
	635.90	11.32	8.7154E-001		3.8008E-001
Cs-134	563.23	8.38	1.3797E+000	1.21E-001	-2.9312E-001
	569.32	15.43	7.2989E-001		6.5092E-003
	604.70	97.60	1.4025E-001		-8.3779E-003
	795.84	85.40	1.2091E-001		2.8968E-002
	801.93	8.73	1.1512E+000		-1.0250E+000
Cs-137	661.65	85.12	1.3330E-001	1.33E-001	-6.9632E-002
Eu-152	121.78	28.40	8.9817E-001	4.20E-001	-1.9784E-002
	244.69	7.49	2.1316E+000		-1.1813E-001
	344.27	26.50	5.0033E-001		2.7204E-001
	778.89	12.74	8.2255E-001		-2.9422E-001
	867.32	4.16	2.4786E+000		-3.7362E+000
	964.01	14.40	9.2252E-001		3.1105E-001
	1085.78	10.00	1.0490E+000		4.0115E-002
	1112.02	13.30	7.4560E-001		-7.4316E-001
1407.95	20.70	4.1989E-001	4.8842E-001		
Eu-154	123.07	40.50	6.2472E-001	2.45E-001	-2.9472E-001
	247.94	6.60	2.2214E+000		-1.7910E+000
	591.81	4.83	2.2323E+000		-1.5437E+000
	723.30	19.70	5.9092E-001		-4.5405E-002
	756.87	4.33	2.4685E+000		3.5290E-001
	873.19	11.50	8.5975E-001		-3.3855E-001
	996.32	10.30	9.1705E-001		-1.3781E+000
	1004.76	17.90	5.4783E-001		6.7028E-002
1274.45	35.50	2.4478E-001	-2.5484E-001		
Eu-155	86.54	30.90	1.5176E+000	1.52E+000	7.2636E-001
	105.31	20.70	1.5937E+000		1.0783E+000
Am-241	59.54	35.90	3.0421E+000	3.04E+000	1.0150E+000
Cm-243	228.19	10.56	1.5449E+000	1.01E+000	1.2930E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.0130E+000	1.01E+000	9.0179E-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 7/28/2006 7:33:45 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-200-F-

Sample Title: OOL-10-01-200-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 7:23:41 AM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-200-F-
 Title: OOL-10-01-200-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	291.64	73.00	0.98	1.59E+002	45.40	6.19E+002
m	2	288-	306	299.61	74.99	0.99	2.63E+002	49.82	9.46E+002
	3	949-	959	953.92	238.58	1.01	1.57E+002	46.64	1.72E+002
	4	1398-	1412	1407.04	351.86	0.51	1.11E+002	41.85	1.20E+002
	5	2037-	2048	2042.80	510.81	1.00	3.93E+001	32.33	9.27E+001
	6	2327-	2338	2331.96	583.11	0.55	9.02E+001	28.10	4.58E+001
	7	2427-	2445	2436.24	609.18	1.21	1.24E+002	35.38	5.94E+001
	8	3636-	3653	3645.59	911.53	1.05	8.45E+001	24.61	2.25E+001
	9	3869-	3884	3877.35	969.48	0.35	4.70E+001	23.44	3.20E+001
	10	4477-	4489	4483.17	1120.94	0.44	2.20E+001	18.74	2.60E+001
	11	5833-	5859	5845.98	1461.67	1.95	5.44E+002	47.56	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: 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	0.972	1460.81*	10.67	1.15374E+001	1.37505E+000
TL-208	0.753	277.35	6.80		
		510.84*	21.60	3.10621E-001	2.60209E-001
		583.14*	84.20	1.90683E-001	6.44015E-002
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	8.59812E+000	2.34193E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.90327E-001	1.64526E-001
Bi-214	0.703	609.31*	46.30	4.82066E-001	1.50231E-001
		1120.29*	15.10	3.02086E-001	2.59761E-001
		1764.49	15.80		
Ac-228	0.629	338.32	11.40		
		911.07*	27.70	6.06976E-001	1.90044E-001
		969.11*	16.60	5.70638E-001	2.90814E-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	0.999		
	K-40	0.972	1.153737E+001	1.375048E+000
	TL-208	0.753	1.976060E-001	6.251527E-002
	Pb-212 @	0.581	4.903274E-001	1.645260E-001
	Bi-214	0.703	4.369550E-001	1.300477E-001
	Ac-228	0.629	5.961014E-001	1.590872E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.6420E-001	28.64
4	351.86	1.8519E-001	37.66

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: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	9.8757E-002	7.87E-002	-2.8202E-002
	1332.49	100.00	7.8738E-002		4.2639E-002
Nb-94	702.63	100.00	1.0890E-001	9.42E-002	4.4043E-002
	871.10	100.00	9.4211E-002		3.0047E-002
Ag-108m	79.20	7.10	7.1644E+000	1.15E-001	-4.3742E+000
	433.93	89.90	1.1454E-001		-4.7554E-002
	614.37	90.40	1.3321E-001		-2.6906E-002
	722.95	90.50	1.1692E-001		-3.7728E-002
Sb-125	176.33	6.89	2.2246E+000	3.44E-001	1.8779E-001
	427.89	29.33	3.4360E-001		3.7875E-002
	463.38	10.35	1.0132E+000		-4.2989E-001
	600.56	17.80	5.6516E-001		1.3789E-001
	606.64	5.02	2.6868E+000		-7.1049E-001
	635.90	11.32	8.1854E-001		-5.3655E-001
Cs-134	563.23	8.38	1.3431E+000	1.07E-001	-5.7387E-001
	569.32	15.43	7.2172E-001		2.5903E-001
	604.70	97.60	1.2916E-001		1.0935E-002
	795.84	85.40	1.0705E-001		-4.6927E-002
	801.93	8.73	1.0755E+000		-1.3673E-001
Cs-137	661.65	85.12	1.1599E-001	1.16E-001	-2.2984E-002
Eu-152	121.78	28.40	8.0791E-001	3.57E-001	9.4171E-003
	244.69	7.49	1.7805E+000		5.6369E-001
	344.27	26.50	4.0226E-001		-2.1796E-001
	778.89	12.74	7.1417E-001		-7.0331E-001
	867.32	4.16	2.2963E+000		-1.2573E+000
	964.01	14.40	7.6504E-001		-3.5412E-002
	1085.78	10.00	8.7619E-001		-8.3533E-002
	1112.02	13.30	7.0317E-001		-2.7429E-001
1407.95	20.70	3.5720E-001	2.5566E-001		
Eu-154	123.07	40.50	5.6019E-001	2.23E-001	2.0655E-001
	247.94	6.60	1.9665E+000		3.5076E-001
	591.81	4.83	2.1324E+000		1.8596E-001
	723.30	19.70	5.4106E-001		1.6102E-001
	756.87	4.33	2.2225E+000		1.1028E-001
	873.19	11.50	8.0722E-001		2.7832E-002
	996.32	10.30	9.0729E-001		5.3586E-001
	1004.76	17.90	4.7228E-001		-2.7225E-001
1274.45	35.50	2.2297E-001	-1.3429E-002		
Eu-155	86.54	30.90	1.3660E+000	1.37E+000	1.4510E+000
	105.31	20.70	1.3698E+000		-6.1712E-001
Am-241	59.54	35.90	2.6409E+000	2.64E+000	4.8708E-001
Cm-243	228.19	10.56	1.3991E+000	9.08E-001	5.5220E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.0818E-001	9.08E-001	-6.5056E-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 7/28/2006 7:52:46 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-10-01-201-F-

Sample Title: OOL-10-01-201-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 7:42:43 AM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-201-F-
 Title: OOL-10-01-201-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	291.44	72.95	1.01	2.08E+002	49.58	9.26E+002
m	2	285-	307	300.38	75.18	1.02	3.21E+002	53.89	1.13E+003
	3	332-	345	338.83	84.80	0.87	1.60E+002	105.67	9.95E+002
	4	947-	961	955.02	238.85	1.00	1.91E+002	61.33	2.72E+002
	5	1174-	1189	1180.58	295.25	0.87	7.43E+001	47.85	1.74E+002
	6	1399-	1416	1407.39	351.95	1.24	1.27E+002	44.59	1.20E+002
	7	2324-	2340	2332.64	583.28	1.46	1.24E+002	37.11	7.45E+001
	8	2430-	2446	2437.33	609.45	1.54	1.46E+002	33.18	4.53E+001
	9	2903-	2912	2907.66	727.04	0.29	3.11E+001	19.28	2.89E+001
	10	3637-	3654	3646.65	911.80	0.68	1.17E+002	27.12	2.26E+001
	11	3868-	3884	3876.35	969.23	0.60	6.57E+001	26.29	3.63E+001
	12	4478-	4489	4483.48	1121.02	0.87	2.73E+001	18.05	2.27E+001
	13	5833-	5859	5846.87	1461.89	2.00	6.17E+002	51.50	1.67E+001
	14	7058-	7071	7064.38	1766.28	1.13	3.65E+001	13.32	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	0.956	1460.81*	10.67	1.30973E+001	1.52270E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.61303E-001	8.55522E-002
		860.37	12.46		
Bi-212	0.999	727.17*	11.80	4.99107E-001	3.14898E-001
Pb-212	0.579	74.81* @	10.70	1.03887E+001	2.68176E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.97177E-001	2.13021E-001
Bi-214	0.971	609.31*	46.30	5.68346E-001	1.47158E-001
		1120.29*	15.10	3.75853E-001	2.51569E-001
		1764.49*	15.80	5.69405E-001	2.15410E-001
PB-214	0.619	74.82* @	6.21	1.79000E+001	4.79997E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.67113E-001	3.77257E-001
		351.92*	37.20	5.21533E-001	2.02857E-001
Ac-228	0.624	338.32	11.40		
		911.07*	27.70	8.43018E-001	2.17600E-001
		969.11*	16.60	7.97797E-001	3.29981E-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	0.956	1.309728E+001	1.522697E+000
TL-208	0.471	2.613027E-001	8.555219E-002
Bi-212	0.999	4.991065E-001	3.148975E-001
Pb-212 @	0.579	5.971768E-001	2.130207E-001
Bi-214	0.971	5.322058E-001	1.094156E-001
PB-214 @	0.619	5.317558E-001	1.786655E-001
Ac-228	0.624	8.293136E-001	1.816582E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.4602E-001	23.88
3	84.80	2.6706E-001	65.94

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: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	1.0325E-001	8.80E-002	8.2188E-002
	1332.49	100.00	8.7962E-002		3.2262E-002
Nb-94	702.63	100.00	9.6777E-002	9.68E-002	-2.0976E-002
	871.10	100.00	9.7461E-002		-2.2341E-002
Ag-108m	79.20	7.10	7.8811E+000	1.19E-001	-6.1971E+000
	433.93	89.90	1.1925E-001		1.6687E-002
	614.37	90.40	1.3690E-001		-1.9388E-002
	722.95	90.50	1.2312E-001		-5.0841E-002
Sb-125	176.33	6.89	2.3998E+000	3.82E-001	1.0977E+000
	427.89	29.33	3.8217E-001		1.2830E-001
	463.38	10.35	1.1238E+000		7.2117E-001
	600.56	17.80	6.2172E-001		1.4606E-001
	606.64	5.02	2.9585E+000		-6.2666E-001
	635.90	11.32	8.5076E-001		-2.8012E-001
Cs-134	563.23	8.38	1.1931E+000	1.22E-001	-1.0738E+000
	569.32	15.43	6.0742E-001		-6.5317E-001
	604.70	97.60	1.3750E-001		5.1182E-002
	795.84	85.40	1.2187E-001		7.6323E-002
	801.93	8.73	1.1463E+000		7.3220E-002
Cs-137	661.65	85.12	1.2625E-001	1.26E-001	6.9523E-003
Eu-152	121.78	28.40	8.7774E-001	3.42E-001	-8.9379E-002
	244.69	7.49	1.9808E+000		-3.9310E-001
	344.27	26.50	4.2897E-001		-1.7036E-001
	778.89	12.74	7.5329E-001		-5.2852E-001
	867.32	4.16	2.4579E+000		-1.4558E+000
	964.01	14.40	8.6058E-001		1.9264E-001
	1085.78	10.00	9.8177E-001		7.8383E-002
	1112.02	13.30	6.7051E-001		-2.9622E-001
1407.95	20.70	3.4157E-001	2.5092E-002		
Eu-154	123.07	40.50	6.1632E-001	2.57E-001	4.1948E-001
	247.94	6.60	2.1123E+000		-1.2564E+000
	591.81	4.83	2.2042E+000		-3.5398E-001
	723.30	19.70	5.5820E-001		-3.1683E-001
	756.87	4.33	2.3489E+000		6.3552E-001
	873.19	11.50	8.7524E-001		6.0008E-001
	996.32	10.30	9.0237E-001		6.5439E-001
	1004.76	17.90	4.9683E-001		-2.0549E-001
1274.45	35.50	2.5658E-001	5.5898E-002		
Eu-155	86.54	30.90	1.4779E+000	1.48E+000	3.7948E-001
	105.31	20.70	1.4980E+000		1.2682E+000
Am-241	59.54	35.90	2.8539E+000	2.85E+000	-4.9314E-002
Cm-243	228.19	10.56	1.4125E+000	9.11E-001	2.8697E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.1078E-001	9.11E-001	1.1610E-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 7/28/2006 8:11:33 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-202-F-

Sample Title: OOL-10-01-202-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 8:01:28 AM

Live Time: 600.0 seconds

Real Time: 601.4 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-202-F-
Title: OOL-10-01-202-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-	312	300.04	75.10	0.93	1.95E+002	138.39	1.51E+003
2	945-	959	954.43	238.71	0.85	1.62E+002	66.27	3.41E+002
3	1398-	1414	1407.28	351.92	0.70	7.42E+001	44.93	1.43E+002
4	2325-	2338	2332.83	583.33	0.91	1.28E+002	34.30	6.47E+001
5	2430-	2444	2436.63	609.28	1.25	1.10E+002	32.93	5.88E+001
6	3637-	3655	3646.24	911.70	1.53	1.30E+002	31.13	3.59E+001
7	3869-	3886	3876.06	969.16	0.80	8.17E+001	28.82	4.13E+001
8	5834-	5860	5847.39	1462.02	1.79	7.25E+002	54.37	1.02E+001
9	6352-	6365	6358.10	1589.70	0.47	1.61E+001	9.65	2.92E+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: 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	0.945	1460.81*	10.67	1.53800E+001	1.69753E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.71471E-001	8.07076E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	6.32905E+000	4.66529E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.05813E-001	2.21410E-001
Bi-214	0.402	609.31*	46.30	4.29882E-001	1.38934E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.627	338.32	11.40		
		911.07*	27.70	9.34687E-001	2.48104E-001
		969.11*	16.60	9.91713E-001	3.64952E-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	0.945	1.537995E+001	1.697534E+000
TL-208	0.471	2.714712E-001	8.070756E-002
Pb-212 @	0.580	5.058131E-001	2.214095E-001
Bi-214	0.402	4.298824E-001	1.389338E-001
Ac-228	0.627	9.527119E-001	2.051802E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.92	1.2366E-001	60.55
9	1589.70	2.6798E-002	60.03

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: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	1.0470E-001	8.41E-002	4.8830E-002
	1332.49	100.00	8.4142E-002		1.9545E-002
Nb-94	702.63	100.00	1.0741E-001	1.07E-001	7.4165E-003
	871.10	100.00	1.0659E-001		3.1108E-002
Ag-108m	79.20	7.10	8.1564E+000	1.25E-001	-1.0834E+000
	433.93	89.90	1.2466E-001		-2.6586E-002
	614.37	90.40	1.3723E-001		2.3577E-002
	722.95	90.50	1.2550E-001		9.0879E-002
Sb-125	176.33	6.89	2.4999E+000	3.99E-001	-1.0104E-001
	427.89	29.33	3.9874E-001		2.2315E-001
	463.38	10.35	1.1005E+000		8.4736E-001
	600.56	17.80	5.6516E-001		2.8930E-002
	606.64	5.02	2.7770E+000		4.0528E+000
	635.90	11.32	9.7154E-001		6.4165E-001
Cs-134	563.23	8.38	1.3168E+000	1.27E-001	1.1569E-001
	569.32	15.43	7.0296E-001		-1.2858E-001
	604.70	97.60	1.3064E-001		-4.1211E-002
	795.84	85.40	1.2701E-001		2.0482E-002
Cs-137	801.93	8.73	1.1560E+000	1.28E-001	2.7995E-001
	661.65	85.12	1.2836E-001		6.1099E-003
Eu-152	121.78	28.40	8.9141E-001	3.61E-001	-5.1163E-001
	244.69	7.49	1.9473E+000		-3.0107E+000
	344.27	26.50	4.4585E-001		-3.2149E-001
	778.89	12.74	7.6699E-001		-7.2926E-001
	867.32	4.16	2.4889E+000		-4.6185E-001
	964.01	14.40	8.8590E-001		-2.1101E-001
	1085.78	10.00	9.1997E-001		-2.6827E-001
	1112.02	13.30	7.7132E-001		2.0290E-001
1407.95	20.70	3.6100E-001	2.5773E-001		
Eu-154	123.07	40.50	6.1741E-001	2.60E-001	-3.7963E-001
	247.94	6.60	2.1618E+000		9.2346E-001
	591.81	4.83	2.1829E+000		-9.7473E-001
	723.30	19.70	5.7662E-001		3.4955E-001
	756.87	4.33	2.3108E+000		2.0975E+000
	873.19	11.50	9.1643E-001		-4.6949E-001
	996.32	10.30	8.9741E-001		-7.4167E-001
	1004.76	17.90	5.2581E-001		-3.9435E-001
1274.45	35.50	2.5985E-001	-2.4607E-001		
Eu-155	86.54	30.90	1.5474E+000	1.55E+000	1.8079E+000
	105.31	20.70	1.5480E+000		9.9129E-001
Am-241	59.54	35.90	3.0153E+000	3.02E+000	-4.7433E-001
Cm-243	228.19	10.56	1.4415E+000	9.43E-001	-1.8839E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.4276E-001	9.43E-001	-6.1929E-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 7/28/2006 3:17:16 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-203-F

Sample Title: OOL-10-01-203-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 3:07:14 PM

Live Time: 600.0 seconds

Real Time: 601.1 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-203-F
Title: OOL-10-01-203-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-	2343	2332.61	583.11	1.04	1.40E+002	43.67	9.52E+001
2	2426-	2448	2436.53	609.09	1.79	2.22E+002	47.73	9.53E+001
3	3634-	3652	3644.20	911.01	1.08	7.96E+001	31.42	5.24E+001
4	4469-	4489	4481.77	1120.41	0.78	5.80E+001	29.60	4.60E+001
5	5830-	5859	5844.10	1460.99	2.60	8.24E+002	61.35	3.32E+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: 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	1.80854E+001	1.98953E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.04897E-001	1.03148E-001
Bi-214	0.707	860.37	12.46		
		609.31*	46.30	8.91744E-001	2.21144E-001
		1120.29*	15.10	8.21417E-001	4.27879E-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	0.999	1.808541E+001	1.989529E+000
TL-208	0.472	3.048971E-001	1.031481E-001
Bi-214	0.707	8.769184E-001	1.964561E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	911.01	1.3270E-001	39.46

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	1.0737E-001	9.39E-002	7.7241E-002
	1332.49	100.00	9.3915E-002		7.0838E-002
Nb-94	702.63	100.00	1.1695E-001	9.58E-002	-6.1950E-002
	871.10	100.00	9.5830E-002		-5.9713E-002
Ag-108m	79.20	7.10	1.0149E+001	1.44E-001	-1.6761E+001
	433.93	89.90	1.4885E-001		-8.2705E-002
	614.37	90.40	1.8359E-001		-2.8274E-002
	722.95	90.50	1.4402E-001		9.2305E-002
Sb-125	176.33	6.89	2.9370E+000	4.64E-001	-1.1318E+000
	427.89	29.33	4.6355E-001		3.9470E-001
	463.38	10.35	1.2742E+000		-1.3944E-001
	600.56	17.80	6.7457E-001		-1.7790E-001
	606.64	5.02	3.5215E+000		-1.1034E+000
	635.90	11.32	1.0542E+000		3.8459E-001
Cs-134	563.23	8.38	1.5294E+000	1.41E-001	-2.0880E+000
	569.32	15.43	8.5030E-001		1.6697E-001
	604.70	97.60	1.6845E-001		-1.1255E-001
	795.84	85.40	1.4061E-001		1.8724E-002
	801.93	8.73	1.3647E+000		-2.7052E-001
Cs-137	661.65	85.12	1.4755E-001	1.48E-001	-6.9569E-002
Eu-152	121.78	28.40	9.6943E-001	4.41E-001	-9.3775E-003
	244.69	7.49	2.3977E+000		-4.9248E+000
	344.27	26.50	5.4422E-001		-5.5019E-001
	778.89	12.74	8.8814E-001		-1.4275E+000
	867.32	4.16	2.3707E+000		-1.6684E+000
	964.01	14.40	9.7563E-001		8.6527E-001
	1085.78	10.00	1.0636E+000		4.7612E-001
	1112.02	13.30	7.3131E-001		-2.2708E-001
1407.95	20.70	4.4061E-001	3.8351E-001		
Eu-154	123.07	40.50	6.6881E-001	2.87E-001	-1.2850E-001
	247.94	6.60	2.5026E+000		-3.0125E+000
	591.81	4.83	2.5398E+000		2.3108E-002
	723.30	19.70	6.6665E-001		4.0733E-001
	756.87	4.33	2.8306E+000		5.5504E-001
	873.19	11.50	8.4209E-001		-3.3893E-001
	996.32	10.30	1.0867E+000		9.5290E-001
	1004.76	17.90	5.7786E-001		-5.2103E-001
1274.45	35.50	2.8733E-001	-1.5724E-002		
Eu-155	86.54	30.90	1.8232E+000	1.79E+000	3.6396E+000
	105.31	20.70	1.7902E+000		2.1464E-001
Am-241	59.54	35.90	4.6780E+000	4.68E+000	-2.4291E+000
Cm-243	228.19	10.56	1.7031E+000	1.15E+000	1.8239E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1469E+000	1.15E+000	-1.3392E-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 7/28/2006 3:32:31 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-10-01-204-F

Sample Title: OOL-10-01-204-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 3:22:29 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-10-01-204-F
Title: OOL-10-01-204-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 8 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.987	511.00*	100.00	2.75971E-001	8.66135E-002
K-40	0.997	1460.81*	10.67	2.05303E+001	2.15902E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.27764E+000	4.14341E-001
		583.14*	84.20	3.18592E-001	9.91287E-002
		860.37	12.46		
Pb-212	0.454	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.691	238.63*	44.60	7.04121E-001	2.66247E-001
		609.31*	46.30	1.13987E+000	2.46038E-001
		1120.29	15.10		
PB-214	0.555	1764.49*	15.80	1.12832E+000	3.22965E-001
		74.82 @	6.21		
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	8.05380E-001	4.38859E-001
		351.92*	37.20	1.03222E+000	2.90655E-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	0.987	2.071545E-001	8.919266E-002
K-40	0.997	2.053026E+001	2.159015E+000
TL-208	0.751	3.185924E-001	9.858345E-002
Pb-212 @	0.454	7.041211E-001	2.662466E-001
Bi-214	0.691	1.135626E+000	1.957152E-001
PB-214 @	0.555	9.630544E-001	2.423272E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.2134E-001	9.99E-002	-1.8279E-002
	1332.49	100.00	9.9898E-002		2.7789E-002
Nb-94	702.63	100.00	1.1585E-001	1.11E-001	3.0956E-002
	871.10	100.00	1.1107E-001		-1.4588E-002
Ag-108m	79.20	7.10	1.0284E+001	1.44E-001	-1.8142E+001
	433.93	89.90	1.4385E-001		2.8213E-002
	614.37	90.40	1.9021E-001		-5.8354E-002
	722.95	90.50	1.4759E-001		4.2687E-002
Sb-125	176.33	6.89	3.1371E+000	4.82E-001	9.4294E-001
	427.89	29.33	4.8247E-001		-1.0692E-001
	463.38	10.35	1.2622E+000		1.2252E+000
	600.56	17.80	6.7819E-001		-7.4325E-001
	606.64	5.02	3.7565E+000		-5.5226E-001
	635.90	11.32	1.0749E+000		-8.1744E-001
Cs-134	563.23	8.38	1.5397E+000	1.48E-001	4.1462E-001
	569.32	15.43	8.3354E-001		-1.4328E-001
	604.70	97.60	1.8534E-001		-2.5509E-002
	795.84	85.40	1.4778E-001		1.8088E-001
Cs-137	801.93	8.73	1.3387E+000	1.44E-001	-2.0655E+000
	661.65	85.12	1.4402E-001		1.1218E-002
Eu-152	121.78	28.40	9.8996E-001	4.27E-001	7.2525E-001
	244.69	7.49	2.4184E+000		-4.6304E-001
	344.27	26.50	5.5484E-001		-1.0437E-001
	778.89	12.74	8.8814E-001		-1.6579E-001
	867.32	4.16	2.7269E+000		-4.6695E+000
	964.01	14.40	1.0036E+000		9.0125E-001
	1085.78	10.00	1.1867E+000		5.2138E-001
	1112.02	13.30	8.2596E-001		-1.4851E+000
1407.95	20.70	4.2736E-001	1.4743E-002		
Eu-154	123.07	40.50	6.8145E-001	3.05E-001	-1.3328E-001
	247.94	6.60	2.6143E+000		1.0776E-002
	591.81	4.83	2.6226E+000		1.0119E+000
	723.30	19.70	6.7971E-001		2.8834E-001
	756.87	4.33	2.7303E+000		8.0432E-001
	873.19	11.50	9.8768E-001		-8.2543E-002
	996.32	10.30	9.7391E-001		1.3612E-001
	1004.76	17.90	5.6155E-001		1.5140E-001
1274.45	35.50	3.0538E-001	-2.3994E-001		
Eu-155	86.54	30.90	1.7724E+000	1.77E+000	2.6093E+000
	105.31	20.70	1.7688E+000		3.3506E-001
Am-241	59.54	35.90	4.6529E+000	4.65E+000	8.2845E-001
Cm-243	228.19	10.56	1.7031E+000	1.17E+000	1.2741E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1708E+000	1.17E+000	-2.5319E-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 7/28/2006 4:02:02 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-205-F

Sample Title: OOL-10-01-205-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 3:51:59 PM

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-10-01-205-F
Title: OOL-10-01-205-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 8 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.000	1460.81*	10.67	2.07660E+001	2.18743E+000
Pb-212	0.584	74.81* @	10.70	1.52074E+001	5.99883E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60		
Bi-214	0.690	609.31*	46.30	5.62005E-001	2.32201E-001
		1120.29	15.10	8.08099E-001	2.22979E-001
		1764.49*	15.80	6.00609E-001	3.36311E-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	1.000	2.076602E+001	2.187433E+000
Pb-212 @	0.584	5.620048E-001	2.322007E-001
Bi-214	0.690	7.447409E-001	1.858427E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.77	4.1005E-001	22.91
5	750.23	2.8717E-002	113.38
6	968.56	9.5000E-002	52.43

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: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	1.2178E-001	8.48E-002	1.5862E-001
	1332.49	100.00	8.4778E-002		-1.3150E-002
Nb-94	702.63	100.00	1.2432E-001	1.09E-001	7.3488E-002
	871.10	100.00	1.0854E-001		1.1932E-002
Ag-108m	79.20	7.10	9.5415E+000	1.45E-001	-1.1960E+001
	433.93	89.90	1.4465E-001		1.7642E-002
	614.37	90.40	1.8385E-001		-3.1163E-002
	722.95	90.50	1.4830E-001		6.8630E-002
Sb-125	176.33	6.89	3.0122E+000	4.45E-001	-2.5358E+000
	427.89	29.33	4.4540E-001		-5.4336E-002
	463.38	10.35	1.3141E+000		1.4809E-002
	600.56	17.80	6.7639E-001		-7.4549E-002
	606.64	5.02	3.5474E+000		3.8937E-001
	635.90	11.32	1.0208E+000		-4.2825E-001
Cs-134	563.23	8.38	1.6166E+000	1.38E-001	1.5126E+000
	569.32	15.43	8.3916E-001		-4.2029E-001
	604.70	97.60	1.7083E-001		-1.2372E-002
	795.84	85.40	1.3842E-001		-2.0894E-002
Cs-137	801.93	8.73	1.3166E+000	1.45E-001	-5.4233E-001
	661.65	85.12	1.4521E-001		1.8542E-002
Eu-152	121.78	28.40	1.0057E+000	4.27E-001	7.0295E-001
	244.69	7.49	2.4338E+000		-3.6128E+000
	344.27	26.50	5.4920E-001		-4.0175E-001
	778.89	12.74	8.9728E-001		-2.7633E-001
	867.32	4.16	2.7657E+000		-2.8495E+000
	964.01	14.40	1.0286E+000		1.7172E-001
	1085.78	10.00	1.0490E+000		3.4775E-001
	1112.02	13.30	8.4355E-001		-1.3457E+000
1407.95	20.70	4.2736E-001	1.8064E-001		
Eu-154	123.07	40.50	6.8746E-001	3.13E-001	-1.9596E-001
	247.94	6.60	2.5538E+000		-1.6037E+000
	591.81	4.83	2.5847E+000		-3.3412E+000
	723.30	19.70	6.9410E-001		7.5634E-001
	756.87	4.33	2.5991E+000		-3.1476E-001
	873.19	11.50	9.4055E-001		-5.8644E-001
	996.32	10.30	1.0252E+000		4.9775E-001
	1004.76	17.90	6.4355E-001		4.4730E-001
1274.45	35.50	3.1258E-001	2.9597E-001		
Eu-155	86.54	30.90	1.7636E+000	1.74E+000	4.0602E+000
	105.31	20.70	1.7389E+000		1.0868E+000
Am-241	59.54	35.90	4.3271E+000	4.33E+000	-1.0721E+000
Cm-243	228.19	10.56	1.6828E+000	1.10E+000	-1.4594E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0974E+000	1.10E+000	-8.1575E-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 7/28/2006 4:15:11 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-10-01-206-F

Sample Title: OOL-10-01-206-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 4:05:09 PM

Live Time: 600.0 seconds

Real Time: 601.0 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-206-F
Title: OOL-10-01-206-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-	1418	1407.21	351.76	2.73	2.46E+002	54.31	1.35E+002
2	2426-	2448	2435.90	608.94	1.69	2.21E+002	47.56	9.47E+001
3	3634-	3654	3642.86	910.68	1.29	7.89E+001	33.45	5.81E+001
4	5829-	5859	5844.17	1461.01	2.93	7.80E+002	57.92	1.93E+001
5	7052-	7067	7060.12	1765.00	1.11	4.80E+001	17.31	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: 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	1.71182E+001	1.88086E+000
Bi-214	0.690	609.31*	46.30	8.89910E-001	2.20442E-001
		1120.29	15.10		
		1764.49*	15.80	7.79681E-001	2.91751E-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	1.711816E+001	1.880865E+000
Bi-214	0.690	8.498498E-001	1.758812E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.76	4.1061E-001	22.04
3	910.68	1.3155E-001	42.38

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: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	9.76E-002	5.5408E-003
	1332.49	100.00	9.7552E-002		4.8083E-002
Nb-94	702.63	100.00	1.1401E-001	1.07E-001	3.2265E-002
	871.10	100.00	1.0726E-001		-8.3600E-002
Ag-108m	79.20	7.10	9.6740E+000	1.27E-001	-1.7367E+001
	433.93	89.90	1.4519E-001		7.1935E-002
	614.37	90.40	1.7965E-001		-4.4842E-002
	722.95	90.50	1.2747E-001		5.1544E-002
Sb-125	176.33	6.89	2.7925E+000	4.26E-001	2.2566E+000
	427.89	29.33	4.2562E-001		-2.4509E-001
	463.38	10.35	1.2081E+000		-7.5277E-001
	600.56	17.80	6.3718E-001		-1.0736E-001
	606.64	5.02	3.5474E+000		-1.4708E-001
	635.90	11.32	1.0084E+000		3.4307E-001
Cs-134	563.23	8.38	1.4404E+000	1.32E-001	-7.0394E-002
	569.32	15.43	7.7494E-001		-3.6004E-001
	604.70	97.60	1.7271E-001		2.9687E-002
	795.84	85.40	1.3164E-001		8.1256E-002
	801.93	8.73	1.2759E+000		7.3266E-001
Cs-137	661.65	85.12	1.3543E-001	1.35E-001	3.0628E-003
Eu-152	121.78	28.40	9.2155E-001	3.49E-001	-1.4887E-001
	244.69	7.49	2.1740E+000		-6.3317E+000
	344.27	26.50	5.2004E-001		-6.4758E-001
	778.89	12.74	8.3757E-001		-1.4913E+000
	867.32	4.16	2.5865E+000		-6.6990E-001
	964.01	14.40	8.7566E-001		6.3441E-001
	1085.78	10.00	1.1109E+000		-3.9343E-002
	1112.02	13.30	7.5518E-001		-1.1987E+000
1407.95	20.70	3.4892E-001	-3.7591E-002		
Eu-154	123.07	40.50	6.4063E-001	3.02E-001	-2.4587E-001
	247.94	6.60	2.3834E+000		-1.9439E-002
	591.81	4.83	2.5527E+000		1.2714E+000
	723.30	19.70	5.8377E-001		5.7753E-002
	756.87	4.33	2.7303E+000		-1.5904E+000
	873.19	11.50	9.6260E-001		-7.2387E-002
	996.32	10.30	9.5943E-001		-1.8719E-001
	1004.76	17.90	5.5878E-001		-7.7019E-002
1274.45	35.50	3.0245E-001	1.7942E-001		
Eu-155	86.54	30.90	1.7264E+000	1.66E+000	2.2724E+000
	105.31	20.70	1.6552E+000		1.6702E+000
Am-241	59.54	35.90	4.3038E+000	4.30E+000	-5.2737E-001
Cm-243	228.19	10.56	1.5950E+000	1.08E+000	-1.3574E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0823E+000	1.08E+000	-3.3155E-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 7/28/2006 7:15:10 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-10-01-207-F

Sample Title: OOL-10-01-207-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 7:05:01 PM

Live Time: 600.0 seconds

Real Time: 601.1 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-10-01-207-F
Title: OOL-10-01-207-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 4 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.000	1460.81*	10.67	2.02661E+001	2.14082E+000
Bi-214	0.401	609.31*	46.30	9.34425E-001	2.24812E-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	1.000	2.026614E+001	2.140822E+000
Bi-214	0.401	9.344249E-001	2.248119E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.18	2.8865E-001	30.17
3	910.85	1.5201E-001	33.55

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: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	9.51E-002	6.6808E-002
	1332.49	100.00	9.5144E-002		7.1146E-002
Nb-94	702.63	100.00	1.1022E-001	1.09E-001	-2.6706E-002
	871.10	100.00	1.0854E-001		-4.0568E-002
Ag-108m	79.20	7.10	9.8946E+000	1.37E-001	-8.4799E+000
	433.93	89.90	1.4545E-001		-1.7327E-001
	614.37	90.40	1.7992E-001		-6.1969E-003
	722.95	90.50	1.3697E-001		2.9878E-002
Sb-125	176.33	6.89	2.8061E+000	4.37E-001	-1.7547E-001
	427.89	29.33	4.3727E-001		1.2021E-001
	463.38	10.35	1.2206E+000		-5.8184E-001
	600.56	17.80	6.3910E-001		-4.5560E-001
	606.64	5.02	3.5646E+000		-8.1786E-001
	635.90	11.32	1.0300E+000		-1.8858E-001
Cs-134	563.23	8.38	1.4256E+000	1.28E-001	-1.2423E+000
	569.32	15.43	8.1063E-001		-1.0747E-002
	604.70	97.60	1.7504E-001		-5.1990E-002
	795.84	85.40	1.2835E-001		-1.5480E-001
	801.93	8.73	1.2759E+000		-1.0360E+000
Cs-137	661.65	85.12	1.5098E-001	1.51E-001	1.2871E-001
Eu-152	121.78	28.40	9.2121E-001	4.03E-001	-1.0124E-001
	244.69	7.49	2.2950E+000		-3.9301E+000
	344.27	26.50	5.2601E-001		-7.6225E-001
	778.89	12.74	9.0333E-001		3.0272E-001
	867.32	4.16	2.6975E+000		-4.9869E-001
	964.01	14.40	9.2205E-001		1.6420E-001
	1085.78	10.00	1.0588E+000		-2.4022E-001
	1112.02	13.30	7.6296E-001		-1.2095E+000
1407.95	20.70	4.0305E-001	4.8634E-003		
Eu-154	123.07	40.50	6.3776E-001	2.84E-001	-3.2543E-001
	247.94	6.60	2.3766E+000		-1.6487E+000
	591.81	4.83	2.4066E+000		-1.5102E+000
	723.30	19.70	6.3451E-001		2.3332E-002
	756.87	4.33	2.5721E+000		-1.7610E+000
	873.19	11.50	9.5164E-001		1.1896E-001
	996.32	10.30	1.0160E+000		-1.9662E-001
	1004.76	17.90	5.9370E-001		6.9390E-002
	1274.45	35.50	2.8420E-001		-9.1008E-002
	Eu-155	86.54	30.90		1.7549E+000
	105.31	20.70	1.6650E+000		-7.3730E-001
Am-241	59.54	35.90	4.4283E+000	4.43E+000	2.6747E+000
Cm-243	228.19	10.56	1.6561E+000	1.15E+000	4.5949E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1502E+000	1.15E+000	2.5648E-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 7/28/2006 8:23:21 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-208-F

Sample Title: OOL-10-01-208-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 8:13:46 PM

Live Time: 600.0 seconds

Real Time: 601.1 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-208-F
Title: OOL-10-01-208-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	1397-	1409	1404.07	350.98	0.30	4.91E+001	43.66	1.67E+002
2	2321-	2341	2331.91	582.94	0.85	1.41E+002	45.19	1.08E+002
3	2423-	2447	2435.08	608.73	0.88	1.87E+002	44.71	8.09E+001
4	5827-	5858	5843.06	1460.73	2.23	1.02E+003	68.37	4.00E+001
5	7051-	7064	7057.97	1764.46	0.28	3.10E+001	16.34	1.40E+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	1.000	1460.81*	10.67	2.23255E+001	2.34940E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.08152E-001	1.06382E-001
Bi-214	0.688	860.37	12.46		
		609.31*	46.30	7.52452E-001	2.02276E-001
		1120.29	15.10		
		1764.49*	15.80	5.03334E-001	2.70033E-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	1.000	2.232550E+001	2.349399E+000
TL-208	0.471	3.081518E-001	1.063816E-001
Bi-214	0.688	6.629107E-001	1.618925E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	350.98	8.1806E-002	88.95

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	1.1318E-001	1.01E-001	-3.1935E-002
	1332.49	100.00	1.0105E-001		1.1204E-003
Nb-94	702.63	100.00	1.0983E-001	1.10E-001	-5.5162E-002
	871.10	100.00	1.1353E-001		1.0048E-001
Ag-108m	79.20	7.10	9.7026E+000	1.46E-001	-6.8495E+000
	433.93	89.90	1.4756E-001		-1.0288E-001
	614.37	90.40	1.6381E-001		-7.9720E-002
	722.95	90.50	1.4582E-001		1.1543E-001
Sb-125	176.33	6.89	2.8553E+000	4.49E-001	-3.7801E+000
	427.89	29.33	4.4861E-001		-2.9517E-001
	463.38	10.35	1.2790E+000		8.1951E-001
	600.56	17.80	6.7819E-001		2.0834E-001
	606.64	5.02	3.2924E+000		7.2017E+000
	635.90	11.32	1.0392E+000		-3.4726E-001
Cs-134	563.23	8.38	1.5294E+000	1.32E-001	-1.6033E+000
	569.32	15.43	8.5946E-001		-3.2755E-001
	604.70	97.60	1.6406E-001		9.1458E-003
	795.84	85.40	1.3211E-001		-5.4075E-002
	801.93	8.73	1.3122E+000		-1.8109E+000
Cs-137	661.65	85.12	1.4599E-001	1.46E-001	4.4452E-002
Eu-152	121.78	28.40	9.5077E-001	4.24E-001	-4.9079E-001
	244.69	7.49	2.2968E+000		-2.8581E+000
	344.27	26.50	5.1929E-001		-5.1005E-001
	778.89	12.74	9.0333E-001		-4.8832E-001
	867.32	4.16	2.8601E+000		1.5703E+000
	964.01	14.40	9.9437E-001		7.0579E-002
	1085.78	10.00	1.0922E+000		-5.6968E-002
	1112.02	13.30	8.8426E-001		-9.3600E-001
Eu-154	1407.95	20.70	4.2398E-001	2.78E-001	1.9291E-001
	123.07	40.50	6.6447E-001		6.0808E-002
	247.94	6.60	2.3834E+000		-2.5442E+000
	591.81	4.83	2.4406E+000		-2.1118E+000
	723.30	19.70	6.6500E-001		-1.4772E-001
	756.87	4.33	2.5721E+000		-6.7293E-001
	873.19	11.50	9.7343E-001		-6.5634E-001
	996.32	10.30	1.0564E+000		-5.1292E-001
Eu-155	1004.76	17.90	6.3391E-001	1.68E+000	-3.3720E-001
	1274.45	35.50	2.7784E-001		1.1847E-001
	86.54	30.90	1.6952E+000		2.2388E+000
Am-241	105.31	20.70	1.6845E+000	4.45E+000	-2.4004E-001
	59.54	35.90	4.4453E+000		-5.3033E-001
Cm-243	228.19	10.56	1.7185E+000	1.17E+000	3.5944E-001

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	4.0078E-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 7/28/2006 8:57:16 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-209-F

Sample Title: OOL-10-01-209-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 8:47:15 PM

Live Time: 600.0 seconds

Real Time: 601.0 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-10-01-209-F
Title: OOL-10-01-209-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-	2340	2331.56	582.85	0.39	5.87E+001	31.70	7.33E+001
2	5828-	5857	5842.38	1460.56	2.57	7.68E+002	57.94	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	0.998	1460.81*	10.67	1.68486E+001	1.86502E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.28058E-001	7.10773E-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: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	0.998	1.684865E+001	1.865019E+000
TL-208	0.470	1.280578E-001	7.107734E-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
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	1.1176E-001	9.45E-002	6.8059E-002
	1332.49	100.00	9.4531E-002		3.5122E-002
Nb-94	702.63	100.00	1.0385E-001	1.04E-001	-4.1134E-002
	871.10	100.00	1.0811E-001		1.1834E-001
Ag-108m	79.20	7.10	9.5328E+000	1.35E-001	-9.3578E+000
	433.93	89.90	1.3726E-001		2.7999E-002
	614.37	90.40	1.5386E-001		-1.3848E-001
	722.95	90.50	1.3505E-001		9.4876E-002
Sb-125	176.33	6.89	2.7189E+000	4.16E-001	1.4202E+000
	427.89	29.33	4.1622E-001		-3.8381E-001
	463.38	10.35	1.1826E+000		-6.1330E-002
	600.56	17.80	6.1759E-001		5.0623E-002
	606.64	5.02	2.9689E+000		4.2389E+000
	635.90	11.32	9.9579E-001		-2.8277E-002
Cs-134	563.23	8.38	1.4586E+000	1.26E-001	-8.5937E-002
	569.32	15.43	7.7899E-001		-7.4273E-002
	604.70	97.60	1.4904E-001		7.7540E-003
	795.84	85.40	1.2643E-001		-2.5224E-002
	801.93	8.73	1.2097E+000		-3.3499E-002
Cs-137	661.65	85.12	1.3501E-001	1.35E-001	6.3293E-002
Eu-152	121.78	28.40	9.1745E-001	4.37E-001	-5.4369E-001
	244.69	7.49	2.1683E+000		-5.3595E+000
	344.27	26.50	4.9307E-001		-4.8177E-001
	778.89	12.74	8.4406E-001		-5.0812E-001
	867.32	4.16	2.6274E+000		-1.7110E-002
	964.01	14.40	9.0941E-001		1.0101E+000
	1085.78	10.00	9.5086E-001		-1.6099E-001
	1112.02	13.30	7.8205E-001		-1.1168E+000
1407.95	20.70	4.3734E-001	-1.5240E-002		
Eu-154	123.07	40.50	6.3872E-001	2.66E-001	1.2475E-001
	247.94	6.60	2.3538E+000		-1.5647E-001
	591.81	4.83	2.2797E+000		-2.0286E+000
	723.30	19.70	6.2223E-001		6.2498E-001
	756.87	4.33	2.5447E+000		-1.8724E+000
	873.19	11.50	9.4055E-001		-9.6914E-001
	996.32	10.30	1.0022E+000		6.2649E-001
	1004.76	17.90	5.4756E-001		9.5801E-002
1274.45	35.50	2.6631E-001	-5.4447E-002		
Eu-155	86.54	30.90	1.6722E+000	1.59E+000	1.1281E+000
	105.31	20.70	1.5916E+000		-2.2215E-001
Am-241	59.54	35.90	4.4302E+000	4.43E+000	7.1629E-001
Cm-243	228.19	10.56	1.5525E+000	1.05E+000	-1.3253E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0527E+000	1.05E+000	-3.3028E-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 7/28/2006 8:41:19 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-10-01-210-F

Sample Title: OOL-10-01-210-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 8:31:19 PM

Live Time: 600.0 seconds

Real Time: 601.0 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-10-01-210-F
Title: OOL-10-01-210-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	2424-	2438	2431.94	607.95	0.51	3.52E+001	36.26	1.04E+002
2	5828-	5858	5843.16	1460.76	2.48	6.84E+002	56.64	3.10E+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: 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	1.000	1460.81*	10.67	1.50151E+001	1.73892E+000
Bi-214	0.367	609.31*	46.30	1.41601E-001	1.46769E-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	1.000	1.501506E+001	1.738917E+000
Bi-214	0.367	1.416010E-001	1.467689E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.1032E-001	9.33E-002	9.5066E-002
	1332.49	100.00	9.3294E-002		1.1201E-001
Nb-94	702.63	100.00	1.0983E-001	1.05E-001	-2.9709E-002
	871.10	100.00	1.0463E-001		-2.2984E-002
Ag-108m	79.20	7.10	9.3421E+000	1.33E-001	-1.2919E+001
	433.93	89.90	1.3297E-001		7.8996E-002
	614.37	90.40	1.5510E-001		-1.5024E-001
	722.95	90.50	1.3505E-001		2.2503E-002
Sb-125	176.33	6.89	2.7925E+000	4.25E-001	7.7109E-001
	427.89	29.33	4.2477E-001		6.1440E-002
	463.38	10.35	1.2081E+000		3.2876E-001
	600.56	17.80	6.9071E-001		1.8113E-001
	606.64	5.02	3.0656E+000		5.4775E+000
	635.90	11.32	9.8303E-001		6.1731E-001
Cs-134	563.23	8.38	1.4219E+000	1.33E-001	5.4386E-002
	569.32	15.43	7.5644E-001		5.9023E-003
	604.70	97.60	1.5228E-001		-1.3134E-002
	795.84	85.40	1.3303E-001		-8.9854E-002
	801.93	8.73	1.2667E+000		4.2788E-001
Cs-137	661.65	85.12	1.3113E-001	1.31E-001	1.0657E-001
Eu-152	121.78	28.40	9.2155E-001	4.14E-001	4.3644E-001
	244.69	7.49	2.1893E+000		-2.4467E+000
	344.27	26.50	4.8022E-001		-1.7113E-001
	778.89	12.74	8.3430E-001		-8.5541E-001
	867.32	4.16	2.6577E+000		-1.7341E+000
	964.01	14.40	9.0174E-001		8.7242E-001
	1085.78	10.00	9.8298E-001		-2.0604E-002
	1112.02	13.30	7.3535E-001		-6.7447E-001
1407.95	20.70	4.1366E-001	2.0338E-001		
Eu-154	123.07	40.50	6.3272E-001	2.76E-001	-1.3432E-001
	247.94	6.60	2.3330E+000		-9.1823E-001
	591.81	4.83	2.3997E+000		-4.4704E-001
	723.30	19.70	6.2928E-001		2.6006E-001
	756.87	4.33	2.4607E+000		-6.9991E-003
	873.19	11.50	8.8683E-001		-2.8913E-001
	996.32	10.30	1.0342E+000		4.6554E-001
	1004.76	17.90	5.3609E-001		1.9647E-001
1274.45	35.50	2.7622E-001	1.9818E-001		
Eu-155	86.54	30.90	1.6657E+000	1.63E+000	6.1671E-001
	105.31	20.70	1.6315E+000		-2.0250E-001
Am-241	59.54	35.90	4.3713E+000	4.37E+000	1.8290E+000
Cm-243	228.19	10.56	1.6339E+000	1.10E+000	6.1351E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0962E+000	1.10E+000	2.5198E-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 7/28/2006 8:40:52 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-211-F-

Sample Title: OOL-10-01-211-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 8:30:50 AM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-211-F-
Title: OOL-10-01-211-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	73.05	1.00	1.80E+002	48.19	8.55E+002
m	2	286-	306	300.19	75.13	1.00	3.28E+002	54.26	1.14E+003
	3	946-	962	954.49	238.72	0.88	2.98E+002	69.80	3.10E+002
	4	1348-	1359	1353.15	338.39	0.38	3.79E+001	37.26	1.28E+002
	5	1398-	1412	1407.30	351.93	1.31	1.44E+002	44.38	1.28E+002
	6	2036-	2052	2041.85	510.58	1.29	8.74E+001	40.23	1.07E+002
	7	2323-	2341	2333.06	583.38	1.39	1.37E+002	39.36	7.85E+001
	8	2430-	2447	2437.61	609.52	1.06	1.50E+002	38.08	6.82E+001
	9	3175-	3187	3182.01	795.63	0.80	3.18E+001	20.42	2.93E+001
	10	3636-	3655	3646.52	911.77	1.29	1.25E+002	32.94	4.50E+001
	11	3870-	3886	3877.68	969.56	0.59	6.38E+001	24.88	3.12E+001
	12	5835-	5861	5847.59	1462.07	1.77	7.42E+002	54.76	9.39E+000
	13	7056-	7074	7064.80	1766.39	0.78	5.03E+001	15.20	2.65E+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	1.49098E-001	7.15814E-002
K-40	0.941	1460.81*	10.67	1.57364E+001	1.72435E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	6.90270E-001	3.36156E-001
		583.14*	84.20	2.90780E-001	9.14597E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	1.06579E+001	2.73198E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.666	238.63*	44.60	9.28373E-001	2.61904E-001
		609.31*	46.30	5.84237E-001	1.65054E-001
		1120.29	15.10		
Ac-228	0.988	1764.49*	15.80	7.85473E-001	2.49849E-001
		338.32*	11.40	5.02883E-001	5.00927E-001
		911.07*	27.70	8.97941E-001	2.58171E-001
		969.11*	16.60	7.75104E-001	3.12788E-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	8.628996E-002	7.422927E-002
K-40	0.941	1.573643E+001	1.724352E+000
TL-208	0.751	2.907798E-001	9.096741E-002
Pb-212 @	0.580	9.283727E-001	2.619040E-001
Bi-214	0.666	6.453770E-001	1.377170E-001
Ac-228	0.988	8.010575E-001	1.850278E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	73.05	2.9988E-001	26.78
5	351.93	2.3995E-001	30.83
9	795.63	5.2917E-002	64.31

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: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	9.22E-002	1.2761E-002
	1332.49	100.00	9.2206E-002		9.2398E-002
Nb-94	702.63	100.00	9.6359E-002	9.64E-002	-1.6596E-002
	871.10	100.00	9.9267E-002		6.4822E-002
Ag-108m	79.20	7.10	7.8520E+000	1.23E-001	-3.7387E+000
	433.93	89.90	1.3801E-001		5.3535E-002
	614.37	90.40	1.4860E-001		2.0031E-002
	722.95	90.50	1.2271E-001		4.0490E-003
Sb-125	176.33	6.89	2.4480E+000	3.94E-001	-3.4854E-001
	427.89	29.33	3.9445E-001		7.0500E-003
	463.38	10.35	1.1365E+000		3.1149E-001
	600.56	17.80	5.7331E-001		-2.9895E-001
	606.64	5.02	2.9438E+000		-1.8833E+000
	635.90	11.32	1.0336E+000		5.1013E-001
Cs-134	563.23	8.38	1.3356E+000	1.29E-001	-8.1035E-001
	569.32	15.43	7.6168E-001		6.4390E-001
	604.70	97.60	1.3123E-001		-1.2364E-001
	795.84	85.40	1.2928E-001		6.6410E-002
	801.93	8.73	1.1364E+000		-2.8685E-002
Cs-137	661.65	85.12	1.3410E-001	1.34E-001	4.6862E-002
Eu-152	121.78	28.40	8.6640E-001	3.68E-001	-4.3569E-001
	244.69	7.49	1.9984E+000		1.2214E-001
	344.27	26.50	4.5969E-001		-1.7389E-002
	778.89	12.74	8.3816E-001		1.6620E-001
	867.32	4.16	2.3515E+000		-4.9383E+000
	964.01	14.40	8.6571E-001		5.3870E-002
	1085.78	10.00	9.8673E-001		3.5838E-001
	1112.02	13.30	7.4560E-001		1.6481E-001
1407.95	20.70	3.6846E-001	2.0806E-002		
Eu-154	123.07	40.50	5.9873E-001	2.32E-001	-7.0135E-001
	247.94	6.60	2.1171E+000		1.3671E-001
	591.81	4.83	2.0881E+000		-6.8242E-001
	723.30	19.70	5.7298E-001		1.0012E-001
	756.87	4.33	2.3489E+000		6.7197E-001
	873.19	11.50	8.4793E-001		-1.9263E-001
	996.32	10.30	8.7731E-001		-9.4752E-003
	1004.76	17.90	4.8778E-001		-2.5637E-002
1274.45	35.50	2.3232E-001	-1.4383E-001		
Eu-155	86.54	30.90	1.4798E+000	1.48E+000	2.6061E+000
	105.31	20.70	1.4905E+000		-7.3013E-001
Am-241	59.54	35.90	2.8792E+000	2.88E+000	-1.6140E+000
Cm-243	228.19	10.56	1.4111E+000	1.00E+000	-6.1787E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.0048E+000	1.00E+000	-1.9140E-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 7/28/2006 3:11:36 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-10-01-212-F

Sample Title: OOL-10-01-212-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 3:01:32 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-212-F
Title: OOL-10-01-212-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	291.25	72.90	0.79	1.11E+002	37.44	5.30E+002
m	2	284-	305	299.48	74.96	0.79	2.04E+002	44.26	6.14E+002
	3	944-	960	953.17	238.39	1.31	1.29E+002	56.31	2.20E+002
	4	1173-	1186	1180.60	295.25	0.60	4.51E+001	39.11	1.28E+002
	5	1396-	1410	1406.09	351.63	1.01	1.10E+002	40.31	1.08E+002
	6	2323-	2337	2331.02	582.87	1.27	7.18E+001	27.05	4.13E+001
	7	2424-	2445	2434.78	608.82	1.22	1.92E+002	38.07	4.95E+001
	8	3634-	3651	3641.82	910.59	1.57	7.63E+001	22.34	1.67E+001
	9	4471-	4486	4479.24	1119.96	0.47	4.36E+001	22.51	2.94E+001
	10	5829-	5853	5841.47	1460.54	1.80	4.46E+002	43.04	9.00E+000
	11	7049-	7065	7057.48	1764.56	0.34	4.98E+001	15.57	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: 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	0.997	1460.81*	10.67	9.45931E+000	1.19159E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.51734E-001	6.05111E-002
Pb-212	0.580	860.37	12.46		
		74.81* @	10.70	6.65160E+000	1.94738E+000
		77.11 @	18.00		
Bi-214	0.993	87.30 @	8.00		
		238.63*	44.60	4.01280E-001	1.86516E-001
		609.31*	46.30	7.46847E-001	1.74650E-001
PB-214	0.618	1120.29*	15.10	5.99084E-001	3.16153E-001
		1764.49*	15.80	7.75766E-001	2.54926E-001
		74.82* @	6.21	1.14609E+001	3.45699E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.44235E-001	3.03873E-001
		351.92*	37.20	4.53778E-001	1.82116E-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	0.997	9.459308E+000	1.191588E+000
TL-208	0.470	1.517339E-001	6.051105E-002
Pb-212 @	0.580	4.012797E-001	1.865162E-001
Bi-214	0.993	7.290851E-001	1.311073E-001
PB-214 @	0.618	4.248301E-001	1.562100E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.8444E-001	33.83
8	910.59	1.2710E-001	29.29

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: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	8.1884E-002	7.37E-002	-6.3860E-002
	1332.49	100.00	7.3657E-002		4.4289E-002
Nb-94	702.63	100.00	9.3811E-002	8.20E-002	1.1725E-002
	871.10	100.00	8.2030E-002		9.3391E-002
Ag-108m	79.20	7.10	6.4909E+000	1.06E-001	-3.7200E+000
	433.93	89.90	1.1260E-001		6.9615E-002
	614.37	90.40	1.2145E-001		-5.7924E-002
	722.95	90.50	1.0621E-001		6.3491E-002
Sb-125	176.33	6.89	1.9455E+000	3.28E-001	-4.5476E-001
	427.89	29.33	3.2830E-001		-2.8188E-001
	463.38	10.35	9.8421E-001		1.9485E-001
	600.56	17.80	5.0884E-001		1.0874E-001
	606.64	5.02	2.9634E+000		4.4451E-001
	635.90	11.32	7.8108E-001		2.0432E-001
Cs-134	563.23	8.38	1.1804E+000	1.04E-001	1.3489E+000
	569.32	15.43	6.3626E-001		-1.3931E-001
	604.70	97.60	1.4349E-001		2.3196E-002
	795.84	85.40	1.0370E-001		5.5408E-002
Cs-137	801.93	8.73	9.2263E-001	1.09E-001	-1.3653E-001
	661.65	85.12	1.0926E-001		-1.9061E-002
Eu-152	121.78	28.40	7.3471E-001	3.57E-001	2.4471E-002
	244.69	7.49	1.6653E+000		6.2201E-002
	344.27	26.50	3.8242E-001		-2.7200E-002
	778.89	12.74	6.9184E-001		-2.4895E-001
	867.32	4.16	1.9301E+000		-1.0883E+000
	964.01	14.40	7.4439E-001		7.7824E-001
	1085.78	10.00	8.5915E-001		5.0691E-001
	1112.02	13.30	6.5781E-001		-2.9270E-001
1407.95	20.70	3.5720E-001	2.3258E-002		
Eu-154	123.07	40.50	5.0883E-001	2.45E-001	-1.0840E-001
	247.94	6.60	1.7861E+000		-9.8043E-001
	591.81	4.83	1.9647E+000		9.2100E-001
	723.30	19.70	4.9441E-001		4.6622E-001
	756.87	4.33	2.0338E+000		-7.2038E-001
	873.19	11.50	7.3710E-001		6.2893E-001
	996.32	10.30	8.4090E-001		3.0011E-001
	1004.76	17.90	4.7228E-001		-5.9068E-002
1274.45	35.50	2.4478E-001	1.7264E-001		
Eu-155	86.54	30.90	1.2379E+000	1.24E+000	8.5105E-001
	105.31	20.70	1.2504E+000		-4.6424E-001
Am-241	59.54	35.90	2.3068E+000	2.31E+000	1.9128E-001
Cm-243	228.19	10.56	1.2417E+000	8.20E-001	-9.5185E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	8.2019E-001	8.20E-001	-1.0049E-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 7/28/2006 2:58:48 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-213-F

Sample Title: OOL-10-01-213-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 2:48:45 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-213-F
Title: OOL-10-01-213-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 12 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.995	1460.81*	10.67	1.04737E+001	1.30345E+000
TL-208	0.464	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.60200E-001	6.64425E-002
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	1.08011E+001	2.70235E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.92179E-001	1.91973E-001
Bi-214	0.989	609.31*	46.30	9.01082E-001	1.83251E-001
		1120.29*	15.10	7.69892E-001	3.15716E-001
		1764.49*	15.80	7.34937E-001	2.69280E-001
PB-214	0.618	74.82* @	6.21	1.86105E+001	4.84826E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	6.92786E-001	3.40920E-001
		351.92*	37.20	4.85782E-001	1.84101E-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	0.995	1.047369E+001	1.303452E+000
TL-208	0.464	1.602004E-001	6.644250E-002
Pb-212 @	0.581	3.921787E-001	1.919729E-001
Bi-214	0.989	8.337811E-001	1.365871E-001
PB-214 @	0.618	5.325185E-001	1.619905E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.3723E-001	30.44
3	84.67	1.7311E-001	76.18
9	910.58	1.3911E-001	32.73

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: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	9.3493E-002	8.01E-002	-9.7421E-002
	1332.49	100.00	8.0126E-002		5.3476E-002
Nb-94	702.63	100.00	9.5094E-002	7.98E-002	4.6009E-002
	871.10	100.00	7.9806E-002		-6.1034E-002
Ag-108m	79.20	7.10	6.7787E+000	1.12E-001	-4.9974E+000
	433.93	89.90	1.1162E-001		-7.0935E-002
	614.37	90.40	1.1570E-001		2.3228E-002
	722.95	90.50	1.1692E-001		-2.7899E-002
Sb-125	176.33	6.89	2.1442E+000	3.51E-001	-2.8782E-001
	427.89	29.33	3.5147E-001		1.5853E-001
	463.38	10.35	1.0468E+000		3.1739E-001
	600.56	17.80	5.4209E-001		-1.1936E-001
	606.64	5.02	3.2200E+000		8.7079E+000
	635.90	11.32	8.0004E-001		-6.9070E-001
Cs-134	563.23	8.38	1.1589E+000	1.17E-001	5.2294E-002
	569.32	15.43	6.6379E-001		1.5351E-001
	604.70	97.60	1.6220E-001		-1.1016E-001
	795.84	85.40	1.1748E-001		9.1028E-002
	801.93	8.73	1.0596E+000		-3.2651E-001
Cs-137	661.65	85.12	1.0876E-001	1.09E-001	3.4711E-002
Eu-152	121.78	28.40	7.7095E-001	3.57E-001	-1.4416E-001
	244.69	7.49	1.7718E+000		-7.5298E-002
	344.27	26.50	4.1584E-001		4.1872E-002
	778.89	12.74	6.4472E-001		-3.8230E-001
	867.32	4.16	1.9568E+000		-8.7673E-001
	964.01	14.40	7.8795E-001		7.8186E-001
	1085.78	10.00	9.5653E-001		1.1176E+000
	1112.02	13.30	7.0714E-001		-2.1580E-001
1407.95	20.70	3.5720E-001	3.1993E-001		
Eu-154	123.07	40.50	5.3826E-001	2.21E-001	1.6954E-002
	247.94	6.60	1.9171E+000		1.8181E-001
	591.81	4.83	1.9647E+000		-1.7787E-001
	723.30	19.70	5.4683E-001		4.1997E-001
	756.87	4.33	2.1408E+000		1.1138E+000
	873.19	11.50	7.0408E-001		-3.0250E-002
	996.32	10.30	8.8238E-001		6.0045E-001
	1004.76	17.90	4.6911E-001		1.0357E-002
1274.45	35.50	2.2105E-001	-1.0684E-001		
Eu-155	86.54	30.90	1.2916E+000	1.29E+000	1.3544E+000
	105.31	20.70	1.3248E+000		2.2661E-001
Am-241	59.54	35.90	2.5164E+000	2.52E+000	-6.0696E-001
Cm-243	228.19	10.56	1.2674E+000	8.71E-001	-7.0359E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	8.7081E-001	8.71E-001	2.9771E-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 8/2/2006 6:19:30 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: GRN7780

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-01-213-F-R

Sample ID: OOL-10-01-213-F

Sample Title: OOL-10-01-213-F-R

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 11:16:02 AM

Live Time: 600.0 seconds

Real Time: 600.9 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-01-213-F-R

Log Number: OOL-10-01-213-F

Title: OOL-10-01-213-F-R

Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	287-	300	296.41	74.06	0.36	1.48E+002	97.68	8.30E+002
2	348-	356	352.25	88.02	0.74	5.34E+001	59.89	4.11E+002
3	1174-	1190	1180.56	295.10	0.91	7.33E+001	44.24	1.39E+002
4	2037-	2053	2042.25	510.52	0.96	6.44E+001	32.89	6.86E+001
5	2425-	2446	2434.88	608.68	1.18	1.12E+002	37.74	6.88E+001
6	4474-	4486	4479.91	1119.94	0.42	2.29E+001	20.21	3.11E+001
7	5825-	5855	5840.55	1460.11	1.82	5.58E+002	47.85	7.75E+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-10-01-213-F-R

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	1.13246E-001	5.98189E-002
K-40	0.984	1460.81*	10.67	1.22520E+001	1.44460E+000
Bi-214	0.700	609.31*	46.30	4.51012E-001	1.61600E-001
		1120.29*	15.10	3.24253E-001	2.88076E-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-10-01-213-F-R

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	1.132460E-001	5.981889E-002
K-40	0.984	1.225198E+001	1.444596E+000
Bi-214	0.700	4.206711E-001	1.409389E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	74.06	2.4625E-001	66.11
2	88.02	8.9066E-002	112.06
3	295.10	1.2210E-001	60.39

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:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-01-213-F-R

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	1.0383E-001	7.12E-002	9.2223E-003
	1332.49	100.00	7.1174E-002		-1.1491E-003
Nb-94	702.63	100.00	9.7917E-002	8.72E-002	-6.9962E-002
	871.10	100.00	8.7153E-002		-1.3696E-002
Ag-108m	79.20	7.10	9.0377E+000	1.20E-001	-1.3807E+001
	433.93	89.90	1.1979E-001		-1.1771E-001
	614.37	90.40	1.4219E-001		-2.3916E-002
	722.95	90.50	1.2540E-001		1.1781E-001
Sb-125	176.33	6.89	2.6174E+000	3.89E-001	4.6234E-001
	427.89	29.33	3.8941E-001		1.3877E-002
	463.38	10.35	1.1191E+000		2.2232E-001
	600.56	17.80	5.7632E-001		-3.3537E-002
	606.64	5.02	2.7481E+000		2.6718E+000
	635.90	11.32	9.3354E-001		8.4033E-001
Cs-134	563.23	8.38	1.2164E+000	1.21E-001	6.0598E-001
	569.32	15.43	6.7011E-001		1.2395E-001
	604.70	97.60	1.3858E-001		-2.2043E-002
	795.84	85.40	1.2097E-001		1.0994E-001
Cs-137	801.93	8.73	1.0971E+000	1.20E-001	-6.5811E-001
	661.65	85.12	1.1968E-001		-1.3935E-001
Eu-152	121.78	28.40	8.9944E-001	3.36E-001	1.6230E-001
	244.69	7.49	1.9041E+000		-4.9000E+000
	344.27	26.50	4.5424E-001		-2.8989E-001
	778.89	12.74	7.8356E-001		4.9803E-001
	867.32	4.16	2.0804E+000		-2.8722E+000
	964.01	14.40	8.5420E-001		1.3753E+000
	1085.78	10.00	8.4673E-001		-9.1519E-001
	1112.02	13.30	6.9387E-001		-3.2121E-001
1407.95	20.70	3.3607E-001	2.0422E-001		
Eu-154	123.07	40.50	6.1734E-001	2.28E-001	-2.2216E-001
	247.94	6.60	2.0753E+000		-1.5911E+000
	591.81	4.83	2.1138E+000		1.6769E-001
	723.30	19.70	5.7034E-001		3.9812E-001
	756.87	4.33	2.2725E+000		1.2337E+000
	873.19	11.50	7.5819E-001		-3.7536E-001
	996.32	10.30	8.7256E-001		6.2794E-001
	1004.76	17.90	5.1838E-001		4.2090E-001
1274.45	35.50	2.2796E-001	-1.4017E-001		
Eu-155	86.54	30.90	1.5881E+000	1.59E+000	7.4725E-001
	105.31	20.70	1.6097E+000		9.0554E-001
Am-241	59.54	35.90	3.9040E+000	3.90E+000	6.1926E-001
Cm-243	228.19	10.56	1.4692E+000	9.62E-001	-3.2259E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.6214E-001	9.62E-001	-1.1809E-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 7/31/2006 11:26:04 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-213-F

Sample Title: OOL-10-01-213-F-S

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 11:16:02 AM

Live Time: 600.0 seconds

Real Time: 600.9 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-213-F
Title: OOL-10-01-213-F-S
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	287-	300	296.41	74.06	0.36	1.48E+002	97.68	8.30E+002
2	348-	356	352.25	88.02	0.74	5.34E+001	59.89	4.11E+002
3	1174-	1190	1180.56	295.10	0.91	7.33E+001	44.24	1.39E+002
4	2037-	2053	2042.25	510.52	0.96	6.44E+001	32.89	6.86E+001
5	2425-	2446	2434.88	608.68	1.18	1.12E+002	37.74	6.88E+001
6	4474-	4486	4479.91	1119.94	0.42	2.29E+001	20.21	3.11E+001
7	5825-	5855	5840.55	1460.11	1.82	5.58E+002	47.85	7.75E+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: 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	0.993	511.00*	100.00	1.13246E-001	5.98189E-002
K-40	0.984	1460.81*	10.67	1.22520E+001	1.44460E+000
Bi-214	0.700	609.31*	46.30	4.51012E-001	1.61600E-001
		1120.29*	15.10	3.24253E-001	2.88076E-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
ANN	0.993	1.132460E-001	5.981889E-002
K-40	0.984	1.225198E+001	1.444596E+000
Bi-214	0.700	4.206711E-001	1.409389E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	74.06	2.4625E-001	66.11
2	88.02	8.9066E-002	112.06
3	295.10	1.2210E-001	60.39

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: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	1.0383E-001	7.12E-002	9.2223E-003
	1332.49	100.00	7.1174E-002		-1.1491E-003
Nb-94	702.63	100.00	9.7917E-002	8.72E-002	-6.9962E-002
	871.10	100.00	8.7153E-002		-1.3696E-002
Ag-108m	79.20	7.10	9.0377E+000	1.20E-001	-1.3807E+001
	433.93	89.90	1.1979E-001		-1.1771E-001
	614.37	90.40	1.4219E-001		-2.3916E-002
	722.95	90.50	1.2540E-001		1.1781E-001
Sb-125	176.33	6.89	2.6174E+000	3.89E-001	4.6234E-001
	427.89	29.33	3.8941E-001		1.3877E-002
	463.38	10.35	1.1191E+000		2.2232E-001
	600.56	17.80	5.7632E-001		-3.3537E-002
	606.64	5.02	2.7481E+000		2.6718E+000
	635.90	11.32	9.3354E-001		8.4033E-001
	795.84	85.40	1.2097E-001		1.0994E-001
Cs-134	563.23	8.38	1.2164E+000	1.21E-001	6.0598E-001
	569.32	15.43	6.7011E-001		1.2395E-001
	604.70	97.60	1.3858E-001		-2.2043E-002
Cs-137	661.65	85.12	1.1968E-001	1.20E-001	-1.3935E-001
	795.84	85.40	1.2097E-001		1.0994E-001
Eu-152	801.93	8.73	1.0971E+000	3.36E-001	-6.5811E-001
	121.78	28.40	8.9944E-001		1.6230E-001
	244.69	7.49	1.9041E+000		-4.9000E+000
	344.27	26.50	4.5424E-001		-2.8989E-001
	778.89	12.74	7.8356E-001		4.9803E-001
	867.32	4.16	2.0804E+000		-2.8722E+000
	964.01	14.40	8.5420E-001		1.3753E+000
	1085.78	10.00	8.4673E-001		-9.1519E-001
	1112.02	13.30	6.9387E-001		-3.2121E-001
	1407.95	20.70	3.3607E-001		2.0422E-001
Eu-154	123.07	40.50	6.1734E-001	2.28E-001	-2.2216E-001
	247.94	6.60	2.0753E+000		-1.5911E+000
	591.81	4.83	2.1138E+000		1.6769E-001
	723.30	19.70	5.7034E-001		3.9812E-001
	756.87	4.33	2.2725E+000		1.2337E+000
	873.19	11.50	7.5819E-001		-3.7536E-001
	996.32	10.30	8.7256E-001		6.2794E-001
	1004.76	17.90	5.1838E-001		4.2090E-001
	1274.45	35.50	2.2796E-001		-1.4017E-001
	1407.95	20.70	3.3607E-001		2.0422E-001
Eu-155	86.54	30.90	1.5881E+000	1.59E+000	7.4725E-001
	105.31	20.70	1.6097E+000		9.0554E-001
Am-241	59.54	35.90	3.9040E+000	3.90E+000	6.1926E-001
Cm-243	228.19	10.56	1.4692E+000	9.62E-001	-3.2259E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.6214E-001	9.62E-001	-1.1809E-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 7/28/2006 2:44:14 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-01-214-F

Sample Title: OOL-10-01-214-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 2:34:12 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-214-F
Title: OOL-10-01-214-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-	304	299.57	74.98	0.61	1.57E+002	90.40	8.73E+002
2	333-	344	340.03	85.10	0.70	1.35E+002	90.67	7.99E+002
3	945-	958	953.60	238.50	0.98	2.22E+002	61.41	2.76E+002
4	1172-	1188	1179.31	294.93	0.57	1.22E+002	55.14	2.14E+002
5	1341-	1355	1351.07	337.87	0.90	7.75E+001	41.42	1.25E+002
6	1398-	1415	1406.14	351.64	1.35	1.91E+002	50.81	1.48E+002
7	2322-	2338	2330.45	582.73	1.06	1.42E+002	35.76	6.10E+001
8	2426-	2442	2434.95	608.86	1.58	2.23E+002	40.59	6.57E+001
9	2901-	2910	2905.62	726.53	0.36	2.77E+001	19.43	3.13E+001
10	3632-	3650	3641.67	910.56	1.38	1.27E+002	32.68	4.48E+001
M 11	3850-	3882	3855.60	964.04	0.89	3.24E+001	14.45	3.07E+001
m 12	3850-	3882	3874.34	968.73	0.89	4.42E+001	15.60	2.53E+001
13	4470-	4486	4477.55	1119.54	0.78	5.55E+001	27.78	4.65E+001
14	5829-	5854	5841.06	1460.44	2.08	8.63E+002	60.94	2.50E+001
15	7048-	7065	7056.75	1764.38	1.26	6.03E+001	17.74	6.68E+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: 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	0.995	1460.81*	10.67	1.83030E+001	1.96633E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.00290E-001	8.51259E-002
		860.37	12.46		
Bi-212	0.984	727.17*	11.80	4.44272E-001	3.16097E-001
Pb-212	0.580	74.81* @	10.70	5.12868E+000	3.11843E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.93676E-001	2.20230E-001
Bi-214	0.991	609.31*	46.30	8.70661E-001	1.91215E-001
		1120.29*	15.10	7.63462E-001	3.90547E-001
		1764.49*	15.80	9.40616E-001	2.92217E-001
PB-214	0.618	74.82* @	6.21	8.83686E+000	5.41130E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	9.30326E-001	4.48700E-001
		351.92*	37.20	7.85579E-001	2.46577E-001
Ac-228	0.992	338.32*	11.40	1.02914E+000	5.72919E-001
		911.07*	27.70	9.13850E-001	2.57222E-001
		969.11*	16.60	5.36052E-001	1.97482E-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	0.995	1.830297E+001	1.966326E+000
TL-208	0.468	3.002903E-001	8.512586E-002
Bi-212	0.984	4.442722E-001	3.160967E-001
Pb-212 @	0.580	6.936759E-001	2.202296E-001
Bi-214	0.991	8.732130E-001	1.480595E-001
PB-214 @	0.618	8.191524E-001	2.160972E-001
Ac-228	0.992	7.007080E-001	1.510953E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	85.10	2.2552E-001	67.01
M 11	964.04	5.3986E-002	44.61

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: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	9.22E-002	1.0778E-001
	1332.49	100.00	9.2206E-002		-7.5828E-002
Nb-94	702.63	100.00	1.1216E-001	1.01E-001	1.2213E-002
	871.10	100.00	1.0060E-001		-5.3197E-002
Ag-108m	79.20	7.10	7.8472E+000	1.29E-001	-6.8421E+000
	433.93	89.90	1.3316E-001		4.2912E-002
	614.37	90.40	1.3756E-001		-2.1243E-002
	722.95	90.50	1.2938E-001		9.0519E-002
Sb-125	176.33	6.89	2.4015E+000	4.10E-001	-8.7643E-001
	427.89	29.33	4.1050E-001		1.1506E-002
	463.38	10.35	1.1591E+000		7.8874E-002
	600.56	17.80	6.4718E-001		2.2734E-001
	606.64	5.02	3.3342E+000		7.3826E+000
	635.90	11.32	1.0016E+000		6.5623E-001
Cs-134	563.23	8.38	1.2704E+000	1.29E-001	-1.9891E-001
	569.32	15.43	6.9872E-001		3.5154E-001
	604.70	97.60	1.6750E-001		-2.8465E-002
	795.84	85.40	1.2883E-001		6.5519E-003
Cs-137	801.93	8.73	1.2174E+000	1.39E-001	5.6334E-001
	661.65	85.12	1.3921E-001		1.8500E-002
Eu-152	121.78	28.40	8.5071E-001	3.57E-001	2.0878E-001
	244.69	7.49	2.0595E+000		-8.2658E-001
	344.27	26.50	4.7234E-001		-4.1864E-001
	778.89	12.74	8.0663E-001		-6.1033E-001
	867.32	4.16	2.5697E+000		8.6295E-001
	964.01	14.40	9.5769E-001		5.0407E-002
	1085.78	10.00	9.7678E-001		-2.9900E-001
	1112.02	13.30	7.9965E-001		-6.2909E-001
1407.95	20.70	3.5720E-001	-2.4146E-001		
Eu-154	123.07	40.50	5.9312E-001	2.85E-001	1.6921E-001
	247.94	6.60	2.2055E+000		3.0312E-001
	591.81	4.83	2.3542E+000		-7.0008E-001
	723.30	19.70	5.9444E-001		4.6758E-001
	756.87	4.33	2.4415E+000		1.3013E+000
	873.19	11.50	8.7907E-001		-7.2817E-001
	996.32	10.30	8.6707E-001		-1.7219E-001
	1004.76	17.90	5.3968E-001		3.2677E-001
1274.45	35.50	2.8457E-001	4.9722E-002		
Eu-155	86.54	30.90	1.4218E+000	1.42E+000	6.2346E-002
	105.31	20.70	1.4442E+000		-5.1700E-002
Am-241	59.54	35.90	2.7378E+000	2.74E+000	2.0298E-002
Cm-243	228.19	10.56	1.4840E+000	9.35E-001	3.9935E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.3519E-001	9.35E-001	-5.6942E-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 7/31/2006 11:20:21 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-10-01-215-F-

Sample Title: OOL-10-01-215-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 11:10:20 AM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-215-F-
Title: OOL-10-01-215-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	299.68	74.94	0.89	2.15E+002	96.16	7.92E+002
2	946-	962	954.98	238.78	1.46	2.30E+002	69.36	3.27E+002
3	1397-	1413	1408.18	352.09	1.49	1.06E+002	45.96	1.42E+002
4	2323-	2341	2332.89	583.29	1.88	1.53E+002	37.70	6.42E+001
5	2426-	2447	2436.65	609.23	1.23	1.58E+002	43.05	8.58E+001
6	3636-	3655	3645.63	911.51	1.86	1.00E+002	34.18	5.78E+001
7	4476-	4489	4482.58	1120.77	0.65	1.90E+001	22.81	4.20E+001
8	5832-	5858	5846.01	1461.66	1.95	8.01E+002	57.02	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: 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	0.975	1460.81*	10.67	1.85005E+001	1.99471E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.38930E-001	9.45419E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	6.71793E+000	3.28451E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.10098E-001	2.41496E-001
Bi-214	0.710	609.31*	46.30	6.49386E-001	1.93928E-001
		1120.29*	15.10	2.77803E-001	3.34802E-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: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	0.975	1.850047E+001	1.994707E+000
TL-208	0.469	3.389299E-001	9.454185E-002
Pb-212 @	0.576	7.100982E-001	2.414962E-001
Bi-214	0.710	5.560360E-001	1.678095E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	352.09	1.7699E-001	43.28
6	911.51	1.6697E-001	34.11

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: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	1.1495E-001	8.94E-002	1.0323E-001
	1332.49	100.00	8.9366E-002		1.8265E-002
Nb-94	702.63	100.00	1.1677E-001	9.28E-002	-2.5716E-002
	871.10	100.00	9.2778E-002		2.3978E-002
Ag-108m	79.20	7.10	7.1056E+000	1.30E-001	-6.1548E+000
	433.93	89.90	1.3022E-001		-2.9863E-003
	614.37	90.40	1.6084E-001		5.2556E-002
	722.95	90.50	1.3565E-001		2.0143E-002
Sb-125	176.33	6.89	2.5362E+000	4.06E-001	-1.4335E-002
	427.89	29.33	4.0585E-001		-2.1963E-001
	463.38	10.35	1.2323E+000		1.2306E+000
	600.56	17.80	6.2339E-001		1.7599E-001
	606.64	5.02	3.1876E+000		-4.9741E-001
	635.90	11.32	1.0603E+000		5.7858E-001
Cs-134	563.23	8.38	1.4692E+000	1.31E-001	1.4139E+000
	569.32	15.43	7.2466E-001		1.0354E-002
	604.70	97.60	1.4975E-001		-1.7203E-002
	795.84	85.40	1.3132E-001		2.0434E-002
Cs-137	801.93	8.73	1.2622E+000	1.56E-001	-5.4062E-001
	661.65	85.12	1.5607E-001		1.9296E-001
Eu-152	121.78	28.40	8.2464E-001	3.49E-001	4.5502E-001
	244.69	7.49	2.1230E+000		-4.6921E-002
	344.27	26.50	4.5468E-001		-6.9972E-001
	778.89	12.74	8.5619E-001		-3.2361E-001
	867.32	4.16	2.4256E+000		-4.7069E-001
	964.01	14.40	8.8300E-001		5.4246E-001
	1085.78	10.00	1.0319E+000		-6.5749E-001
	1112.02	13.30	7.4718E-001		-2.0402E-001
1407.95	20.70	3.4924E-001	8.7789E-002		
Eu-154	123.07	40.50	5.6780E-001	2.60E-001	-2.2463E-001
	247.94	6.60	2.3356E+000		2.0103E-001
	591.81	4.83	2.3361E+000		2.3475E-002
	723.30	19.70	6.1190E-001		-9.5375E-002
	756.87	4.33	2.6387E+000		9.8292E-001
	873.19	11.50	8.0248E-001		7.5535E-002
	996.32	10.30	9.3462E-001		-2.2096E-001
	1004.76	17.90	5.6886E-001		-8.1972E-003
1274.45	35.50	2.6046E-001	-4.6842E-001		
Eu-155	86.54	30.90	1.2786E+000	1.28E+000	1.2951E+000
	105.31	20.70	1.4084E+000		-6.5034E-001
Am-241	59.54	35.90	2.6403E+000	2.64E+000	4.6994E-001
Cm-243	228.19	10.56	1.5853E+000	1.04E+000	5.1496E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.0358E+000	1.04E+000	3.9514E-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 7/28/2006 1:05:24 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-01-216-

Sample Title: OOL-10-01-216-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 12:55:23 PM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-216-
Title: OOL-10-01-216-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 10 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.969	1460.81*	10.67	2.03211E+001	2.15568E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.47456E-001	9.95380E-002
		860.37	12.46		
Bi-212	0.999	727.17*	11.80	6.71800E-001	4.70984E-001
Pb-212	0.593	74.81* @	10.70	7.66612E+000	4.05070E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.73498E-001	2.66499E-001
Bi-214	0.402	609.31*	46.30	7.05520E-001	1.80783E-001
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.627	74.82* @	6.21	1.32089E+001	7.04503E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.35382E-001	3.02951E-001
Ac-228	0.629	351.92*	37.20	4.62185E-001	2.41125E-001
		338.32	11.40		
		911.07*	27.70	1.00463E+000	2.79453E-001
		969.11*	16.60	6.71464E-001	3.28481E-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	0.969	2.032114E+001	2.155682E+000
TL-208	0.471	3.474563E-001	9.953801E-002
Bi-212	0.999	6.718001E-001	4.709837E-001
Pb-212 @	0.593	7.734976E-001	2.664993E-001
Bi-214	0.402	7.055201E-001	1.807825E-001
PB-214 @	0.627	4.905717E-001	1.886620E-001
Ac-228	0.629	8.647413E-001	2.128482E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.1102E-001	9.41E-002	-5.5170E-002
	1332.49	100.00	9.4141E-002		5.3105E-002
Nb-94	702.63	100.00	1.2532E-001	1.07E-001	5.0803E-002
	871.10	100.00	1.0745E-001		9.5276E-002
Ag-108m	79.20	7.10	9.4468E+000	1.46E-001	-4.3709E+000
	433.93	89.90	1.5170E-001		1.3730E-001
	614.37	90.40	1.7714E-001		4.0292E-002
	722.95	90.50	1.4632E-001		-8.7533E-002
Sb-125	176.33	6.89	2.8571E+000	4.45E-001	1.1471E+000
	427.89	29.33	4.4468E-001		-4.0403E-001
	463.38	10.35	1.2578E+000		-3.8220E-002
	600.56	17.80	6.4866E-001		-1.5020E-001
	606.64	5.02	3.1506E+000		-4.6901E-002
	635.90	11.32	9.6394E-001		-1.0575E+000
Cs-134	563.23	8.38	1.5036E+000	1.47E-001	2.5574E-001
	569.32	15.43	8.4334E-001		1.4026E-001
	604.70	97.60	1.5571E-001		-3.5872E-002
	795.84	85.40	1.4695E-001		-1.5359E-003
	801.93	8.73	1.2839E+000		-2.4421E+000
Cs-137	661.65	85.12	1.3133E-001	1.31E-001	4.3639E-002
Eu-152	121.78	28.40	9.6127E-001	4.35E-001	-4.9273E-001
	244.69	7.49	2.3725E+000		2.7814E-001
	344.27	26.50	5.3852E-001		-4.5590E-001
	778.89	12.74	9.4119E-001		9.0146E-002
	867.32	4.16	2.6461E+000		-1.0050E+000
	964.01	14.40	1.0034E+000		-2.3212E-001
	1085.78	10.00	1.1230E+000		7.9873E-001
	1112.02	13.30	8.3837E-001		6.6219E-001
1407.95	20.70	4.3467E-001	3.3014E-001		
Eu-154	123.07	40.50	6.6256E-001	2.78E-001	-4.7891E-002
	247.94	6.60	2.5331E+000		-2.0828E+000
	591.81	4.83	2.6984E+000		1.5490E+000
	723.30	19.70	6.7225E-001		-3.6090E-001
	756.87	4.33	2.7695E+000		-1.0202E+000
	873.19	11.50	9.4681E-001		-3.9272E-002
	996.32	10.30	1.0466E+000		-2.8432E-001
	1004.76	17.90	6.3592E-001		-1.5112E-001
1274.45	35.50	2.7764E-001	-2.3110E-002		
Eu-155	86.54	30.90	1.6325E+000	1.63E+000	2.4065E+000
	105.31	20.70	1.6454E+000		-6.1558E-001
Am-241	59.54	35.90	5.0479E+000	5.05E+000	-5.4568E+000
Cm-243	228.19	10.56	1.7086E+000	1.16E+000	-3.2423E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1579E+000	1.16E+000	4.1721E-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 7/28/2006 1:23:01 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-10-01-217-

Sample Title: OOL-10-01-217-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 1:12:59 PM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-217-
 Title: OOL-10-01-217-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	291.68	72.87	1.24	1.59E+002	48.78	9.49E+002
m	2	285-	308	301.02	75.21	1.25	2.39E+002	53.14	1.17E+003
	3	333-	344	340.03	84.96	1.09	1.15E+002	83.13	6.71E+002
	4	948-	963	955.24	238.79	0.55	1.67E+002	68.17	3.45E+002
	5	1402-	1415	1407.81	351.95	1.04	7.81E+001	41.09	1.30E+002
	6	2033-	2049	2042.29	510.58	1.56	9.32E+001	41.97	1.17E+002
	7	2324-	2339	2333.23	583.33	1.43	1.12E+002	35.18	6.99E+001
	8	2429-	2448	2437.74	609.46	1.45	1.45E+002	36.67	5.85E+001
	9	2902-	2916	2909.72	727.47	0.69	3.13E+001	24.35	4.27E+001
	10	3637-	3655	3646.31	911.64	1.18	1.00E+002	31.02	4.45E+001
	11	3871-	3886	3876.04	969.08	1.88	5.62E+001	27.27	4.48E+001
	12	5833-	5860	5845.93	1461.62	2.04	8.79E+002	59.04	6.51E+000
	13	7055-	7070	7062.94	1765.91	1.17	3.60E+001	11.76	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
ANN	0.994	511.00*	100.00	1.67294E-001	7.87065E-002
K-40	0.978	1460.81*	10.67	1.99918E+001	2.10256E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	7.74508E-001	3.69831E-001
		583.14*	84.20	2.50337E-001	8.50241E-002
		860.37	12.46		
Bi-212	0.997	727.17*	11.80	5.31127E-001	4.18255E-001
Pb-212	0.593	74.81* @	10.70	9.23903E+000	2.73778E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.45080E-001	2.38391E-001
Bi-214	0.683	609.31*	46.30	5.99402E-001	1.68170E-001
		1120.29	15.10		
		1764.49*	15.80	5.85541E-001	2.00033E-001
Ac-228	0.627	338.32	11.40		
		911.07*	27.70	7.64956E-001	2.52005E-001
		969.11*	16.60	7.25148E-001	3.60145E-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	0.994	1.132209E-001	8.080152E-002
K-40	0.978	1.999180E+001	2.102556E+000
TL-208	0.752	2.503374E-001	8.463179E-002
Bi-212	0.997	5.311265E-001	4.182550E-001
Pb-212 @	0.593	5.450804E-001	2.383905E-001
Bi-214	0.683	5.936625E-001	1.287234E-001
Ac-228	0.627	7.518717E-001	2.064762E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.6422E-001	30.77
3	84.96	1.9217E-001	72.10
5	351.95	1.3013E-001	52.63

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	1.2008E-001	7.91E-002	1.1939E-002
	1332.49	100.00	7.9147E-002		-3.1267E-002
Nb-94	702.63	100.00	1.1089E-001	1.11E-001	7.9552E-002
	871.10	100.00	1.1417E-001		7.3975E-002
Ag-108m	79.20	7.10	1.0109E+001	1.39E-001	2.3177E+000
	433.93	89.90	1.4300E-001		-9.6511E-003
	614.37	90.40	1.7284E-001		-3.0829E-002
	722.95	90.50	1.3936E-001		5.5289E-003
Sb-125	176.33	6.89	2.8719E+000	4.21E-001	-6.6275E-001
	427.89	29.33	4.2143E-001		-3.0855E-001
	463.38	10.35	1.2925E+000		4.9821E-001
	600.56	17.80	6.4667E-001		-2.2294E-002
	606.64	5.02	3.1043E+000		-6.9858E-001
	635.90	11.32	1.0273E+000		4.2223E-001
Cs-134	563.23	8.38	1.4663E+000	1.43E-001	6.3163E-001
	569.32	15.43	7.9721E-001		3.2309E-001
	604.70	97.60	1.5516E-001		-3.8195E-003
	795.84	85.40	1.4337E-001		6.6360E-002
Cs-137	801.93	8.73	1.2187E+000	1.39E-001	-2.6835E+000
	661.65	85.12	1.3935E-001		-7.1997E-002
Eu-152	121.78	28.40	9.5374E-001	4.49E-001	-8.4726E-001
	244.69	7.49	2.3510E+000		-8.2086E-001
	344.27	26.50	5.4886E-001		-9.1279E-001
	778.89	12.74	8.8729E-001		-2.0164E-001
	867.32	4.16	2.7831E+000		-1.4414E+000
	964.01	14.40	1.0352E+000		-1.0304E+000
	1085.78	10.00	1.0721E+000		-1.6859E-001
	1112.02	13.30	8.4217E-001		-5.1738E-002
1407.95	20.70	4.4882E-001	3.0489E-001		
Eu-154	123.07	40.50	6.6690E-001	2.79E-001	4.1048E-002
	247.94	6.60	2.5804E+000		2.2318E-001
	591.81	4.83	2.3270E+000		-1.7632E+000
	723.30	19.70	6.3292E-001		5.9610E-002
	756.87	4.33	2.8660E+000		2.5072E+000
	873.19	11.50	9.3883E-001		-2.7074E-001
	996.32	10.30	1.1117E+000		-8.0312E-002
	1004.76	17.90	6.3592E-001		-2.1196E-001
1274.45	35.50	2.7941E-001	-2.8687E-001		
Eu-155	86.54	30.90	1.7049E+000	1.67E+000	1.2294E+000
	105.31	20.70	1.6658E+000		-3.1838E-001
Am-241	59.54	35.90	4.7702E+000	4.77E+000	-1.3413E+001
Cm-243	228.19	10.56	1.6284E+000	1.13E+000	-1.0858E+000

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	1.4704E+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 7/28/2006 1:42:42 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-01-218-

Sample Title: OOL-10-01-218-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 1:32:38 PM

Live Time: 600.0 seconds

Real Time: 601.4 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-01-218-
Title: OOL-10-01-218-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 10 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.980	1460.81*	10.67	2.04602E+001	2.17915E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.66051E-001	9.79832E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.00499E+001	4.68175E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.20154E-001	2.63563E-001
Bi-214	0.988	609.31*	46.30	4.08524E-001	1.87813E-001
		1120.29*	15.10	2.77142E-001	3.28055E-001
		1764.49*	15.80	4.64376E-001	2.16791E-001
Ac-228	0.629	338.32	11.40		
		911.07*	27.70	8.54745E-001	2.56049E-001
		969.11*	16.60	9.30516E-001	3.36390E-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	0.980	2.046023E+001	2.179146E+000
TL-208	0.470	3.660511E-001	9.798317E-002
Pb-212 @	0.593	8.201537E-001	2.635628E-001
Bi-214	0.988	4.079743E-001	1.302783E-001
Ac-228	0.629	8.825406E-001	2.037417E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	352.11	1.3438E-001	57.36

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: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	3.0310E-002
	1332.49	100.00	9.4824E-002		-2.1129E-002
Nb-94	702.63	100.00	1.1681E-001	1.16E-001	-3.5864E-002
	871.10	100.00	1.1589E-001		3.7713E-002
Ag-108m	79.20	7.10	1.0140E+001	1.35E-001	-1.1667E+001
	433.93	89.90	1.4850E-001		1.8328E-001
	614.37	90.40	1.7742E-001		-1.5929E-002
	722.95	90.50	1.3492E-001		8.0715E-002
Sb-125	176.33	6.89	3.0445E+000	4.43E-001	1.7187E+000
	427.89	29.33	4.4300E-001		-3.6369E-001
	463.38	10.35	1.2876E+000		1.1501E+000
	600.56	17.80	7.2004E-001		1.6031E-001
	606.64	5.02	3.3584E+000		4.1034E+000
	635.90	11.32	1.0559E+000		1.8905E-001
Cs-134	563.23	8.38	1.5146E+000	1.42E-001	6.8007E-001
	569.32	15.43	8.2362E-001		-4.6675E-002
	604.70	97.60	1.6396E-001		1.0368E-002
	795.84	85.40	1.4246E-001		4.9628E-002
	801.93	8.73	1.3458E+000		-2.4881E+000
Cs-137	661.65	85.12	1.3979E-001	1.40E-001	1.1371E-002
Eu-152	121.78	28.40	1.0093E+000	3.93E-001	5.8611E-001
	244.69	7.49	2.4254E+000		1.1938E+000
	344.27	26.50	5.2338E-001		-6.3524E-001
	778.89	12.74	9.1624E-001		-8.9194E-001
	867.32	4.16	2.7831E+000		-3.9127E+000
	964.01	14.40	9.8083E-001		3.9679E-001
	1085.78	10.00	1.0978E+000		-1.7510E+000
	1112.02	13.30	8.7926E-001		-1.7973E-001
1407.95	20.70	3.9289E-001	-2.4094E-001		
Eu-154	123.07	40.50	6.9744E-001	3.01E-001	2.9175E-001
	247.94	6.60	2.6600E+000		-1.1533E+000
	591.81	4.83	2.4853E+000		1.4163E+000
	723.30	19.70	6.2549E-001		6.8217E-001
	756.87	4.33	2.6036E+000		-1.6261E+000
	873.19	11.50	1.0230E+000		8.5760E-001
	996.32	10.30	1.0369E+000		-2.0324E-001
	1004.76	17.90	6.0909E-001		-3.6208E-001
1274.45	35.50	3.0147E-001	2.0924E-001		
Eu-155	86.54	30.90	1.7304E+000	1.72E+000	2.7947E+000
	105.31	20.70	1.7198E+000		-2.2530E-001
Am-241	59.54	35.90	4.8286E+000	4.83E+000	-8.5979E+000
Cm-243	228.19	10.56	1.6928E+000	1.17E+000	-8.1217E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1656E+000	1.17E+000	4.7812E-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 7/28/2006 1:57:52 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-01-219-

Sample Title: OOL-10-01-219-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 1:47:49 PM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-01-219-
 Title: OOL-10-01-219-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	291.63	72.86	1.25	1.25E+002	49.29	8.16E+002
m	2	287-	309	300.93	75.19	1.26	3.43E+002	55.65	1.21E+003
	3	949-	961	955.17	238.77	0.98	2.33E+002	61.66	2.87E+002
	4	1173-	1191	1180.56	295.13	0.76	1.28E+002	63.22	2.70E+002
	5	1397-	1415	1407.99	351.99	1.24	1.53E+002	54.73	1.85E+002
	6	2321-	2344	2333.11	583.30	1.73	1.89E+002	42.72	7.15E+001
	7	2426-	2447	2438.01	609.53	1.30	2.07E+002	45.26	8.71E+001
	8	3175-	3187	3180.48	795.17	0.81	2.51E+001	22.06	3.69E+001
	9	3634-	3655	3645.22	911.37	1.55	1.18E+002	34.72	5.23E+001
	10	3869-	3885	3876.24	969.13	0.35	4.98E+001	30.12	5.92E+001
	11	4478-	4490	4483.70	1121.02	0.61	3.84E+001	22.77	3.66E+001
	12	5736-	5749	5742.82	1435.84	0.34	9.08E+000	12.22	9.92E+000
	13	5832-	5859	5846.47	1461.76	1.99	9.05E+002	63.39	3.15E+001
	14	7055-	7070	7061.59	1765.58	1.23	4.40E+001	14.68	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: 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	0.971	1460.81*	10.67	2.05618E+001	2.20177E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.22999E-001	1.10118E-001
Pb-212	0.593	860.37	12.46		
		74.81* @	10.70	1.32512E+001	3.37327E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.61234E-001	2.34022E-001
		609.31*	46.30	8.52460E-001	2.14042E-001
Bi-214	0.988	1120.29*	15.10	5.66327E-001	3.41341E-001
		1764.49*	15.80	7.15620E-001	2.49215E-001
PB-214	0.627	74.82* @	6.21	2.28323E+001	6.04395E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.02406E+000	5.33104E-001
		351.92*	37.20	6.55550E-001	2.59449E-001
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	8.96304E-001	2.83669E-001
		969.11*	16.60	6.42588E-001	3.94625E-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	0.971	2.056176E+001	2.201769E+000
TL-208	0.471	4.229985E-001	1.101176E-001
Pb-212 @	0.593	7.612343E-001	2.340215E-001
Bi-214	0.988	7.522894E-001	1.466298E-001
PB-214 @	0.627	7.261190E-001	2.332880E-001
Ac-228	0.631	8.098671E-001	2.303347E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.0914E-001	39.28
8	795.17	4.1841E-002	87.87
12	1435.84	1.5132E-002	134.64

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: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	1.2573E-001	8.92E-002	-7.9816E-002
	1332.49	100.00	8.9202E-002		7.0516E-002
Nb-94	702.63	100.00	1.2388E-001	1.15E-001	4.7134E-002
	871.10	100.00	1.1503E-001		-5.3098E-003
Ag-108m	79.20	7.10	1.0068E+001	1.51E-001	-8.6946E+000
	433.93	89.90	1.5688E-001		2.0785E-002
	614.37	90.40	1.9257E-001		1.4895E-002
	722.95	90.50	1.5114E-001		9.0757E-002
Sb-125	176.33	6.89	3.1890E+000	4.87E-001	4.2574E+000
	427.89	29.33	4.8701E-001		-5.4739E-001
	463.38	10.35	1.3334E+000		1.1895E+000
	600.56	17.80	7.5479E-001		4.8922E-001
	606.64	5.02	3.5761E+000		6.0385E+000
	635.90	11.32	1.1431E+000		6.1702E-001
Cs-134	563.23	8.38	1.5929E+000	1.46E-001	-6.5487E-001
	569.32	15.43	8.7394E-001		6.2385E-002
	604.70	97.60	1.7787E-001		2.0109E-002
	795.84	85.40	1.4606E-001		-2.3942E-003
	801.93	8.73	1.2741E+000		-2.6581E-001
Cs-137	661.65	85.12	1.5293E-001	1.53E-001	1.6733E-002
Eu-152	121.78	28.40	1.0074E+000	4.52E-001	-7.0560E-001
	244.69	7.49	2.5111E+000		-2.2429E+000
	344.27	26.50	5.5613E-001		-8.8807E-001
	778.89	12.74	9.6246E-001		2.6991E-001
	867.32	4.16	2.7625E+000		-2.9750E+000
	964.01	14.40	1.0328E+000		8.0624E-001
	1085.78	10.00	1.0927E+000		-4.4936E-001
	1112.02	13.30	8.6831E-001		-5.4855E-001
1407.95	20.70	4.5229E-001	-9.9031E-002		
Eu-154	123.07	40.50	7.0135E-001	3.17E-001	-1.9713E-001
	247.94	6.60	2.6989E+000		-2.1106E+000
	591.81	4.83	2.6727E+000		-1.5176E+000
	723.30	19.70	7.0107E-001		4.8220E-001
	756.87	4.33	2.6787E+000		-1.5034E+000
	873.19	11.50	9.8569E-001		-6.0759E-001
	996.32	10.30	1.1207E+000		-4.4546E-001
	1004.76	17.90	6.3329E-001		-1.7880E-001
1274.45	35.50	3.1734E-001	-1.7063E-001		
Eu-155	86.54	30.90	1.7441E+000	1.73E+000	2.1998E+000
	105.31	20.70	1.7306E+000		2.0943E-001
Am-241	59.54	35.90	4.8133E+000	4.81E+000	-8.3202E+000
Cm-243	228.19	10.56	1.7596E+000	1.18E+000	2.9494E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1778E+000	1.18E+000	9.1284E-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 7/31/2006 10:03:18 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-10-01-220-F-

Sample Title: OOL-10-01-220-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 9:53:15 AM

Live Time: 600.0 seconds

Real Time: 600.9 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-220-F-
Title: OOL-10-01-220-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	1399-	1417	1406.68	351.63	0.97	1.40E+002	44.38	1.10E+002
2	1713-	1724	1717.91	429.44	0.38	2.66E+001	24.54	5.14E+001
3	2323-	2341	2329.80	582.41	0.43	1.28E+002	38.42	7.56E+001
4	3435-	3446	3440.10	859.99	0.31	1.57E+001	15.40	1.73E+001
5	3633-	3652	3641.01	910.22	1.32	1.05E+002	30.39	3.80E+001
6	5826-	5856	5840.89	1460.19	2.34	7.32E+002	54.99	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	0.988	1460.81*	10.67	1.60550E+001	1.77372E+000
TL-208	0.611	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.79823E-001	9.13144E-002
		860.37*	12.46	2.53633E-001	2.50331E-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	0.988	1.605502E+001	1.773718E+000
TL-208	0.611	2.767477E-001	8.578529E-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
1	351.63	2.3320E-001	31.72
2	429.44	4.4295E-002	92.34
5	910.22	1.7495E-001	28.95

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	1.0434E-001	7.98E-002	-2.5657E-002
	1332.49	100.00	7.9787E-002		3.2391E-002
Nb-94	702.63	100.00	9.9649E-002	9.78E-002	-4.5555E-003
	871.10	100.00	9.7753E-002		1.1821E-002
Ag-108m	79.20	7.10	9.2017E+000	1.38E-001	-1.7113E+001
	433.93	89.90	1.3838E-001		2.0445E-003
	614.37	90.40	1.3842E-001		-2.4708E-001
	722.95	90.50	1.3773E-001		9.3915E-002
Sb-125	176.33	6.89	2.6813E+000	4.22E-001	-7.9104E-001
	427.89	29.33	4.2223E-001		1.2994E-001
	463.38	10.35	1.1929E+000		1.4794E-001
	600.56	17.80	6.1560E-001		-1.0840E-001
	606.64	5.02	2.9792E+000		5.9362E+000
	635.90	11.32	9.9895E-001		-3.4691E-002
Cs-134	563.23	8.38	1.4441E+000	1.25E-001	3.5274E-001
	569.32	15.43	8.1834E-001		-2.3211E-001
	604.70	97.60	1.5121E-001		1.9442E-001
	795.84	85.40	1.2545E-001		3.9566E-002
Cs-137	801.93	8.73	1.1801E+000	1.30E-001	-9.7657E-001
	661.65	85.12	1.3026E-001		8.7630E-002
Eu-152	121.78	28.40	8.8285E-001	3.40E-001	1.7679E-002
	244.69	7.49	2.1158E+000		-3.1964E+000
	344.27	26.50	5.2749E-001		-9.9382E-002
	778.89	12.74	8.7889E-001		-1.3590E-002
	867.32	4.16	2.3707E+000		9.5847E-001
	964.01	14.40	9.0430E-001		6.2056E-001
	1085.78	10.00	9.4540E-001		-2.8537E-002
	1112.02	13.30	7.6296E-001		-1.4244E+000
1407.95	20.70	3.4041E-001	-3.9756E-001		
Eu-154	123.07	40.50	6.1486E-001	2.63E-001	-7.5268E-002
	247.94	6.60	2.3237E+000		5.6140E-001
	591.81	4.83	2.3651E+000		1.7186E-001
	723.30	19.70	6.3277E-001		4.9630E-001
	756.87	4.33	2.3537E+000		5.8660E-002
	873.19	11.50	8.2518E-001		-1.1960E+000
	996.32	10.30	9.7868E-001		-2.1908E-001
	1004.76	17.90	5.4756E-001		-1.8486E-001
1274.45	35.50	2.6291E-001	-1.8889E-001		
Eu-155	86.54	30.90	1.6773E+000	1.63E+000	1.9930E+000
	105.31	20.70	1.6265E+000		-5.2728E-003
Am-241	59.54	35.90	4.2609E+000	4.26E+000	3.7184E+000
Cm-243	228.19	10.56	1.5288E+000	1.08E+000	8.2985E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0788E+000	1.08E+000	6.9893E-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 7/31/2006 10:20:38 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-01-221-F-

Sample Title: OOL-10-01-221-F-G

Description: 100% Satulated Soil

Sample Type:

Geometry:

Acquisition Started: 7/31/2006 10:10:36 AM

Live Time: 600.0 seconds

Real Time: 600.9 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-01-221-F-
Title: OOL-10-01-221-F-G
Description: 100% Satulated Soil

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2323-	2340	2331.15	582.75	0.57	9.86E+001	39.36	9.34E+001
2	2425-	2446	2435.33	608.79	1.84	1.23E+002	45.83	1.13E+002
3	3635-	3652	3643.83	910.92	1.76	9.41E+001	31.17	4.89E+001
4	3868-	3881	3873.42	968.32	0.56	4.85E+001	22.38	2.95E+001
5	5826-	5856	5841.44	1460.33	2.43	7.57E+002	54.60	3.86E+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: 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	1.66183E+001	1.80172E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.14999E-001	9.02508E-002
Bi-214	0.398	860.37	12.46		
		609.31*	46.30	4.95434E-001	1.94131E-001
		1120.29	15.10		
Ac-228	0.629	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	6.90406E-001	2.42158E-001
		969.11*	16.60	6.02879E-001	2.85216E-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	1.661830E+001	1.801718E+000
TL-208	0.468	2.149989E-001	9.025084E-002
Bi-214	0.398	4.954340E-001	1.941305E-001
Ac-228	0.629	6.537410E-001	1.845978E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.1176E-001	8.48E-002	-4.9149E-002
	1332.49	100.00	8.4778E-002		-5.6286E-002
Nb-94	702.63	100.00	1.1803E-001	9.78E-002	-4.4673E-004
	871.10	100.00	9.7753E-002		4.8555E-002
Ag-108m	79.20	7.10	8.9142E+000	1.37E-001	-1.1506E+001
	433.93	89.90	1.3838E-001		-6.2664E-002
	614.37	90.40	1.5936E-001		8.2523E-002
	722.95	90.50	1.3659E-001		-5.5150E-002
Sb-125	176.33	6.89	2.7985E+000	4.25E-001	-6.7119E-001
	427.89	29.33	4.2477E-001		-2.9956E-001
	463.38	10.35	1.2056E+000		3.7737E-002
	600.56	17.80	6.8538E-001		2.2423E-001
	606.64	5.02	3.2643E+000		5.8761E+000
	635.90	11.32	9.7334E-001		4.1356E-002
Cs-134	563.23	8.38	1.4909E+000	1.23E-001	-6.3665E-001
	569.32	15.43	7.8703E-001		-4.2213E-001
	604.70	97.60	1.6651E-001		2.7935E-002
	795.84	85.40	1.2299E-001		-2.8408E-002
Cs-137	801.93	8.73	1.1600E+000	1.48E-001	-8.8300E-001
	661.65	85.12	1.4793E-001		8.5883E-002
Eu-152	121.78	28.40	9.2971E-001	3.96E-001	1.8105E-001
	244.69	7.49	2.2157E+000		-3.5074E+000
	344.27	26.50	5.0866E-001		-8.7740E-001
	778.89	12.74	8.3757E-001		-3.6324E-001
	867.32	4.16	2.3932E+000		-3.4633E-001
	964.01	14.40	8.6231E-001		-8.0544E-001
	1085.78	10.00	1.0684E+000		6.0509E-001
	1112.02	13.30	7.7065E-001		-1.3607E+000
1407.95	20.70	3.9581E-001	9.4044E-002		
Eu-154	123.07	40.50	6.4348E-001	2.56E-001	-2.6828E-001
	247.94	6.60	2.3652E+000		-1.4510E+000
	591.81	4.83	2.4940E+000		6.9858E-001
	723.30	19.70	6.3970E-001		4.8139E-001
	756.87	4.33	2.5811E+000		-2.2072E-002
	873.19	11.50	8.2944E-001		-4.0341E-001
	996.32	10.30	1.0431E+000		9.5286E-001
	1004.76	17.90	5.6976E-001		1.1921E-001
1274.45	35.50	2.5598E-001	1.6085E-001		
Eu-155	86.54	30.90	1.6375E+000	1.61E+000	2.1759E+000
	105.31	20.70	1.6086E+000		1.4695E-001
Am-241	59.54	35.90	3.9952E+000	4.00E+000	6.0159E-001
Cm-243	228.19	10.56	1.6114E+000	1.11E+000	6.4901E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1054E+000	1.11E+000	-1.0661E-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 8/4/2006 12:08:11 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-101-F

Sample Title: OOL-10-02-101-F-G

Description: 100% ASPHALT

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 11:58:10 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: GRN7780
Log Number: OOL-10-02-101-F
Title: OOL-10-02-101-F-G
Description: 100% ASPHALT

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1299-	1308	1303.86	325.92	0.63	1.87E+001	19.88	3.73E+001
2	5828-	5854	5841.18	1460.26	1.30	2.11E+002	31.25	9.90E+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: 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	1.44824E+001	2.44350E+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	0.990	1.448245E+001	2.443499E+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	325.92	3.1176E-002	106.26

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: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	2.1706E-001	2.04E-001	-3.2203E-002
	1332.49	100.00	2.0406E-001		8.9811E-002
Nb-94	702.63	100.00	2.2474E-001	1.95E-001	-9.3427E-002
	871.10	100.00	1.9453E-001		9.1336E-003
Ag-108m	79.20	7.10	1.9385E+001	2.79E-001	-6.6161E+000
	433.93	89.90	2.7948E-001		1.6143E-001
	614.37	90.40	2.8268E-001		-3.4900E-001
	722.95	90.50	2.9083E-001		-6.0765E-002
Sb-125	176.33	6.89	5.0144E+000	8.73E-001	-4.3819E-001
	427.89	29.33	8.7322E-001		3.0301E-002
	463.38	10.35	2.3200E+000		1.5036E+000
	600.56	17.80	1.4739E+000		-8.1522E-001
	606.64	5.02	5.9075E+000		3.8854E+000
	635.90	11.32	2.0443E+000		9.2839E-001
Cs-134	563.23	8.38	2.9136E+000	2.95E-001	1.8774E+000
	569.32	15.43	1.6532E+000		9.6925E-001
	604.70	97.60	2.9835E-001		3.1308E-001
	795.84	85.40	2.9482E-001		-5.3493E-002
	801.93	8.73	2.7683E+000		8.7969E-001
Cs-137	661.65	85.12	2.5877E-001	2.59E-001	-2.1501E-001
Eu-152	121.78	28.40	2.0385E+000	9.46E-001	-8.9514E-001
	244.69	7.49	3.9566E+000		-3.5779E+000
	344.27	26.50	1.0566E+000		6.8169E-001
	778.89	12.74	1.6140E+000		2.4744E-001
	867.32	4.16	5.0489E+000		1.6060E+000
	964.01	14.40	1.7683E+000		8.5958E-001
	1085.78	10.00	1.9382E+000		-8.1680E-002
	1112.02	13.30	1.5594E+000		-2.1413E+000
1407.95	20.70	9.4562E-001	2.0238E-001		
Eu-154	123.07	40.50	1.4225E+000	5.88E-001	9.3327E-001
	247.94	6.60	4.2956E+000		-1.2893E+000
	591.81	4.83	5.5505E+000		3.2726E+000
	723.30	19.70	1.3829E+000		1.3306E+000
	756.87	4.33	5.0476E+000		2.3024E-001
	873.19	11.50	1.6512E+000		-4.0252E-001
	996.32	10.30	2.0998E+000		4.2821E-001
	1004.76	17.90	1.2589E+000		3.8365E-001
1274.45	35.50	5.8800E-001	1.6321E-001		
Eu-155	86.54	30.90	3.5415E+000	3.54E+000	2.0431E+000
	105.31	20.70	3.6383E+000		-2.6586E-001
Am-241	59.54	35.90	9.3592E+000	9.36E+000	-1.4501E+000
Cm-243	228.19	10.56	3.1160E+000	1.90E+000	2.0533E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.8956E+000	1.90E+000	-1.3207E+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 8/4/2006 12:23:02 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-102-F

Sample Title: OOL-10-02-102-F-G

Description: 100% ASPHALT

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 12:13:01 AM

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: GRN7780
Log Number: OOL-10-02-102-F
Title: OOL-10-02-102-F-G
Description: 100% ASPHALT

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1621-	1630	1625.09	406.23	0.68	1.46E+001	12.48	1.14E+001
2	5829-	5853	5842.20	1460.52	1.12	1.93E+002	30.58	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: 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	1.32167E+001	2.35546E+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	0.997	1.321668E+001	2.355459E+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	406.23	2.4407E-002	85.19

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: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	2.0483E-001	1.92E-001	-7.8332E-002
	1332.49	100.00	1.9247E-001		1.5139E-001
Nb-94	702.63	100.00	2.2656E-001	2.27E-001	2.0632E-001
	871.10	100.00	2.3827E-001		9.6906E-002
Ag-108m	79.20	7.10	1.9438E+001	2.50E-001	-9.2963E+000
	433.93	89.90	2.5279E-001		-8.0493E-002
	614.37	90.40	2.6575E-001		-3.6802E-001
	722.95	90.50	2.4973E-001		-1.3665E-002
Sb-125	176.33	6.89	5.3094E+000	7.85E-001	-1.1225E+000
	427.89	29.33	7.8511E-001		2.0772E-001
	463.38	10.35	2.3949E+000		4.8671E-001
	600.56	17.80	1.3310E+000		-1.3329E+000
	606.64	5.02	5.7297E+000		8.1029E+000
	635.90	11.32	2.0591E+000		2.1760E+000
Cs-134	563.23	8.38	2.8426E+000	2.76E-001	-2.4245E+000
	569.32	15.43	1.5686E+000		-9.3210E-001
	604.70	97.60	2.9174E-001		1.9086E-001
	795.84	85.40	2.7622E-001		2.1387E-002
Cs-137	801.93	8.73	2.5770E+000	2.81E-001	6.6610E-002
	661.65	85.12	2.8130E-001		3.5716E-002
Eu-152	121.78	28.40	1.9687E+000	8.99E-001	1.4328E+000
	244.69	7.49	3.6640E+000		-4.2904E+000
	344.27	26.50	1.0237E+000		1.2603E-002
	778.89	12.74	1.7406E+000		-9.8761E-001
	867.32	4.16	5.7228E+000		-1.0792E+000
	964.01	14.40	1.6223E+000		4.1587E-001
	1085.78	10.00	1.9893E+000		2.5895E-001
	1112.02	13.30	1.5410E+000		-1.2742E+000
1407.95	20.70	8.9869E-001	-1.2112E-001		
Eu-154	123.07	40.50	1.3288E+000	5.88E-001	-3.7675E-001
	247.94	6.60	4.2075E+000		-9.3392E-001
	591.81	4.83	5.4355E+000		3.0179E+000
	723.30	19.70	1.1380E+000		-1.7356E-001
	756.87	4.33	5.4357E+000		3.6339E+000
	873.19	11.50	2.0400E+000		4.3136E-001
	996.32	10.30	2.3612E+000		-7.5866E-001
	1004.76	17.90	1.1066E+000		-9.1199E-001
1274.45	35.50	5.8800E-001	1.6321E-001		
Eu-155	86.54	30.90	3.3951E+000	3.40E+000	1.2158E+000
	105.31	20.70	3.5402E+000		5.9190E-001
Am-241	59.54	35.90	8.1676E+000	8.17E+000	3.9520E+000
Cm-243	228.19	10.56	2.7083E+000	1.96E+000	2.1606E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.9604E+000	1.96E+000	-6.4815E-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 8/4/2006 12:39:55 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-10-02-103-F

Sample Title: OOL-10-02-103-F-G

Description: 100% ASPHALT

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 12:29:54 AM

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

Filename: GRN7780
Log Number: OOL-10-02-103-F
Title: OOL-10-02-103-F-G
Description: 100% ASPHALT

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5831-	5854	5842.22	1460.52	1.95	1.76E+002	30.22	1.52E+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	1.20591E+001	2.29208E+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	0.997	1.205913E+001	2.292079E+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	2.2858E-001	1.48E-001	-1.2017E-002
	1332.49	100.00	1.4779E-001		-2.7514E-002
Nb-94	702.63	100.00	2.1728E-001	2.14E-001	1.5747E-002
	871.10	100.00	2.1447E-001		-1.7367E-001
Ag-108m	79.20	7.10	1.9164E+001	2.50E-001	-1.6574E+001
	433.93	89.90	2.5279E-001		-9.8263E-002
	614.37	90.40	2.8756E-001		-3.0346E-002
	722.95	90.50	2.4973E-001		-1.1551E-002
Sb-125	176.33	6.89	5.4431E+000	8.03E-001	3.1521E+000
	427.89	29.33	8.0269E-001		-6.7290E-002
	463.38	10.35	2.2160E+000		3.4671E-001
	600.56	17.80	1.2765E+000		1.9681E-001
	606.64	5.02	5.6778E+000		4.0372E+000
	635.90	11.32	1.8398E+000		-1.1068E+000
Cs-134	563.23	8.38	2.9657E+000	2.56E-001	2.8030E+000
	569.32	15.43	1.4580E+000		-6.9509E-001
	604.70	97.60	2.9573E-001		3.4979E-001
	795.84	85.40	2.5617E-001		6.7236E-002
	801.93	8.73	2.2950E+000		4.7144E-001
Cs-137	661.65	85.12	2.5445E-001	2.54E-001	-1.3234E-001
Eu-152	121.78	28.40	1.8789E+000	8.82E-001	6.0328E-001
	244.69	7.49	4.0696E+000		-2.2617E+000
	344.27	26.50	8.9638E-001		-4.1497E-001
	778.89	12.74	1.7557E+000		-2.4806E-001
	867.32	4.16	5.7677E+000		3.6520E+000
	964.01	14.40	1.5363E+000		-7.0990E-002
	1085.78	10.00	1.9893E+000		-7.3804E-001
	1112.02	13.30	1.6652E+000		-2.9458E-001
1407.95	20.70	8.8242E-001	3.3740E-001		
Eu-154	123.07	40.50	1.2765E+000	5.49E-001	-8.2268E-001
	247.94	6.60	4.5843E+000		-1.8314E+000
	591.81	4.83	4.5786E+000		-1.4365E+000
	723.30	19.70	1.1659E+000		3.4464E-001
	756.87	4.33	4.7699E+000		-3.3548E+000
	873.19	11.50	1.9020E+000		-1.3210E+000
	996.32	10.30	2.1212E+000		1.6396E+000
	1004.76	17.90	1.1336E+000		4.8180E-001
1274.45	35.50	5.4939E-001	6.7980E-002		
Eu-155	86.54	30.90	3.5187E+000	3.32E+000	3.4556E+000
	105.31	20.70	3.3160E+000		-4.0816E-001
Am-241	59.54	35.90	6.9821E+000	6.98E+000	-5.4743E+000
Cm-243	228.19	10.56	3.0244E+000	1.84E+000	2.0804E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.8421E+000	1.84E+000	-2.3358E+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 8/4/2006 1:00:23 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-10-02-104-F

Sample Title: OOL-10-02-104-F-G

Description: 100% ASPHALT

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 12:50:22 AM

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: GRN7780
Log Number: OOL-10-02-104-F
Title: OOL-10-02-104-F-G
Description: 100% ASPHALT

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	3869-	3880	3874.44	968.57	0.26	1.36E+001	12.34	1.04E+001
2	5829-	5853	5840.84	1460.18	0.93	2.21E+002	30.69	6.01E+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: 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	0.987	1460.81*	10.67	1.51606E+001	2.43730E+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	0.987	1.516061E+001	2.437295E+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	968.57	2.2656E-002	90.79

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: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	2.4163E-001	1.83E-001	-6.8519E-002
	1332.49	100.00	1.8324E-001		4.3930E-002
Nb-94	702.63	100.00	2.4731E-001	2.23E-001	1.8236E-001
	871.10	100.00	2.2271E-001		2.2543E-002
Ag-108m	79.20	7.10	1.9111E+001	2.42E-001	-2.4852E+001
	433.93	89.90	2.4217E-001		-1.3282E-002
	614.37	90.40	2.9076E-001		2.2787E-001
	722.95	90.50	2.8205E-001		-4.0051E-002
Sb-125	176.33	6.89	4.7984E+000	8.16E-001	-1.8234E-001
	427.89	29.33	8.1560E-001		-2.1763E-001
	463.38	10.35	2.4193E+000		-1.3201E-001
	600.56	17.80	1.4898E+000		-3.1969E-002
	606.64	5.02	5.7297E+000		1.9739E+000
	635.90	11.32	2.0143E+000		3.4147E-001
Cs-134	563.23	8.38	2.8605E+000	2.49E-001	1.6061E+000
	569.32	15.43	1.5094E+000		9.1721E-001
	604.70	97.60	2.9039E-001		-8.1721E-002
	795.84	85.40	2.4910E-001		-7.8122E-002
	801.93	8.73	2.7062E+000		1.3468E+000
Cs-137	661.65	85.12	2.5225E-001	2.52E-001	9.3521E-002
Eu-152	121.78	28.40	1.8060E+000	7.95E-001	5.9428E-001
	244.69	7.49	3.9462E+000		-1.1799E+000
	344.27	26.50	9.5828E-001		2.2052E-001
	778.89	12.74	1.7406E+000		5.3062E-001
	867.32	4.16	4.8914E+000		-2.5474E+000
	964.01	14.40	1.7809E+000		4.3469E-001
	1085.78	10.00	1.8587E+000		-1.3988E+000
	1112.02	13.30	1.6481E+000		-1.5778E+000
1407.95	20.70	7.9547E-001	-5.0177E-001		
Eu-154	123.07	40.50	1.2489E+000	5.65E-001	-1.0386E+000
	247.94	6.60	4.0517E+000		-2.6271E+000
	591.81	4.83	5.2880E+000		-1.5025E+000
	723.30	19.70	1.3441E+000		9.6333E-001
	756.87	4.33	5.2670E+000		-1.0113E+001
	873.19	11.50	2.0565E+000		1.1755E+000
	996.32	10.30	2.1632E+000		1.0341E+000
	1004.76	17.90	1.2470E+000		-1.8439E-001
1274.45	35.50	5.6518E-001	-3.8607E-001		
Eu-155	86.54	30.90	3.5345E+000	3.30E+000	3.1800E+000
	105.31	20.70	3.3015E+000		-4.6709E+000
Am-241	59.54	35.90	8.2018E+000	8.20E+000	-6.1645E+000
Cm-243	228.19	10.56	2.9161E+000	2.08E+000	-1.1802E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0776E+000	2.08E+000	8.2576E-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 8/4/2006 10:46:12 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-166-F-

Sample Title: OOL-10-02-105-F-G

Description: Wet Asphalt

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 10:36:11 AM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-166-F-
Title: OOL-10-02-105-F-G
Description: Wet Asphalt

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	305	299.95	75.08	0.54	6.03E+001	55.06	3.21E+002
2	949-	959	954.70	238.77	0.62	2.61E+001	25.27	5.89E+001
3	1401-	1413	1406.87	351.82	0.61	3.93E+001	24.57	4.47E+001
4	2428-	2443	2436.60	609.27	0.69	6.20E+001	24.16	3.00E+001
5	5327-	5338	5332.75	1333.35	0.57	1.26E+001	11.11	7.39E+000
6	5836-	5856	5845.63	1461.58	0.59	1.84E+002	31.80	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: 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	0.977	1460.81*	10.67	1.20782E+001	2.30899E+000
Pb-212	0.565	74.81* @	10.70	5.32260E+000	4.97445E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60		
Bi-214	0.405	609.31*	46.30	2.55695E-001	2.50502E-001
		1120.29	15.10	7.41515E-001	3.03290E-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: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	0.977	1.207822E+001	2.308992E+000
Pb-212 @	0.565	2.556951E-001	2.505018E-001
Bi-214	0.405	7.415150E-001	3.032897E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.82	6.5556E-002	62.47
5	1333.35	2.1021E-002	88.12

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	2.3704E-001	2.02E-001	6.5227E-002
	1332.49	100.00	2.0156E-001		2.0716E-002
Nb-94	702.63	100.00	1.9519E-001	1.95E-001	1.2053E-001
	871.10	100.00	2.2914E-001		4.2396E-002
Ag-108m	79.20	7.10	1.3909E+001	2.28E-001	2.5003E-001
	433.93	89.90	2.5101E-001		9.9187E-002
	614.37	90.40	3.0080E-001		-1.2924E-001
	722.95	90.50	2.2796E-001		-1.9431E-001
Sb-125	176.33	6.89	4.1330E+000	7.92E-001	-2.9358E+000
	427.89	29.33	7.9181E-001		3.1148E-001
	463.38	10.35	2.2233E+000		-7.1533E-001
	600.56	17.80	1.5101E+000		1.5251E+000
	606.64	5.02	6.2738E+000		4.6551E+000
	635.90	11.32	2.1952E+000		8.8687E-001
Cs-134	563.23	8.38	2.7922E+000	2.97E-001	-2.9776E+000
	569.32	15.43	1.6980E+000		1.6613E+000
	604.70	97.60	3.0495E-001		3.7077E-003
	795.84	85.40	2.9661E-001		-1.2626E-001
	801.93	8.73	2.6561E+000		7.8620E-001
Cs-137	661.65	85.12	2.5421E-001	2.54E-001	-1.5226E-003
Eu-152	121.78	28.40	1.5496E+000	8.57E-001	-8.0448E-001
	244.69	7.49	3.5522E+000		3.4887E-001
	344.27	26.50	8.5656E-001		-2.9081E-003
	778.89	12.74	1.7797E+000		-3.8701E-001
	867.32	4.16	5.4575E+000		-1.8011E+000
	964.01	14.40	1.6898E+000		1.6037E-001
	1085.78	10.00	1.8629E+000		-9.8434E-001
	1112.02	13.30	1.6048E+000		4.8024E-001
1407.95	20.70	9.0752E-001	3.0097E-001		
Eu-154	123.07	40.50	1.0970E+000	4.98E-001	-5.3245E-001
	247.94	6.60	3.8247E+000		1.6475E-001
	591.81	4.83	5.2386E+000		-1.7275E+000
	723.30	19.70	1.0665E+000		-4.7643E-001
	756.87	4.33	5.1596E+000		2.2997E+000
	873.19	11.50	1.8936E+000		-7.7365E-001
	996.32	10.30	2.3775E+000		5.5558E-001
	1004.76	17.90	1.3805E+000		3.2177E-001
1274.45	35.50	4.9837E-001	2.2487E-002		
Eu-155	86.54	30.90	2.6120E+000	2.61E+000	1.7153E+000
	105.31	20.70	2.6798E+000		-3.7425E-001
Am-241	59.54	35.90	4.5101E+000	4.51E+000	1.0825E+000
Cm-243	228.19	10.56	2.5571E+000	1.82E+000	-1.2587E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.8154E+000	1.82E+000	1.3716E+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 8/3/2006 3:45:24 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-106-F

Sample Title: OOL-10-02-106-F-G

Description: 100% Vegetation/Wetland
Concrete security brock

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 3:35:21 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-10-02-106-F
Title: OOL-10-02-106-F-G
Description: 100% Vegetation/Wetland
Concrete security brock

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5828-	5856	5841.96	1460.46	3.25	2.98E+002	35.67	7.25E+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: 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	2.04286E+001	2.95406E+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	2.042859E+001	2.954056E+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	2.69E-001	9.2481E-002
	1332.49	100.00	2.9997E-001		3.8698E-001
Nb-94	702.63	100.00	2.8828E-001	2.88E-001	-9.0250E-002
	871.10	100.00	2.9186E-001		2.6434E-001
Ag-108m	79.20	7.10	2.4930E+001	3.29E-001	-3.5795E+001
	433.93	89.90	3.2943E-001		-1.8236E-001
	614.37	90.40	3.4303E-001		-9.7764E-002
	722.95	90.50	3.2955E-001		-2.1621E-001
Sb-125	176.33	6.89	6.5717E+000	9.85E-001	-3.5632E-001
	427.89	29.33	9.8483E-001		4.6053E-001
	463.38	10.35	2.8003E+000		-7.2336E-001
	600.56	17.80	1.6886E+000		-2.1221E-002
	606.64	5.02	6.5908E+000		3.1940E-001
	635.90	11.32	2.4235E+000		-1.8796E-001
Cs-134	563.23	8.38	3.8423E+000	3.08E-001	-1.1642E+000
	569.32	15.43	2.0139E+000		4.1403E-001
	604.70	97.60	3.4432E-001		-4.0483E-002
	795.84	85.40	3.0846E-001		-2.1767E-001
Cs-137	801.93	8.73	3.2547E+000	3.36E-001	-7.3669E-001
	661.65	85.12	3.3630E-001		4.7992E-002
Eu-152	121.78	28.40	2.3701E+000	9.15E-001	1.1551E+000
	244.69	7.49	4.9267E+000		-3.6443E+000
	344.27	26.50	1.1851E+000		-9.2680E-001
	778.89	12.74	2.2057E+000		-8.6491E-001
	867.32	4.16	7.1889E+000		3.3772E+000
	964.01	14.40	2.3223E+000		1.6772E+000
	1085.78	10.00	2.5170E+000		-5.9548E-001
	1112.02	13.30	1.9023E+000		-1.5840E+000
	1407.95	20.70	9.1463E-001		4.0661E-001
	Eu-154	123.07	40.50		1.6369E+000
247.94		6.60	5.3546E+000	-1.7049E+000	
591.81		4.83	6.3189E+000	-1.5794E+000	
723.30		19.70	1.5141E+000	-1.1461E+000	
756.87		4.33	6.4184E+000	-5.1150E+000	
873.19		11.50	2.4315E+000	-8.9633E-001	
996.32		10.30	2.7278E+000	1.6218E+000	
1004.76		17.90	1.4353E+000	8.4280E-002	
1274.45	35.50	7.2647E-001	5.8220E-001		
Eu-155	86.54	30.90	4.3607E+000	4.19E+000	4.4483E+000
	105.31	20.70	4.1931E+000		2.4014E-001
Am-241	59.54	35.90	9.9753E+000	9.98E+000	-1.4953E+001
Cm-243	228.19	10.56	3.5878E+000	2.47E+000	-4.9707E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4700E+000	2.47E+000	2.1589E-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 8/3/2006 3:31:55 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-10-02-107-F

Sample Title: OOL-10-02-107-F-G

Description: 100% Vegetation/Wetland

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 3:21:53 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-10-02-107-F
Title: OOL-10-02-107-F-G
Description: 100% Vegetation/Wetland

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5829-	5857	5842.86	1460.68	1.85	3.14E+002	38.25	1.45E+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	2.15112E+001	3.14967E+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	0.999	2.151115E+001	3.149665E+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	3.1427E-001	2.85E-001	4.4252E-002
	1332.49	100.00	2.8475E-001		1.3244E-001
Nb-94	702.63	100.00	2.9657E-001	2.86E-001	-4.6199E-001
	871.10	100.00	2.8574E-001		-2.5325E-002
Ag-108m	79.20	7.10	2.4833E+001	3.23E-001	-1.3730E+001
	433.93	89.90	3.2263E-001		-1.1020E-001
	614.37	90.40	3.4964E-001		-5.9607E-001
	722.95	90.50	3.6123E-001		2.0507E-001
Sb-125	176.33	6.89	6.2504E+000	1.06E+000	8.3191E-001
	427.89	29.33	1.0556E+000		2.9522E-001
	463.38	10.35	2.9123E+000		1.8121E+000
	600.56	17.80	1.7694E+000		1.3587E-001
	606.64	5.02	6.9798E+000		7.9097E+000
	635.90	11.32	2.7913E+000		1.0409E+000
Cs-134	563.23	8.38	3.3667E+000	3.32E-001	-7.6596E-001
	569.32	15.43	1.7072E+000		-7.8971E-001
	604.70	97.60	3.5100E-001		3.4778E-001
	795.84	85.40	3.3221E-001		2.9942E-001
Cs-137	801.93	8.73	3.0220E+000	3.52E-001	-1.7158E+000
	661.65	85.12	3.5211E-001		-7.0702E-002
Eu-152	121.78	28.40	2.3002E+000	9.15E-001	-1.6361E+000
	244.69	7.49	4.6533E+000		-9.7017E+000
	344.27	26.50	1.2258E+000		4.0372E-001
	778.89	12.74	2.2753E+000		-3.3737E+000
	867.32	4.16	6.6746E+000		2.9998E-001
	964.01	14.40	2.2743E+000		9.5631E-001
	1085.78	10.00	2.6126E+000		1.7377E+000
	1112.02	13.30	1.9170E+000		-1.6785E+000
1407.95	20.70	9.1463E-001	3.7666E-001		
Eu-154	123.07	40.50	1.6066E+000	6.45E-001	-3.9065E-001
	247.94	6.60	5.3546E+000		-1.2885E+000
	591.81	4.83	6.4901E+000		8.2680E-001
	723.30	19.70	1.6406E+000		4.9280E-001
	756.87	4.33	6.8864E+000		5.9201E-001
	873.19	11.50	2.4589E+000		-2.7277E-002
	996.32	10.30	2.7439E+000		9.5340E-001
	1004.76	17.90	1.6543E+000		2.5084E-001
1274.45	35.50	6.4458E-001	-7.5279E-002		
Eu-155	86.54	30.90	4.3508E+000	4.22E+000	1.0685E+000
	105.31	20.70	4.2196E+000		-2.8553E+000
Am-241	59.54	35.90	9.7251E+000	9.73E+000	1.2498E+000
Cm-243	228.19	10.56	3.6265E+000	2.52E+000	1.4725E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.5195E+000	2.52E+000	2.2609E+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 8/3/2006 3:19:14 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-10-02-108-F

Sample Title: OOL-10-02-108-F-G

Description: 100% Vegetation/Wetland

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 3:09:12 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-10-02-108-F
Title: OOL-10-02-108-F-G
Description: 100% Vegetation/Wetland

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5829-	5855	5842.37	1460.56	2.87	3.60E+002	41.53	2.03E+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
K-40	0.998	1460.81*	10.67	2.46780E+001	3.48028E+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	0.998	2.467801E+001	3.480283E+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	2.8227E-001	2.69E-001	-7.8711E-002
	1332.49	100.00	2.6862E-001		2.2930E-001
Nb-94	702.63	100.00	3.0063E-001	2.84E-001	-2.8412E-002
	871.10	100.00	2.8419E-001		1.1650E-001
Ag-108m	79.20	7.10	2.6235E+001	3.51E-001	-2.7484E+000
	433.93	89.90	3.5838E-001		1.0520E-001
	614.37	90.40	3.5868E-001		-2.0899E-001
	722.95	90.50	3.5148E-001		8.1110E-004
Sb-125	176.33	6.89	6.3835E+000	1.07E+000	-3.1355E+000
	427.89	29.33	1.0686E+000		1.0726E+000
	463.38	10.35	3.0392E+000		4.1974E-001
	600.56	17.80	1.7694E+000		2.1173E-001
	606.64	5.02	7.0632E+000		3.9718E+000
	635.90	11.32	2.8961E+000		3.4048E+000
Cs-134	563.23	8.38	3.8028E+000	3.20E-001	3.2582E+000
	569.32	15.43	1.9915E+000		1.3221E+000
	604.70	97.60	3.6292E-001		1.4845E-001
	795.84	85.40	3.1965E-001		-3.4776E-003
	801.93	8.73	3.2719E+000		-1.2754E+000
Cs-137	661.65	85.12	3.5365E-001	3.54E-001	1.6998E-001
Eu-152	121.78	28.40	2.4319E+000	8.49E-001	2.5583E+000
	244.69	7.49	5.0253E+000		-7.2119E+000
	344.27	26.50	1.1851E+000		-1.1203E+000
	778.89	12.74	2.3757E+000		1.0061E+000
	867.32	4.16	6.5197E+000		-5.7234E+000
	964.01	14.40	2.2936E+000		1.2516E+000
	1085.78	10.00	2.9624E+000		9.6736E-001
	1112.02	13.30	2.2014E+000		-2.0761E-001
	1407.95	20.70	8.4884E-001		-4.1841E-001
	Eu-154	123.07	40.50		1.6718E+000
247.94		6.60	5.5299E+000	1.9218E+000	
591.81		4.83	6.3437E+000	-2.2958E+000	
723.30		19.70	1.6406E+000	1.3678E+000	
756.87		4.33	7.0141E+000	2.3451E+000	
873.19		11.50	2.4589E+000	6.6605E-003	
996.32		10.30	2.7918E+000	-1.1638E+000	
1004.76		17.90	1.5442E+000	-1.8497E+000	
1274.45		35.50	7.3236E-001	4.3965E-001	
Eu-155		86.54	30.90	4.4141E+000	4.41E+000
	105.31	20.70	4.4063E+000	4.4850E-002	
Am-241	59.54	35.90	1.1282E+001	1.13E+001	4.4637E+000
Cm-243	228.19	10.56	3.7403E+000	2.61E+000	1.8275E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.6061E+000	2.61E+000	-9.4376E-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 8/3/2006 3:06:15 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-10-02-110-F

Sample Title: OOL-10-02-109-F-G

Description: 100% Vegetation/Wetland

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 2:56:13 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-10-02-110-F
Title: OOL-10-02-109-F-G
Description: 100% Vegetation/Wetland

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	3410-	3421	3415.24	853.77	0.50	1.40E+001	16.81	2.30E+001
2	5830-	5857	5842.99	1460.72	2.48	3.57E+002	40.35	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: 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	1.000	1460.81*	10.67	2.45113E+001	3.40657E+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	1.000	2.451131E+001	3.406572E+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	853.77	2.3288E-002	120.33

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	3.0945E-001	2.89E-001	2.0036E-001
	1332.49	100.00	2.8864E-001		2.0704E-001
Nb-94	702.63	100.00	3.0196E-001	3.02E-001	-8.5965E-002
	871.10	100.00	3.1226E-001		1.1667E-001
Ag-108m	79.20	7.10	2.5333E+001	3.42E-001	8.2228E+000
	433.93	89.90	3.4153E-001		-1.3261E-001
	614.37	90.40	3.7607E-001		-3.8301E-001
	722.95	90.50	3.5708E-001		1.4438E-001
Sb-125	176.33	6.89	6.5074E+000	1.02E+000	5.7668E+000
	427.89	29.33	1.0158E+000		1.6400E-001
	463.38	10.35	3.0583E+000		9.5573E-001
	600.56	17.80	1.7890E+000		-3.2744E+000
	606.64	5.02	7.2270E+000		2.3965E+000
	635.90	11.32	2.6932E+000		-4.4956E-001
Cs-134	563.23	8.38	3.8553E+000	3.62E-001	2.3563E+000
	569.32	15.43	2.0065E+000		-6.6248E-001
	604.70	97.60	3.6185E-001		9.7659E-003
	795.84	85.40	3.6718E-001		6.9508E-002
	801.93	8.73	3.2201E+000		-2.1302E+000
Cs-137	661.65	85.12	3.8731E-001	3.87E-001	5.6894E-002
Eu-152	121.78	28.40	2.3714E+000	9.61E-001	4.4164E-001
	244.69	7.49	4.8515E+000		-5.3416E+000
	344.27	26.50	1.1494E+000		-3.0206E-001
	778.89	12.74	2.3428E+000		-1.4285E+000
	867.32	4.16	7.5336E+000		-2.4674E+000
	964.01	14.40	2.2743E+000		3.2986E-001
	1085.78	10.00	2.7405E+000		-4.0421E-001
	1112.02	13.30	2.1887E+000		-1.2319E-001
1407.95	20.70	9.6070E-001	-4.7493E-001		
Eu-154	123.07	40.50	1.6448E+000	7.21E-001	3.9639E-001
	247.94	6.60	5.3546E+000		-7.1763E-001
	591.81	4.83	6.7267E+000		-3.4856E+000
	723.30	19.70	1.6342E+000		-2.5502E-001
	756.87	4.33	6.9186E+000		-5.9099E-001
	873.19	11.50	2.6920E+000		1.0459E+000
	996.32	10.30	2.5428E+000		6.2478E-001
	1004.76	17.90	1.5153E+000		-3.6948E-001
1274.45	35.50	7.2052E-001	5.4965E-001		
Eu-155	86.54	30.90	4.2080E+000	4.21E+000	1.3548E+000
	105.31	20.70	4.2234E+000		-1.8167E-001
Am-241	59.54	35.90	1.0110E+001	1.01E+001	-5.9577E+000
Cm-243	228.19	10.56	3.4861E+000	2.46E+000	-1.1443E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4650E+000	2.46E+000	1.9136E+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 8/3/2006 2:43:00 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-10-02-110-F

Sample Title: OOL-10-02-110-F-G

Description: 100% Vegetation

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 2:32:56 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-10-02-110-F
Title: OOL-10-02-110-F-G
Description: 100% Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2322-	2334	2328.75	582.15	0.86	1.94E+001	23.39	4.56E+001
2	5829-	5857	5843.38	1460.81	2.43	3.11E+002	38.27	1.48E+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	1.000	1460.81*	10.67	2.13532E+001	3.14381E+000
TL-208	0.451	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.29553E-001	1.57469E-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	1.000	2.135317E+001	3.143814E+000
TL-208	0.451	1.295529E-001	1.574692E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.6183E-001	2.62E-001	1.9005E-002
	1332.49	100.00	2.7069E-001		2.3225E-001
Nb-94	702.63	100.00	2.7827E-001	2.78E-001	-3.5212E-001
	871.10	100.00	2.8107E-001		1.0038E-001
Ag-108m	79.20	7.10	2.4322E+001	3.29E-001	-1.4786E+001
	433.93	89.90	3.2943E-001		2.9818E-001
	614.37	90.40	3.9382E-001		1.4305E-001
	722.95	90.50	3.4143E-001		3.0656E-001
Sb-125	176.33	6.89	5.7080E+000	1.06E+000	-5.1632E+000
	427.89	29.33	1.0556E+000		-6.7897E-001
	463.38	10.35	2.8822E+000		-9.1202E-001
	600.56	17.80	1.8019E+000		1.2523E+000
	606.64	5.02	6.7231E+000		4.0887E+000
	635.90	11.32	2.5796E+000		-9.5731E-001
Cs-134	563.23	8.38	3.6955E+000	3.20E-001	-7.6386E-001
	569.32	15.43	2.1011E+000		-1.4008E+000
	604.70	97.60	3.3750E-001		2.8895E-001
	795.84	85.40	3.1965E-001		-1.3043E-001
	801.93	8.73	3.0773E+000		-6.5533E-001
Cs-137	661.65	85.12	3.6573E-001	3.66E-001	1.0241E-001
Eu-152	121.78	28.40	2.3233E+000	9.76E-001	1.1983E+000
	244.69	7.49	4.5734E+000		-4.4493E+000
	344.27	26.50	1.1228E+000		-4.5040E-001
	778.89	12.74	2.2639E+000		2.3562E-001
	867.32	4.16	6.9000E+000		7.2061E-001
	964.01	14.40	2.2052E+000		1.9215E+000
	1085.78	10.00	2.7405E+000		5.4135E-002
	1112.02	13.30	1.9745E+000		-5.3231E-001
1407.95	20.70	9.7553E-001	2.9991E-002		
Eu-154	123.07	40.50	1.5976E+000	7.08E-001	-4.3842E-001
	247.94	6.60	5.1937E+000		4.5436E+000
	591.81	4.83	6.2691E+000		-1.5703E+000
	723.30	19.70	1.5210E+000		6.5435E-001
	756.87	4.33	6.8216E+000		-8.3579E+000
	873.19	11.50	2.4315E+000		-2.4485E+000
	996.32	10.30	2.5947E+000		-4.0629E+000
	1004.76	17.90	1.3828E+000		-1.7334E+000
1274.45	35.50	7.0848E-001	-1.9202E-002		
Eu-155	86.54	30.90	4.4544E+000	4.19E+000	3.1501E+000
	105.31	20.70	4.1892E+000		6.1973E-001
Am-241	59.54	35.90	1.1146E+001	1.11E+001	7.7258E-001
Cm-243	228.19	10.56	3.3215E+000	2.42E+000	-1.1581E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4194E+000	2.42E+000	6.0314E-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 8/3/2006 2:30:01 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-10-02-111-F

Sample Title: OOL-10-02-111-F-G

Description: 100% Vegetation

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 2:19:59 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-10-02-111-F
Title: OOL-10-02-111-F-G
Description: 100% Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5830-	5856	5843.18	1460.76	0.95	3.21E+002	36.71	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: 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	1.000	1460.81*	10.67	2.20437E+001	3.08718E+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	1.000	2.204366E+001	3.087182E+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
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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	2.7502E-001	2.75E-001	1.5240E-001
	1332.49	100.00	3.1440E-001		3.8386E-001
Nb-94	702.63	100.00	2.8404E-001	2.53E-001	1.2348E-001
	871.10	100.00	2.5281E-001		4.0956E-002
Ag-108m	79.20	7.10	2.5987E+001	3.04E-001	-1.1084E+001
	433.93	89.90	3.0371E-001		-2.8518E-002
	614.37	90.40	3.1512E-001		6.3098E-003
	722.95	90.50	3.2651E-001		1.6595E-001
Sb-125	176.33	6.89	6.3240E+000	9.71E-001	2.1065E+000
	427.89	29.33	9.7072E-001		2.1662E-001
	463.38	10.35	2.7689E+000		1.9032E+000
	600.56	17.80	1.6179E+000		2.8953E-002
	606.64	5.02	6.1282E+000		3.5553E+000
	635.90	11.32	2.5562E+000		-4.4390E-001
Cs-134	563.23	8.38	3.6127E+000	3.07E-001	3.0808E+000
	569.32	15.43	1.7764E+000		-2.0379E-001
	604.70	97.60	3.0737E-001		1.4608E-002
	795.84	85.40	3.3045E-001		-1.6688E-001
	801.93	8.73	3.1317E+000		-1.2174E+000
Cs-137	661.65	85.12	3.4272E-001	3.43E-001	1.2662E-001
Eu-152	121.78	28.40	2.3714E+000	1.10E+000	4.6160E-001
	244.69	7.49	4.4461E+000		-4.5828E+000
	344.27	26.50	1.1658E+000		-2.3824E-002
	778.89	12.74	2.1336E+000		-1.1545E+000
	867.32	4.16	6.0720E+000		4.2486E+000
	964.01	14.40	2.0271E+000		2.1434E+000
	1085.78	10.00	2.6126E+000		-1.5753E+000
	1112.02	13.30	1.9023E+000		-2.9949E-001
	1407.95	20.70	1.0991E+000		7.9281E-001
Eu-154	123.07	40.50	1.6342E+000	7.32E-001	-4.6539E-001
	247.94	6.60	5.0695E+000		3.3864E+000
	591.81	4.83	6.2441E+000		4.7700E-001
	723.30	19.70	1.5141E+000		9.8752E-001
	756.87	4.33	6.2779E+000		-1.5532E+000
	873.19	11.50	2.1685E+000		-6.9307E-001
	996.32	10.30	2.5602E+000		-7.8732E-002
	1004.76	17.90	1.3280E+000		9.3602E-002
	1274.45	35.50	7.3236E-001		4.8989E-001
Eu-155	86.54	30.90	4.6215E+000	4.35E+000	8.0891E+000
	105.31	20.70	4.3480E+000		-9.8242E-001
Am-241	59.54	35.90	1.0077E+001	1.01E+001	-5.0078E+000
Cm-243	228.19	10.56	3.3515E+000	2.36E+000	3.9117E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3573E+000	2.36E+000	-7.3505E-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 8/3/2006 2:00:02 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-112-F

Sample Title: OOL-10-02-112-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 1:50:01 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-10-02-112-F
Title: OOL-10-02-112-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	5828-	5855	5842.96	1460.71	1.33	3.12E+002	37.10	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	1.000	1460.81*	10.67	2.13801E+001	3.07818E+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	1.000	2.138010E+001	3.078180E+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	2.6757E-001	2.68E-001	-9.3181E-002
	1332.49	100.00	2.8670E-001		-4.4460E-003
Nb-94	702.63	100.00	2.8117E-001	2.75E-001	1.1880E-002
	871.10	100.00	2.7470E-001		-7.6950E-002
Ag-108m	79.20	7.10	2.4727E+001	3.11E-001	-2.4462E+001
	433.93	89.90	3.1095E-001		9.4317E-002
	614.37	90.40	3.3216E-001		-1.8083E-001
	722.95	90.50	3.3406E-001		-3.3253E-002
Sb-125	176.33	6.89	6.1417E+000	9.81E-001	-1.2428E+000
	427.89	29.33	9.8132E-001		-8.1652E-002
	463.38	10.35	2.7898E+000		2.1028E+000
	600.56	17.80	1.6251E+000		-2.4495E+000
	606.64	5.02	6.5461E+000		4.6386E+000
	635.90	11.32	2.4482E+000		-1.1132E+000
Cs-134	563.23	8.38	3.4115E+000	3.27E-001	8.0057E-001
	569.32	15.43	1.7248E+000		-2.1266E+000
	604.70	97.60	3.2699E-001		1.3306E-001
	795.84	85.40	3.2689E-001		3.2613E-001
	801.93	8.73	3.3396E+000		2.8292E+000
Cs-137	661.65	85.12	3.2475E-001	3.25E-001	-3.5504E-002
Eu-152	121.78	28.40	2.2886E+000	8.14E-001	8.8974E-001
	244.69	7.49	4.5644E+000		-5.2687E+000
	344.27	26.50	1.0919E+000		-1.0107E+000
	778.89	12.74	2.0716E+000		1.0580E+000
	867.32	4.16	6.8257E+000		-7.4862E-001
	964.01	14.40	2.1024E+000		4.7546E-001
	1085.78	10.00	2.5170E+000		1.8920E-001
	1112.02	13.30	2.0979E+000		-8.5719E-001
1407.95	20.70	8.1370E-001	-4.7582E-003		
Eu-154	123.07	40.50	1.5840E+000	6.10E-001	-7.7946E-001
	247.94	6.60	4.8771E+000		-4.7708E+000
	591.81	4.83	6.4173E+000		2.1755E+000
	723.30	19.70	1.5687E+000		7.7516E-001
	756.87	4.33	6.3486E+000		2.6836E+000
	873.19	11.50	2.3330E+000		-1.8467E+000
	996.32	10.30	2.7115E+000		-6.8537E-001
	1004.76	17.90	1.5537E+000		2.6141E-001
1274.45	35.50	6.0989E-001	-7.2043E-001		
Eu-155	86.54	30.90	4.5258E+000	4.53E+000	1.2585E+000
	105.31	20.70	4.5783E+000		2.8739E+000
Am-241	59.54	35.90	1.0283E+001	1.03E+001	-7.6211E+000
Cm-243	228.19	10.56	3.3215E+000	2.42E+000	1.4649E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4245E+000	2.42E+000	1.0792E-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 8/3/2006 1:44:32 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-113-F

Sample Title: OOL-10-02-113-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 1:34:32 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: 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-10-02-113-F
Title: OOL-10-02-113-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	2324-	2336	2330.34	582.55	0.54	2.38E+001	24.90	5.22E+001
2	5320-	5333	5326.74	1331.65	0.32	2.00E+001	15.04	1.40E+001
3	5831-	5856	5842.02	1460.47	2.28	2.87E+002	36.89	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: 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	6.30105E+000	9.57082E-001
TL-208	0.464	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	5.19506E-002	5.46964E-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: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	6.301050E+000	9.570820E-001
TL-208	0.464	5.195060E-002	5.469643E-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	1331.65	3.3358E-002	75.13

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	9.6878E-002	9.14E-002	4.7869E-002
	1332.49	100.00	9.1404E-002		2.7851E-002
Nb-94	702.63	100.00	9.2976E-002	9.30E-002	3.0264E-002
	871.10	100.00	1.0010E-001		2.2813E-002
Ag-108m	79.20	7.10	9.4041E+000	1.00E-001	-1.1303E+001
	433.93	89.90	1.0709E-001		-8.8534E-003
	614.37	90.40	1.1304E-001		-7.9473E-002
	722.95	90.50	1.0016E-001		3.9762E-002
Sb-125	176.33	6.89	1.9740E+000	2.98E-001	2.4098E-001
	427.89	29.33	2.9757E-001		-4.7867E-001
	463.38	10.35	9.4712E-001		3.4870E-001
	600.56	17.80	5.7417E-001		-5.8729E-001
	606.64	5.02	2.1614E+000		-5.3714E-001
	635.90	11.32	8.4805E-001		3.1974E-001
Cs-134	563.23	8.38	1.1853E+000	1.11E-001	-1.1107E-001
	569.32	15.43	6.4847E-001		-5.8979E-001
	604.70	97.60	1.1179E-001		7.7332E-002
	795.84	85.40	1.1144E-001		7.0010E-002
	801.93	8.73	9.9501E-001		-3.2329E-001
Cs-137	661.65	85.12	1.1968E-001	1.20E-001	3.2656E-002
Eu-152	121.78	28.40	7.7163E-001	2.78E-001	-2.4508E-001
	244.69	7.49	1.4946E+000		-3.0796E+000
	344.27	26.50	3.5390E-001		-4.3142E-001
	778.89	12.74	7.0212E-001		1.1515E-001
	867.32	4.16	2.2426E+000		-2.7527E+000
	964.01	14.40	7.1118E-001		4.2637E-001
	1085.78	10.00	8.4673E-001		3.8031E-001
	1112.02	13.30	6.5869E-001		2.0046E-002
	1407.95	20.70	2.7813E-001		-2.1955E-001
	Eu-154	123.07	40.50		5.3541E-001
247.94		6.60	1.6358E+000	1.2938E-001	
591.81		4.83	2.1372E+000	1.3748E+000	
723.30		19.70	4.6500E-001	8.6403E-002	
756.87		4.33	2.3337E+000	1.7176E-001	
873.19		11.50	8.7487E-001	-2.2457E-002	
996.32		10.30	8.9381E-001	4.1845E-002	
1004.76		17.90	5.1536E-001	1.9273E-001	
1274.45	35.50	2.2995E-001	3.7624E-002		
Eu-155	86.54	30.90	1.5847E+000	1.48E+000	5.9655E-001
	105.31	20.70	1.4771E+000		-8.3310E-001
Am-241	59.54	35.90	4.9045E+000	4.90E+000	2.0503E+000
Cm-243	228.19	10.56	1.1103E+000	7.34E-001	3.0644E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	7.3386E-001	7.34E-001	-3.3361E-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 8/4/2006 3:10:02 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-113-F-

Sample Title: OOL-10-02-113-F-R

Description: Vegetation--Satulated Soil

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 3:00:00 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-10-02-113-F-
Title: OOL-10-02-113-F-R
Description: Vegetation--Satulated Soil

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5831-	5857	5843.57	1460.86	1.69	2.90E+002	35.83	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: 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	1.000	1460.81*	10.67	1.98922E+001	2.93910E+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	1.000	1.989223E+001	2.939098E+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	2.7318E-001	2.73E-001	5.9404E-002
	1332.49	100.00	2.7681E-001		2.9667E-001
Nb-94	702.63	100.00	3.0063E-001	2.90E-001	1.9894E-001
	871.10	100.00	2.9034E-001		-1.0395E-001
Ag-108m	79.20	7.10	2.4930E+001	3.16E-001	-1.7070E+001
	433.93	89.90	3.1567E-001		1.4919E-001
	614.37	90.40	3.3491E-001		-5.8249E-001
	722.95	90.50	3.3106E-001		5.7915E-003
Sb-125	176.33	6.89	6.1349E+000	9.67E-001	5.1813E+000
	427.89	29.33	9.6716E-001		-3.8282E-001
	463.38	10.35	2.9421E+000		1.7441E-001
	600.56	17.80	1.7562E+000		1.3536E+000
	606.64	5.02	6.4329E+000		-6.8595E-001
	635.90	11.32	2.5207E+000		-9.9967E-001
Cs-134	563.23	8.38	3.6955E+000	3.29E-001	-3.6414E+000
	569.32	15.43	2.0213E+000		-1.4990E-002
	604.70	97.60	3.2936E-001		-1.9319E-001
	795.84	85.40	3.6240E-001		2.1660E-001
Cs-137	801.93	8.73	3.3730E+000	3.80E-001	-2.3107E+000
	661.65	85.12	3.8026E-001		-4.8029E-002
Eu-152	121.78	28.40	2.3002E+000	1.05E+000	-2.6399E-001
	244.69	7.49	4.5913E+000		-3.8362E+000
	344.27	26.50	1.1755E+000		-4.4910E-001
	778.89	12.74	2.4927E+000		6.0848E-001
	867.32	4.16	7.6998E+000		6.1645E+000
	964.01	14.40	2.2743E+000		1.2184E+000
	1085.78	10.00	2.7226E+000		-1.1348E+000
	1112.02	13.30	1.8115E+000		-1.6406E+000
1407.95	20.70	1.0462E+000	7.1806E-001		
Eu-154	123.07	40.50	1.5822E+000	7.55E-001	1.7760E-001
	247.94	6.60	4.8552E+000		-2.8359E+000
	591.81	4.83	6.5620E+000		8.5016E-001
	723.30	19.70	1.5416E+000		1.0651E+000
	756.87	4.33	6.7232E+000		-2.1546E+000
	873.19	11.50	2.4993E+000		-1.4981E-001
	996.32	10.30	2.7439E+000		1.4527E+000
Eu-155	1004.76	17.90	1.7065E+000	4.20E+000	8.6308E-001
	1274.45	35.50	7.5543E-001		4.1036E-003
	86.54	30.90	4.3804E+000		-2.4707E-001
Am-241	105.31	20.70	4.1969E+000	1.15E+001	-2.4468E+000
	59.54	35.90	1.1510E+001		4.1522E+000
Cm-243	228.19	10.56	3.2111E+000	2.29E+000	-5.4125E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2880E+000	2.29E+000	-1.0525E+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 8/3/2006 1:32:44 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-10-02-114-F

Sample Title: OOL-10-02-114-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 1:22:43 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-10-02-114-F
Title: OOL-10-02-114-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5829-	5855	5842.88	1460.69	1.09	2.89E+002	36.54	1.35E+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	1.000	1460.81*	10.67	1.97975E+001	2.97580E+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	1.000	1.979751E+001	2.975805E+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	2.9619E-001	2.94E-001	3.6984E-001
	1332.49	100.00	2.9436E-001		7.4907E-002
Nb-94	702.63	100.00	3.0330E-001	2.93E-001	4.4386E-002
	871.10	100.00	2.9337E-001		1.7812E-001
Ag-108m	79.20	7.10	2.6018E+001	3.28E-001	-1.8633E+001
	433.93	89.90	3.2831E-001		1.5468E-001
	614.37	90.40	3.5868E-001		-3.0001E-002
	722.95	90.50	3.2955E-001		2.0780E-002
Sb-125	176.33	6.89	6.1827E+000	9.60E-001	3.7056E-001
	427.89	29.33	9.6000E-001		-4.8063E-001
	463.38	10.35	2.9123E+000		-1.7581E-001
	600.56	17.80	1.7694E+000		5.2175E-001
	606.64	5.02	6.8098E+000		4.5286E+000
	635.90	11.32	2.2559E+000		-1.1392E+000
Cs-134	563.23	8.38	3.6543E+000	3.36E-001	2.1317E-001
	569.32	15.43	1.9459E+000		-3.2764E-001
	604.70	97.60	3.4768E-001		1.2846E-001
	795.84	85.40	3.3571E-001		9.8729E-002
	801.93	8.73	3.2719E+000		-1.5249E+000
Cs-137	661.65	85.12	3.5823E-001	3.58E-001	2.2514E-001
Eu-152	121.78	28.40	2.4525E+000	1.07E+000	1.0344E-001
	244.69	7.49	4.4461E+000		-8.2778E+000
	344.27	26.50	1.1228E+000		-1.5986E+000
	778.89	12.74	2.2524E+000		1.9512E-001
	867.32	4.16	7.1534E+000		-1.2120E+000
	964.01	14.40	2.1129E+000		2.3141E-002
	1085.78	10.00	2.7759E+000		1.4941E+000
	1112.02	13.30	1.9745E+000		-2.0347E+000
1407.95	20.70	1.0730E+000	-1.6180E-001		
Eu-154	123.07	40.50	1.6786E+000	6.84E-001	-1.4265E+000
	247.94	6.60	4.9636E+000		1.8321E+000
	591.81	4.83	6.5141E+000		7.3869E+000
	723.30	19.70	1.5071E+000		2.3562E-001
	756.87	4.33	7.0770E+000		7.0161E-001
	873.19	11.50	2.4859E+000		-4.8404E-001
	996.32	10.30	2.5947E+000		7.2809E-002
	1004.76	17.90	1.4041E+000		-4.9101E-001
1274.45	35.50	6.8369E-001	-5.2708E-001		
Eu-155	86.54	30.90	4.5272E+000	4.49E+000	-8.6294E-001
	105.31	20.70	4.4852E+000		-2.5686E-001
Am-241	59.54	35.90	1.1200E+001	1.12E+001	3.7793E+000
Cm-243	228.19	10.56	3.2851E+000	2.37E+000	1.5693E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3678E+000	2.37E+000	-8.1030E-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 8/3/2006 1:19:57 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-115-F

Sample Title: OOL-10-02-115-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 1:09:54 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-10-02-115-F
Title: OOL-10-02-115-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5828-	5856	5843.25	1460.78	2.71	3.03E+002	36.60	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
K-40	1.000	1460.81*	10.67	2.07715E+001	3.02241E+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	1.000	2.077152E+001	3.022412E+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
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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	3.0290E-001	2.67E-001	7.9442E-002
	1332.49	100.00	2.6653E-001		3.6341E-001
Nb-94	702.63	100.00	3.0196E-001	3.02E-001	3.0146E-001
	871.10	100.00	3.3134E-001		3.1654E-001
Ag-108m	79.20	7.10	2.6274E+001	3.26E-001	-1.6504E+001
	433.93	89.90	3.2605E-001		-1.5768E-001
	614.37	90.40	3.5868E-001		-1.3648E-001
	722.95	90.50	3.5289E-001		2.8907E-001
Sb-125	176.33	6.89	6.7358E+000	9.92E-001	4.7129E+000
	427.89	29.33	9.9180E-001		-4.8557E-001
	463.38	10.35	3.0583E+000		5.3125E-001
	600.56	17.80	1.6536E+000		-4.0761E-001
	606.64	5.02	6.6573E+000		1.7454E+000
	635.90	11.32	2.3985E+000		-1.1850E+000
Cs-134	563.23	8.38	3.7226E+000	3.34E-001	4.7087E-001
	569.32	15.43	2.0139E+000		-1.6082E-001
	604.70	97.60	3.3404E-001		3.0845E-001
	795.84	85.40	3.6875E-001		2.8779E-001
Cs-137	801.93	8.73	3.2719E+000	3.72E-001	-1.0267E+000
	661.65	85.12	3.7161E-001		-2.2239E-001
Eu-152	121.78	28.40	2.5380E+000	1.06E+000	2.1462E+000
	244.69	7.49	4.9680E+000		-1.6876E+000
	344.27	26.50	1.2502E+000		3.1322E-001
	778.89	12.74	2.4082E+000		4.8842E-001
	867.32	4.16	7.5336E+000		-4.1842E+000
	964.01	14.40	2.1952E+000		2.2870E-001
	1085.78	10.00	2.4577E+000		1.2180E+000
	1112.02	13.30	2.1111E+000		1.7966E+000
	1407.95	20.70	1.0597E+000		5.3494E-001
	Eu-154	123.07	40.50		1.7501E+000
247.94		6.60	5.3645E+000	9.8633E-001	
591.81		4.83	6.2189E+000	1.5357E+000	
723.30		19.70	1.6213E+000	7.6542E-001	
756.87		4.33	7.0456E+000	1.7940E+000	
873.19		11.50	2.8127E+000	-1.7548E-001	
996.32		10.30	2.6621E+000	6.9648E-001	
1004.76		17.90	1.5818E+000	1.2491E-001	
1274.45	35.50	7.2052E-001	-2.5425E-001		
Eu-155	86.54	30.90	4.6758E+000	4.68E+000	2.7830E+000
	105.31	20.70	4.7674E+000		1.8635E+000
Am-241	59.54	35.90	1.1871E+001	1.19E+001	1.1935E+001
Cm-243	228.19	10.56	3.4918E+000	2.44E+000	1.6980E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4398E+000	2.44E+000	1.8020E-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 8/3/2006 4:35:16 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-10-02-116-F-

Sample Title: OOL-10-02-116-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 4:25:13 PM

Live Time: 600.0 seconds

Real Time: 601.4 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 4/26/2006

Calibration Efficiency: 7829Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-116-F-
Title: OOL-10-02-116-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1759-	1768	1763.17	440.80	0.94	2.16E+001	20.74	3.84E+001
2	2323-	2340	2332.00	583.02	0.63	6.88E+001	33.23	6.72E+001
3	5323-	5338	5329.91	1332.60	0.38	7.02E+001	21.79	1.78E+001
4	5832-	5856	5844.21	1461.19	1.75	2.34E+002	34.07	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: 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	0.995	1460.81*	10.67	1.64347E+001	2.73854E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.68762E-001	2.34710E-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	0.995	1.643467E+001	2.738539E+000
TL-208	0.472	4.687624E-001	2.347104E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	440.80	3.5944E-002	96.17
3	1332.60	1.1706E-001	31.03

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	3.6440E-001	3.64E-001	1.3624E-001
	1332.49	100.00	3.9877E-001		6.1522E-001
Nb-94	702.63	100.00	3.8044E-001	3.76E-001	-2.0274E-001
	871.10	100.00	3.7617E-001		-1.8069E-001
Ag-108m	79.20	7.10	3.1393E+001	3.98E-001	-1.3475E+001
	433.93	89.90	4.2841E-001		6.4194E-001
	614.37	90.40	4.6355E-001		-4.4088E-001
	722.95	90.50	3.9831E-001		6.1394E-002
Sb-125	176.33	6.89	7.0887E+000	1.35E+000	-4.3635E+000
	427.89	29.33	1.3451E+000		-9.0000E-002
	463.38	10.35	3.5019E+000		-2.2268E+000
	600.56	17.80	2.2966E+000		-2.1760E-002
	606.64	5.02	9.0256E+000		1.4695E+001
	635.90	11.32	3.3450E+000		1.6859E-001
Cs-134	563.23	8.38	4.4109E+000	4.62E-001	5.0719E-001
	569.32	15.43	2.4915E+000		1.0120E-001
	604.70	97.60	4.6206E-001		6.5514E-001
	795.84	85.40	4.7741E-001		4.2224E-001
	801.93	8.73	4.5533E+000		5.2198E-001
Cs-137	661.65	85.12	4.4038E-001	4.40E-001	4.8264E-002
Eu-152	121.78	28.40	2.9555E+000	1.16E+000	2.1581E+000
	244.69	7.49	5.1931E+000		-6.4160E+000
	344.27	26.50	1.3415E+000		-1.1660E+000
	778.89	12.74	2.9005E+000		-1.3452E+000
	867.32	4.16	9.1210E+000		-4.9712E+000
	964.01	14.40	2.6013E+000		-7.2167E-001
	1085.78	10.00	3.4060E+000		3.3005E+000
	1112.02	13.30	2.4211E+000		-5.4429E-001
	1407.95	20.70	1.1618E+000		-7.0407E-002
	Eu-154	123.07	40.50		2.0237E+000
247.94		6.60	5.7617E+000	-7.1023E+000	
591.81		4.83	7.8943E+000	5.2794E+000	
723.30		19.70	1.8121E+000	-1.7197E+000	
756.87		4.33	8.3370E+000	-3.5448E+000	
873.19		11.50	3.1972E+000	5.7372E-001	
996.32		10.30	3.3475E+000	-1.4367E-001	
1004.76		17.90	1.9224E+000	-1.5108E+000	
1274.45		35.50	9.2613E-001	3.9599E-001	
Eu-155		86.54	30.90	5.3573E+000	5.32E+000
	105.31	20.70	5.3227E+000	-1.8990E-001	
Am-241	59.54	35.90	1.4152E+001	1.42E+001	6.6810E+000
Cm-243	228.19	10.56	3.8988E+000	2.67E+000	-1.2147E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.6676E+000	2.67E+000	-3.8431E-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 8/3/2006 4:22:05 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-02-117-F-

Sample Title: OOL-10-02-117-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 4:12:02 PM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 4/26/2006

Calibration Efficiency: 7829Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

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

Filename: ORG7829
Log Number: OOL-10-02-117-F-
Title: OOL-10-02-117-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	950-	964	954.19	238.52	0.98	5.57E+001	39.44	1.19E+002
2	4687-	4699	4693.41	1173.45	0.64	2.04E+001	16.03	1.76E+001
3	5323-	5337	5330.01	1332.62	1.13	4.58E+001	18.71	1.52E+001
4	5832-	5855	5844.30	1461.21	1.39	2.06E+002	31.23	1.19E+001
5	7054-	7067	7060.71	1765.35	0.42	2.28E+001	11.04	3.19E+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: 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	0.995	1460.81*	10.67	1.44762E+001	2.48747E+000
Co-60	0.999	1173.22*	100.00	1.40763E-001	1.11152E-001
		1332.49*	100.00	3.32213E-001	1.38321E-001
Pb-212	0.421	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.68845E-001	4.12713E-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	0.995	1.447620E+001	2.487472E+000
Co-60	0.999	2.158819E-001	8.664356E-002
Pb-212 @	0.421	5.688445E-001	4.127126E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1765.35	3.8013E-002	48.40

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: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	1.7344E-001	1.73E-001	1.4076E-001
		1332.49*	100.00	1.8056E-001		3.3221E-001
	Nb-94	702.63	100.00	3.3882E-001	3.23E-001	2.4676E-001
		871.10	100.00	3.2308E-001		4.4837E-002
	Ag-108m	79.20	7.10	3.1852E+001	3.60E-001	-3.9386E+001
		433.93	89.90	3.5952E-001		1.8572E-001
		614.37	90.40	3.6611E-001		-3.6762E-001
		722.95	90.50	3.8246E-001		2.0129E-001
	Sb-125	176.33	6.89	6.8008E+000	1.01E+000	5.1081E+000
		427.89	29.33	1.0124E+000		-3.1239E-001
		463.38	10.35	3.0908E+000		-5.2292E-001
		600.56	17.80	1.9962E+000		1.3538E+000
		606.64	5.02	7.0144E+000		4.2534E+000
		635.90	11.32	2.9131E+000		-1.2727E+000
	Cs-134	563.23	8.38	3.8445E+000	3.51E-001	-2.1484E+000
		569.32	15.43	2.1170E+000		-4.7594E-001
		604.70	97.60	3.5142E-001		7.5366E-002
		795.84	85.40	4.1206E-001		1.1571E-001
	Cs-137	801.93	8.73	3.5936E+000	4.02E-001	-1.8092E+000
		661.65	85.12	4.0205E-001		3.3891E-001
	Eu-152	121.78	28.40	2.8184E+000	9.61E-001	6.2027E-001
		244.69	7.49	5.1119E+000		1.4968E+000
		344.27	26.50	1.2194E+000		-4.0681E-001
		778.89	12.74	2.5642E+000		4.2738E-001
		867.32	4.16	7.8612E+000		1.6862E+000
		964.01	14.40	2.4617E+000		7.4933E-001
		1085.78	10.00	2.7383E+000		5.9230E-001
		1112.02	13.30	2.4580E+000		1.3114E+000
	Eu-154	1407.95	20.70	9.6101E-001	7.60E-001	-1.8338E-001
		123.07	40.50	1.9471E+000		6.3778E-001
		247.94	6.60	5.6475E+000		3.9506E-001
		591.81	4.83	7.4107E+000		8.7103E+000
		723.30	19.70	1.7448E+000		1.3877E-001
		756.87	4.33	6.7065E+000		-3.7741E+000
		873.19	11.50	2.8608E+000		5.0899E-001
		996.32	10.30	2.5992E+000		1.8133E-001
	Eu-155	1004.76	17.90	1.6402E+000	5.19E+000	-1.1391E-001
		1274.45	35.50	7.6000E-001		6.1673E-003
		86.54	30.90	5.5411E+000		7.9994E+000
	Am-241	105.31	20.70	5.1935E+000	1.38E+001	1.0390E+000
		59.54	35.90	1.3768E+001		-1.5901E+001
	Cm-243	228.19	10.56	3.5134E+000	2.41E+000	-2.3645E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4073E+000	2.41E+000	-1.3456E+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 8/3/2006 4:09:52 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-02-118-F-

Sample Title: OOL-10-02-118-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 3:59:49 PM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 4/26/2006

Calibration Efficiency: 7829Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-118-F-
Title: OOL-10-02-118-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	300.92	75.19	0.90	2.48E+002	112.45	1.10E+003
2	947-	960	955.47	238.84	0.35	4.66E+001	36.13	1.06E+002
3	3640-	3652	3645.09	911.34	1.57	2.15E+001	20.30	3.25E+001
4	5834-	5854	5844.28	1461.21	1.10	1.87E+002	29.54	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: 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	0.995	1460.81*	10.67	1.31557E+001	2.33241E+000
Pb-212	0.576	74.81* @	10.70	2.55543E+001	1.26234E+001
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60		

* = 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: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	0.995	1.315570E+001	2.332412E+000
Pb-212 @	0.576	4.759280E-001	3.767444E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	911.34	3.5833E-002	94.41

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: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	2.9480E-001	2.95E-001	1.4488E-001
	1332.49	100.00	3.1409E-001		3.0069E-001
Nb-94	702.63	100.00	3.2110E-001	2.83E-001	-4.9292E-003
	871.10	100.00	2.8294E-001		-2.3530E-001
Ag-108m	79.20	7.10	3.1239E+001	3.41E-001	-6.5133E+000
	433.93	89.90	3.5196E-001		1.2264E-001
	614.37	90.40	3.5695E-001		-3.7279E-001
	722.95	90.50	3.4098E-001		4.9260E-003
Sb-125	176.33	6.89	6.6168E+000	1.03E+000	4.8725E-001
	427.89	29.33	1.0335E+000		-1.4341E+000
	463.38	10.35	2.8568E+000		1.2949E+000
	600.56	17.80	1.7663E+000		-8.7010E-001
	606.64	5.02	6.7498E+000		6.2481E+000
	635.90	11.32	2.6228E+000		1.1316E-001
Cs-134	563.23	8.38	3.4428E+000	3.40E-001	-5.0468E+000
	569.32	15.43	2.0196E+000		2.3249E+000
	604.70	97.60	3.3981E-001		2.9116E-001
	795.84	85.40	3.6667E-001		1.9895E-001
	801.93	8.73	3.5608E+000		-3.3532E+000
Cs-137	661.65	85.12	3.5942E-001	3.59E-001	-1.2465E-001
Eu-152	121.78	28.40	2.9945E+000	9.45E-001	-7.2655E-001
	244.69	7.49	4.7990E+000		-2.1175E+000
	344.27	26.50	1.1499E+000		-3.4049E-001
	778.89	12.74	2.2596E+000		1.3850E-003
	867.32	4.16	6.7942E+000		-2.6117E+000
	964.01	14.40	2.3837E+000		-6.8217E-001
	1085.78	10.00	2.7383E+000		-3.2916E+000
	1112.02	13.30	1.9193E+000		-3.4617E-001
1407.95	20.70	9.4485E-001	-1.7324E-001		
Eu-154	123.07	40.50	2.0731E+000	7.09E-001	2.5997E-001
	247.94	6.60	5.0259E+000		-6.3705E+000
	591.81	4.83	7.2123E+000		7.2146E+000
	723.30	19.70	1.5526E+000		-7.8162E-001
	756.87	4.33	6.4585E+000		-2.4664E+000
	873.19	11.50	2.6156E+000		2.3329E+000
	996.32	10.30	2.7246E+000		6.0347E-001
	1004.76	17.90	1.6305E+000		-6.4352E-001
1274.45	35.50	7.0861E-001	5.5549E-002		
Eu-155	86.54	30.90	5.3606E+000	5.28E+000	1.5146E+000
	105.31	20.70	5.2795E+000		3.2392E+000
Am-241	59.54	35.90	1.4267E+001	1.43E+001	7.4735E+000
Cm-243	228.19	10.56	3.4606E+000	2.50E+000	-3.5005E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.5006E+000	2.50E+000	1.2512E+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 8/3/2006 3:52:31 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-02-119-F-

Sample Title: OOL-10-02-119-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 3:42:28 PM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 4/26/2006

Calibration Efficiency: 7829Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-119-F-
Title: OOL-10-02-119-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	295-	310	301.68	75.38	0.77	1.37E+002	133.63	1.50E+003
2	789-	800	793.07	198.24	0.34	3.98E+001	37.55	1.28E+002
3	948-	961	954.10	238.50	1.28	6.13E+001	37.68	1.12E+002
4	2325-	2340	2331.85	582.99	1.61	5.36E+001	26.15	4.14E+001
5	3638-	3649	3643.74	911.00	0.28	2.86E+001	18.04	2.24E+001
6	3870-	3882	3875.58	968.97	1.00	1.96E+001	18.40	2.54E+001
7	5322-	5339	5330.43	1332.73	0.44	5.04E+001	18.61	1.16E+001
8	5833-	5855	5844.68	1461.31	1.36	2.35E+002	31.45	5.75E+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: 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	0.992	1460.81*	10.67	1.65280E+001	2.58342E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.65003E-001	1.84568E-001
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	1.40378E+001	1.39395E+001
		77.11 @	18.00		
		87.30 @	8.00		
Ac-228	0.634	238.63*	44.60	6.26417E-001	3.97286E-001
		338.32	11.40		
		911.07*	27.70	6.67683E-001	4.27373E-001
		969.11*	16.60	7.75384E-001	7.31894E-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	0.992	1.652801E+001	2.583419E+000
TL-208	0.472	3.650030E-001	1.845676E-001
Pb-212 @	0.576	6.264169E-001	3.972858E-001
Ac-228	0.634	6.950685E-001	3.690606E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	198.24	6.6265E-002	94.44
7	1332.73	8.3918E-002	36.95

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	3.2823E-001	3.28E-001	2.3227E-001
	1332.49	100.00	3.3649E-001		3.3273E-001
Nb-94	702.63	100.00	3.1585E-001	3.08E-001	-3.0352E-001
	871.10	100.00	3.0830E-001		-2.5186E-001
Ag-108m	79.20	7.10	3.2708E+001	3.67E-001	5.6594E+000
	433.93	89.90	3.7107E-001		-1.8819E-001
	614.37	90.40	4.0408E-001		9.1837E-002
	722.95	90.50	3.6731E-001		4.2109E-003
Sb-125	176.33	6.89	6.5651E+000	1.14E+000	-3.9126E+000
	427.89	29.33	1.1357E+000		9.7158E-002
	463.38	10.35	3.2058E+000		5.6604E-001
	600.56	17.80	2.0611E+000		-4.7945E-001
	606.64	5.02	7.5946E+000		6.5496E+000
	635.90	11.32	2.7270E+000		-1.8430E+000
Cs-134	563.23	8.38	3.8173E+000	3.85E-001	6.3142E-001
	569.32	15.43	2.1603E+000		3.6507E-001
	604.70	97.60	3.8509E-001		-2.0136E-001
	795.84	85.40	3.8928E-001		5.6132E-002
Cs-137	801.93	8.73	3.4603E+000	3.79E-001	-3.1881E+000
	661.65	85.12	3.7916E-001		-1.0122E-001
Eu-152	121.78	28.40	2.8822E+000	9.61E-001	-4.3266E-001
	244.69	7.49	5.1770E+000		-6.1754E-001
	344.27	26.50	1.2666E+000		4.0041E-001
	778.89	12.74	2.5957E+000		1.7175E+000
	867.32	4.16	7.4755E+000		1.5728E+000
	964.01	14.40	2.5185E+000		1.3285E-001
	1085.78	10.00	3.0138E+000		7.3237E-001
	1112.02	13.30	2.1295E+000		-2.1291E+000
1407.95	20.70	9.6101E-001	4.7367E-001		
Eu-154	123.07	40.50	1.9912E+000	8.47E-001	1.8559E-001
	247.94	6.60	5.9286E+000		-1.2723E+000
	591.81	4.83	7.7505E+000		7.5268E+000
	723.30	19.70	1.7069E+000		2.6933E-001
	756.87	4.33	7.1753E+000		1.4835E+000
	873.19	11.50	2.6692E+000		2.2453E+000
	996.32	10.30	3.1593E+000		6.8983E-001
Eu-155	1004.76	17.90	1.8978E+000	5.26E+000	1.6807E+000
	1274.45	35.50	8.4743E-001		8.9112E-001
	86.54	30.90	5.4834E+000		1.7922E+000
Am-241	105.31	20.70	5.2585E+000	1.41E+001	1.7881E+000
	59.54	35.90	1.4081E+001		-1.8677E+001
Cm-243	228.19	10.56	3.5768E+000	2.55E+000	1.5709E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.5509E+000	2.55E+000	1.3916E+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 8/3/2006 3:37:59 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-02-120-F-

Sample Title: OOL-10-02-120-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 3:27:56 PM

Live Time: 600.0 seconds

Real Time: 601.4 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 4/26/2006

Calibration Efficiency: 7829Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

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

Filename: ORG7829
Log Number: OOL-10-02-120-F-
Title: OOL-10-02-120-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	556-	569	559.76	139.90	0.95	9.45E+001	70.36	4.31E+002
2	2033-	2053	2045.01	511.26	1.85	1.29E+002	44.94	1.08E+002
3	2320-	2338	2330.93	582.76	0.84	7.90E+001	34.04	6.60E+001
4	5320-	5339	5330.18	1332.67	1.12	8.80E+001	23.34	1.50E+001
5	5833-	5856	5844.70	1461.31	0.98	2.12E+002	34.59	2.44E+001
6	7057-	7070	7063.30	1766.00	0.72	1.74E+001	10.89	4.60E+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	7.08180E-001	2.66665E-001
K-40	0.992	1460.81*	10.67	1.48633E+001	2.71191E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	3.27861E+000	1.26326E+000
		583.14*	84.20	5.38049E-001	2.42576E-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
ANN	0.998	5.919612E-001	2.717375E-001
K-40	0.992	1.486328E+001	2.711910E+000
TL-208	0.749	5.380489E-001	2.419412E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	139.90	1.5755E-001	74.43
4	1332.67	1.4660E-001	26.53
6	1766.00	2.8996E-002	62.57

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: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	3.9025E-001	3.90E-001	-1.1523E-001
	1332.49	100.00	4.1063E-001		7.1454E-001
Nb-94	702.63	100.00	3.8585E-001	3.86E-001	3.0855E-002
	871.10	100.00	3.9649E-001		3.0985E-001
Ag-108m	79.20	7.10	3.2015E+001	3.74E-001	-1.0773E+001
	433.93	89.90	3.7415E-001		-2.7375E-002
	614.37	90.40	4.5334E-001		-1.4324E-001
	722.95	90.50	4.3998E-001		-8.8676E-002
Sb-125	176.33	6.89	7.3361E+000	1.22E+000	-2.4712E+000
	427.89	29.33	1.2234E+000		2.1411E-001
	463.38	10.35	3.3528E+000		-8.2515E-001
	600.56	17.80	2.2705E+000		1.4017E+000
	606.64	5.02	7.9253E+000		-1.9300E+000
	635.90	11.32	3.3450E+000		2.1278E+000
Cs-134	563.23	8.38	4.4923E+000	4.23E-001	2.1069E-001
	569.32	15.43	2.4290E+000		1.1362E-001
	604.70	97.60	4.2257E-001		2.2199E-001
	795.84	85.40	4.5804E-001		-6.7338E-002
	801.93	8.73	4.5149E+000		1.9346E+000
Cs-137	661.65	85.12	4.6490E-001	4.65E-001	1.2040E-001
Eu-152	121.78	28.40	3.1038E+000	1.05E+000	2.7334E+000
	244.69	7.49	5.4062E+000		-1.2299E+001
	344.27	26.50	1.4341E+000		-3.4160E-001
	778.89	12.74	3.0187E+000		-4.1525E-001
	867.32	4.16	9.6318E+000		-3.5014E+000
	964.01	14.40	2.6549E+000		2.2522E+000
	1085.78	10.00	3.5266E+000		4.5662E-001
	1112.02	13.30	2.3709E+000		8.7433E-001
	1407.95	20.70	1.0522E+000		-5.1619E-001
Eu-154	123.07	40.50	2.1384E+000	9.51E-001	1.1442E-001
	247.94	6.60	6.0909E+000		-1.3992E+000
	591.81	4.83	8.6503E+000		5.9839E+000
	723.30	19.70	2.0161E+000		-1.4807E-001
	756.87	4.33	9.2508E+000		1.1616E+000
	873.19	11.50	3.4599E+000		2.6006E+000
	996.32	10.30	3.6683E+000		4.7005E+000
	1004.76	17.90	1.9705E+000		6.0951E-001
	1274.45	35.50	9.5084E-001		3.4215E-001
Eu-155	86.54	30.90	5.6684E+000	5.54E+000	7.3597E+000
	105.31	20.70	5.5379E+000		-1.8192E+000
Am-241	59.54	35.90	1.4646E+001	1.46E+001	-1.1994E+001
Cm-243	228.19	10.56	3.9713E+000	2.77E+000	3.3239E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.7656E+000	2.77E+000	-7.5689E-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 8/3/2006 3:24:06 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-02-121-F-

Sample Title: OOL-10-02-121-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 3:14:03 PM

Live Time: 600.0 seconds

Real Time: 601.4 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 4/26/2006

Calibration Efficiency: 7829Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-121-F-
Title: OOL-10-02-121-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	297-	305	301.04	75.22	0.93	1.92E+002	86.34	8.15E+002
2	336-	346	341.03	85.22	0.61	8.45E+001	93.27	9.11E+002
3	2041-	2055	2045.56	511.40	0.31	5.19E+001	40.85	1.15E+002
4	4687-	4699	4692.68	1173.27	0.52	2.83E+001	19.05	2.47E+001
5	5321-	5340	5330.65	1332.78	0.71	8.28E+001	19.79	5.21E+000
6	5833-	5857	5844.81	1461.34	1.34	2.39E+002	33.27	1.22E+001
7	7054-	7067	7060.14	1765.21	0.35	1.16E+001	13.57	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: 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	2.85671E-001	2.28530E-001
K-40	0.991	1460.81*	10.67	1.67809E+001	2.70386E+000
Co-60	0.998	1173.22*	100.00	1.95197E-001	1.32314E-001
		1332.49*	100.00	6.01040E-001	1.51178E-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	2.856711E-001	2.285301E-001
K-40	0.991	1.678090E+001	2.703857E+000
Co-60	0.998	3.712335E-001	9.956566E-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
1	75.22	3.1927E-001	45.07
2	85.22	1.4079E-001	110.42
7	1765.21	1.9312E-002	117.13

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	2.0331E-001	1.24E-001	1.9520E-001
		1332.49*	100.00	1.2409E-001		6.0104E-001
	Nb-94	702.63	100.00	3.7605E-001	3.66E-001	-2.0616E-001
		871.10	100.00	3.6620E-001		-5.8733E-001
	Ag-108m	79.20	7.10	3.2232E+001	4.01E-001	-3.3915E+001
		433.93	89.90	4.0081E-001		-1.1665E-001
		614.37	90.40	4.3217E-001		-7.3278E-001
		722.95	90.50	4.1723E-001		1.4228E-001
	Sb-125	176.33	6.89	7.1958E+000	1.28E+000	3.5464E-001
		427.89	29.33	1.2774E+000		5.6313E-001
		463.38	10.35	3.6693E+000		2.9527E+000
		600.56	17.80	2.3018E+000		1.8376E+000
		606.64	5.02	8.2787E+000		3.7713E+000
		635.90	11.32	3.3358E+000		8.5895E-001
	Cs-134	563.23	8.38	4.5948E+000	4.31E-001	3.5912E+000
		569.32	15.43	2.5881E+000		1.9227E+000
		604.70	97.60	4.3095E-001		1.4792E-001
		795.84	85.40	4.6718E-001		-1.2244E-002
		801.93	8.73	4.3976E+000		2.1371E+000
	Cs-137	661.65	85.12	4.8359E-001	4.84E-001	2.0634E-001
	Eu-152	121.78	28.40	3.0399E+000	1.09E+000	-1.1685E+000
		244.69	7.49	5.6774E+000		-7.0567E+000
		344.27	26.50	1.4530E+000		8.7155E-001
		778.89	12.74	3.1065E+000		1.2313E+000
		867.32	4.16	9.2658E+000		-1.4197E+001
		964.01	14.40	2.6726E+000		1.4615E+000
		1085.78	10.00	3.2808E+000		2.2118E+000
		1112.02	13.30	2.3582E+000		-2.3436E+000
		1407.95	20.70	1.0947E+000		-4.4239E-001
	Eu-154	123.07	40.50	2.1119E+000	9.98E-001	1.1937E-001
		247.94	6.60	6.2833E+000		-1.4363E+000
		591.81	4.83	8.3680E+000		5.0611E+000
		723.30	19.70	1.9394E+000		9.5970E-001
		756.87	4.33	8.6084E+000		-3.0282E+000
		873.19	11.50	3.1752E+000		-2.5224E+000
		996.32	10.30	3.4032E+000		-2.1139E+000
		1004.76	17.90	2.0252E+000		-5.7286E-001
		1274.45	35.50	9.9830E-001		1.0798E+000
	Eu-155	86.54	30.90	5.6333E+000	5.59E+000	5.3377E+000
		105.31	20.70	5.5876E+000		3.1992E+000
	Am-241	59.54	35.90	1.5060E+001	1.51E+001	-1.5503E+001
	Cm-243	228.19	10.56	4.0121E+000	2.74E+000	-6.3244E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.7380E+000	2.74E+000	-7.8762E-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 8/3/2006 3:09:08 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-02-122-F-

Sample Title: OOL-10-02-122-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 2:59:04 PM

Live Time: 600.0 seconds

Real Time: 601.4 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 4/26/2006

Calibration Efficiency: 7829Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-122-F-
Title: OOL-10-02-122-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	297-	309	300.73	75.14	0.84	1.82E+002	121.55	1.39E+003
2	787-	799	794.07	198.49	1.05	5.63E+001	44.96	1.79E+002
3	950-	960	954.78	238.67	0.96	8.18E+001	37.02	1.15E+002
4	2035-	2054	2043.05	510.78	1.88	1.34E+002	42.48	9.56E+001
5	5321-	5337	5329.58	1332.52	0.28	4.54E+001	23.02	2.96E+001
6	5834-	5855	5844.46	1461.25	2.15	2.22E+002	36.06	3.06E+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: 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	7.39817E-001	2.55874E-001
K-40	0.994	1460.81*	10.67	1.56260E+001	2.83175E+000
Pb-212	0.577	74.81* @	10.70	1.88086E+001	1.30792E+001
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.35656E-001	4.00332E-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	7.398168E-001	2.558735E-001
K-40	0.994	1.562605E+001	2.831753E+000
Pb-212 @	0.577	8.356557E-001	4.003322E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	198.49	9.3750E-002	79.93
5	1332.52	7.5622E-002	50.75

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: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	3.9848E-001	3.80E-001	2.3462E-001
	1332.49	100.00	3.8027E-001		6.2748E-001
Nb-94	702.63	100.00	3.8153E-001	3.82E-001	-1.3566E-001
	871.10	100.00	4.1244E-001		4.2252E-001
Ag-108m	79.20	7.10	3.5776E+001	4.17E-001	3.3155E+000
	433.93	89.90	4.1668E-001		-6.5972E-002
	614.37	90.40	4.5540E-001		2.3793E-001
	722.95	90.50	4.1723E-001		1.1276E-001
Sb-125	176.33	6.89	7.3708E+000	1.35E+000	1.3550E+000
	427.89	29.33	1.3477E+000		-6.9174E-001
	463.38	10.35	3.6937E+000		1.5361E-001
	600.56	17.80	2.4519E+000		2.5500E+000
	606.64	5.02	8.3330E+000		-1.7872E+000
	635.90	11.32	3.5145E+000		1.0155E+000
Cs-134	563.23	8.38	4.4109E+000	4.33E-001	-6.8177E-001
	569.32	15.43	2.5463E+000		1.6982E+000
	604.70	97.60	4.3279E-001		1.1121E-001
	795.84	85.40	4.5139E-001		2.0338E-001
Cs-137	801.93	8.73	4.4891E+000	4.80E-001	-1.1176E+000
	661.65	85.12	4.8014E-001		-5.6736E-002
Eu-152	121.78	28.40	3.1944E+000	1.21E+000	3.3674E+000
	244.69	7.49	5.7286E+000		8.2272E-001
	344.27	26.50	1.3928E+000		-1.1804E+000
	778.89	12.74	2.9738E+000		5.0967E-001
	867.32	4.16	9.2371E+000		-1.3206E+001
	964.01	14.40	3.0028E+000		1.2519E+000
	1085.78	10.00	3.5560E+000		-1.3627E+000
	1112.02	13.30	2.7016E+000		-2.7901E-001
Eu-154	1407.95	20.70	1.2125E+000	8.47E-001	6.2560E-001
	123.07	40.50	2.2037E+000		1.9063E+000
	247.94	6.60	6.2053E+000		-3.7992E+000
	591.81	4.83	9.1533E+000		8.6133E+000
	723.30	19.70	1.9226E+000		3.1729E-001
	756.87	4.33	9.1261E+000		-7.8473E-001
	873.19	11.50	3.5396E+000		1.6351E+000
Eu-155	996.32	10.30	3.6555E+000	5.65E+000	-6.9939E-001
	1004.76	17.90	2.1806E+000		2.3205E+000
	1274.45	35.50	8.4743E-001		-2.2111E-001
Am-241	86.54	30.90	5.9217E+000	1.55E+001	4.0254E+000
	105.31	20.70	5.6452E+000		2.7828E+000
Cm-243	59.54	35.90	1.5538E+001	2.82E+000	-9.5810E+000
	228.19	10.56	4.0323E+000		-7.3603E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.8155E+000	2.82E+000	1.8391E-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 8/3/2006 2:28:01 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-10-02-123-F-

Sample Title: OOL-10-02-123-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 2:18:04 PM

Live Time: 600.0 seconds

Real Time: 601.4 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 4/26/2006

Calibration Efficiency: 7829Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

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

Filename: ORG7829
Log Number: OOL-10-02-123-F-
Title: OOL-10-02-123-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	297-	305	301.14	75.24	0.98	9.32E+001	85.83	8.55E+002
2	785-	801	794.08	198.49	0.66	6.72E+001	54.84	2.29E+002
3	2032-	2056	2044.43	511.12	1.34	1.39E+002	52.04	1.37E+002
4	2327-	2337	2331.94	583.01	0.27	2.39E+001	24.81	5.71E+001
5	5323-	5338	5330.55	1332.76	1.22	6.90E+001	21.21	1.60E+001
6	5833-	5855	5843.90	1461.11	1.57	2.25E+002	32.78	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: 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	7.64149E-001	3.05978E-001
K-40	0.997	1460.81*	10.67	1.57893E+001	2.63407E+000
TL-208	0.753	277.35	6.80		
		510.84*	21.60	3.53773E+000	1.44573E+000
		583.14*	84.20	1.62815E-001	1.70414E-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
ANN	1.000	7.289810E-001	3.081818E-001
K-40	0.997	1.578928E+001	2.634070E+000
TL-208	0.753	1.628145E-001	1.703317E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	75.24	1.5529E-001	92.12
2	198.49	1.1207E-001	81.56
5	1332.76	1.1500E-001	30.74

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	3.3806E-001	3.38E-001	-9.5159E-002
	1332.49	100.00	3.8342E-001		5.4263E-001
Nb-94	702.63	100.00	4.0572E-001	4.06E-001	-2.0612E-001
	871.10	100.00	4.0908E-001		-3.7639E-001
Ag-108m	79.20	7.10	3.2328E+001	4.15E-001	-2.8200E+001
	433.93	89.90	4.1485E-001		-2.1091E-002
	614.37	90.40	4.5643E-001		-1.3402E-001
	722.95	90.50	4.4114E-001		-5.7694E-002
Sb-125	176.33	6.89	7.3187E+000	1.25E+000	-2.6882E+000
	427.89	29.33	1.2521E+000		-6.8497E-001
	463.38	10.35	3.7501E+000		5.7784E-002
	600.56	17.80	2.3121E+000		-1.2513E-001
	606.64	5.02	8.5469E+000		4.9550E+000
	635.90	11.32	3.5491E+000		-1.1700E+000
Cs-134	563.23	8.38	4.6060E+000	4.30E-001	2.6530E+000
	569.32	15.43	2.4479E+000		-1.1209E-001
	604.70	97.60	4.3003E-001		-1.4129E-001
	795.84	85.40	4.8119E-001		1.3062E-002
	801.93	8.73	4.5533E+000		-4.1812E+000
Cs-137	661.65	85.12	5.0375E-001	5.04E-001	3.6252E-001
Eu-152	121.78	28.40	3.0681E+000	1.05E+000	-5.0469E-001
	244.69	7.49	5.7938E+000		-3.5503E+000
	344.27	26.50	1.4610E+000		5.3233E-001
	778.89	12.74	3.0717E+000		-1.9075E+000
	867.32	4.16	9.8230E+000		-1.4937E+000
	964.01	14.40	2.8345E+000		2.3424E+000
	1085.78	10.00	3.7137E+000		2.5673E-001
	1112.02	13.30	2.6457E+000		-1.9181E-001
	1407.95	20.70	1.0522E+000		1.9662E-001
Eu-154	123.07	40.50	2.1384E+000	1.01E+000	-1.8435E-001
	247.94	6.60	6.3176E+000		1.1478E+000
	591.81	4.83	8.5946E+000		5.8526E+000
	723.30	19.70	2.0321E+000		4.0140E-001
	756.87	4.33	9.0757E+000		1.1253E+000
	873.19	11.50	3.6654E+000		2.7152E+000
	996.32	10.30	3.7689E+000		-1.1938E-001
	1004.76	17.90	2.2230E+000		1.3785E+000
	1274.45	35.50	1.0121E+000		8.0787E-001
Eu-155	86.54	30.90	5.7409E+000	5.69E+000	8.7655E+000
	105.31	20.70	5.6925E+000		2.3325E+000
Am-241	59.54	35.90	1.4723E+001	1.47E+001	8.3973E+000
Cm-243	228.19	10.56	3.7658E+000	2.93E+000	-3.3748E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.9343E+000	2.93E+000	5.5444E-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 8/3/2006 2:10:06 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-02-124-F-

Sample Title: OOL-10-02-124-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 2:00:01 PM

Live Time: 600.0 seconds

Real Time: 601.4 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 4/26/2006

Calibration Efficiency: 7829Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-124-F-
Title: OOL-10-02-124-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	292-	305	301.26	75.27	1.05	4.00E+002	120.53	1.23E+003
2	951-	960	955.28	238.80	0.86	5.93E+001	32.59	9.57E+001
3	1622-	1631	1626.47	406.62	0.96	2.81E+001	22.15	4.39E+001
4	2377-	2387	2382.73	595.71	0.40	3.05E+001	25.87	6.05E+001
5	2430-	2443	2436.04	609.03	0.93	5.10E+001	29.55	6.40E+001
6	3174-	3186	3179.66	794.97	0.73	1.85E+001	22.61	4.35E+001
7	5322-	5340	5330.37	1332.71	1.54	1.15E+002	24.53	1.21E+001
8	5833-	5854	5843.62	1461.04	1.88	2.02E+002	33.71	2.49E+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: 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	0.998	1460.81*	10.67	1.42007E+001	2.63265E+000
Pb-212	0.576	74.81* @	10.70	4.11241E+001	1.47714E+001
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60		
Bi-214	0.403	609.31*	46.30	6.05764E-001	3.46343E-001
		1120.29	15.10	6.41031E-001	3.79643E-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: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	0.998	1.420073E+001	2.632653E+000
Pb-212 @	0.576	6.057641E-001	3.463431E-001
Bi-214	0.403	6.410306E-001	3.796434E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	406.62	4.6858E-002	78.78
4	595.71	5.0833E-002	84.81
6	794.97	3.0813E-002	122.27
7	1332.71	1.9150E-001	21.35

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: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	3.8042E-001	3.80E-001	2.3560E-001
	1332.49	100.00	4.4150E-001		5.8265E-001
Nb-94	702.63	100.00	4.1578E-001	3.88E-001	-1.1936E-002
	871.10	100.00	3.8826E-001		-9.0847E-002
Ag-108m	79.20	7.10	3.3264E+001	4.38E-001	-4.7176E+001
	433.93	89.90	4.3808E-001		1.1011E-002
	614.37	90.40	4.8523E-001		1.2947E-001
	722.95	90.50	4.9981E-001		3.3408E-001
Sb-125	176.33	6.89	7.4567E+000	1.35E+000	-3.8790E+000
	427.89	29.33	1.3529E+000		-5.6106E-001
	463.38	10.35	3.7819E+000		-8.9431E-002
	600.56	17.80	2.5281E+000		-1.9563E+000
	606.64	5.02	9.0256E+000		8.8860E+000
	635.90	11.32	3.6088E+000		1.7871E+000
Cs-134	563.23	8.38	4.9204E+000	4.65E-001	-3.4335E-001
	569.32	15.43	2.7488E+000		8.7570E-001
	604.70	97.60	4.6462E-001		-9.2138E-002
	795.84	85.40	4.7614E-001		-1.0218E-001
	801.93	8.73	4.8372E+000		3.1348E+000
Cs-137	661.65	85.12	5.0484E-001	5.05E-001	-6.0340E-002
Eu-152	121.78	28.40	3.1729E+000	1.19E+000	3.8491E-001
	244.69	7.49	5.8009E+000		2.2704E+000
	344.27	26.50	1.5107E+000		2.3280E-002
	778.89	12.74	3.0717E+000		-2.1234E+000
	867.32	4.16	9.7960E+000		6.2431E+000
	964.01	14.40	2.8917E+000		2.2646E-001
	1085.78	10.00	3.5413E+000		-5.0786E+000
	1112.02	13.30	2.6116E+000		-2.5811E-002
1407.95	20.70	1.1874E+000	1.0999E+000		
Eu-154	123.07	40.50	2.1726E+000	9.51E-001	-7.1935E-001
	247.94	6.60	6.3518E+000		-6.0423E+000
	591.81	4.83	9.4452E+000		8.8153E-001
	723.30	19.70	2.2870E+000		-3.2979E-001
	756.87	4.33	9.1261E+000		2.1129E+000
	873.19	11.50	3.4295E+000		-9.7625E-001
	996.32	10.30	3.8547E+000		-1.7005E+000
Eu-155	1004.76	17.90	2.2089E+000	5.57E+000	1.3703E+000
	1274.45	35.50	9.5084E-001		4.7916E-001
	86.54	30.90	5.8135E+000		5.8539E+000
Am-241	105.31	20.70	5.5664E+000	1.43E+001	4.0146E-001
	59.54	35.90	1.4267E+001		-5.5706E+000
Cm-243	228.19	10.56	4.0524E+000	2.91E+000	-1.2101E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.9083E+000	2.91E+000	2.7337E-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 8/3/2006 1:49:44 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-02-125-F-

Sample Title: OOL-10-02-125-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 1:39:39 PM

Live Time: 600.0 seconds

Real Time: 601.5 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 4/26/2006

Calibration Efficiency: 7829Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-125-F-
Title: OOL-10-02-125-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	309	300.38	75.05	0.93	2.19E+002	124.60	1.38E+003
2	950-	960	954.36	238.57	1.33	8.65E+001	38.51	1.24E+002
3	2034-	2054	2042.44	510.62	0.89	1.52E+002	46.40	1.13E+002
4	2430-	2444	2437.48	609.40	0.48	4.66E+001	30.78	6.94E+001
5	3637-	3650	3643.70	910.99	1.27	4.96E+001	23.99	3.64E+001
6	5322-	5341	5329.68	1332.54	0.65	8.60E+001	25.89	2.50E+001
7	5834-	5855	5844.14	1461.17	0.45	2.32E+002	33.27	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: 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	8.39372E-001	2.81289E-001
K-40	0.996	1460.81*	10.67	1.62685E+001	2.68318E+000
Pb-212	0.577	74.81* @	10.70	2.27195E+001	1.36553E+001
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.405	238.63*	44.60	8.84242E-001	4.17194E-001
		609.31*	46.30	5.84782E-001	3.93364E-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
ANN	0.995	8.393716E-001	2.812894E-001
K-40	0.996	1.626852E+001	2.683175E+000
Pb-212 @	0.577	8.842418E-001	4.171935E-001
Bi-214	0.405	5.847823E-001	3.933639E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.99	8.2665E-002	48.36
6	1332.54	1.4333E-001	30.10

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	3.5838E-001	3.58E-001	-5.0635E-002
	1332.49	100.00	4.2213E-001		6.8296E-001
Nb-94	702.63	100.00	4.1179E-001	3.98E-001	-1.9455E-001
	871.10	100.00	3.9765E-001		8.0381E-003
Ag-108m	79.20	7.10	3.3840E+001	4.23E-001	-2.2828E+001
	433.93	89.90	4.2304E-001		-5.3424E-001
	614.37	90.40	5.0595E-001		-6.8571E-003
	722.95	90.50	4.4805E-001		-2.8388E-001
Sb-125	176.33	6.89	7.6589E+000	1.35E+000	2.7487E-001
	427.89	29.33	1.3451E+000		1.9362E-001
	463.38	10.35	3.7501E+000		8.2050E-001
	600.56	17.80	2.4128E+000		1.0536E+000
	606.64	5.02	9.0919E+000		2.4794E+000
	635.90	11.32	3.7089E+000		-1.7948E+000
Cs-134	563.23	8.38	4.6507E+000	4.55E-001	-4.5366E+000
	569.32	15.43	2.6640E+000		-6.9311E-001
	604.70	97.60	4.5948E-001		-1.4668E-001
	795.84	85.40	4.5539E-001		-1.0922E-001
	801.93	8.73	4.4891E+000		-5.3434E+000
Cs-137	661.65	85.12	4.9934E-001	4.99E-001	4.1268E-001
Eu-152	121.78	28.40	3.2231E+000	1.15E+000	-7.7135E-001
	244.69	7.49	5.9987E+000		1.7308E-001
	344.27	26.50	1.5662E+000		-7.3400E-001
	778.89	12.74	3.2582E+000		-1.6928E+000
	867.32	4.16	9.7960E+000		2.5608E-001
	964.01	14.40	3.0106E+000		3.5225E+000
	1085.78	10.00	3.8913E+000		2.5084E+000
	1112.02	13.30	2.9341E+000		1.4030E+000
1407.95	20.70	1.1487E+000	2.1605E-001		
Eu-154	123.07	40.50	2.2478E+000	9.16E-001	-3.4533E-002
	247.94	6.60	6.6103E+000		1.7872E+000
	591.81	4.83	8.6133E+000		2.1463E+000
	723.30	19.70	2.0743E+000		4.7486E-001
	756.87	4.33	8.9741E+000		-6.2875E+000
	873.19	11.50	3.5099E+000		-3.8248E-001
	996.32	10.30	3.7440E+000		-2.7465E+000
	1004.76	17.90	2.1081E+000		3.3741E-002
1274.45	35.50	9.1606E-001	4.7248E-001		
Eu-155	86.54	30.90	5.9177E+000	5.92E+000	8.5619E+000
	105.31	20.70	5.9181E+000		4.0081E+000
Am-241	59.54	35.90	1.5077E+001	1.51E+001	-9.1985E+000
Cm-243	228.19	10.56	4.2341E+000	2.94E+000	3.2075E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.9386E+000	2.94E+000	-1.6837E+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 8/3/2006 1:55:51 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-10-02-126-F-

Sample Title: OOL-10-02-126-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 1:45:48 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-126-F-
Title: OOL-10-02-126-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	336-	345	340.02	85.09	0.94	1.20E+002	87.71	8.26E+002
2	948-	961	954.90	238.82	1.09	7.63E+001	51.31	2.21E+002
3	2350-	2360	2355.81	589.07	0.52	1.93E+001	22.06	4.47E+001
4	2429-	2444	2437.84	609.58	0.80	5.79E+001	32.85	7.41E+001
5	4688-	4703	4695.78	1174.10	1.19	4.27E+001	23.24	3.23E+001
6	5096-	5107	5101.85	1275.62	0.51	2.30E+001	17.04	2.10E+001
7	5326-	5346	5335.22	1333.97	0.90	1.46E+002	26.92	1.22E+001
8	5837-	5860	5848.69	1462.34	1.50	3.25E+002	37.86	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: 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	0.913	1460.81*	10.67	2.13857E+001	3.03377E+000
Co-60	0.944	1173.22*	100.00	2.74645E-001	1.50878E-001
		1332.49*	100.00	9.72621E-001	1.95110E-001
Pb-212	0.402	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.404	238.63*	44.60	7.46946E-001	5.15707E-001
		609.31*	46.30	6.92005E-001	4.02160E-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	0.913	2.138573E+001	3.033772E+000
Co-60	0.944	5.358364E-001	1.193543E-001
Pb-212 @	0.402	7.469463E-001	5.157072E-001
Bi-214	0.404	6.920051E-001	4.021599E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	85.09	2.0044E-001	72.93
3	589.07	3.2174E-002	114.25
6	1275.62	3.8333E-002	74.09

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: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	2.2651E-001	1.62E-001	2.7465E-001
		1332.49*	100.00	1.6173E-001		9.7262E-001
	Nb-94	702.63	100.00	3.6263E-001	3.63E-001	-3.5225E-001
		871.10	100.00	3.8489E-001		1.5147E-001
	Ag-108m	79.20	7.10	2.3819E+001	4.07E-001	-3.9574E+001
		433.93	89.90	4.0698E-001		1.0058E-001
		614.37	90.40	4.6551E-001		8.4911E-002
		722.95	90.50	4.1919E-001		1.3508E-002
	Sb-125	176.33	6.89	6.6003E+000	1.27E+000	-1.0313E+000
		427.89	29.33	1.2656E+000		1.3831E+000
		463.38	10.35	3.4576E+000		1.8647E+000
		600.56	17.80	2.1915E+000		1.1922E+000
		606.64	5.02	8.2694E+000		3.2625E+000
		635.90	11.32	3.1563E+000		-1.4088E+000
	Cs-134	563.23	8.38	4.2585E+000	4.02E-001	-6.8282E-001
		569.32	15.43	2.3081E+000		-4.0059E-001
		604.70	97.60	4.0230E-001		1.0094E-001
		795.84	85.40	4.2087E-001		4.1693E-002
		801.93	8.73	3.9953E+000		-4.4257E+000
	Cs-137	661.65	85.12	4.5659E-001	4.57E-001	4.0590E-001
	Eu-152	121.78	28.40	2.6413E+000	1.05E+000	1.4281E+000
		244.69	7.49	5.0952E+000		-1.1717E+000
		344.27	26.50	1.3169E+000		-1.5057E-001
		778.89	12.74	2.9003E+000		-2.0368E+000
		867.32	4.16	9.1646E+000		-1.1192E+001
		964.01	14.40	2.6832E+000		-3.9700E+000
		1085.78	10.00	3.3970E+000		1.5746E+000
		1112.02	13.30	2.4939E+000		-3.4501E+000
		1407.95	20.70	1.0549E+000		-2.4929E-001
	Eu-154	123.07	40.50	1.8140E+000	9.13E-001	5.0271E-001
		247.94	6.60	5.8669E+000		1.0156E+000
		591.81	4.83	7.7277E+000		-2.4663E+000
		723.30	19.70	1.9158E+000		1.2624E-002
		756.87	4.33	8.4019E+000		5.9861E+000
		873.19	11.50	3.3300E+000		6.5410E-001
		996.32	10.30	3.5610E+000		2.8133E+000
		1004.76	17.90	1.9420E+000		6.5843E-001
		1274.45	35.50	9.1274E-001		6.6629E-001
	Eu-155	86.54	30.90	4.4585E+000	4.46E+000	3.7022E+000
		105.31	20.70	4.6276E+000		2.4812E+000
	Am-241	59.54	35.90	7.7258E+000	7.73E+000	-6.0895E+000
	Cm-243	228.19	10.56	3.7988E+000	2.70E+000	-1.5548E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.6957E+000	2.70E+000	1.1192E+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 8/3/2006 2:19:40 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-127-F-

Sample Title: OOL-10-02-127-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 2:09:38 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-127-F-
Title: OOL-10-02-127-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	297-	307	300.57	75.23	0.83	1.79E+002	99.03	9.89E+002
2	347-	355	350.49	87.71	0.36	7.02E+001	77.32	6.95E+002
3	947-	961	954.89	238.82	1.03	5.56E+001	51.14	2.17E+002
4	1402-	1414	1407.55	351.99	0.40	4.55E+001	35.42	1.06E+002
5	2036-	2054	2043.90	511.09	0.68	1.03E+002	43.61	1.16E+002
6	2434-	2446	2438.40	609.72	0.88	4.74E+001	26.85	5.26E+001
7	3638-	3654	3647.13	911.92	0.82	5.47E+001	29.98	5.73E+001
8	4689-	4703	4696.54	1174.29	0.55	4.64E+001	21.30	2.46E+001
9	5327-	5346	5335.57	1334.06	1.20	1.44E+002	28.44	1.97E+001
10	5838-	5859	5849.47	1462.54	1.99	3.39E+002	39.28	1.65E+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	1.000	511.00*	100.00	5.39914E-001	2.41312E-001
K-40	0.891	1460.81*	10.67	2.23407E+001	3.15463E+000
Co-60	0.933	1173.22*	100.00	2.98277E-001	1.38879E-001
		1332.49*	100.00	9.62466E-001	2.04197E-001
Pb-212	0.713	74.81* @	10.70	1.57457E+001	9.23284E+000
		77.11 @	18.00		
		87.30* @	8.00	5.51356E+000	6.16719E+000
Bi-214	0.401	238.63*	44.60	5.44116E-001	5.07737E-001
		609.31*	46.30	5.66851E-001	3.28703E-001
		1120.29	15.10		
PB-214	0.304	1764.49	15.80		
		74.82* @	6.21	2.71302E+001	1.60299E+001
		77.11 @	10.50		
		87.30* @	4.67	9.44507E+000	1.05888E+001
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	5.80671E-001	4.62222E-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	5.399143E-001	2.413122E-001
K-40	0.891	2.234068E+001	3.154627E+000
Co-60	0.933	5.083403E-001	1.148360E-001
Pb-212 @	0.713	5.441158E-001	5.077375E-001
Bi-214	0.401	5.668510E-001	3.287027E-001
PB-214 @	0.304	5.806712E-001	4.610490E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	911.92	9.1164E-002	54.82

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: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	1.9643E-001	1.96E-001	2.9828E-001
		1332.49*	100.00	1.9676E-001		9.6247E-001
	Nb-94	702.63	100.00	3.7481E-001	3.75E-001	-1.8814E-001
		871.10	100.00	3.8489E-001		-2.3784E-002
	Ag-108m	79.20	7.10	2.3727E+001	3.82E-001	1.5439E+001
		433.93	89.90	3.8224E-001		-3.4619E-004
		614.37	90.40	4.3639E-001		8.2594E-002
		722.95	90.50	4.1808E-001		1.4190E-001
	Sb-125	176.33	6.89	6.6534E+000	1.14E+000	-1.2042E+000
		427.89	29.33	1.1414E+000		-3.8537E-001
		463.38	10.35	3.4734E+000		9.4640E-001
		600.56	17.80	2.1667E+000		-1.6543E-001
		606.64	5.02	8.1197E+000		-2.4582E+000
		635.90	11.32	3.1825E+000		-9.9057E-001
	Cs-134	563.23	8.38	4.2915E+000	3.84E-001	-9.1470E-001
		569.32	15.43	2.3912E+000		-6.1811E-001
		604.70	97.60	3.8395E-001		-1.8696E-001
		795.84	85.40	4.3364E-001		2.8821E-001
		801.93	8.73	4.3350E+000		1.8545E+000
	Cs-137	661.65	85.12	4.1758E-001	4.18E-001	8.7308E-002
	Eu-152	121.78	28.40	2.4912E+000	1.02E+000	-2.2362E+000
		244.69	7.49	5.3876E+000		3.0027E+000
		344.27	26.50	1.2783E+000		4.4279E-001
		778.89	12.74	2.8068E+000		1.2409E+000
		867.32	4.16	9.2684E+000		-1.1734E+001
		964.01	14.40	2.6440E+000		-3.9821E+000
		1085.78	10.00	3.2877E+000		3.5544E-001
		1112.02	13.30	2.5862E+000		1.5586E-001
		1407.95	20.70	1.0170E+000		3.0812E-001
	Eu-154	123.07	40.50	1.7350E+000	8.59E-001	-1.0438E+000
		247.94	6.60	5.7212E+000		-3.4886E+000
		591.81	4.83	7.9137E+000		-3.9696E+000
		723.30	19.70	1.9209E+000		9.4631E-001
		756.87	4.33	8.4999E+000		-9.8077E-001
		873.19	11.50	3.4045E+000		4.2601E+000
		996.32	10.30	3.5957E+000		4.3909E+000
		1004.76	17.90	1.9206E+000		-1.1055E+000
		1274.45	35.50	8.5933E-001		-3.8136E-001
	Eu-155	86.54	30.90	4.5138E+000	4.51E+000	6.5175E+000
		105.31	20.70	4.5121E+000		4.8405E-001
	Am-241	59.54	35.90	7.9787E+000	7.98E+000	2.3995E-001
	Cm-243	228.19	10.56	4.0184E+000	2.54E+000	1.4116E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.5450E+000	2.54E+000	-3.6689E-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 8/3/2006 2:34:02 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-128-F-

Sample Title: OOL-10-02-128-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 2:23:59 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-02-128-F-
 Title: OOL-10-02-128-F-G
 Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	305	292.15	73.12	0.68	1.04E+002	45.28	8.70E+002
m	2	287-	305	300.66	75.25	0.68	2.34E+002	54.77	9.10E+002
	3	951-	961	955.01	238.85	0.50	3.95E+001	42.84	1.81E+002
	4	2034-	2053	2045.34	511.45	1.42	1.23E+002	42.21	9.75E+001
	5	2328-	2338	2333.17	583.41	0.80	3.34E+001	24.31	5.06E+001
	6	2430-	2443	2438.05	609.63	1.07	4.13E+001	29.96	6.97E+001
	7	4478-	4489	4483.91	1121.13	0.98	1.85E+001	17.83	2.55E+001
	8	4691-	4704	4696.52	1174.28	0.90	3.85E+001	20.32	2.45E+001
	9	4756-	4767	4761.57	1190.55	0.31	1.50E+001	12.00	9.00E+000
	10	5326-	5343	5334.34	1333.75	1.48	1.03E+002	27.46	2.86E+001
	11	5838-	5860	5849.45	1462.53	1.78	3.18E+002	38.46	1.73E+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: 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	6.43811E-001	2.39449E-001
K-40	0.892	1460.81*	10.67	2.09070E+001	3.04464E+000
Co-60	0.949	1173.22*	100.00	2.47410E-001	1.32028E-001
		1332.49*	100.00	6.89712E-001	1.91005E-001
TL-208	0.749	277.35	6.80		
		510.84*	21.60	2.98061E+000	1.13497E+000
		583.14*	84.20	2.16670E-001	1.60332E-001
		860.37	12.46		
Pb-212	0.564	74.81* @	10.70	2.05180E+001	6.26892E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.703	238.63*	44.60	3.86928E-001	4.23696E-001
		609.31*	46.30	4.93848E-001	3.63492E-001
		1120.29*	15.10	7.80943E-001	7.56424E-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: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	5.970105E-001	2.419354E-001
K-40	0.892	2.090697E+001	3.044643E+000
Co-60	0.949	3.904136E-001	1.086074E-001
TL-208	0.749	2.166695E-001	1.601759E-001
Pb-212 @	0.564	3.869276E-001	4.236962E-001
Bi-214	0.703	5.477070E-001	3.276274E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.7392E-001	43.39
9	1190.55	2.5000E-002	80.02

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: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	1.9302E-001	1.93E-001	2.4741E-001
		1332.49*	100.00	2.2961E-001		6.8971E-001
	Nb-94	702.63	100.00	3.6056E-001	3.46E-001	-1.1042E-001
		871.10	100.00	3.4623E-001		-5.6024E-002
	Ag-108m	79.20	7.10	2.3788E+001	3.63E-001	-2.6429E+001
		433.93	89.90	3.6253E-001		-3.0642E-001
		614.37	90.40	4.4218E-001		-1.5059E-001
		722.95	90.50	3.9529E-001		-1.8539E-001
	Sb-125	176.33	6.89	6.7060E+000	1.20E+000	9.2251E-001
		427.89	29.33	1.1998E+000		1.0938E+000
		463.38	10.35	3.4178E+000		4.0272E-001
		600.56	17.80	2.2062E+000		8.3382E-001
		606.64	5.02	7.8811E+000		3.5793E-001
		635.90	11.32	2.9280E+000		-1.5661E+000
	Cs-134	563.23	8.38	4.1918E+000	3.92E-001	-1.9721E+000
		569.32	15.43	2.3202E+000		1.5527E+000
		604.70	97.60	3.9231E-001		5.7548E-002
		795.84	85.40	4.1957E-001		2.3628E-001
		801.93	8.73	3.8616E+000		1.1904E-001
	Cs-137	661.65	85.12	4.2827E-001	4.28E-001	-3.3019E-001
	Eu-152	121.78	28.40	2.5807E+000	9.36E-001	1.9043E-001
		244.69	7.49	5.3448E+000		1.8437E+000
		344.27	26.50	1.3437E+000		-3.7720E-001
		778.89	12.74	2.9418E+000		-3.7433E-001
		867.32	4.16	8.2852E+000		1.7817E+000
		964.01	14.40	2.6754E+000		-9.8570E-001
		1085.78	10.00	3.3015E+000		1.2025E+000
		1112.02	13.30	2.6063E+000		1.6251E+000
		1407.95	20.70	9.3622E-001		-5.1726E-001
	Eu-154	123.07	40.50	1.7832E+000	8.68E-001	8.1431E-001
		247.94	6.60	5.9342E+000		6.9902E-001
		591.81	4.83	7.9503E+000		1.7246E+000
		723.30	19.70	1.8376E+000		3.3542E-001
		756.87	4.33	8.5968E+000		-4.2344E-001
		873.19	11.50	3.0540E+000		-6.5459E-001
		996.32	10.30	3.3940E+000		-1.1777E-001
		1004.76	17.90	1.8769E+000		-1.5175E+000
		1274.45	35.50	8.6847E-001		3.7721E-001
	Eu-155	86.54	30.90	4.4202E+000	4.42E+000	3.5892E+000
		105.31	20.70	4.5613E+000		2.2044E+000
	Am-241	59.54	35.90	7.8549E+000	7.85E+000	2.4672E+000
	Cm-243	228.19	10.56	4.0600E+000	2.67E+000	1.6741E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.6697E+000	2.67E+000	3.4957E-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 8/3/2006 2:47:30 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-10-02-129-F-

Sample Title: OOL-10-02-129-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 2:37:28 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-129-F-
Title: OOL-10-02-129-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	291.82	73.04	0.84	2.04E+002	49.85	8.79E+002
m	2	286-	306	300.34	75.17	0.84	3.31E+002	56.07	1.05E+003
	3	335-	346	339.67	85.01	0.68	1.71E+002	102.89	1.03E+003
	4	2037-	2053	2043.15	510.90	1.49	7.92E+001	37.21	8.98E+001
	5	2380-	2389	2384.92	596.35	0.53	2.04E+001	22.63	4.96E+001
	6	3639-	3655	3646.82	911.84	1.39	5.70E+001	28.47	4.90E+001
	7	5326-	5344	5335.47	1334.03	1.25	1.15E+002	25.57	1.65E+001
	8	5837-	5862	5850.07	1462.69	1.78	3.47E+002	36.51	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	1.000	511.00*	100.00	4.16292E-001	2.03996E-001
K-40	0.873	1460.81*	10.67	2.28364E+001	3.03180E+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: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	4.162922E-001	2.039961E-001
K-40	0.873	2.283637E+001	3.031802E+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	73.04	3.4045E-001	24.40
m 2	75.17	5.5184E-001	16.93
3	85.01	2.8560E-001	60.04
5	596.35	3.4012E-002	110.88
6	911.84	9.4969E-002	49.97
7	1334.03	1.9091E-001	22.32

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: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	3.1928E-001	3.19E-001	2.6448E-001
	1332.49	100.00	4.1165E-001		8.3009E-001
Nb-94	702.63	100.00	3.5743E-001	3.57E-001	-3.1634E-002
	871.10	100.00	3.6381E-001		-1.9941E-001
Ag-108m	79.20	7.10	2.3528E+001	3.82E-001	-2.8744E+000
	433.93	89.90	3.8224E-001		-4.2882E-002
	614.37	90.40	3.8461E-001		-3.4807E-001
	722.95	90.50	3.9176E-001		-3.0285E-001
Sb-125	176.33	6.89	7.0077E+000	1.18E+000	5.9819E+000
	427.89	29.33	1.1807E+000		1.5486E-001
	463.38	10.35	3.0077E+000		-6.7705E-001
	600.56	17.80	2.1517E+000		-6.6578E-001
	606.64	5.02	7.5628E+000		5.4185E+000
	635.90	11.32	3.1031E+000		1.2092E+000
Cs-134	563.23	8.38	4.2364E+000	3.69E-001	-3.3263E+000
	569.32	15.43	2.2530E+000		1.6671E-002
	604.70	97.60	3.6858E-001		-8.5298E-001
	795.84	85.40	4.2346E-001		2.9281E-001
	801.93	8.73	3.9557E+000		-8.6230E-002
Cs-137	661.65	85.12	4.1878E-001	4.19E-001	-8.2245E-002
Eu-152	121.78	28.40	2.6927E+000	9.91E-001	-1.0425E+000
	244.69	7.49	5.6645E+000		2.7141E+000
	344.27	26.50	1.3277E+000		6.6587E-001
	778.89	12.74	2.6828E+000		2.2639E+000
	867.32	4.16	9.0331E+000		4.0599E-002
	964.01	14.40	2.4638E+000		-2.4841E+000
	1085.78	10.00	3.3428E+000		-7.8293E-002
	1112.02	13.30	2.4516E+000		1.5266E+000
Eu-154	1407.95	20.70	9.9088E-001	8.41E-001	-8.4785E-001
	123.07	40.50	1.8601E+000		-1.0219E+000
	247.94	6.60	6.0090E+000		-1.7360E+000
	591.81	4.83	7.5369E+000		-5.2108E+000
	723.30	19.70	1.8215E+000		-8.1703E-001
	756.87	4.33	7.7063E+000		-1.0361E+001
	873.19	11.50	3.2245E+000		3.3527E-001
	996.32	10.30	3.3197E+000		1.1389E+000
Eu-155	1004.76	17.90	1.8397E+000	4.65E+000	-6.5758E-002
	1274.45	35.50	8.4072E-001		7.2544E-001
	86.54	30.90	4.6538E+000		4.9509E+000
Am-241	105.31	20.70	4.6987E+000	7.87E+000	1.0164E+000
	59.54	35.90	7.8681E+000		-5.8111E-001
Cm-243	228.19	10.56	4.1056E+000	2.70E+000	9.4016E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.6957E+000	2.70E+000	-1.5456E-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 8/3/2006 3:06:58 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-130-F-

Sample Title: OOL-10-02-130-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 2:56:56 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-02-130-F-
 Title: OOL-10-02-130-F-G
 Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	291.83	73.05	0.86	1.13E+002	49.38	1.22E+003
m	2	285-	306	299.78	75.03	0.87	2.93E+002	58.24	1.15E+003
	3	946-	962	953.99	238.60	0.87	8.60E+001	59.07	2.62E+002
	4	1402-	1411	1406.53	351.74	1.06	3.34E+001	28.50	7.86E+001
	5	1458-	1466	1461.66	365.52	0.50	1.82E+001	22.07	4.78E+001
	6	2427-	2443	2436.02	609.13	0.74	3.29E+001	35.34	9.21E+001
	7	3638-	3650	3644.36	911.23	0.69	3.47E+001	22.95	3.83E+001
	8	5321-	5337	5328.57	1332.31	1.36	8.52E+001	20.89	8.78E+000
	9	5831-	5855	5843.37	1461.01	1.97	2.95E+002	39.16	2.51E+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	1.93925E+001	3.01636E+000
Pb-212	0.566	74.81* @	10.70	2.59410E+001	7.23911E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60		
Bi-214	0.404	609.31*	46.30	8.41638E-001	5.92854E-001
		1120.29	15.10	3.93500E-001	4.25304E-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: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	1.939248E+001	3.016365E+000
Pb-212 @	0.566	8.416385E-001	5.928538E-001
Bi-214	0.404	3.935004E-001	4.253042E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	73.05	1.8811E-001	43.75
4	351.74	5.5655E-002	85.34
5	365.52	3.0316E-002	121.32
7	911.23	5.7894E-002	66.07
8	1332.31	1.4203E-001	24.51

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	3.1779E-001	3.18E-001	9.7974E-002
	1332.49	100.00	3.6068E-001		2.7219E-001
Nb-94	702.63	100.00	3.4022E-001	3.33E-001	1.9119E-001
	871.10	100.00	3.3271E-001		4.8345E-002
Ag-108m	79.20	7.10	2.4410E+001	3.61E-001	1.5717E-001
	433.93	89.90	3.6059E-001		2.3578E-002
	614.37	90.40	3.9982E-001		2.1806E-001
	722.95	90.50	3.8699E-001		-1.6922E-001
Sb-125	176.33	6.89	7.3868E+000	1.11E+000	3.2625E-001
	427.89	29.33	1.1067E+000		-3.9199E-001
	463.38	10.35	3.2196E+000		3.1113E+000
	600.56	17.80	1.9401E+000		-1.3408E+000
	606.64	5.02	7.8984E+000		2.9921E+000
	635.90	11.32	2.7716E+000		-5.3725E-001
Cs-134	563.23	8.38	3.9488E+000	3.84E-001	-5.3117E-001
	569.32	15.43	2.1514E+000		1.1228E+000
	604.70	97.60	3.9870E-001		-1.4949E-001
	795.84	85.40	3.8417E-001		2.2939E-002
	801.93	8.73	3.6368E+000		-2.7439E-002
Cs-137	661.65	85.12	4.2237E-001	4.22E-001	1.0791E-002
Eu-152	121.78	28.40	2.8412E+000	1.02E+000	9.5630E-001
	244.69	7.49	5.8893E+000		2.3953E+000
	344.27	26.50	1.2922E+000		-3.8655E-001
	778.89	12.74	2.3945E+000		-3.4025E+000
	867.32	4.16	7.9895E+000		-1.0433E+001
	964.01	14.40	2.6440E+000		-2.4958E-001
	1085.78	10.00	3.1160E+000		-2.4229E+000
	1112.02	13.30	2.2629E+000		1.4498E-001
1407.95	20.70	1.0170E+000	-1.8866E-001		
Eu-154	123.07	40.50	1.9694E+000	9.13E-001	7.1786E-001
	247.94	6.60	6.4849E+000		-2.1179E+000
	591.81	4.83	7.0363E+000		1.1811E+000
	723.30	19.70	1.7944E+000		-9.0071E-002
	756.87	4.33	7.3750E+000		2.9347E+000
	873.19	11.50	3.0019E+000		-5.4014E-001
	996.32	10.30	3.1788E+000		-2.6365E+000
	1004.76	17.90	1.8621E+000		6.2673E-001
1274.45	35.50	9.1274E-001	4.6514E-001		
Eu-155	86.54	30.90	4.7036E+000	4.70E+000	2.7473E+000
	105.31	20.70	4.8780E+000		2.5433E+000
Am-241	59.54	35.90	7.9496E+000	7.95E+000	-2.8452E+000
Cm-243	228.19	10.56	4.3905E+000	2.72E+000	1.9750E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.7171E+000	2.72E+000	1.4672E+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 8/3/2006 3:21:26 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-131-F-

Sample Title: OOL-10-02-131-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 3:11:24 PM

Live Time: 600.0 seconds

Real Time: 601.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-131-F-
Title: OOL-10-02-131-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 10 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	2.23450E+001	3.16770E+000
Co-60	1.000	1173.22*	100.00	1.61723E-001	1.17197E-001
		1332.49*	100.00	5.16687E-001	1.65547E-001
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.63119E-001	2.26909E-001
		860.37	12.46		
Pb-212	0.565	74.81* @	10.70	1.72495E+001	1.01601E+001
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.402	238.63*	44.60	8.15198E-001	5.29483E-001
		609.31*	46.30	4.98704E-001	2.90995E-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	0.998	2.234500E+001	3.167696E+000
Co-60	1.000	2.802304E-001	9.565373E-002
TL-208	0.472	3.631192E-001	2.269091E-001
Pb-212 @	0.565	8.151981E-001	5.294830E-001
Bi-214	0.402	4.987039E-001	2.909946E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.9269E-001	49.93
4	351.51	4.2468E-002	120.92
7	911.03	5.2917E-002	73.78

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	1.8171E-001	1.82E-001	1.6172E-001
		1332.49*	100.00	2.0594E-001		5.1669E-001
	Nb-94	702.63	100.00	3.3352E-001	3.34E-001	-1.5554E-001
		871.10	100.00	3.4982E-001		1.0002E-001
	Ag-108m	79.20	7.10	2.4470E+001	3.85E-001	3.7010E+000
		433.93	89.90	3.8497E-001		2.6067E-001
		614.37	90.40	3.9120E-001		-2.0116E-001
		722.95	90.50	3.9294E-001		1.6486E-001
	Sb-125	176.33	6.89	7.3233E+000	1.12E+000	-2.0596E+000
		427.89	29.33	1.1213E+000		-8.1672E-001
		463.38	10.35	3.2535E+000		6.5852E-001
		600.56	17.80	1.9513E+000		-1.3341E+000
		606.64	5.02	7.6168E+000		4.8616E+000
		635.90	11.32	2.8994E+000		-3.7826E-001
	Cs-134	563.23	8.38	3.9607E+000	3.90E-001	-2.9354E+000
		569.32	15.43	2.1644E+000		1.3070E+000
		604.70	97.60	3.8954E-001		-1.3695E-001
		795.84	85.40	4.3614E-001		4.0181E-001
		801.93	8.73	4.0085E+000		1.7705E+000
	Cs-137	661.65	85.12	4.3177E-001	4.32E-001	4.6861E-001
	Eu-152	121.78	28.40	2.8486E+000	1.02E+000	2.4073E+000
		244.69	7.49	6.0491E+000		-4.3550E+000
		344.27	26.50	1.3569E+000		2.3036E-001
		778.89	12.74	2.6092E+000		-1.6986E+000
		867.32	4.16	8.1977E+000		-2.7049E+000
		964.01	14.40	2.4723E+000		2.1583E-001
		1085.78	10.00	3.0864E+000		2.5316E-001
		1112.02	13.30	2.1558E+000		8.7909E-001
		1407.95	20.70	1.0170E+000		-1.8220E-001
	Eu-154	123.07	40.50	1.9524E+000	8.73E-001	-8.2920E-001
		247.94	6.60	6.8122E+000		5.6256E+000
		591.81	4.83	7.4981E+000		1.6198E+000
		723.30	19.70	1.7944E+000		5.3232E-001
		756.87	4.33	7.9973E+000		-5.7680E+000
		873.19	11.50	3.1753E+000		1.8934E-001
		996.32	10.30	3.5259E+000		1.5410E+000
		1004.76	17.90	2.0254E+000		9.9537E-001
		1274.45	35.50	8.7300E-001		1.5478E-001
	Eu-155	86.54	30.90	4.7529E+000	4.74E+000	2.0036E-001
		105.31	20.70	4.7359E+000		4.3101E-001
	Am-241	59.54	35.90	8.1070E+000	8.11E+000	-2.0790E+000
	Cm-243	228.19	10.56	4.4032E+000	2.85E+000	1.1318E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.8544E+000	2.85E+000	-9.9352E-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 8/3/2006 3:38:56 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-10-02-132-F-

Sample Title: OOL-10-02-132-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 3:28:52 PM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-132-F-
Title: OOL-10-02-132-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	304	291.96	73.08	0.79	1.91E+002	54.21	1.14E+003
m	2	286-	304	300.18	75.13	0.80	2.77E+002	59.71	1.19E+003
	3	947-	958	953.32	238.43	0.41	7.13E+001	52.92	2.63E+002
	4	2321-	2338	2331.07	582.88	0.44	6.05E+001	32.79	6.75E+001
	5	3638-	3650	3645.11	911.42	0.91	3.83E+001	19.47	2.28E+001
	6	4687-	4699	4692.84	1173.36	0.57	2.52E+001	17.62	2.08E+001
	7	5324-	5338	5330.06	1332.68	0.94	5.74E+001	20.12	1.66E+001
	8	5833-	5855	5843.64	1461.08	1.49	3.46E+002	38.86	1.18E+001
	9	7055-	7068	7061.35	1765.53	1.00	2.10E+001	8.98	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	0.997	1460.81*	10.67	2.27678E+001	3.15147E+000
Co-60	0.999	1173.22*	100.00	1.62016E-001	1.13927E-001
		1332.49*	100.00	3.82742E-001	1.37461E-001
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.92553E-001	2.19020E-001
		860.37	12.46		
Pb-212	0.565	74.81* @	10.70	2.44164E+001	7.11432E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.97306E-001	5.29179E-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	0.997	2.276775E+001	3.151474E+000
Co-60	0.999	2.518951E-001	8.771675E-002
TL-208	0.471	3.925535E-001	2.190197E-001
Pb-212 @	0.565	6.973065E-001	5.291789E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.1873E-001	28.35
5	911.42	6.3750E-002	50.89
9	1765.53	3.5000E-002	42.77

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	1.7502E-001	1.70E-001	1.6202E-001
		1332.49*	100.00	1.6996E-001		3.8274E-001
	Nb-94	702.63	100.00	3.3352E-001	3.24E-001	7.6518E-002
		871.10	100.00	3.2380E-001		2.7825E-001
	Ag-108m	79.20	7.10	2.7076E+001	3.43E-001	-3.2292E+001
		433.93	89.90	3.4266E-001		-1.3617E-001
		614.37	90.40	3.8239E-001		-7.8816E-001
		722.95	90.50	3.7849E-001		2.4263E-001
	Sb-125	176.33	6.89	8.9135E+000	1.22E+000	-3.8075E+000
		427.89	29.33	1.2186E+000		3.8455E-001
		463.38	10.35	3.5281E+000		1.7614E+000
		600.56	17.80	1.9457E+000		1.1255E+000
		606.64	5.02	7.5266E+000		7.0231E+000
		635.90	11.32	2.9375E+000		2.0454E+000
	Cs-134	563.23	8.38	3.9962E+000	3.74E-001	1.3360E+000
		569.32	15.43	2.1837E+000		-6.2231E-001
		604.70	97.60	3.7730E-001		1.1386E-001
		795.84	85.40	3.7404E-001		1.1889E-002
		801.93	8.73	3.4733E+000		-7.2986E-001
	Cs-137	661.65	85.12	4.0162E-001	4.02E-001	3.0069E-001
	Eu-152	121.78	28.40	3.2700E+000	1.07E+000	-1.8385E+000
		244.69	7.49	6.6949E+000		-3.5272E+000
		344.27	26.50	1.3777E+000		2.8465E-001
		778.89	12.74	2.5811E+000		-3.4586E-001
		867.32	4.16	7.7755E+000		-3.6974E+000
		964.01	14.40	2.4295E+000		1.4150E+000
		1085.78	10.00	2.9803E+000		-7.1290E-003
		1112.02	13.30	2.0428E+000		9.8423E-001
		1407.95	20.70	1.0672E+000		6.6027E-001
	Eu-154	123.07	40.50	2.2693E+000	8.55E-001	8.7866E-001
		247.94	6.60	7.5804E+000		2.0155E-001
		591.81	4.83	7.0363E+000		3.2411E+000
		723.30	19.70	1.7446E+000		6.2814E-001
		756.87	4.33	7.5425E+000		-5.0937E+000
		873.19	11.50	2.8396E+000		-4.5587E-001
		996.32	10.30	3.0033E+000		-2.2188E-001
		1004.76	17.90	1.6903E+000		7.3126E-001
		1274.45	35.50	8.5472E-001		5.0913E-001
	Eu-155	86.54	30.90	5.1369E+000	5.14E+000	2.9781E+000
		105.31	20.70	5.5136E+000		8.3626E-001
	Am-241	59.54	35.90	8.2457E+000	8.25E+000	-3.6323E+000
	Cm-243	228.19	10.56	5.0219E+000	3.24E+000	-2.7874E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	3.2448E+000	3.24E+000	7.4971E-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 8/3/2006 4:13:22 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-133-F-

Sample Title: OOL-10-02-133-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 4:03:20 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-133-F-
Title: OOL-10-02-133-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	305	300.07	75.11	0.83	1.39E+002	97.41	9.78E+002
2	949-	959	953.67	238.51	0.41	7.59E+001	46.12	1.99E+002
3	1398-	1415	1406.64	351.76	0.74	1.03E+002	43.67	1.21E+002
4	2323-	2339	2330.94	582.85	0.85	8.12E+001	30.75	5.28E+001
5	2431-	2443	2436.33	609.20	0.72	4.51E+001	27.87	5.89E+001
6	3637-	3650	3643.83	911.10	0.45	4.80E+001	24.28	3.80E+001
7	5323-	5339	5330.04	1332.67	0.48	6.18E+001	17.63	6.17E+000
8	5832-	5854	5843.60	1461.07	1.35	4.08E+002	43.22	2.02E+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: 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	0.997	1460.81*	10.67	2.68223E+001	3.57714E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	5.27036E-001	2.11342E-001
		860.37	12.46		
Pb-212	0.565	74.81* @	10.70	1.22418E+001	8.92520E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.405	238.63*	44.60	7.42416E-001	4.66081E-001
		609.31*	46.30	5.38761E-001	3.39872E-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	0.997	2.682230E+001	3.577143E+000
TL-208	0.471	5.270359E-001	2.113418E-001
Pb-212 @	0.565	7.424156E-001	4.660813E-001
Bi-214	0.405	5.387607E-001	3.398719E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.76	1.7167E-001	42.40
6	911.10	7.9922E-002	50.64
7	1332.67	1.0305E-001	28.51

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	3.2659E-001	3.20E-001	1.3652E-001
	1332.49	100.00	3.2040E-001		5.0655E-001
Nb-94	702.63	100.00	3.2898E-001	3.04E-001	-2.9116E-001
	871.10	100.00	3.0377E-001		-3.6785E-001
Ag-108m	79.20	7.10	2.2837E+001	3.67E-001	-6.5440E+000
	433.93	89.90	3.7016E-001		1.6666E-001
	614.37	90.40	3.8239E-001		-2.9626E-002
	722.95	90.50	3.6726E-001		-1.3787E-001
Sb-125	176.33	6.89	7.0852E+000	1.11E+000	-1.6799E+000
	427.89	29.33	1.1125E+000		-4.8132E-001
	463.38	10.35	3.3449E+000		1.4647E+000
	600.56	17.80	1.8128E+000		-5.1160E-001
	606.64	5.02	7.5989E+000		7.5790E+000
	635.90	11.32	2.6689E+000		-4.7891E-002
Cs-134	563.23	8.38	3.9128E+000	3.76E-001	-1.9018E+000
	569.32	15.43	2.2468E+000		-1.1153E+000
	604.70	97.60	3.7634E-001		-1.7425E-001
	795.84	85.40	4.0092E-001		5.1139E-001
	801.93	8.73	3.5635E+000		7.3605E-001
Cs-137	661.65	85.12	4.1274E-001	4.13E-001	3.6105E-001
Eu-152	121.78	28.40	2.6946E+000	9.78E-001	-2.9589E-001
	244.69	7.49	5.7249E+000		-3.2886E+000
	344.27	26.50	1.3437E+000		8.8775E-001
	778.89	12.74	2.4847E+000		-4.8896E-001
	867.32	4.16	7.6819E+000		1.5698E+000
	964.01	14.40	2.4381E+000		2.8602E-001
	1085.78	10.00	2.7215E+000		-1.1464E+000
	1112.02	13.30	2.1801E+000		-1.2794E+000
1407.95	20.70	9.7753E-001	1.7989E-001		
Eu-154	123.07	40.50	1.8587E+000	7.56E-001	-1.2968E+000
	247.94	6.60	6.5077E+000		2.1169E+000
	591.81	4.83	7.0777E+000		9.5853E-001
	723.30	19.70	1.7047E+000		6.6110E-001
	756.87	4.33	7.4592E+000		-2.2667E+000
	873.19	11.50	2.6309E+000		-1.3429E+000
	996.32	10.30	2.9470E+000		-8.7503E-001
	1004.76	17.90	1.8472E+000		9.8910E-001
1274.45	35.50	7.5621E-001	3.2422E-001		
Eu-155	86.54	30.90	4.3793E+000	4.38E+000	4.4549E+000
	105.31	20.70	4.6495E+000		-3.5849E+000
Am-241	59.54	35.90	7.2891E+000	7.29E+000	1.9169E-001
Cm-243	228.19	10.56	4.1283E+000	2.85E+000	4.1397E-003

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.8463E+000	2.85E+000	-9.9040E-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 8/3/2006 4:28:22 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-134-F-

Sample Title: OOL-10-02-134-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 4:18:20 PM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-134-F-
Title: OOL-10-02-134-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	305	300.19	75.13	0.77	1.05E+002	90.12	8.43E+002
2	946-	960	953.93	238.58	0.87	9.20E+001	49.14	1.86E+002
3	2325-	2338	2331.28	582.94	1.46	7.68E+001	28.75	5.02E+001
4	2429-	2444	2435.53	609.00	1.42	6.26E+001	31.51	6.44E+001
5	3633-	3651	3644.09	911.16	1.46	8.19E+001	27.30	3.31E+001
6	5324-	5335	5329.84	1332.62	0.66	2.90E+001	15.09	1.20E+001
7	5831-	5856	5843.85	1461.13	1.86	3.89E+002	44.41	2.93E+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: 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	2.55688E+001	3.57991E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.98248E-001	1.97851E-001
		860.37	12.46		
Pb-212	0.565	74.81* @	10.70	9.24290E+000	8.14939E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.00655E-001	5.01171E-001
Bi-214	0.403	609.31*	46.30	7.47874E-001	3.88064E-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	2.556884E+001	3.579912E+000
TL-208	0.472	4.982480E-001	1.978510E-001
Pb-212 @	0.565	9.006547E-001	5.011707E-001
Bi-214	0.403	7.478740E-001	3.880639E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	911.16	1.3656E-001	33.31
6	1332.62	4.8313E-002	52.06

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: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	3.2369E-001	2.85E-001	-3.3025E-002
	1332.49	100.00	2.8489E-001		6.8339E-002
Nb-94	702.63	100.00	3.3800E-001	3.20E-001	-4.8907E-002
	871.10	100.00	3.1990E-001		1.1729E-001
Ag-108m	79.20	7.10	2.0475E+001	3.60E-001	-1.6612E+001
	433.93	89.90	3.5962E-001		-2.6117E-001
	614.37	90.40	3.8792E-001		7.8501E-003
	722.95	90.50	3.6343E-001		1.6710E-001
Sb-125	176.33	6.89	6.0952E+000	1.11E+000	6.3535E-001
	427.89	29.33	1.1096E+000		-5.8396E-001
	463.38	10.35	3.1419E+000		-8.2947E-001
	600.56	17.80	1.8366E+000		6.5804E-001
	606.64	5.02	7.6704E+000		8.5471E+000
	635.90	11.32	2.6689E+000		-1.4262E+000
Cs-134	563.23	8.38	3.8397E+000	3.72E-001	-3.0682E+000
	569.32	15.43	2.0308E+000		-4.8797E-001
	604.70	97.60	3.7248E-001		-1.0553E-001
	795.84	85.40	3.9264E-001		2.1865E-001
	801.93	8.73	3.7509E+000		3.4054E+000
Cs-137	661.65	85.12	3.9145E-001	3.91E-001	-1.6888E-001
Eu-152	121.78	28.40	2.3438E+000	1.07E+000	9.5493E-001
	244.69	7.49	4.8482E+000		-3.2085E+000
	344.27	26.50	1.2093E+000		2.7760E-001
	778.89	12.74	2.2135E+000		-2.0742E+000
	867.32	4.16	7.4585E+000		-1.2753E+001
	964.01	14.40	2.5474E+000		1.3216E+000
	1085.78	10.00	2.8862E+000		1.6344E-001
	1112.02	13.30	2.2512E+000		7.1670E-001
1407.95	20.70	1.0672E+000	-4.1555E-001		
Eu-154	123.07	40.50	1.6064E+000	6.96E-001	-8.2948E-001
	247.94	6.60	5.5626E+000		-3.3935E-001
	591.81	4.83	6.7607E+000		-9.4674E-001
	723.30	19.70	1.6756E+000		1.2657E+000
	756.87	4.33	7.5425E+000		-2.4275E+000
	873.19	11.50	2.7604E+000		1.7542E+000
	996.32	10.30	2.9185E+000		8.3094E-001
	1004.76	17.90	1.6821E+000		6.9661E-002
1274.45	35.50	6.9565E-001	-1.9366E-002		
Eu-155	86.54	30.90	3.9183E+000	3.91E+000	5.8482E+000
	105.31	20.70	3.9140E+000		-1.6627E+000
Am-241	59.54	35.90	6.7783E+000	6.78E+000	1.9122E+000
Cm-243	228.19	10.56	3.7242E+000	2.61E+000	1.0135E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.6081E+000	2.61E+000	3.8968E-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 8/3/2006 4:43:34 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-10-02-135-F-

Sample Title: OOL-10-02-135-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 4:33:32 PM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-135-F-
Title: OOL-10-02-135-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	305	300.46	75.20	0.86	1.50E+002	88.06	7.81E+002
2	333-	345	339.03	84.85	0.66	1.10E+002	90.74	7.72E+002
3	948-	961	953.78	238.54	0.91	1.03E+002	44.74	1.52E+002
4	1401-	1410	1406.02	351.61	1.09	5.60E+001	28.81	7.10E+001
5	2322-	2340	2331.61	583.02	1.02	7.30E+001	31.61	5.50E+001
6	2429-	2442	2436.27	609.19	0.39	5.44E+001	27.68	5.26E+001
7	3637-	3650	3643.13	910.92	1.13	4.38E+001	24.84	4.22E+001
8	4473-	4485	4478.65	1119.81	0.68	2.57E+001	18.02	2.23E+001
9	4687-	4700	4692.80	1173.35	0.74	3.25E+001	19.08	2.25E+001
10	5324-	5339	5329.85	1332.63	1.28	6.50E+001	19.77	1.20E+001
11	5833-	5855	5844.09	1461.19	1.58	4.03E+002	43.48	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: 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	0.994	1460.81*	10.67	2.65067E+001	3.57571E+000
Co-60	0.999	1173.22* 1332.49*	100.00 100.00	2.08659E-001 4.33394E-001	1.23674E-001 1.36159E-001
TL-208	0.473	277.35 510.84 583.14* 860.37	6.80 21.60 84.20 12.46	4.73921E-001	2.14491E-001
Pb-212	0.565	74.81* @ 77.11 @ 87.30 @ 238.63*	10.70 18.00 8.00 44.60	1.31911E+001	8.16517E+000
Bi-214	0.709	609.31* 1120.29* 1764.49	46.30 15.10 15.80	1.01230E+000 6.50528E-001 1.08179E+000	4.65678E-001 3.40656E-001 7.68523E-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	0.994	2.650670E+001	3.575706E+000
Co-60	0.999	3.102523E-001	9.154715E-002
TL-208	0.473	4.739208E-001	2.144908E-001
Pb-212 @	0.565	1.012295E+000	4.656782E-001
Bi-214	0.709	7.213476E-001	3.114320E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.8298E-001	82.65
4	351.61	9.3340E-002	51.43
7	910.92	7.2994E-002	56.72

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	1.8421E-001	1.51E-001	2.0866E-001
		1332.49*	100.00	1.5110E-001		4.3339E-001
	Nb-94	702.63	100.00	3.1253E-001	3.13E-001	-9.6430E-002
		871.10	100.00	3.5455E-001		8.3320E-002
	Ag-108m	79.20	7.10	2.0718E+001	3.53E-001	-6.2895E+000
		433.93	89.90	3.5274E-001		-2.4338E-001
		614.37	90.40	4.0928E-001		-6.9160E-002
		722.95	90.50	3.9176E-001		2.7674E-001
	Sb-125	176.33	6.89	6.1336E+000	1.09E+000	1.8931E-001
		427.89	29.33	1.0918E+000		6.2627E-003
		463.38	10.35	2.9985E+000		-2.8515E+000
		600.56	17.80	1.8543E+000		-6.4271E-001
		606.64	5.02	7.6347E+000		9.8290E+000
		635.90	11.32	2.8994E+000		-3.3544E-001
	Cs-134	563.23	8.38	4.0080E+000	3.58E-001	2.3230E+000
		569.32	15.43	2.2155E+000		-1.4678E+000
		604.70	97.60	3.7826E-001		7.8200E-002
		795.84	85.40	3.5751E-001		2.4610E-003
		801.93	8.73	3.7369E+000		2.2948E+000
	Cs-137	661.65	85.12	3.8496E-001	3.85E-001	3.8229E-001
	Eu-152	121.78	28.40	2.3729E+000	1.08E+000	3.5969E-002
		244.69	7.49	5.0423E+000		6.7223E-001
		344.27	26.50	1.1884E+000		-1.7214E-001
		778.89	12.74	2.5525E+000		-1.0797E+000
		867.32	4.16	8.1388E+000		-5.4904E+000
		964.01	14.40	2.4892E+000		-2.0638E-002
		1085.78	10.00	3.0263E+000		1.8411E+000
		1112.02	13.30	2.0938E+000		-1.2404E+000
		1407.95	20.70	1.0793E+000		3.3818E-002
	Eu-154	123.07	40.50	1.6530E+000	8.41E-001	2.7739E-001
		247.94	6.60	5.8244E+000		-2.8241E+000
		591.81	4.83	6.7172E+000		7.0339E-002
		723.30	19.70	1.7890E+000		1.0722E+000
		756.87	4.33	7.7600E+000		8.3667E+000
		873.19	11.50	3.0848E+000		-1.9750E+000
		996.32	10.30	2.9470E+000		2.3340E-001
		1004.76	17.90	1.6317E+000		-9.6754E-004
		1274.45	35.50	8.4072E-001		6.1178E-001
	Eu-155	86.54	30.90	3.8391E+000	3.84E+000	2.0991E-001
		105.31	20.70	4.0452E+000		3.4388E-001
	Am-241	59.54	35.90	6.3362E+000	6.34E+000	-5.8124E+000
	Cm-243	228.19	10.56	3.6482E+000	2.54E+000	9.8344E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.5404E+000	2.54E+000	1.9824E+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 8/3/2006 10:41:06 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-136-F

Sample Title: OOL-10-02-136-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 10:31:03 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-02-136-F
Title: OOL-10-02-136-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5830-	5852	5842.28	1460.54	1.11	2.67E+002	36.29	1.97E+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	0.998	1460.81*	10.67	1.83391E+001	2.89922E+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	0.998	1.833909E+001	2.899219E+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
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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	2.6376E-001	2.64E-001	2.0486E-001
	1332.49	100.00	2.7882E-001		4.0431E-001
Nb-94	702.63	100.00	2.6938E-001	2.44E-001	9.8012E-002
	871.10	100.00	2.4383E-001		2.5491E-003
Ag-108m	79.20	7.10	2.0156E+001	3.06E-001	-8.6711E+000
	433.93	89.90	3.0614E-001		-1.6927E-001
	614.37	90.40	3.2518E-001		-3.2490E-001
	722.95	90.50	3.2344E-001		-2.7723E-001
Sb-125	176.33	6.89	5.4817E+000	9.71E-001	1.4614E+000
	427.89	29.33	9.7072E-001		-2.3504E-001
	463.38	10.35	2.5027E+000		-7.5893E-002
	600.56	17.80	1.6886E+000		-7.1559E-001
	606.64	5.02	6.8741E+000		9.0280E+000
	635.90	11.32	2.2693E+000		6.0128E-001
Cs-134	563.23	8.38	3.2906E+000	3.16E-001	-2.3486E+000
	569.32	15.43	1.8511E+000		-1.6314E-001
	604.70	97.60	3.4432E-001		-2.9557E-002
	795.84	85.40	3.1597E-001		-1.8936E-002
	801.93	8.73	3.0956E+000		-1.3646E+000
Cs-137	661.65	85.12	2.9838E-001	2.98E-001	-4.4594E-001
Eu-152	121.78	28.40	1.9853E+000	9.15E-001	8.9463E-001
	244.69	7.49	4.1298E+000		7.8945E-001
	344.27	26.50	1.0954E+000		-1.8239E-001
	778.89	12.74	1.9943E+000		-1.7911E-001
	867.32	4.16	6.3608E+000		1.8034E+000
	964.01	14.40	2.1024E+000		-7.2056E-001
	1085.78	10.00	2.4777E+000		1.3368E+000
	1112.02	13.30	1.8575E+000		-1.7102E+000
1407.95	20.70	9.1463E-001	-3.3940E-002		
Eu-154	123.07	40.50	1.3749E+000	5.88E-001	5.7599E-001
	247.94	6.60	4.5727E+000		-4.0027E+000
	591.81	4.83	6.0656E+000		2.5162E+000
	723.30	19.70	1.5071E+000		-8.9789E-002
	756.87	4.33	5.6787E+000		3.0337E-001
	873.19	11.50	1.9895E+000		1.6525E-001
	996.32	10.30	2.4356E+000		-1.2801E+000
	1004.76	17.90	1.4859E+000		6.7809E-001
1274.45	35.50	5.8800E-001	1.7015E-001		
Eu-155	86.54	30.90	3.6329E+000	3.63E+000	9.5959E-001
	105.31	20.70	3.7252E+000		1.0052E+000
Am-241	59.54	35.90	8.9834E+000	8.98E+000	-3.8071E+000
Cm-243	228.19	10.56	3.2049E+000	2.15E+000	4.0102E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1540E+000	2.15E+000	-9.4414E-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 8/3/2006 10:25:27 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-137-F

Sample Title: OOL-10-02-137-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 10:15:25 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-10-02-137-F
Title: OOL-10-02-137-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	5829-	5854	5841.55	1460.36	1.21	2.83E+002	35.30	9.70E+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	0.993	1460.81*	10.67	1.94365E+001	2.88828E+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	1.943645E+001	2.888278E+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	2.7502E-001	2.35E-001	1.1324E-002
	1332.49	100.00	2.3514E-001		1.1350E-001
Nb-94	702.63	100.00	2.6017E-001	2.51E-001	-9.9840E-002
	871.10	100.00	2.5104E-001		1.7593E-001
Ag-108m	79.20	7.10	2.0869E+001	2.98E-001	-1.4794E+001
	433.93	89.90	2.9878E-001		-3.8650E-002
	614.37	90.40	3.2234E-001		-2.6199E-001
	722.95	90.50	2.9766E-001		2.0713E-001
Sb-125	176.33	6.89	5.9396E+000	8.53E-001	1.3917E+000
	427.89	29.33	8.5311E-001		-2.3939E-001
	463.38	10.35	2.4792E+000		-3.0626E-001
	600.56	17.80	1.6179E+000		-6.8689E-001
	606.64	5.02	6.5011E+000		6.2281E+000
	635.90	11.32	2.2153E+000		-6.6694E-001
Cs-134	563.23	8.38	3.1488E+000	3.07E-001	1.0463E+000
	569.32	15.43	1.5974E+000		-2.6077E+000
	604.70	97.60	3.2699E-001		-1.0627E-002
	795.84	85.40	3.0655E-001		1.1447E-001
	801.93	8.73	2.9655E+000		1.3844E+000
Cs-137	661.65	85.12	3.0385E-001	3.04E-001	1.2018E-001
Eu-152	121.78	28.40	2.0076E+000	9.30E-001	2.6841E-001
	244.69	7.49	4.3528E+000		-5.7085E+000
	344.27	26.50	9.8963E-001		-3.6223E-001
	778.89	12.74	1.9000E+000		2.7696E-002
	867.32	4.16	5.9436E+000		2.8143E-001
	964.01	14.40	1.9141E+000		-1.5831E-001
	1085.78	10.00	2.3969E+000		1.5639E-001
	1112.02	13.30	1.7481E+000		-2.4499E-001
1407.95	20.70	9.3027E-001	2.2397E-001		
Eu-154	123.07	40.50	1.3780E+000	6.10E-001	-6.0495E-001
	247.94	6.60	4.9636E+000		3.6790E+000
	591.81	4.83	5.8276E+000		3.6116E+000
	723.30	19.70	1.3598E+000		5.4384E-001
	756.87	4.33	5.5586E+000		-2.6201E+000
	873.19	11.50	2.1372E+000		1.5545E+000
	996.32	10.30	2.4173E+000		5.0060E-001
	1004.76	17.90	1.3280E+000		-8.5004E-002
1274.45	35.50	6.0989E-001	-2.8913E-001		
Eu-155	86.54	30.90	3.8446E+000	3.58E+000	4.4259E+000
	105.31	20.70	3.5784E+000		-2.2258E+000
Am-241	59.54	35.90	9.4926E+000	9.49E+000	-6.0605E+000
Cm-243	228.19	10.56	2.9299E+000	2.15E+000	-7.8559E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1482E+000	2.15E+000	3.5251E-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 8/3/2006 9:48:31 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-10-02-138-F

Sample Title: OOL-10-02-138-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 9:38:29 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: GRN7780
Log Number: OOL-10-02-138-F
Title: OOL-10-02-138-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	2326-	2339	2332.92	583.19	0.47	3.86E+001	21.93	2.94E+001
2	2428-	2441	2434.97	608.70	0.63	4.25E+001	20.56	2.45E+001
3	5829-	5853	5842.29	1460.54	2.50	2.38E+002	33.33	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: 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	0.998	1460.81*	10.67	1.62964E+001	2.64006E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.58253E-001	1.50747E-001
Bi-214	0.399	860.37	12.46		
		609.31*	46.30	5.24611E-001	2.62113E-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	0.998	1.629636E+001	2.640055E+000
TL-208	0.472	2.582530E-001	1.507474E-001
Bi-214	0.399	5.246109E-001	2.621129E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	2.5595E-001	2.23E-001	2.9770E-001
	1332.49	100.00	2.2277E-001		1.8198E-001
Nb-94	702.63	100.00	2.3193E-001	2.23E-001	-2.9491E-001
	871.10	100.00	2.2271E-001		-1.7439E-002
Ag-108m	79.20	7.10	1.9892E+001	2.98E-001	-1.2507E+001
	433.93	89.90	3.0248E-001		1.1086E-001
	614.37	90.40	3.3354E-001		-1.3649E-001
	722.95	90.50	2.9766E-001		8.2510E-002
Sb-125	176.33	6.89	5.5506E+000	9.53E-001	-1.6562E+000
	427.89	29.33	9.5279E-001		9.2710E-001
	463.38	10.35	2.5606E+000		-1.9026E+000
	600.56	17.80	1.4498E+000		2.8515E-001
	606.64	5.02	6.2236E+000		4.9343E+000
	635.90	11.32	2.1458E+000		7.3897E-001
Cs-134	563.23	8.38	2.9484E+000	3.01E-001	-1.4136E+000
	569.32	15.43	1.6256E+000		5.4292E-001
	604.70	97.60	3.1115E-001		-2.0851E-001
	795.84	85.40	3.0074E-001		-3.1288E-002
	801.93	8.73	2.8884E+000		-1.8511E+000
Cs-137	661.65	85.12	2.7933E-001	2.79E-001	6.3685E-002
Eu-152	121.78	28.40	2.0076E+000	8.99E-001	4.2759E-001
	244.69	7.49	4.1990E+000		-1.9422E+000
	344.27	26.50	9.8577E-001		-1.3077E-002
	778.89	12.74	2.0462E+000		-3.4737E-001
	867.32	4.16	5.5858E+000		2.9240E-001
	964.01	14.40	1.8788E+000		1.2368E+000
	1085.78	10.00	2.2258E+000		-2.7750E-001
	1112.02	13.30	1.7481E+000		-9.8634E-001
1407.95	20.70	8.9869E-001	-1.1385E-001		
Eu-154	123.07	40.50	1.4061E+000	6.10E-001	7.5441E-001
	247.94	6.60	4.5021E+000		-1.2911E+000
	591.81	4.83	4.9789E+000		-5.2263E+000
	723.30	19.70	1.3829E+000		4.2252E-001
	756.87	4.33	5.3941E+000		-2.5668E+000
	873.19	11.50	1.9199E+000		7.1443E-001
	996.32	10.30	2.4719E+000		1.5477E-002
	1004.76	17.90	1.3612E+000		9.5898E-001
1274.45	35.50	6.0989E-001	-9.2685E-002		
Eu-155	86.54	30.90	3.7961E+000	3.74E+000	4.8032E+000
	105.31	20.70	3.7380E+000		2.1781E+000
Am-241	59.54	35.90	8.0466E+000	8.05E+000	-9.7060E+000
Cm-243	228.19	10.56	2.8814E+000	2.07E+000	5.4890E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0716E+000	2.07E+000	-3.0551E+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 8/3/2006 9:26:56 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-139-F

Sample Title: OOL-10-02-139-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 9:16:54 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-10-02-139-F
Title: OOL-10-02-139-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2659-	2670	2664.12	665.99	0.33	1.30E+001	13.30	1.30E+001
2	5828-	5855	5841.46	1460.33	2.45	2.80E+002	37.94	2.10E+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: 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	1.92098E+001	3.03196E+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	1.920978E+001	3.031964E+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	665.99	2.1747E-002	101.92

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	2.3737E-001	2.04E-001	-1.8218E-001
	1332.49	100.00	2.0406E-001		-6.2395E-002
Nb-94	702.63	100.00	2.3890E-001	2.39E-001	1.8346E-002
	871.10	100.00	2.5631E-001		1.6108E-001
Ag-108m	79.20	7.10	2.1576E+001	2.92E-001	-4.1264E+001
	433.93	89.90	3.0125E-001		1.6581E-001
	614.37	90.40	2.9234E-001		-2.2029E-001
	722.95	90.50	3.0596E-001		7.5328E-002
Sb-125	176.33	6.89	5.7154E+000	8.85E-001	1.5991E+000
	427.89	29.33	8.8505E-001		-3.2542E-003
	463.38	10.35	2.3578E+000		-9.3176E-001
	600.56	17.80	1.3574E+000		-2.9966E-001
	606.64	5.02	5.8825E+000		3.4512E+000
	635.90	11.32	2.1174E+000		3.2408E-001
Cs-134	563.23	8.38	3.0836E+000	2.63E-001	3.2237E+000
	569.32	15.43	1.6068E+000		-1.9826E-002
	604.70	97.60	2.9307E-001		1.2411E-001
	795.84	85.40	2.6304E-001		-7.5646E-002
	801.93	8.73	2.5990E+000		1.5461E-001
Cs-137	661.65	85.12	3.2306E-001	3.23E-001	2.4387E-001
Eu-152	121.78	28.40	2.0254E+000	9.15E-001	-9.4249E-001
	244.69	7.49	4.4737E+000		-6.8126E+000
	344.27	26.50	9.8963E-001		-8.4596E-001
	778.89	12.74	1.6943E+000		-1.2646E+000
	867.32	4.16	6.0720E+000		-3.8597E+000
	964.01	14.40	2.1851E+000		0.0000E+000
	1085.78	10.00	2.1578E+000		-5.1970E-001
	1112.02	13.30	1.9023E+000		7.5076E-002
1407.95	20.70	9.1463E-001	-3.1877E-001		
Eu-154	123.07	40.50	1.4133E+000	5.41E-001	4.5734E-001
	247.94	6.60	4.7555E+000		8.0599E-001
	591.81	4.83	5.3178E+000		5.8066E+000
	723.30	19.70	1.4057E+000		1.8092E-001
	756.87	4.33	5.9863E+000		-1.0121E+000
	873.19	11.50	2.2298E+000		3.7685E-001
	996.32	10.30	2.3801E+000		-1.5296E+000
	1004.76	17.90	1.4558E+000		1.0261E+000
1274.45	35.50	5.4130E-001	-1.8626E-001		
Eu-155	86.54	30.90	4.0572E+000	3.80E+000	5.5495E+000
	105.31	20.70	3.7995E+000		-1.5448E+000
Am-241	59.54	35.90	1.0206E+001	1.02E+001	-4.5477E+000
Cm-243	228.19	10.56	3.1353E+000	2.05E+000	1.1682E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0474E+000	2.05E+000	-1.2670E+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 8/3/2006 9:13:13 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-140-F

Sample Title: OOL-10-02-140-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 9:03:11 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-02-140-F
Title: OOL-10-02-140-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	694-	704	698.09	174.48	0.50	3.37E+001	35.60	1.24E+002
2	2323-	2338	2329.52	582.34	0.34	5.69E+001	24.40	3.21E+001
3	3869-	3880	3874.54	968.60	1.37	2.10E+001	15.35	1.60E+001
4	5828-	5856	5841.73	1460.40	2.04	2.90E+002	37.02	1.45E+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	1.98621E+001	3.00591E+000
TL-208	0.458	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.81103E-001	1.70930E-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	0.995	1.986210E+001	3.005908E+000
TL-208	0.458	3.811032E-001	1.709305E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	174.48	5.6216E-002	105.53
3	968.60	3.5011E-002	73.06

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: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	2.3737E-001	2.12E-001	2.4726E-001
	1332.49	100.00	2.1230E-001		1.9975E-001
Nb-94	702.63	100.00	2.4398E-001	2.31E-001	2.4852E-002
	871.10	100.00	2.3063E-001		-3.8877E-003
Ag-108m	79.20	7.10	2.2096E+001	2.71E-001	-1.7853E+001
	433.93	89.90	2.7135E-001		-2.0059E-001
	614.37	90.40	3.3354E-001		-1.2066E-001
	722.95	90.50	3.1404E-001		1.9071E-001
Sb-125	176.33	6.89	6.1623E+000	8.45E-001	5.8698E+000
	427.89	29.33	8.4493E-001		-3.5207E-001
	463.38	10.35	2.4910E+000		6.3257E-001
	600.56	17.80	1.4819E+000		-2.5784E-001
	606.64	5.02	6.3870E+000		1.8338E+000
	635.90	11.32	2.3088E+000		-4.6111E-002
Cs-134	563.23	8.38	3.1326E+000	3.14E-001	-3.6935E-001
	569.32	15.43	1.7335E+000		-4.6580E-001
	604.70	97.60	3.3053E-001		3.7723E-001
	795.84	85.40	3.1411E-001		3.1435E-001
Cs-137	801.93	8.73	2.9078E+000	2.89E-001	-4.7069E-001
	661.65	85.12	2.8903E-001		-4.3490E-002
Eu-152	121.78	28.40	2.0876E+000	1.06E+000	7.3636E-001
	244.69	7.49	4.3810E+000		-4.4412E+000
	344.27	26.50	1.1023E+000		-4.4194E-001
	778.89	12.74	1.7406E+000		-2.2441E+000
	867.32	4.16	5.7677E+000		-1.3521E-001
	964.01	14.40	2.0918E+000		1.9502E+000
	1085.78	10.00	2.2479E+000		-6.0193E-001
	1112.02	13.30	1.6308E+000		-1.7757E+000
	1407.95	20.70	1.0597E+000		-3.1649E-001
	Eu-154	123.07	40.50		1.4437E+000
247.94		6.60	4.6992E+000	-4.3005E+000	
591.81		4.83	4.9146E+000	-4.0340E+000	
723.30		19.70	1.4355E+000	7.8766E-001	
756.87		4.33	5.7572E+000	5.4173E+000	
873.19		11.50	2.0565E+000	1.1458E+000	
996.32		10.30	2.0782E+000	3.6301E-001	
1004.76		17.90	1.2589E+000	-1.0452E-001	
1274.45	35.50	5.4130E-001	-3.3459E-001		
Eu-155	86.54	30.90	3.9194E+000	3.92E+000	1.4240E-001
	105.31	20.70	3.9762E+000		9.8281E-003
Am-241	59.54	35.90	8.9782E+000	8.98E+000	-2.3798E+000
Cm-243	228.19	10.56	3.2973E+000	2.16E+000	-2.4278E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1597E+000	2.16E+000	2.5986E+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 8/3/2006 8:47:56 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-141-F

Sample Title: OOL-10-02-141-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 8:37:54 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: GRN7780
Log Number: OOL-10-02-141-F
Title: OOL-10-02-141-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2033-	2045	2040.54	510.09	0.86	2.79E+001	26.44	5.81E+001
2	5829-	5854	5842.26	1460.53	2.81	3.00E+002	38.47	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: 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	1.50645E-001	1.44357E-001
K-40	0.998	1460.81*	10.67	2.06118E+001	3.12280E+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	0.974	1.506454E-001	1.443571E-001
K-40	0.998	2.061178E+001	3.122798E+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	2.6376E-001	1.95E-001	4.0976E-002
	1332.49	100.00	1.9544E-001		-3.9343E-002
Nb-94	702.63	100.00	2.6938E-001	2.34E-001	1.9864E-001
	871.10	100.00	2.3449E-001		4.9582E-002
Ag-108m	79.20	7.10	2.1586E+001	2.71E-001	-1.4872E+001
	433.93	89.90	3.0002E-001		-4.8233E-002
	614.37	90.40	3.2518E-001		-1.1940E-002
	722.95	90.50	2.7112E-001		-1.7924E-001
Sb-125	176.33	6.89	5.8538E+000	8.69E-001	6.7927E-001
	427.89	29.33	8.6923E-001		-1.6557E-001
	463.38	10.35	2.4193E+000		1.2703E-001
	600.56	17.80	1.6251E+000		-4.2994E-001
	606.64	5.02	6.5236E+000		7.0167E+000
	635.90	11.32	2.1174E+000		3.5450E-001
Cs-134	563.23	8.38	3.1326E+000	2.76E-001	1.9862E+000
	569.32	15.43	1.5393E+000		-1.2510E+000
	604.70	97.60	3.3404E-001		2.9132E-001
	795.84	85.40	2.7622E-001		-2.3918E-001
	801.93	8.73	2.8489E+000		1.8581E-001
Cs-137	661.65	85.12	2.6720E-001	2.67E-001	-5.1721E-002
Eu-152	121.78	28.40	2.0545E+000	8.82E-001	1.1880E-002
	244.69	7.49	4.5464E+000		-2.3151E+000
	344.27	26.50	1.0779E+000		8.4739E-001
	778.89	12.74	1.8580E+000		9.1971E-001
	867.32	4.16	5.6775E+000		-4.0538E+000
	964.01	14.40	1.8669E+000		-5.3741E-001
	1085.78	10.00	2.2034E+000		-4.1034E-001
	1112.02	13.30	1.5594E+000		-1.9856E+000
Eu-154	1407.95	20.70	8.8242E-001	6.10E-001	7.6780E-002
	123.07	40.50	1.4487E+000		1.0087E+000
	247.94	6.60	5.0274E+000		-6.9834E-001
	591.81	4.83	5.7733E+000		1.9999E+000
	723.30	19.70	1.2456E+000		8.4289E-002
	756.87	4.33	6.4531E+000		2.4363E+000
	873.19	11.50	2.0064E+000		2.0237E+000
	996.32	10.30	2.3612E+000		-4.0828E-001
Eu-155	1004.76	17.90	1.2824E+000	3.82E+000	3.2102E-001
	1274.45	35.50	6.0989E-001		-3.1818E-001
	86.54	30.90	3.8478E+000		1.1558E+000
Am-241	105.31	20.70	3.8163E+000	8.59E+000	2.0178E+000
	59.54	35.90	8.5908E+000		-3.5668E+000
Cm-243	228.19	10.56	3.2851E+000	2.18E+000	2.8928E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1769E+000	2.18E+000	-7.2205E-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 8/3/2006 7:12:02 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-142-F

Sample Title: OOL-10-02-142-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 7:02:00 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-10-02-142-F
Title: OOL-10-02-142-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	5829-	5855	5842.03	1460.48	2.44	2.95E+002	36.08	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: 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	2.02356E+001	2.96838E+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	2.023557E+001	2.968384E+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	2.4581E-001	2.18E-001	1.4097E-001
	1332.49	100.00	2.1760E-001		4.5656E-002
Nb-94	702.63	100.00	2.5702E-001	2.33E-001	1.5202E-001
	871.10	100.00	2.3257E-001		1.6076E-002
Ag-108m	79.20	7.10	2.1958E+001	2.90E-001	-3.4414E+000
	433.93	89.90	2.8994E-001		-6.1954E-002
	614.37	90.40	3.2939E-001		4.3594E-002
	722.95	90.50	3.0596E-001		3.8500E-001
Sb-125	176.33	6.89	5.8826E+000	8.89E-001	3.1777E-001
	427.89	29.33	8.8895E-001		1.0615E-001
	463.38	10.35	2.6393E+000		8.3897E-001
	600.56	17.80	1.4169E+000		1.8262E-001
	606.64	5.02	6.0067E+000		-2.5005E+000
	635.90	11.32	2.1878E+000		-2.2780E+000
Cs-134	563.23	8.38	3.1164E+000	3.03E-001	0.0000E+000
	569.32	15.43	1.8348E+000		3.8810E-001
	604.70	97.60	3.0610E-001		-3.0370E-002
	795.84	85.40	3.0269E-001		1.1362E-001
	801.93	8.73	2.7062E+000		-1.9411E+000
Cs-137	661.65	85.12	2.9654E-001	2.97E-001	-1.0344E-001
Eu-152	121.78	28.40	2.0371E+000	1.00E+000	3.5865E-001
	244.69	7.49	4.6445E+000		-5.4448E+000
	344.27	26.50	1.0815E+000		-6.1930E-001
	778.89	12.74	1.8580E+000		1.0707E-001
	867.32	4.16	5.5393E+000		-5.2844E-001
	964.01	14.40	2.1545E+000		1.5499E+000
	1085.78	10.00	2.0634E+000		9.3987E-001
	1112.02	13.30	1.7155E+000		-9.9343E-001
	1407.95	20.70	1.0044E+000		8.4972E-001
Eu-154	123.07	40.50	1.4123E+000	5.57E-001	-9.0357E-001
	247.94	6.60	4.9421E+000		-1.6131E+000
	591.81	4.83	5.1973E+000		-2.4919E+000
	723.30	19.70	1.3676E+000		2.1100E-001
	756.87	4.33	6.4531E+000		4.0721E+000
	873.19	11.50	2.1213E+000		5.2876E-001
	996.32	10.30	2.1839E+000		-5.1233E-001
	1004.76	17.90	1.2707E+000		1.4793E-001
	1274.45	35.50	5.5735E-001		-3.0153E-001
Eu-155	86.54	30.90	3.7403E+000	3.74E+000	2.9503E+000
	105.31	20.70	3.8247E+000		-4.7081E-001
Am-241	59.54	35.90	9.2491E+000	9.25E+000	-4.8765E+000
Cm-243	228.19	10.56	3.0640E+000	2.21E+000	-1.9689E+000

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	-1.0329E+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 8/3/2006 6:45:12 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-143-F

Sample Title: OOL-10-02-143-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 6:35:11 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-10-02-143-F
Title: OOL-10-02-143-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	2035-	2045	2040.75	510.15	0.86	3.42E+001	25.13	5.38E+001
2	5829-	5858	5842.67	1460.64	2.98	2.88E+002	36.10	1.09E+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
ANN	0.977	511.00*	100.00	1.84540E-001	1.38187E-001
K-40	0.999	1460.81*	10.67	1.97657E+001	2.94875E+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	0.977	1.845397E-001	1.381875E-001
K-40	0.999	1.976572E+001	2.948748E+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	2.7318E-001	2.15E-001	2.8075E-001
	1332.49	100.00	2.1497E-001		2.7918E-002
Nb-94	702.63	100.00	2.7534E-001	2.51E-001	9.2747E-002
	871.10	100.00	2.5104E-001		-2.3101E-002
Ag-108m	79.20	7.10	2.1520E+001	3.14E-001	-2.3030E+001
	433.93	89.90	3.2033E-001		1.9910E-001
	614.37	90.40	3.2376E-001		-9.9341E-002
	722.95	90.50	3.1404E-001		-6.6008E-003
Sb-125	176.33	6.89	5.7448E+000	9.88E-001	-1.1390E+000
	427.89	29.33	9.8832E-001		2.0941E-001
	463.38	10.35	2.7689E+000		1.0817E-001
	600.56	17.80	1.6677E+000		3.4105E-001
	606.64	5.02	6.8954E+000		7.5805E+000
	635.90	11.32	2.2825E+000		1.2904E+000
Cs-134	563.23	8.38	3.0168E+000	2.93E-001	-4.7992E-001
	569.32	15.43	1.7248E+000		1.0418E-001
	604.70	97.60	3.4879E-001		1.5417E-001
	795.84	85.40	2.9281E-001		-1.5621E-002
	801.93	8.73	2.8489E+000		4.7301E-001
Cs-137	661.65	85.12	3.0922E-001	3.09E-001	-8.6497E-002
Eu-152	121.78	28.40	2.1945E+000	9.15E-001	1.8150E+000
	244.69	7.49	4.4368E+000		-6.6332E+000
	344.27	26.50	1.0494E+000		-1.0588E+000
	778.89	12.74	2.0074E+000		-7.7474E-001
	867.32	4.16	6.0720E+000		1.6497E-001
	964.01	14.40	1.9827E+000		1.8448E+000
	1085.78	10.00	2.2916E+000		6.9834E-001
	1112.02	13.30	1.9603E+000		-1.6977E+000
1407.95	20.70	9.1463E-001	4.0794E-001		
Eu-154	123.07	40.50	1.5055E+000	6.17E-001	8.4145E-001
	247.94	6.60	4.7667E+000		5.0799E-001
	591.81	4.83	5.6352E+000		-2.4502E-001
	723.30	19.70	1.4057E+000		-5.3260E-001
	756.87	4.33	6.2064E+000		-2.1914E-002
	873.19	11.50	2.0892E+000		-2.7229E-001
	996.32	10.30	2.2043E+000		-4.3522E-001
	1004.76	17.90	1.1727E+000		-1.4569E+000
1274.45	35.50	6.1700E-001	-4.2724E-001		
Eu-155	86.54	30.90	4.0020E+000	3.95E+000	3.1056E+000
	105.31	20.70	3.9520E+000		-1.9772E-001
Am-241	59.54	35.90	9.4138E+000	9.41E+000	-1.4902E+000
Cm-243	228.19	10.56	3.4341E+000	2.19E+000	4.1088E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1883E+000	2.19E+000	2.0734E-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 8/3/2006 6:27:03 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-144-F

Sample Title: OOL-10-02-144-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 6:17:01 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-02-144-F
Title: OOL-10-02-144-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	291-	311	295.96	73.95	0.80	7.96E+001	35.96	4.44E+002
m	2	291-	311	303.03	75.71	0.81	9.57E+001	36.47	4.62E+002
	3	5830-	5856	5841.49	1460.34	1.57	2.89E+002	38.43	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: 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	1.97935E+001	3.08561E+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	1.979350E+001	3.085610E+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	73.95	1.3264E-001	45.18
m 2	75.71	1.5948E-001	38.11

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: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	2.56E-001	-9.7903E-002
	1332.49	100.00	2.5580E-001		1.9463E-001
Nb-94	702.63	100.00	2.6482E-001	2.38E-001	2.8067E-001
	871.10	100.00	2.3827E-001		-2.3649E-001
Ag-108m	79.20	7.10	2.3475E+001	3.07E-001	-1.3630E+001
	433.93	89.90	3.0735E-001		-1.2833E-001
	614.37	90.40	3.4303E-001		-5.6309E-001
	722.95	90.50	3.1404E-001		2.5470E-001
Sb-125	176.33	6.89	6.3439E+000	9.71E-001	2.2093E+000
	427.89	29.33	9.7072E-001		-2.3035E-002
	463.38	10.35	2.5947E+000		-1.8336E+000
	600.56	17.80	1.6677E+000		-8.6317E-001
	606.64	5.02	6.9377E+000		6.7481E+000
	635.90	11.32	2.3219E+000		2.6880E-001
Cs-134	563.23	8.38	3.2284E+000	2.78E-001	8.8487E-001
	569.32	15.43	1.7160E+000		-1.7428E+000
	604.70	97.60	3.5647E-001		2.3848E-001
	795.84	85.40	2.7835E-001		-3.9431E-001
	801.93	8.73	3.0220E+000		1.5124E+000
Cs-137	661.65	85.12	3.2642E-001	3.26E-001	1.6896E-001
Eu-152	121.78	28.40	2.2093E+000	1.02E+000	-2.1024E-002
	244.69	7.49	4.6621E+000		-4.0323E+000
	344.27	26.50	1.1295E+000		-1.7339E+000
	778.89	12.74	2.0716E+000		-2.1921E+000
	867.32	4.16	6.2388E+000		3.4279E-001
	964.01	14.40	2.2152E+000		1.9652E+000
	1085.78	10.00	2.4577E+000		-7.4080E-003
	1112.02	13.30	1.6652E+000		-3.0685E-001
1407.95	20.70	1.0186E+000	3.9665E-001		
Eu-154	123.07	40.50	1.5499E+000	6.10E-001	1.4637E+000
	247.94	6.60	4.9849E+000		-1.0481E+000
	591.81	4.83	6.0656E+000		1.1433E+000
	723.30	19.70	1.4281E+000		6.2652E-001
	756.87	4.33	6.1340E+000		2.0521E+000
	873.19	11.50	2.1372E+000		2.4694E+000
	996.32	10.30	2.1839E+000		6.5731E-001
	1004.76	17.90	1.2589E+000		-2.8697E-001
1274.45	35.50	6.0989E-001	-3.0723E-001		
Eu-155	86.54	30.90	4.0996E+000	4.09E+000	2.2890E+000
	105.31	20.70	4.0890E+000		7.4248E-001
Am-241	59.54	35.90	8.8580E+000	8.86E+000	-8.4751E+000
Cm-243	228.19	10.56	3.3396E+000	2.43E+000	2.0613E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4347E+000	2.43E+000	2.2937E+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 8/3/2006 6:11:20 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-10-02-145-F

Sample Title: OOL-10-02-145-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 6:01:18 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-10-02-145-F
Title: OOL-10-02-145-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	3637-	3651	3643.83	910.92	1.00	5.55E+001	18.71	1.25E+001
2	5829-	5855	5842.09	1460.49	2.67	3.27E+002	37.80	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: 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	2.24194E+001	3.16578E+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	0.997	2.241938E+001	3.165780E+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	910.92	9.2543E-002	33.70

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: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	2.4163E-001	2.20E-001	4.6147E-002
	1332.49	100.00	2.2020E-001		1.7505E-001
Nb-94	702.63	100.00	2.7534E-001	2.75E-001	-1.7920E-001
	871.10	100.00	2.7630E-001		1.2070E-001
Ag-108m	79.20	7.10	2.2206E+001	2.94E-001	-1.2366E+001
	433.93	89.90	2.9376E-001		-1.0330E-001
	614.37	90.40	3.2939E-001		-8.3026E-002
	722.95	90.50	3.3555E-001		2.4144E-001
Sb-125	176.33	6.89	5.9254E+000	8.89E-001	-5.7135E-001
	427.89	29.33	8.8895E-001		2.7421E-001
	463.38	10.35	2.6504E+000		-2.0591E+000
	600.56	17.80	1.5740E+000		-9.7267E-001
	606.64	5.02	6.2472E+000		3.1105E+000
	635.90	11.32	2.4235E+000		2.4854E+000
Cs-134	563.23	8.38	3.4848E+000	3.15E-001	4.6552E-001
	569.32	15.43	1.8100E+000		6.3444E-002
	604.70	97.60	3.1488E-001		-1.0864E-001
	795.84	85.40	3.3045E-001		4.2652E-002
	801.93	8.73	3.1317E+000		-2.8534E-002
Cs-137	661.65	85.12	3.1098E-001	3.11E-001	-2.1777E-001
Eu-152	121.78	28.40	2.1480E+000	1.04E+000	-1.5224E-001
	244.69	7.49	4.4461E+000		-3.2500E+000
	344.27	26.50	1.0421E+000		-1.6804E-004
	778.89	12.74	1.9679E+000		-2.5739E+000
	867.32	4.16	6.1141E+000		-4.5675E+000
	964.01	14.40	1.9827E+000		-1.9123E-001
	1085.78	10.00	2.5170E+000		-6.8860E-001
	1112.02	13.30	2.0027E+000		-8.5332E-001
	1407.95	20.70	1.0597E+000		2.7924E-001
Eu-154	123.07	40.50	1.4764E+000	6.64E-001	-1.4896E-001
	247.94	6.60	4.8222E+000		3.1523E-001
	591.81	4.83	6.1427E+000		2.3797E+000
	723.30	19.70	1.5210E+000		2.8839E-001
	756.87	4.33	5.8347E+000		9.3383E-001
	873.19	11.50	2.3616E+000		-1.1717E-001
	996.32	10.30	2.4719E+000		4.0870E-001
	1004.76	17.90	1.2940E+000		-6.0534E-001
	1274.45	35.50	6.6445E-001		-1.8967E-001
Eu-155	86.54	30.90	3.8478E+000	3.85E+000	-5.3298E-001
	105.31	20.70	3.9762E+000		4.8101E+000
Am-241	59.54	35.90	8.8633E+000	8.86E+000	-1.2469E+001
Cm-243	228.19	10.56	3.3634E+000	2.15E+000	-1.2124E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1482E+000	2.15E+000	-8.9691E-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 8/3/2006 4:17:54 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-146-F

Sample Title: OOL-10-02-146-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 4:07:53 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-10-02-146-F
Title: OOL-10-02-146-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	3636-	3648	3641.71	910.39	0.51	3.12E+001	21.31	3.28E+001
2	5830-	5856	5841.91	1460.45	2.79	3.29E+002	41.45	2.81E+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	0.996	1460.81*	10.67	2.25648E+001	3.37998E+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	2.256481E+001	3.379980E+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	5.2057E-002	68.24

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: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	2.7685E-001	2.77E-001	1.1237E-001
	1332.49	100.00	3.3150E-001		3.5881E-001
Nb-94	702.63	100.00	2.8828E-001	2.88E-001	-1.2730E-001
	871.10	100.00	3.0658E-001		-1.6886E-001
Ag-108m	79.20	7.10	2.1912E+001	3.34E-001	-8.2272E+000
	433.93	89.90	3.3937E-001		-3.8133E-001
	614.37	90.40	3.9267E-001		-2.4556E-001
	722.95	90.50	3.3406E-001		4.2208E-001
Sb-125	176.33	6.89	6.2705E+000	1.10E+000	6.6278E+000
	427.89	29.33	1.0971E+000		7.8953E-001
	463.38	10.35	3.0677E+000		2.3956E+000
	600.56	17.80	1.7495E+000		4.2577E-001
	606.64	5.02	7.2068E+000		2.8309E+000
	635.90	11.32	2.7372E+000		1.0767E-001
Cs-134	563.23	8.38	3.7361E+000	3.59E-001	-1.5245E-001
	569.32	15.43	1.9382E+000		-5.5698E-001
	604.70	97.60	3.5864E-001		-2.7551E-005
	795.84	85.40	3.6718E-001		-3.3215E-003
	801.93	8.73	3.5505E+000		-2.9634E-001
Cs-137	661.65	85.12	3.6424E-001	3.64E-001	-1.2033E-001
Eu-152	121.78	28.40	2.2201E+000	9.90E-001	4.8677E-001
	244.69	7.49	4.9101E+000		-4.9001E+000
	344.27	26.50	1.2258E+000		-1.1517E-001
	778.89	12.74	2.4190E+000		1.7472E+000
	867.32	4.16	7.4660E+000		1.3798E+000
	964.01	14.40	2.4425E+000		3.7435E+000
	1085.78	10.00	2.4974E+000		-1.9651E+000
	1112.02	13.30	2.0577E+000		-2.7815E-001
1407.95	20.70	9.9010E-001	-6.7480E-001		
Eu-154	123.07	40.50	1.5283E+000	7.89E-001	6.1555E-001
	247.94	6.60	5.4039E+000		-3.0205E+000
	591.81	4.83	6.3437E+000		1.1669E+000
	723.30	19.70	1.5071E+000		9.3372E-001
	756.87	4.33	7.1703E+000		4.7438E+000
	873.19	11.50	2.6796E+000		-7.5937E-001
	996.32	10.30	2.6454E+000		6.0236E-002
	1004.76	17.90	1.5818E+000		-8.5318E-001
1274.45	35.50	7.8868E-001	1.2883E-001		
Eu-155	86.54	30.90	3.8349E+000	3.83E+000	2.5181E+000
	105.31	20.70	4.0518E+000		2.8359E+000
Am-241	59.54	35.90	9.7966E+000	9.80E+000	-6.9799E+000
Cm-243	228.19	10.56	3.6100E+000	2.44E+000	3.4286E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4398E+000	2.44E+000	-4.2773E-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 8/3/2006 4:02:53 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-10-02-147-F

Sample Title: OOL-10-02-147-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 3:52:52 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: GRN7780
Log Number: OOL-10-02-147-F
Title: OOL-10-02-147-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5830-	5855	5842.02	1460.47	3.04	3.04E+002	35.54	6.10E+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	2.08505E+001	2.96571E+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	2.085045E+001	2.965711E+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	2.6567E-001	2.28E-001	1.3961E-001
	1332.49	100.00	2.2781E-001		1.4088E-001
Nb-94	702.63	100.00	2.4731E-001	2.42E-001	3.2480E-002
	871.10	100.00	2.4199E-001		-8.0444E-002
Ag-108m	79.20	7.10	2.2243E+001	3.12E-001	-2.3201E+001
	433.93	89.90	3.1684E-001		1.5815E-001
	614.37	90.40	3.4436E-001		-3.6936E-001
	722.95	90.50	3.1244E-001		2.5677E-001
Sb-125	176.33	6.89	6.1759E+000	9.20E-001	5.1588E-001
	427.89	29.33	9.1957E-001		-1.0399E+000
	463.38	10.35	2.6171E+000		-1.6592E+000
	600.56	17.80	1.5055E+000		-3.7819E-001
	606.64	5.02	6.5461E+000		8.9922E+000
	635.90	11.32	2.4110E+000		1.4807E+000
Cs-134	563.23	8.38	3.0670E+000	2.87E-001	1.3192E+000
	569.32	15.43	1.6256E+000		-1.3070E+000
	604.70	97.60	3.2817E-001		1.2656E-001
	795.84	85.40	2.8671E-001		1.7252E-001
	801.93	8.73	3.0033E+000		6.5024E-001
Cs-137	661.65	85.12	3.1448E-001	3.14E-001	-2.0096E-001
Eu-152	121.78	28.40	2.2729E+000	1.00E+000	-5.4330E-001
	244.69	7.49	4.5011E+000		-5.2759E+000
	344.27	26.50	1.1126E+000		-1.1510E+000
	778.89	12.74	1.8721E+000		-1.3381E+000
	867.32	4.16	5.7228E+000		-5.3551E-001
	964.01	14.40	2.0051E+000		-5.9887E-001
	1085.78	10.00	2.3969E+000		-5.6300E-001
	1112.02	13.30	1.6989E+000		-8.2236E-001
	1407.95	20.70	1.0044E+000		6.1424E-001
	Eu-154	123.07	40.50		1.5583E+000
247.94		6.60	5.1112E+000	3.0598E+000	
591.81		4.83	5.6071E+000	1.7883E+000	
723.30		19.70	1.4281E+000	6.2460E-001	
756.87		4.33	6.0236E+000	4.3065E+000	
873.19		11.50	2.1213E+000	6.2399E-001	
996.32		10.30	2.2043E+000	-8.5125E-001	
1004.76		17.90	1.1854E+000	-7.1460E-001	
1274.45		35.50	6.3095E-001	4.3021E-001	
Eu-155		86.54	30.90	4.1400E+000	3.99E+000
	105.31	20.70	3.9902E+000	-6.4059E-001	
Am-241	59.54	35.90	1.0233E+001	1.02E+001	3.7507E+000
Cm-243	228.19	10.56	3.5317E+000	2.17E+000	2.3863E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1712E+000	2.17E+000	-2.3959E+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 8/4/2006 10:13:37 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-10-02-173-F-

Sample Title: OOL-10-02-148-F-G

Description: 100% Wet grass--phone pole in sh

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 10:03:34 AM

Live Time: 600.0 seconds

Real Time: 600.9 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-02-173-F-
Title: OOL-10-02-148-F-G
Description: 100% Wet grass--phone pole in shot

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5827-	5852	5839.85	1459.93	1.58	3.10E+002	36.81	9.90E+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: 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	2.12716E+001	3.05647E+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	2.127164E+001	3.056475E+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	3.1107E-001	3.11E-001	7.6021E-002
	1332.49	100.00	3.4133E-001		4.5261E-001
Nb-94	702.63	100.00	2.7088E-001	2.71E-001	-1.6335E-001
	871.10	100.00	3.0658E-001		2.2071E-001
Ag-108m	79.20	7.10	2.3604E+001	3.25E-001	-3.3160E+001
	433.93	89.90	3.2491E-001		2.8309E-002
	614.37	90.40	3.7364E-001		-6.1054E-001
	722.95	90.50	3.4433E-001		1.2541E-001
Sb-125	176.33	6.89	6.0380E+000	9.78E-001	2.2063E+000
	427.89	29.33	9.7780E-001		-2.7566E-001
	463.38	10.35	2.9618E+000		2.1482E+000
	600.56	17.80	1.7295E+000		-1.3462E+000
	606.64	5.02	7.5047E+000		5.9982E+000
	635.90	11.32	2.5679E+000		-1.3001E+000
Cs-134	563.23	8.38	3.8423E+000	3.61E-001	-1.8132E+000
	569.32	15.43	2.0139E+000		5.8652E-001
	604.70	97.60	3.8158E-001		2.6920E-001
	795.84	85.40	3.6079E-001		4.3547E-002
	801.93	8.73	3.5661E+000		-3.3835E+000
Cs-137	661.65	85.12	3.5056E-001	3.51E-001	-3.7462E-002
Eu-152	121.78	28.40	2.2782E+000	1.03E+000	1.4022E-001
	244.69	7.49	4.7059E+000		-6.9754E+000
	344.27	26.50	1.2441E+000		-6.6954E-001
	778.89	12.74	2.2175E+000		1.3607E-001
	867.32	4.16	6.7127E+000		-6.8340E+000
	964.01	14.40	2.3318E+000		1.5065E+000
	1085.78	10.00	2.7226E+000		-7.5667E-001
	1112.02	13.30	2.0441E+000		-7.3644E-002
	1407.95	20.70	1.0325E+000		2.3129E-001
	Eu-154	123.07	40.50		1.5749E+000
247.94		6.60	5.2748E+000	-3.4326E-001	
591.81		4.83	6.7267E+000	4.1047E+000	
723.30		19.70	1.5687E+000	1.5921E-001	
756.87		4.33	6.3836E+000	2.6014E+000	
873.19		11.50	2.6920E+000	-7.1260E-001	
996.32		10.30	2.4899E+000	-1.4589E+000	
1004.76		17.90	1.6719E+000	-6.2852E-001	
1274.45		35.50	7.1453E-001	9.8103E-002	
Eu-155		86.54	30.90	4.2764E+000	4.23E+000
	105.31	20.70	4.2290E+000	3.5801E+000	
Am-241	59.54	35.90	9.2189E+000	9.22E+000	-7.5315E+000
Cm-243	228.19	10.56	3.3694E+000	2.56E+000	-1.0264E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.5583E+000	2.56E+000	2.6096E+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 8/4/2006 10:57:14 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-149-F-

Sample Title: OOL-10-02-149-F-G

Description: 100% Wet grass

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 10:47:14 AM

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-10-02-149-F-
Title: OOL-10-02-149-F-G
Description: 100% Wet grass

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5826-	5853	5840.41	1460.07	0.72	2.69E+002	39.68	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: 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	1.84230E+001	3.10402E+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	0.982	1.842303E+001	3.104024E+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	3.2676E-001	3.16E-001	3.0476E-001
	1332.49	100.00	3.1615E-001		3.8560E-001
Nb-94	702.63	100.00	3.3720E-001	3.16E-001	2.7721E-002
	871.10	100.00	3.1645E-001		2.4698E-001
Ag-108m	79.20	7.10	2.3715E+001	3.37E-001	7.0621E+000
	433.93	89.90	3.4153E-001		-3.9784E-001
	614.37	90.40	3.8328E-001		-6.2314E-001
	722.95	90.50	3.3703E-001		1.1881E-001
Sb-125	176.33	6.89	6.2234E+000	1.04E+000	-4.1303E-001
	427.89	29.33	1.0425E+000		1.3816E-001
	463.38	10.35	2.9322E+000		1.1449E+000
	600.56	17.80	1.8019E+000		6.1355E-002
	606.64	5.02	7.6013E+000		1.1284E+001
	635.90	11.32	2.6709E+000		2.5600E-002
Cs-134	563.23	8.38	3.8160E+000	3.56E-001	-2.0733E+000
	569.32	15.43	2.1152E+000		-2.8654E-001
	604.70	97.60	3.7956E-001		8.2296E-002
	795.84	85.40	3.5592E-001		2.0868E-001
Cs-137	801.93	8.73	3.2890E+000	3.82E-001	2.4292E-001
	661.65	85.12	3.8168E-001		-1.0654E-002
Eu-152	121.78	28.40	2.3297E+000	9.76E-001	-5.9089E-001
	244.69	7.49	4.9018E+000		-6.1624E+000
	344.27	26.50	1.2562E+000		-9.5210E-001
	778.89	12.74	2.1939E+000		-6.6181E-002
	867.32	4.16	7.2941E+000		-4.5894E+000
	964.01	14.40	2.3693E+000		3.5793E+000
	1085.78	10.00	3.1218E+000		1.2035E+000
	1112.02	13.30	2.1111E+000		-1.5789E+000
1407.95	20.70	9.7553E-001	6.2866E-002		
Eu-154	123.07	40.50	1.6395E+000	7.08E-001	1.9089E+000
	247.94	6.60	5.5490E+000		2.1304E+000
	591.81	4.83	6.7034E+000		-1.3729E+000
	723.30	19.70	1.5619E+000		2.8190E-001
	756.87	4.33	7.1393E+000		-8.1777E+000
	873.19	11.50	2.6421E+000		-2.8102E+000
	996.32	10.30	2.6286E+000		6.9775E-001
	1004.76	17.90	1.6094E+000		-6.6003E-002
1274.45	35.50	7.0848E-001	-5.0031E-001		
Eu-155	86.54	30.90	4.2373E+000	4.24E+000	2.8845E+000
	105.31	20.70	4.4009E+000		4.1436E+000
Am-241	59.54	35.90	9.8108E+000	9.81E+000	-4.7143E+000
Cm-243	228.19	10.56	3.5260E+000	2.38E+000	3.5801E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3834E+000	2.38E+000	-3.2631E-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 8/4/2006 11:12:28 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-10-02-150-F-

Sample Title: OOL-10-02-150-F-G

Description: 100% Wet grass

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 11:02:27 AM

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-10-02-150-F-
Title: OOL-10-02-150-F-G
Description: 100% Wet grass

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5826-	5853	5839.94	1459.95	1.90	3.21E+002	38.41	1.40E+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	2.20193E+001	3.18116E+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	2.201925E+001	3.181155E+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	2.9619E-001	2.96E-001	8.5593E-003
	1332.49	100.00	3.0907E-001		4.1321E-001
Nb-94	702.63	100.00	3.1375E-001	2.95E-001	-5.1157E-002
	871.10	100.00	2.9486E-001		-2.5876E-001
Ag-108m	79.20	7.10	2.3518E+001	3.31E-001	-2.9334E+001
	433.93	89.90	3.5111E-001		-1.8804E-002
	614.37	90.40	3.7849E-001		-2.4125E-001
	722.95	90.50	3.3106E-001		-1.2837E-001
Sb-125	176.33	6.89	6.2906E+000	1.10E+000	1.4685E+000
	427.89	29.33	1.1002E+000		9.5679E-002
	463.38	10.35	3.2688E+000		4.0139E+000
	600.56	17.80	1.8590E+000		-2.0183E-001
	606.64	5.02	7.1456E+000		4.7941E-001
	635.90	11.32	2.7913E+000		8.6472E-001
Cs-134	563.23	8.38	3.9199E+000	3.49E-001	1.8305E+000
	569.32	15.43	1.9688E+000		-5.8205E-001
	604.70	97.60	3.6925E-001		2.7235E-001
	795.84	85.40	3.4932E-001		4.8355E-002
	801.93	8.73	3.4549E+000		4.3669E-001
Cs-137	661.65	85.12	3.5671E-001	3.57E-001	-8.3096E-003
Eu-152	121.78	28.40	2.2886E+000	9.90E-001	-7.1586E-001
	244.69	7.49	4.8261E+000		-4.0176E+000
	344.27	26.50	1.2800E+000		-9.9345E-002
	778.89	12.74	2.4296E+000		-1.9452E-001
	867.32	4.16	7.1534E+000		3.5354E+000
	964.01	14.40	2.3970E+000		2.6895E+000
	1085.78	10.00	2.8792E+000		-8.1710E-001
	1112.02	13.30	2.0441E+000		-2.4690E+000
1407.95	20.70	9.9010E-001	5.7964E-001		
Eu-154	123.07	40.50	1.5712E+000	8.10E-001	-6.7662E-001
	247.94	6.60	5.3348E+000		-1.6500E-001
	591.81	4.83	6.5381E+000		-2.5476E+000
	723.30	19.70	1.5484E+000		-3.0116E-001
	756.87	4.33	7.1393E+000		-5.9317E+000
	873.19	11.50	2.5911E+000		-1.7886E+000
	996.32	10.30	2.7600E+000		5.5432E-001
Eu-155	1004.76	17.90	1.6454E+000	4.30E+000	8.6514E-001
	1274.45	35.50	8.1004E-001		8.5460E-001
	86.54	30.90	4.3023E+000		3.2034E+000
Am-241	105.31	20.70	4.3278E+000	1.10E+001	-7.0669E-001
	59.54	35.90	1.1016E+001		-1.2315E-001
Cm-243	228.19	10.56	3.6375E+000	2.47E+000	-2.9542E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4700E+000	2.47E+000	2.7232E-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 8/4/2006 1:43:22 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-151-F-

Sample Title: OOL-10-02-151-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 1:33:20 PM

Live Time: 600.0 seconds

Real Time: 601.1 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-10-02-151-F-
Title: OOL-10-02-151-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2325-	2337	2331.35	582.80	1.24	4.45E+001	29.91	7.15E+001
2	2375-	2390	2381.36	595.30	1.34	5.00E+001	36.75	1.00E+002
3	5091-	5102	5096.14	1274.00	0.61	2.27E+001	18.98	2.83E+001
4	5317-	5340	5326.98	1331.71	1.63	1.94E+002	32.81	2.13E+001
5	5828-	5854	5842.31	1460.55	1.92	2.87E+002	41.46	3.68E+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	0.998	1460.81*	10.67	1.97075E+001	3.26137E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.97867E-001	2.04059E-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	0.998	1.970745E+001	3.261374E+000
TL-208	0.470	2.978669E-001	2.040595E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	595.30	8.3350E-002	73.48
3	1274.00	3.7753E-002	83.80
4	1331.71	3.2287E-001	16.94

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: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	4.8400E-001	4.84E-001	6.3385E-001
	1332.49	100.00	5.2878E-001		1.0039E+000
Nb-94	702.63	100.00	4.7523E-001	4.66E-001	-3.3597E-001
	871.10	100.00	4.6629E-001		1.1024E-001
Ag-108m	79.20	7.10	2.9668E+001	4.67E-001	-4.5212E+001
	433.93	89.90	4.6735E-001		1.2481E-001
	614.37	90.40	5.4327E-001		-3.7404E-001
	722.95	90.50	5.2993E-001		3.1246E-001
Sb-125	176.33	6.89	7.7700E+000	1.45E+000	8.6340E-005
	427.89	29.33	1.4502E+000		-1.3058E-001
	463.38	10.35	4.3283E+000		3.8533E+000
	600.56	17.80	2.6413E+000		-1.0775E+000
	606.64	5.02	9.7731E+000		1.7204E+000
	635.90	11.32	3.9945E+000		-2.4556E+000
Cs-134	563.23	8.38	5.4781E+000	5.04E-001	-6.3564E-003
	569.32	15.43	3.1249E+000		1.4752E+000
	604.70	97.60	5.0368E-001		4.4956E-001
	795.84	85.40	5.4375E-001		7.1682E-002
	801.93	8.73	5.3374E+000		2.0991E+000
Cs-137	661.65	85.12	5.6507E-001	5.65E-001	5.4448E-001
Eu-152	121.78	28.40	3.0222E+000	1.10E+000	2.3014E+000
	244.69	7.49	6.0880E+000		-6.3963E+000
	344.27	26.50	1.6487E+000		-5.9485E-001
	778.89	12.74	3.5801E+000		-8.2358E-001
	867.32	4.16	1.1088E+001		5.4536E+000
	964.01	14.40	3.3406E+000		6.7158E-001
	1085.78	10.00	3.9750E+000		-5.4292E-001
	1112.02	13.30	3.0937E+000		-8.8570E-001
1407.95	20.70	1.0991E+000	8.5648E-001		
Eu-154	123.07	40.50	2.0861E+000	1.03E+000	7.3326E-001
	247.94	6.60	6.7892E+000		-8.5701E+000
	591.81	4.83	1.0303E+001		-3.6801E+000
	723.30	19.70	2.4134E+000		-1.0139E+000
	756.87	4.33	1.0821E+001		-1.4650E+000
	873.19	11.50	3.9671E+000		-3.4664E-001
	996.32	10.30	4.2207E+000		1.5165E+000
Eu-155	1004.76	17.90	2.4034E+000	5.46E+000	-1.2542E-001
	1274.45	35.50	1.0347E+000		-1.9285E-001
	86.54	30.90	5.4850E+000		2.5036E+000
Am-241	105.31	20.70	5.4565E+000	1.18E+001	4.2213E+000
	59.54	35.90	1.1801E+001		-7.5207E+000
Cm-243	228.19	10.56	4.4894E+000	3.20E+000	-2.3214E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.2024E+000	3.20E+000	1.3126E-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 8/4/2006 1:59:51 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-152-F-

Sample Title: OOL-10-02-152-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 1:49:49 PM

Live Time: 600.0 seconds

Real Time: 601.2 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-10-02-152-F-
Title: OOL-10-02-152-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5316-	5339	5327.40	1331.82	1.28	1.95E+002	36.02	3.57E+001
2	5829-	5855	5840.21	1460.02	1.86	3.09E+002	39.70	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	0.980	1460.81*	10.67	2.11791E+001	3.21811E+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	0.980	2.117912E+001	3.218111E+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	1331.82	3.2547E-001	18.45

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	4.8501E-001	4.85E-001	5.1130E-001
	1332.49	100.00	5.4287E-001		1.2911E+000
Nb-94	702.63	100.00	5.1356E-001	4.89E-001	2.1947E-001
	871.10	100.00	4.8885E-001		-3.0418E-001
Ag-108m	79.20	7.10	3.0679E+001	5.00E-001	-5.8941E+001
	433.93	89.90	5.0043E-001		-1.5960E-001
	614.37	90.40	5.7146E-001		-2.6524E-001
	722.95	90.50	5.7153E-001		2.8812E-001
Sb-125	176.33	6.89	8.2198E+000	1.60E+000	-2.2365E-001
	427.89	29.33	1.6032E+000		-8.9592E-001
	463.38	10.35	4.6467E+000		7.1906E+000
	600.56	17.80	2.7886E+000		3.5857E-001
	606.64	5.02	1.0305E+001		4.8995E+000
	635.90	11.32	4.3328E+000		-2.5996E-001
Cs-134	563.23	8.38	6.0445E+000	5.30E-001	2.8547E+000
	569.32	15.43	3.1483E+000		-1.2130E+000
	604.70	97.60	5.2951E-001		4.1168E-001
	795.84	85.40	5.6230E-001		-5.1393E-001
Cs-137	801.93	8.73	5.6170E+000	5.97E-001	-3.1480E+000
	661.65	85.12	5.9711E-001		3.4972E-001
Eu-152	121.78	28.40	2.9749E+000	1.21E+000	2.2609E+000
	244.69	7.49	6.4881E+000		-3.3925E+000
	344.27	26.50	1.7347E+000		2.4673E-001
	778.89	12.74	4.0017E+000		1.9779E+000
	867.32	4.16	1.2034E+001		9.0589E+000
	964.01	14.40	3.6800E+000		-5.0041E-001
	1085.78	10.00	4.2196E+000		1.6511E+000
	1112.02	13.30	3.1287E+000		-1.2792E+000
	1407.95	20.70	1.2091E+000		-2.5702E-001
	Eu-154	123.07	40.50		2.0239E+000
247.94		6.60	7.0923E+000	-1.0168E+000	
591.81		4.83	1.0259E+001	7.9051E+000	
723.30		19.70	2.6258E+000	1.5186E+000	
756.87		4.33	1.1369E+001	-2.0075E+000	
873.19		11.50	4.2834E+000	1.1994E+000	
996.32		10.30	4.9356E+000	3.5866E+000	
1004.76		17.90	2.5595E+000	-1.4074E+000	
Eu-155	1274.45	35.50	1.0977E+000	5.48E+000	2.6216E-001
	86.54	30.90	5.5861E+000		4.2035E+000
	105.31	20.70	5.4783E+000		-1.7868E+000
Am-241	59.54	35.90	1.2532E+001	1.25E+001	-4.5389E+000
Cm-243	228.19	10.56	4.6286E+000	3.48E+000	-8.5590E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.4841E+000	3.48E+000	9.1395E-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 8/4/2006 2:14:27 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-153-F-

Sample Title: OOL-10-02-153-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 2:04:25 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: 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-10-02-153-F-
Title: OOL-10-02-153-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	2040-	2052	2045.57	511.35	0.81	5.15E+001	41.04	1.40E+002
2	5316-	5340	5325.60	1331.37	2.03	2.04E+002	34.91	2.91E+001
3	5826-	5852	5840.65	1460.13	2.15	3.01E+002	41.58	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
ANN	0.996	511.00*	100.00	2.78551E-001	2.25208E-001
K-40	0.985	1460.81*	10.67	2.06567E+001	3.30643E+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	0.996	2.785505E-001	2.252079E-001
K-40	0.985	2.065670E+001	3.306431E+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	1331.37	3.3981E-001	17.12

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	5.0092E-001	5.01E-001	3.8957E-001
	1332.49	100.00	5.4584E-001		1.4207E+000
Nb-94	702.63	100.00	5.0660E-001	5.07E-001	2.7638E-001
	871.10	100.00	5.1457E-001		-8.7778E-002
Ag-108m	79.20	7.10	3.1297E+001	5.03E-001	-2.2197E+001
	433.93	89.90	5.0332E-001		-4.1189E-001
	614.37	90.40	5.7616E-001		-3.0485E-001
	722.95	90.50	5.5598E-001		-3.1966E-001
Sb-125	176.33	6.89	8.0658E+000	1.59E+000	-1.7060E+000
	427.89	29.33	1.5884E+000		-6.2874E-001
	463.38	10.35	4.4392E+000		-1.2140E+000
	600.56	17.80	2.8970E+000		-2.1576E+000
	606.64	5.02	1.0811E+001		1.0920E+001
	635.90	11.32	4.5117E+000		-1.5344E+000
Cs-134	563.23	8.38	5.9291E+000	5.51E-001	-9.4087E-001
	569.32	15.43	3.1716E+000		9.1101E-001
	604.70	97.60	5.5066E-001		6.3412E-004
	795.84	85.40	6.0424E-001		3.2750E-001
	801.93	8.73	5.9382E+000		4.2791E+000
Cs-137	661.65	85.12	5.9084E-001	5.91E-001	2.0363E-002
Eu-152	121.78	28.40	3.0398E+000	1.15E+000	1.1239E+000
	244.69	7.49	6.5255E+000		-8.5361E+000
	344.27	26.50	1.8770E+000		-1.0148E-001
	778.89	12.74	3.9635E+000		3.7473E-001
	867.32	4.16	1.2054E+001		3.8042E+000
	964.01	14.40	3.3341E+000		-1.7044E+000
	1085.78	10.00	4.3201E+000		-1.1234E+000
	1112.02	13.30	3.3955E+000		-9.5346E-001
1407.95	20.70	1.1495E+000	1.8912E-002		
Eu-154	123.07	40.50	2.0916E+000	1.16E+000	7.6474E-002
	247.94	6.60	7.2607E+000		3.3628E-001
	591.81	4.83	1.1092E+001		7.4450E+000
	723.30	19.70	2.5463E+000		-1.6810E+000
	756.87	4.33	1.1745E+001		4.8127E+000
	873.19	11.50	4.5056E+000		-2.5360E+000
	996.32	10.30	4.6854E+000		6.1142E-001
	1004.76	17.90	2.5200E+000		-1.0880E+000
1274.45	35.50	1.1570E+000	8.4845E-001		
Eu-155	86.54	30.90	5.6961E+000	5.70E+000	6.5336E+000
	105.31	20.70	5.7402E+000		-2.5410E+000
Am-241	59.54	35.90	1.2741E+001	1.27E+001	-6.2016E+000
Cm-243	228.19	10.56	4.8379E+000	3.41E+000	-1.3253E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.4132E+000	3.41E+000	1.0164E+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 8/4/2006 2:31:27 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-154-F-

Sample Title: OOL-10-02-154-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 2:21:25 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: 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-10-02-154-F-
Title: OOL-10-02-154-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5312-	5338	5326.25	1331.53	2.77	2.51E+002	39.86	3.70E+001
2	5826-	5853	5839.32	1459.80	2.94	3.08E+002	43.21	3.90E+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: 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	0.967	1460.81*	10.67	2.11256E+001	3.42187E+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	0.967	2.112563E+001	3.421870E+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	1331.53	4.1832E-001	15.88

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: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	5.0287E-001	5.03E-001	5.1276E-001
	1332.49	100.00	5.9668E-001		1.7996E+000
Nb-94	702.63	100.00	5.3017E-001	4.96E-001	3.0719E-001
	871.10	100.00	4.9585E-001		-2.2083E-001
Ag-108m	79.20	7.10	3.2068E+001	5.37E-001	-4.4277E+001
	433.93	89.90	5.3682E-001		-3.4484E-001
	614.37	90.40	5.7146E-001		-2.5276E-001
	722.95	90.50	5.8082E-001		-2.2477E-001
Sb-125	176.33	6.89	8.4751E+000	1.66E+000	6.5247E+000
	427.89	29.33	1.6591E+000		9.8869E-001
	463.38	10.35	4.4968E+000		-3.5218E-002
	600.56	17.80	2.8930E+000		7.0963E-001
	606.64	5.02	1.0486E+001		3.7375E+000
	635.90	11.32	4.5633E+000		-1.4100E+000
Cs-134	563.23	8.38	5.9871E+000	5.25E-001	-1.3673E+000
	569.32	15.43	3.3515E+000		-2.2358E+000
	604.70	97.60	5.2517E-001		-5.7246E-001
	795.84	85.40	5.9952E-001		5.8992E-001
Cs-137	801.93	8.73	5.5188E+000	5.98E-001	-8.1047E-001
	661.65	85.12	5.9800E-001		6.7841E-002
Eu-152	121.78	28.40	3.1803E+000	1.21E+000	1.2776E+000
	244.69	7.49	6.7813E+000		-4.8743E+000
	344.27	26.50	1.7325E+000		1.0869E+000
	778.89	12.74	3.8991E+000		-2.5277E+000
	867.32	4.16	1.2075E+001		4.0456E+000
	964.01	14.40	3.5238E+000		4.0671E-001
	1085.78	10.00	4.2757E+000		-1.4740E-002
	1112.02	13.30	3.2146E+000		-1.1586E-001
1407.95	20.70	1.2091E+000	1.8096E-001		
Eu-154	123.07	40.50	2.1863E+000	1.19E+000	3.0084E-001
	247.94	6.60	7.3897E+000		-3.0836E+000
	591.81	4.83	1.1257E+001		8.6358E-001
	723.30	19.70	2.6723E+000		-3.1433E-001
	756.87	4.33	1.1445E+001		-6.3379E+000
	873.19	11.50	4.3588E+000		-2.9884E+000
	996.32	10.30	4.4690E+000		-2.3468E+000
	1004.76	17.90	2.5762E+000		-6.8701E-001
1274.45	35.50	1.1856E+000	4.6811E-001		
Eu-155	86.54	30.90	5.8051E+000	5.79E+000	4.3439E+000
	105.31	20.70	5.7897E+000		2.5542E+000
Am-241	59.54	35.90	1.3110E+001	1.31E+001	-1.4543E+001
Cm-243	228.19	10.56	4.7719E+000	3.27E+000	-2.7514E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.2667E+000	3.27E+000	1.4780E+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 8/4/2006 2:46:04 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-155-F-

Sample Title: OOL-10-02-155-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 2:36:01 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: 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-10-02-155-F-
Title: OOL-10-02-155-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5314-	5339	5324.29	1331.04	1.10	2.22E+002	39.28	4.32E+001
2	5825-	5852	5837.54	1459.35	1.90	3.06E+002	40.09	2.47E+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: 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	0.933	1460.81*	10.67	2.10066E+001	3.23282E+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	0.933	2.100657E+001	3.232820E+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	1331.04	3.6973E-001	17.71

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	5.2290E-001	5.23E-001	1.0076E+000
	1332.49	100.00	5.8025E-001		1.7985E+000
Nb-94	702.63	100.00	5.1048E-001	5.10E-001	3.8834E-002
	871.10	100.00	5.1956E-001		-3.2075E-001
Ag-108m	79.20	7.10	3.2740E+001	5.08E-001	-3.6781E+001
	433.93	89.90	5.0835E-001		-2.5438E-001
	614.37	90.40	6.1381E-001		-6.7948E-002
	722.95	90.50	6.0058E-001		9.3470E-002
Sb-125	176.33	6.89	8.5828E+000	1.58E+000	4.4500E+000
	427.89	29.33	1.5841E+000		-4.5497E-001
	463.38	10.35	4.6773E+000		-3.5458E-001
	600.56	17.80	3.0428E+000		-3.6314E-001
	606.64	5.02	1.1190E+001		3.3264E+000
	635.90	11.32	4.7762E+000		-8.3456E-001
Cs-134	563.23	8.38	6.2690E+000	5.74E-001	-1.9004E+000
	569.32	15.43	3.3776E+000		7.5600E-002
	604.70	97.60	5.7432E-001		2.7277E-001
	795.84	85.40	6.2184E-001		-4.1170E-001
	801.93	8.73	6.2249E+000		3.1875E-001
Cs-137	661.65	85.12	6.5313E-001	6.53E-001	1.7289E-001
Eu-152	121.78	28.40	3.2191E+000	1.24E+000	5.8670E-001
	244.69	7.49	6.6058E+000		-5.3147E+000
	344.27	26.50	1.8651E+000		-1.4203E+000
	778.89	12.74	4.1931E+000		-1.0063E+000
	867.32	4.16	1.2656E+001		6.2619E+000
	964.01	14.40	3.6976E+000		1.9679E+000
	1085.78	10.00	4.8191E+000		5.3346E-001
	1112.02	13.30	3.6122E+000		7.8617E-002
Eu-154	1407.95	20.70	1.2435E+000	1.22E+000	-2.6480E-001
	123.07	40.50	2.1975E+000		-6.2063E-001
	247.94	6.60	7.3541E+000		-9.0963E-001
	591.81	4.83	1.1324E+001		2.9176E+000
	723.30	19.70	2.7555E+000		9.0979E-001
	756.87	4.33	1.2512E+001		2.7544E+000
	873.19	11.50	4.6126E+000		1.5438E+000
	996.32	10.30	4.9356E+000		3.1532E+000
Eu-155	1004.76	17.90	2.8652E+000	5.87E+000	-1.2174E+000
	1274.45	35.50	1.2236E+000		1.3338E+000
	86.54	30.90	5.9006E+000		6.6165E+000
Am-241	105.31	20.70	5.8700E+000	1.34E+001	-3.3270E+000
	59.54	35.90	1.3366E+001		7.3225E+000
Cm-243	228.19	10.56	5.0383E+000	3.44E+000	2.4302E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.4382E+000	3.44E+000	-3.4959E-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 8/4/2006 1:23:14 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-10-02-156-F-

Sample Title: OOL-10-02-156-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 1:13:09 AM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-02-156-F-
 Title: OOL-10-02-156-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	285-	306	290.70	72.76	1.05	4.67E+002	65.05	1.32E+003
m	2	285-	306	299.68	75.01	1.05	9.66E+002	77.77	1.72E+003
	3	331-	344	338.71	84.77	1.15	3.98E+002	134.48	1.56E+003
	4	949-	959	953.64	238.51	1.05	4.43E+001	51.02	2.63E+002
	5	2032-	2048	2038.37	509.71	0.64	1.76E+002	53.51	1.82E+002
	6	2324-	2333	2328.83	582.33	0.78	4.15E+001	31.76	9.75E+001
	7	4679-	4696	4686.92	1171.88	1.18	9.36E+001	33.74	6.24E+001
	8	5084-	5098	5091.29	1272.98	0.97	5.02E+001	23.87	3.38E+001
	9	5313-	5334	5324.13	1331.20	1.48	1.82E+002	37.57	4.94E+001
	10	5826-	5850	5837.56	1459.56	1.56	3.66E+002	43.10	2.83E+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: 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	0.937	511.00*	100.00	9.22796E-001	3.09376E-001
K-40	0.942	1460.81*	10.67	2.40372E+001	3.43689E+000
Co-60	0.936	1173.22*	100.00	6.01221E-001	2.21799E-001
		1332.49*	100.00	1.21016E+000	2.67770E-001
TL-208	0.728	277.35	6.80		
		510.84*	21.60	4.27220E+000	1.47418E+000
		583.14*	84.20	2.69195E-001	2.09075E-001
Pb-212	0.566	860.37	12.46		
		74.81* @	10.70	8.54989E+001	1.81177E+001
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.33075E-001	5.03761E-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	0.937	8.646498E-001	3.126492E-001
K-40	0.942	2.403719E+001	3.436892E+000
Co-60	0.936	8.490100E-001	1.708111E-001
TL-208	0.728	2.691953E-001	2.088905E-001
Pb-212 @	0.566	4.330752E-001	5.037609E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	7.7807E-001	13.93
3	84.77	6.6330E-001	33.79
8	1272.98	8.3651E-002	47.55

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: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	3.1826E-001	3.17E-001	6.0122E-001
		1332.49*	100.00	3.1696E-001		1.2102E+000
	Nb-94	702.63	100.00	4.9456E-001	4.93E-001	2.1321E-001
		871.10	100.00	4.9296E-001		-2.0585E-001
	Ag-108m	79.20	7.10	2.6639E+001	5.07E-001	-5.5106E+000
		433.93	89.90	5.1658E-001		3.1268E-001
		614.37	90.40	5.0719E-001		-8.9852E-001
		722.95	90.50	5.2895E-001		3.1136E-001
	Sb-125	176.33	6.89	7.5640E+000	1.57E+000	-1.1685E+000
		427.89	29.33	1.5667E+000		-1.0195E-001
		463.38	10.35	4.4677E+000		2.1596E+000
		600.56	17.80	2.7209E+000		-6.0467E+000
		606.64	5.02	1.0300E+001		7.0540E+000
		635.90	11.32	4.1849E+000		2.5175E+000
	Cs-134	563.23	8.38	5.6947E+000	5.28E-001	6.3919E+000
		569.32	15.43	3.0534E+000		-1.0398E+000
		604.70	97.60	5.2792E-001		-2.4261E-001
		795.84	85.40	5.5727E-001		-3.6699E-001
		801.93	8.73	5.5833E+000		8.0661E-001
	Cs-137	661.65	85.12	5.6579E-001	5.66E-001	-8.1470E-002
	Eu-152	121.78	28.40	2.9036E+000	1.15E+000	1.9602E-001
		244.69	7.49	6.8743E+000		2.0095E+000
		344.27	26.50	1.7660E+000		5.8042E-001
		778.89	12.74	3.5035E+000		-2.7684E+000
		867.32	4.16	1.1757E+001		5.0040E+000
		964.01	14.40	3.5252E+000		-1.0528E+000
		1085.78	10.00	4.3977E+000		1.5094E+000
		1112.02	13.30	3.3219E+000		-3.3019E+000
		1407.95	20.70	1.1492E+000		6.8082E-001
	Eu-154	123.07	40.50	1.9882E+000	1.19E+000	-8.7322E-001
		247.94	6.60	7.6193E+000		3.8764E+000
		591.81	4.83	1.0477E+001		-4.0308E+000
		723.30	19.70	2.4382E+000		2.1007E+000
		756.87	4.33	1.0766E+001		2.1482E+000
		873.19	11.50	4.2380E+000		-2.4039E-001
		996.32	10.30	4.5285E+000		-6.4450E-001
		1004.76	17.90	2.5197E+000		-1.6028E+000
		1274.45	35.50	1.1945E+000		1.0021E+000
	Eu-155	86.54	30.90	5.4021E+000	5.17E+000	1.0966E+000
		105.31	20.70	5.1685E+000		1.5985E+000
	Am-241	59.54	35.90	9.3353E+000	9.34E+000	3.0568E+000
	Cm-243	228.19	10.56	4.8605E+000	3.47E+000	-4.1243E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	3.4681E+000	3.47E+000	-1.5227E+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 8/4/2006 1:06:15 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-10-02-157-F-

Sample Title: OOL-10-02-157-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 12:56:09 AM

Live Time: 600.0 seconds

Real Time: 601.5 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-157-F-
Title: OOL-10-02-157-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 12 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.981	511.00*	100.00	1.45624E+000	4.05967E-001
K-40	0.939	1460.81*	10.67	2.23811E+001	3.29403E+000
Co-60	0.947	1173.22*	100.00	5.80891E-001	2.02523E-001
		1332.49*	100.00	1.51557E+000	2.73865E-001
TL-208	0.735	277.35	6.80		
		510.84*	21.60	6.74183E+000	1.95846E+000
		583.14*	84.20	3.45313E-001	2.60790E-001
Bi-214	0.390	860.37	12.46		
		609.31*	46.30	6.99314E-001	4.83024E-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
ANN	0.981	1.381648E+000	4.098494E-001
K-40	0.939	2.238108E+001	3.294030E+000
Co-60	0.947	9.113259E-001	1.628352E-001
TL-208	0.735	3.453126E-001	2.605471E-001
Bi-214	0.390	6.993138E-001	4.830242E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.0720E+000	11.32
m 2	75.02	1.7890E+000	7.78
M 3	84.80	1.1566E+000	10.44
m 4	87.39	3.1144E-001	33.18
5	197.97	9.7694E-002	86.35
10	1273.60	5.6667E-002	62.26

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: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	2.8066E-001	2.67E-001	5.8089E-001
		1332.49*	100.00	2.6744E-001		1.5156E+000
	Nb-94	702.63	100.00	5.1508E-001	5.11E-001	-9.2240E-002
		871.10	100.00	5.1095E-001		9.0416E-002
	Ag-108m	79.20	7.10	2.8837E+001	5.47E-001	3.9556E+000
		433.93	89.90	5.4709E-001		-1.4090E-001
		614.37	90.40	5.6155E-001		-6.0453E-001
		722.95	90.50	5.7620E-001		4.1315E-001
	Sb-125	176.33	6.89	8.5760E+000	1.72E+000	7.1442E+000
		427.89	29.33	1.7156E+000		-3.7931E-001
		463.38	10.35	4.9833E+000		5.7768E+000
		600.56	17.80	3.0331E+000		-2.9457E+000
		606.64	5.02	1.1083E+001		3.6221E+000
		635.90	11.32	4.5607E+000		4.0761E+000
	Cs-134	563.23	8.38	5.9813E+000	5.85E-001	-1.0232E-001
		569.32	15.43	3.3382E+000		-2.2902E+000
		604.70	97.60	5.8494E-001		-1.4293E-001
		795.84	85.40	5.8925E-001		1.8321E-001
		801.93	8.73	5.5461E+000		2.1286E+000
	Cs-137	661.65	85.12	6.0150E-001	6.01E-001	1.1999E-001
	Eu-152	121.78	28.40	3.1845E+000	1.08E+000	4.0649E-001
		244.69	7.49	7.4829E+000		3.3319E+000
		344.27	26.50	1.8784E+000		2.5265E-001
		778.89	12.74	3.8496E+000		-3.0912E+000
		867.32	4.16	1.2442E+001		-2.1598E+000
		964.01	14.40	3.4242E+000		7.7986E-002
		1085.78	10.00	4.3874E+000		-1.5398E+000
		1112.02	13.30	3.2514E+000		-3.6542E+000
		1407.95	20.70	1.0793E+000		-1.0409E-001
	Eu-154	123.07	40.50	2.2070E+000	1.19E+000	2.5132E-001
		247.94	6.60	8.2343E+000		5.2271E+000
		591.81	4.83	1.0999E+001		-4.4522E+000
		723.30	19.70	2.6290E+000		3.7300E-001
		756.87	4.33	1.1955E+001		1.5165E+000
		873.19	11.50	4.4872E+000		5.1714E+000
		996.32	10.30	4.5646E+000		1.5691E+000
		1004.76	17.90	2.6973E+000		6.8446E-002
		1274.45	35.50	1.1945E+000		3.1032E-001
	Eu-155	86.54	30.90	5.8213E+000	5.51E+000	-2.0737E-001
		105.31	20.70	5.5136E+000		-2.9340E+000
	Am-241	59.54	35.90	9.8631E+000	9.86E+000	4.0509E+000
	Cm-243	228.19	10.56	5.5410E+000	3.85E+000	4.7798E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	3.8515E+000	3.85E+000	-6.7270E-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 8/4/2006 12:47:11 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-158-F-

Sample Title: OOL-10-02-158-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 12:37:06 AM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-02-158-F-
 Title: OOL-10-02-158-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-	306	290.85	72.80	0.97	6.25E+002	72.33	1.67E+003
m	2	284-	306	299.63	75.00	0.98	1.25E+003	87.80	2.00E+003
	3	332-	344	338.90	84.81	1.07	4.67E+002	142.02	1.81E+003
	4	949-	960	953.73	238.53	0.65	7.49E+001	62.39	3.69E+002
	5	2029-	2050	2040.23	510.17	1.52	2.49E+002	69.01	2.64E+002
	6	2375-	2385	2380.47	595.24	0.58	3.10E+001	32.87	1.05E+002
	7	2425-	2438	2432.58	608.26	0.40	4.22E+001	39.82	1.35E+002
	8	3634-	3648	3639.94	910.12	0.49	3.90E+001	35.81	1.02E+002
	9	4679-	4697	4687.78	1172.10	1.12	8.43E+001	31.56	5.07E+001
	10	5313-	5335	5324.76	1331.35	1.59	2.73E+002	38.88	3.13E+001
	11	5826-	5849	5837.66	1459.59	1.52	3.35E+002	40.81	2.42E+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: 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	0.974	511.00*	100.00	1.30708E+000	4.06195E-001
K-40	0.944	1460.81*	10.67	2.20047E+001	3.22010E+000
Co-60	0.952	1173.22*	100.00	5.41524E-001	2.07111E-001
		1332.49*	100.00	1.81772E+000	2.95743E-001
Pb-212	0.566	74.81* @	10.70	1.11154E+002	2.31331E+001
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.380	238.63*	44.60	7.33145E-001	6.21152E-001
		609.31*	46.30	5.04836E-001	4.80065E-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
ANN	0.974	1.307079E+000	4.061950E-001
K-40	0.944	2.200469E+001	3.220104E+000
Co-60	0.952	9.614592E-001	1.696473E-001
Pb-212 @	0.566	7.331452E-001	6.211518E-001
Bi-214	0.380	5.048362E-001	4.800650E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.0416E+000	11.57
3	84.81	7.7902E-001	30.38
6	595.24	5.1602E-002	106.18
8	910.12	6.4965E-002	91.87

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: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	2.9688E-001	2.59E-001	5.4152E-001
		1332.49*	100.00	2.5901E-001		1.8177E+000
	Nb-94	702.63	100.00	5.4096E-001	5.11E-001	3.8356E-001
		871.10	100.00	5.1095E-001		-2.7141E-001
	Ag-108m	79.20	7.10	2.9365E+001	5.90E-001	-2.6115E+001
		433.93	89.90	5.8952E-001		-3.2215E-001
		614.37	90.40	6.0197E-001		6.5019E-002
		722.95	90.50	6.0257E-001		4.2096E-002
	Sb-125	176.33	6.89	8.9915E+000	1.72E+000	4.2130E+000
		427.89	29.33	1.7212E+000		-1.4400E+000
		463.38	10.35	4.9887E+000		2.0870E+000
		600.56	17.80	2.9834E+000		5.6046E-001
		606.64	5.02	1.1204E+001		1.2307E+001
		635.90	11.32	4.6085E+000		3.5032E+000
	Cs-134	563.23	8.38	6.4943E+000	5.75E-001	5.9995E-001
		569.32	15.43	3.6076E+000		-3.6409E-001
		604.70	97.60	5.7511E-001		3.2341E-001
		795.84	85.40	5.8558E-001		-5.6572E-001
		801.93	8.73	5.8193E+000		-1.9588E+000
	Cs-137	661.65	85.12	6.3202E-001	6.32E-001	-2.2022E-001
	Eu-152	121.78	28.40	3.3736E+000	1.25E+000	-6.8906E-001
		244.69	7.49	7.9164E+000		-5.1428E-001
		344.27	26.50	2.0403E+000		-2.2083E-001
		778.89	12.74	3.8745E+000		8.3704E-001
		867.32	4.16	1.2555E+001		2.0249E+000
		964.01	14.40	3.4780E+000		-8.9498E-001
		1085.78	10.00	4.5290E+000		1.6666E+000
		1112.02	13.30	3.3063E+000		-9.6480E-001
		1407.95	20.70	1.2462E+000		-1.5301E-001
	Eu-154	123.07	40.50	2.3421E+000	1.13E+000	1.6363E+000
		247.94	6.60	9.0693E+000		1.1245E+001
		591.81	4.83	1.1547E+001		5.1213E+000
		723.30	19.70	2.7685E+000		6.5183E-001
		756.87	4.33	1.2275E+001		2.0161E+001
		873.19	11.50	4.4105E+000		-1.1977E+000
		996.32	10.30	4.5646E+000		9.4163E-001
		1004.76	17.90	2.6973E+000		-4.6578E-003
		1274.45	35.50	1.1275E+000		1.1466E+000
	Eu-155	86.54	30.90	6.1033E+000	5.66E+000	1.8201E+000
		105.31	20.70	5.6561E+000		-3.1279E+000
	Am-241	59.54	35.90	9.9151E+000	9.92E+000	-1.9670E+000
	Cm-243	228.19	10.56	5.6041E+000	3.94E+000	1.9659E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	3.9429E+000	3.94E+000	3.9144E-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 8/4/2006 12:30:33 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-159-F-

Sample Title: OOL-10-02-159-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 12:20:28 AM

Live Time: 600.0 seconds

Real Time: 601.8 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-02-159-F-
 Title: OOL-10-02-159-F-G
 Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	290.99	72.83	1.05	7.53E+002	77.65	1.99E+003
m	2	284-	306	299.65	75.00	1.05	1.34E+003	91.19	2.32E+003
	3	332-	345	338.49	84.71	1.07	5.06E+002	156.49	2.12E+003
	4	1347-	1356	1352.95	338.34	0.93	4.60E+001	42.04	1.79E+002
	5	2031-	2052	2042.12	510.64	1.17	2.43E+002	70.76	2.82E+002
	6	3634-	3648	3640.53	910.27	0.63	4.87E+001	36.83	1.05E+002
	7	4679-	4697	4686.41	1171.76	1.41	8.00E+001	35.80	7.40E+001
	8	5314-	5335	5324.36	1331.25	1.54	2.09E+002	39.33	5.17E+001
	9	5827-	5850	5837.59	1459.57	1.50	3.54E+002	41.66	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: 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	1.27570E+000	4.12547E-001
K-40	0.942	1460.81*	10.67	2.32483E+001	3.32279E+000
Co-60	0.932	1173.22*	100.00	5.13579E-001	2.33464E-001
		1332.49*	100.00	1.39508E+000	2.84041E-001
Ac-228	0.526	338.32*	11.40	1.89951E+000	1.76065E+000
		911.07*	27.70	1.07555E+000	8.22636E-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: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	1.275696E+000	4.125474E-001
K-40	0.942	2.324828E+001	3.322794E+000
Co-60	0.932	8.689956E-001	1.803588E-001
Ac-228	0.526	1.223192E+000	7.452967E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.2555E+000	10.31
m 2	75.00	2.2383E+000	6.79
3	84.71	8.4259E-001	30.95

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	3.5396E-001	3.23E-001	5.1358E-001
		1332.49*	100.00	3.2294E-001		1.3951E+000
	Nb-94	702.63	100.00	5.2432E-001	5.24E-001	-1.6750E-001
		871.10	100.00	5.4434E-001		-1.8905E-001
	Ag-108m	79.20	7.10	3.0476E+001	5.82E-001	-2.0366E+001
		433.93	89.90	6.0960E-001		-3.4074E-002
		614.37	90.40	5.8212E-001		-5.2653E-001
		722.95	90.50	5.9647E-001		1.4561E-001
	Sb-125	176.33	6.89	9.5399E+000	1.85E+000	-7.3042E+000
		427.89	29.33	1.8488E+000		-6.1467E-001
		463.38	10.35	5.2782E+000		1.0762E+000
		600.56	17.80	3.1163E+000		-6.0732E+000
		606.64	5.02	1.1252E+001		7.7791E+000
		635.90	11.32	4.8285E+000		1.5061E+000
	Cs-134	563.23	8.38	6.4225E+000	5.81E-001	5.8161E+000
		569.32	15.43	3.5266E+000		7.6113E-001
		604.70	97.60	5.8066E-001		5.0295E-001
		795.84	85.40	6.0369E-001		1.4486E-001
		801.93	8.73	5.9163E+000		-3.3805E-001
	Cs-137	661.65	85.12	6.6034E-001	6.60E-001	-1.4918E-001
	Eu-152	121.78	28.40	3.5659E+000	1.23E+000	3.9246E+000
		244.69	7.49	8.1616E+000		-2.4933E-001
		344.27	26.50	2.1182E+000		9.8246E-001
		778.89	12.74	4.1949E+000		1.8252E+000
		867.32	4.16	1.2908E+001		-2.1859E-001
		964.01	14.40	3.5775E+000		1.7837E+000
		1085.78	10.00	4.7616E+000		1.1601E+000
		1112.02	13.30	3.2829E+000		-1.0214E+000
		1407.95	20.70	1.2254E+000		-6.2747E-001
	Eu-154	123.07	40.50	2.4295E+000	1.02E+000	2.6923E-001
		247.94	6.60	9.2991E+000		-2.8764E+000
		591.81	4.83	1.2010E+001		7.3392E-001
		723.30	19.70	2.7157E+000		-1.0912E-001
		756.87	4.33	1.2023E+001		2.7201E+000
		873.19	11.50	4.8651E+000		-3.2129E-001
		996.32	10.30	4.8263E+000		-2.4985E+000
		1004.76	17.90	2.8540E+000		9.8162E-001
		1274.45	35.50	1.0184E+000		3.3741E-001
	Eu-155	86.54	30.90	6.2701E+000	6.17E+000	3.6336E+000
		105.31	20.70	6.1660E+000		1.5166E-001
	Am-241	59.54	35.90	1.0229E+001	1.02E+001	1.6895E+000
	Cm-243	228.19	10.56	6.2081E+000	4.34E+000	1.7551E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	4.3416E+000	4.34E+000	2.6763E+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 8/3/2006 10:50:39 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-10-02-160-F-

Sample Title: OOL-10-02-160-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 10:40:36 PM

Live Time: 600.0 seconds

Real Time: 601.5 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-160-F-
Title: OOL-10-02-160-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	284-	306	291.26	72.90	1.03	6.64E+002	73.50	1.80E+003
m	2	284-	306	299.80	75.04	1.04	1.16E+003	85.52	2.22E+003
M	3	332-	356	338.97	84.83	1.15	6.49E+002	72.34	1.64E+003
m	4	332-	356	349.76	87.53	1.15	3.00E+002	63.68	2.21E+003
	5	944-	959	952.87	238.32	0.90	1.17E+002	70.37	3.90E+002
	6	1400-	1411	1404.37	351.20	0.79	3.93E+001	46.33	2.06E+002
	7	2030-	2050	2039.72	510.04	1.62	2.49E+002	66.82	2.52E+002
	8	3632-	3648	3639.88	910.11	0.97	6.35E+001	36.97	9.35E+001
	9	4681-	4697	4688.45	1172.27	1.13	7.98E+001	32.70	6.32E+001
	10	5087-	5102	5093.85	1273.62	1.74	4.51E+001	25.73	4.19E+001
	11	5316-	5336	5325.39	1331.51	1.94	2.42E+002	40.99	5.46E+001
	12	5827-	5849	5838.04	1459.68	1.62	3.20E+002	42.38	3.76E+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	0.965	511.00*	100.00	1.30780E+000	3.96021E-001
K-40	0.952	1460.81*	10.67	2.10606E+001	3.26623E+000
Co-60	0.965	1173.22*	100.00	5.12333E-001	2.13894E-001
		1332.49*	100.00	1.61597E+000	3.01155E-001
Pb-212	0.713	74.81* @	10.70	1.02932E+002	2.15465E+001
		77.11 @	18.00		
		87.30* @	8.00	2.37097E+001	6.84654E+000
		238.63*	44.60	1.14155E+000	7.11317E-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	0.965	1.307797E+000	3.960207E-001
K-40	0.952	2.106062E+001	3.266230E+000
Co-60	0.965	8.823875E-001	1.743852E-001
Pb-212 @	0.713	1.141546E+000	7.113167E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.1075E+000	11.06
M 3	84.83	1.0819E+000	11.14
6	351.20	6.5519E-002	117.85
8	910.11	1.0582E-001	58.23
10	1273.62	7.5115E-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: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	3.1525E-001	3.15E-001	5.1233E-001
		1332.49*	100.00	3.2418E-001		1.6160E+000
	Nb-94	702.63	100.00	5.4436E-001	5.34E-001	1.8676E-001
		871.10	100.00	5.3447E-001		1.0732E-001
	Ag-108m	79.20	7.10	2.9435E+001	5.33E-001	-1.9172E+001
		433.93	89.90	5.4074E-001		-1.7550E-001
		614.37	90.40	5.3311E-001		-8.0265E-001
		722.95	90.50	5.9263E-001		-1.7183E-001
	Sb-125	176.33	6.89	8.9829E+000	1.75E+000	-5.8139E+000
		427.89	29.33	1.7453E+000		1.2719E+000
		463.38	10.35	4.9342E+000		-4.0675E-001
		600.56	17.80	2.8924E+000		-4.9841E+000
		606.64	5.02	1.0469E+001		9.0217E+000
		635.90	11.32	4.6203E+000		-2.0273E+000
	Cs-134	563.23	8.38	6.2395E+000	5.51E-001	-2.7876E+000
		569.32	15.43	3.1818E+000		-2.9776E+000
		604.70	97.60	5.5107E-001		5.5233E-001
		795.84	85.40	6.2126E-001		3.5227E-001
		801.93	8.73	5.5833E+000		-8.2227E-001
	Cs-137	661.65	85.12	6.3903E-001	6.39E-001	-1.2897E-001
	Eu-152	121.78	28.40	3.1927E+000	1.28E+000	-5.9655E-001
		244.69	7.49	7.6682E+000		3.9670E+000
		344.27	26.50	1.9321E+000		-5.2444E-001
		778.89	12.74	4.1143E+000		1.3941E+000
		867.32	4.16	1.2945E+001		4.2977E+000
		964.01	14.40	3.4899E+000		1.4546E+000
		1085.78	10.00	4.6079E+000		-2.3447E+000
		1112.02	13.30	3.2514E+000		1.2687E+000
		1407.95	20.70	1.2768E+000		-1.1209E+000
	Eu-154	123.07	40.50	2.2029E+000	1.22E+000	-1.3821E+000
		247.94	6.60	8.5219E+000		-3.4620E+000
		591.81	4.83	1.1168E+001		-5.9973E+000
		723.30	19.70	2.7121E+000		-8.8518E-001
		756.87	4.33	1.1448E+001		-8.7644E+000
		873.19	11.50	4.5148E+000		-1.6184E+000
		996.32	10.30	4.7923E+000		3.2585E-001
		1004.76	17.90	2.6463E+000		8.4829E-001
		1274.45	35.50	1.2234E+000		1.3506E-001
	Eu-155	86.54	30.90	5.9359E+000	5.60E+000	1.8370E+001
		105.31	20.70	5.6046E+000		-1.5270E+000
	Am-241	59.54	35.90	9.9099E+000	9.91E+000	3.1376E-001
	Cm-243	228.19	10.56	5.3299E+000	3.94E+000	-6.4988E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	3.9400E+000	3.94E+000	-1.0973E+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 8/3/2006 10:27:31 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-10-02-161-F-

Sample Title: OOL-10-02-161-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 10:17:26 PM

Live Time: 600.0 seconds

Real Time: 602.2 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-161-F-
Title: OOL-10-02-161-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 11 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.947	511.00*	100.00	1.06568E+000	4.08772E-001
K-40	0.973	1460.81*	10.67	2.12330E+001	3.18098E+000
Co-60	0.958	1173.22*	100.00	2.68290E-001	1.73304E-001
		1332.49*	100.00	1.58964E+000	2.70093E-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	0.947	1.065677E+000	4.087721E-001
K-40	0.973	2.123297E+001	3.180981E+000
Co-60	0.958	6.536480E-001	1.458601E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.7815E+000	8.41
m 2	75.09	3.2852E+000	5.41
M 3	84.89	1.6349E+000	9.32
m 4	87.52	3.5910E-001	34.99
6	595.30	1.0144E-001	69.53
7	888.95	3.9432E-002	116.42
8	910.18	5.7089E-002	106.40

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	2.7179E-001	2.35E-001	2.6829E-001
		1332.49*	100.00	2.3503E-001		1.5896E+000
	Nb-94	702.63	100.00	5.1147E-001	5.01E-001	-2.9701E-001
		871.10	100.00	5.0122E-001		1.6507E-001
	Ag-108m	79.20	7.10	3.5334E+001	5.76E-001	-5.8135E+001
		433.93	89.90	6.4253E-001		-2.6577E-001
		614.37	90.40	5.7559E-001		-1.2793E+000
		722.95	90.50	5.8565E-001		4.1676E-001
	Sb-125	176.33	6.89	1.2334E+001	2.04E+000	1.1343E+001
		427.89	29.33	2.0382E+000		9.0426E-001
		463.38	10.35	5.5764E+000		6.4087E-001
		600.56	17.80	3.0401E+000		-1.3328E+000
		606.64	5.02	1.1240E+001		6.7762E+000
		635.90	11.32	4.5185E+000		-2.0859E+000
	Cs-134	563.23	8.38	6.5722E+000	5.79E-001	1.2930E+000
		569.32	15.43	3.5188E+000		-1.0548E+000
		604.70	97.60	5.7943E-001		5.8565E-001
		795.84	85.40	5.9561E-001		-1.6864E-001
		801.93	8.73	5.7388E+000		-1.1728E+000
	Cs-137	661.65	85.12	6.2809E-001	6.28E-001	2.6175E-001
	Eu-152	121.78	28.40	4.3564E+000	1.15E+000	3.0669E+000
		244.69	7.49	1.0325E+001		1.6820E+000
		344.27	26.50	2.4447E+000		7.9318E-001
		778.89	12.74	3.8991E+000		-1.2056E+000
		867.32	4.16	1.2212E+001		1.4894E+001
		964.01	14.40	3.3137E+000		2.9601E+000
		1085.78	10.00	4.3253E+000		-1.8767E+000
		1112.02	13.30	3.0635E+000		-1.9867E+000
		1407.95	20.70	1.1492E+000		-7.1810E-001
	Eu-154	123.07	40.50	2.9867E+000	1.17E+000	-4.8770E-001
		247.94	6.60	1.1688E+001		5.8123E+000
		591.81	4.83	1.1422E+001		-7.2248E+000
		723.30	19.70	2.6437E+000		-8.4953E-001
		756.87	4.33	1.1625E+001		7.6755E+000
		873.19	11.50	4.2306E+000		-9.4872E-001
		996.32	10.30	4.3999E+000		-4.7048E-001
		1004.76	17.90	2.6973E+000		4.0948E+000
		1274.45	35.50	1.1682E+000		1.4816E+000
	Eu-155	86.54	30.90	7.3715E+000	7.36E+000	2.6371E+001
		105.31	20.70	7.3615E+000		5.2664E+000
	Am-241	59.54	35.90	1.1532E+001	1.15E+001	-4.7037E+000
	Cm-243	228.19	10.56	7.3478E+000	5.07E+000	-1.9599E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	5.0686E+000	5.07E+000	-1.8686E+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 8/3/2006 10:13:00 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-162-F-

Sample Title: OOL-10-02-162-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 10:02:57 PM

Live Time: 600.0 seconds

Real Time: 601.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-02-162-F-
 Title: OOL-10-02-162-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-	306	291.24	72.90	1.01	7.70E+002	80.92	2.29E+003
m	2	284-	306	299.75	75.02	1.01	1.40E+003	96.06	2.74E+003
M	3	332-	356	338.99	84.84	1.19	8.15E+002	83.95	2.45E+003
m	4	332-	356	349.61	87.49	1.20	2.76E+002	72.18	3.24E+003
	5	946-	961	953.46	238.46	0.57	1.62E+002	89.72	6.40E+002
	6	2031-	2050	2040.49	510.24	2.00	2.14E+002	66.04	2.63E+002
	7	4680-	4697	4688.77	1172.35	1.14	6.22E+001	31.00	5.78E+001
	8	5315-	5335	5325.46	1331.53	1.60	2.09E+002	34.74	2.89E+001
	9	5828-	5850	5840.19	1460.22	1.94	3.17E+002	40.05	2.59E+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: 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	0.978	511.00*	100.00	1.12449E+000	3.81055E-001
K-40	0.987	1460.81*	10.67	2.08494E+001	3.12783E+000
Co-60	0.968	1173.22*	100.00	3.99281E-001	2.01610E-001
		1332.49*	100.00	1.39362E+000	2.56049E-001
Pb-212	0.714	74.81* @	10.70	1.24172E+002	2.57797E+001
		77.11 @	18.00		
		87.30* @	8.00	2.17894E+001	7.12700E+000
		238.63*	44.60	1.58277E+000	9.12241E-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	0.978	1.124491E+000	3.810548E-001
K-40	0.987	2.084938E+001	3.127826E+000
Co-60	0.968	7.798242E-001	1.584009E-001
Pb-212 @	0.714	1.582769E+000	9.122413E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.2827E+000	10.51
M 3	84.84	1.3577E+000	10.31

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: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	3.0720E-001	2.43E-001	3.9928E-001
		1332.49*	100.00	2.4284E-001		1.3936E+000
	Nb-94	702.63	100.00	5.2149E-001	4.92E-001	3.6889E-001
		871.10	100.00	4.9212E-001		9.0164E-002
	Ag-108m	79.20	7.10	3.3725E+001	5.64E-001	-2.2041E+001
		433.93	89.90	6.1800E-001		3.0972E-001
		614.37	90.40	5.9142E-001		-4.5212E-001
		722.95	90.50	5.6416E-001		2.8596E-002
	Sb-125	176.33	6.89	1.1558E+001	1.91E+000	8.7576E+000
		427.89	29.33	1.9051E+000		-8.8689E-001
		463.38	10.35	5.2628E+000		2.2229E+000
		600.56	17.80	2.9328E+000		-1.1667E+000
		606.64	5.02	1.0936E+001		3.4464E+000
		635.90	11.32	4.3832E+000		-6.3914E-001
	Cs-134	563.23	8.38	6.4513E+000	5.66E-001	-7.7650E-001
		569.32	15.43	3.4157E+000		-9.1435E-001
		604.70	97.60	5.6638E-001		2.6534E-001
		795.84	85.40	5.8466E-001		3.7224E-001
		801.93	8.73	5.4708E+000		4.8947E-001
	Cs-137	661.65	85.12	5.9736E-001	5.97E-001	1.8124E-001
	Eu-152	121.78	28.40	4.0053E+000	1.13E+000	-1.5246E+000
		244.69	7.49	9.7145E+000		4.2075E+000
		344.27	26.50	2.2596E+000		-1.1357E+000
		778.89	12.74	3.7550E+000		-1.7221E-001
		867.32	4.16	1.1697E+001		4.6055E+000
		964.01	14.40	3.3323E+000		1.8887E+000
		1085.78	10.00	4.2622E+000		1.9379E+000
		1112.02	13.30	3.2195E+000		8.3327E-001
		1407.95	20.70	1.1264E+000		-4.3838E-001
	Eu-154	123.07	40.50	2.8060E+000	1.12E+000	2.1694E+000
		247.94	6.60	1.0682E+001		-8.6788E+000
		591.81	4.83	1.1409E+001		1.2450E+001
		723.30	19.70	2.6069E+000		1.4753E+000
		756.87	4.33	1.1103E+001		-1.0541E+001
		873.19	11.50	4.2085E+000		-3.6120E+000
		996.32	10.30	4.1200E+000		-2.6813E+000
		1004.76	17.90	2.3398E+000		-2.8327E-001
		1274.45	35.50	1.1206E+000		8.5724E-001
	Eu-155	86.54	30.90	6.8496E+000	6.82E+000	2.0503E+001
		105.31	20.70	6.8196E+000		4.6966E-001
	Am-241	59.54	35.90	1.0923E+001	1.09E+001	-4.7936E-002
	Cm-243	228.19	10.56	7.0771E+000	4.72E+000	1.2784E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	4.7158E+000	4.72E+000	1.0270E+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 8/3/2006 9:33:49 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-163-F-

Sample Title: OOL-10-02-163-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 9:23:44 PM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-02-163-F-
 Title: OOL-10-02-163-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-	306	291.24	72.90	1.01	4.57E+002	68.51	1.83E+003
m	2	284-	306	299.96	75.08	1.02	9.67E+002	81.96	2.12E+003
	3	332-	343	339.61	84.99	0.98	3.47E+002	131.26	1.65E+003
	4	945-	958	953.43	238.46	0.50	8.19E+001	71.31	4.49E+002
	5	2374-	2385	2379.04	594.88	1.05	3.65E+001	34.15	1.04E+002
	6	3635-	3649	3641.35	910.48	1.59	6.43E+001	30.56	6.17E+001
	7	4679-	4698	4688.76	1172.34	0.58	8.17E+001	30.84	4.73E+001
	8	5314-	5338	5325.71	1331.59	1.56	2.35E+002	35.96	2.47E+001
	9	5829-	5850	5839.34	1460.01	1.72	3.40E+002	39.20	1.62E+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	0.975	1460.81*	10.67	2.23379E+001	3.14864E+000
Co-60	0.970	1173.22*	100.00	5.24906E-001	2.02357E-001
		1332.49*	100.00	1.56839E+000	2.69428E-001
Pb-212	0.565	74.81* @	10.70	8.54145E+001	1.82397E+001
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.01609E-001	7.08959E-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	0.975	2.233790E+001	3.148643E+000
Co-60	0.970	9.012392E-001	1.618030E-001
Pb-212 @	0.565	8.016087E-001	7.089586E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	7.6214E-001	14.98
3	84.99	5.7874E-001	37.80
5	594.88	6.0810E-002	93.59
6	910.48	1.0722E-001	47.50

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: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	2.8959E-001	2.39E-001	5.2491E-001
		1332.49*	100.00	2.3888E-001		1.5684E+000
	Nb-94	702.63	100.00	4.8166E-001	4.82E-001	1.5107E-001
		871.10	100.00	5.0610E-001		-4.2612E-002
	Ag-108m	79.20	7.10	3.0079E+001	5.32E-001	-2.1270E+001
		433.93	89.90	5.5210E-001		1.7746E-001
		614.37	90.40	5.4790E-001		-6.0152E-001
		722.95	90.50	5.3241E-001		1.1435E-001
	Sb-125	176.33	6.89	9.7011E+000	1.78E+000	-2.5814E+000
		427.89	29.33	1.7817E+000		1.3403E+000
		463.38	10.35	4.8121E+000		1.7816E+000
		600.56	17.80	2.7716E+000		6.4138E-001
		606.64	5.02	9.8433E+000		5.5732E-001
		635.90	11.32	4.2240E+000		-5.7029E-001
	Cs-134	563.23	8.38	6.1118E+000	5.01E-001	-1.1524E+000
		569.32	15.43	3.1818E+000		-1.1754E+000
		604.70	97.60	5.0083E-001		-1.4083E-001
		795.84	85.40	5.7161E-001		-2.2776E-001
		801.93	8.73	5.7926E+000		5.5195E-001
	Cs-137	661.65	85.12	5.6227E-001	5.62E-001	1.1092E-001
	Eu-152	121.78	28.40	3.5733E+000	1.30E+000	2.5237E+000
		244.69	7.49	8.7005E+000		2.7389E+000
		344.27	26.50	1.8765E+000		-3.0831E-001
		778.89	12.74	3.6513E+000		-4.5765E-001
		867.32	4.16	1.2056E+001		5.5154E+000
		964.01	14.40	3.3074E+000		2.2381E+000
		1085.78	10.00	4.1000E+000		3.7657E+000
		1112.02	13.30	3.1792E+000		-1.2384E+000
		1407.95	20.70	1.2967E+000		-2.0794E+000
	Eu-154	123.07	40.50	2.4630E+000	1.16E+000	3.3413E-001
		247.94	6.60	9.8123E+000		7.2934E+000
		591.81	4.83	1.0708E+001		2.0505E-001
		723.30	19.70	2.4302E+000		-4.1353E-001
		756.87	4.33	1.1286E+001		6.7002E+000
		873.19	11.50	4.3964E+000		1.9955E+000
		996.32	10.30	4.2187E+000		-5.4316E-001
		1004.76	17.90	2.4315E+000		-5.3117E-001
		1274.45	35.50	1.1615E+000		4.9223E-001
	Eu-155	86.54	30.90	5.9424E+000	5.92E+000	-1.2708E+000
		105.31	20.70	5.9229E+000		-1.8143E+000
	Am-241	59.54	35.90	9.7583E+000	9.76E+000	-1.8991E+000
	Cm-243	228.19	10.56	6.0300E+000	4.11E+000	7.7282E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	4.1054E+000	4.11E+000	2.2044E+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 8/3/2006 7:19:13 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-164-F-

Sample Title: OOL-10-02-164-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 7:09:10 PM

Live Time: 600.0 seconds

Real Time: 601.5 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-02-164-F-
 Title: OOL-10-02-164-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	284-	306	291.45	72.95	0.87	5.19E+002	69.53	1.71E+003
m	2	284-	306	300.14	75.12	0.88	9.47E+002	81.96	1.78E+003
M	3	332-	356	339.19	84.89	1.17	6.38E+002	72.91	1.81E+003
m	4	332-	356	349.76	87.53	1.18	2.45E+002	63.22	2.28E+003
	5	789-	800	792.81	198.30	0.68	6.73E+001	71.81	5.08E+002
	6	949-	961	953.62	238.50	0.72	9.25E+001	71.26	4.64E+002
	7	1402-	1412	1406.45	351.72	0.32	4.20E+001	44.75	2.00E+002
	8	2033-	2053	2043.01	510.87	0.41	1.52E+002	62.11	2.34E+002
	9	2323-	2334	2328.84	582.33	1.04	5.68E+001	35.61	1.09E+002
	10	3632-	3651	3641.90	910.61	0.47	9.70E+001	39.60	8.80E+001
	11	4682-	4698	4691.26	1172.97	0.61	7.29E+001	28.04	4.21E+001
	12	5089-	5103	5096.61	1274.31	1.75	5.55E+001	22.05	2.45E+001
	13	5315-	5337	5327.93	1332.15	1.54	1.58E+002	36.52	4.88E+001
	14	5830-	5854	5841.52	1460.55	1.55	2.88E+002	38.77	2.50E+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: 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	7.97196E-001	3.44929E-001
K-40	0.997	1460.81*	10.67	1.89381E+001	2.97506E+000
Co-60	0.997	1173.22*	100.00	4.68246E-001	1.83822E-001
		1332.49*	100.00	1.05472E+000	2.57136E-001
TL-208	0.737	277.35	6.80		
		510.84*	21.60	3.69072E+000	1.62509E+000
		583.14*	84.20	3.68498E-001	2.36063E-001
Pb-212	0.714	860.37	12.46		
		74.81* @	10.70	8.34875E+001	1.78891E+001
		77.11 @	18.00		
		87.30* @	8.00	1.93167E+001	6.26513E+000
PB-214	0.303	238.63*	44.60	9.05490E-001	7.11561E-001
		74.82* @	6.21	1.43851E+002	3.25443E+001
		77.11 @	10.50		
		87.30* @	4.67	3.30906E+001	1.10199E+001
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	5.35917E-001	5.77853E-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	7.176008E-001	3.486681E-001
K-40	0.997	1.893813E+001	2.975055E+000
Co-60	0.997	6.665977E-001	1.495399E-001
TL-208	0.737	3.684979E-001	2.357574E-001
Pb-212 @	0.714	9.054903E-001	7.115606E-001
PB-214 @	0.303	5.359169E-001	5.770537E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	8.6542E-001	13.39
M 3	84.89	1.0637E+000	11.42
5	198.30	1.1219E-001	106.68
10	910.61	1.6170E-001	40.82
12	1274.31	9.2536E-002	39.72

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	2.5997E-001	2.60E-001	4.6825E-001
		1332.49*	100.00	3.1957E-001		1.0547E+000
	Nb-94	702.63	100.00	4.7312E-001	4.73E-001	-2.6962E-001
		871.10	100.00	4.8200E-001		1.6330E-001
	Ag-108m	79.20	7.10	2.9702E+001	5.28E-001	-1.1911E+001
		433.93	89.90	5.6931E-001		-1.3396E-001
		614.37	90.40	5.3861E-001		-6.0163E-001
		722.95	90.50	5.2809E-001		2.0316E-001
	Sb-125	176.33	6.89	1.0173E+001	1.68E+000	8.4348E+000
		427.89	29.33	1.6796E+000		9.2270E-002
		463.38	10.35	4.6694E+000		-9.9838E-001
		600.56	17.80	2.8099E+000		1.7688E+000
		606.64	5.02	1.0234E+001		7.3791E+000
		635.90	11.32	4.0920E+000		-1.3089E+000
	Cs-134	563.23	8.38	5.6207E+000	5.27E-001	-5.7878E+000
		569.32	15.43	3.1293E+000		1.3065E+000
		604.70	97.60	5.2724E-001		-1.7430E-001
		795.84	85.40	5.4254E-001		1.1366E-001
		801.93	8.73	5.2778E+000		-2.9942E+000
	Cs-137	661.65	85.12	5.5873E-001	5.59E-001	-1.6543E-001
	Eu-152	121.78	28.40	3.6460E+000	1.14E+000	1.3974E+000
		244.69	7.49	8.2401E+000		8.9957E-001
		344.27	26.50	2.0421E+000		6.2539E-001
		778.89	12.74	3.5035E+000		-2.1081E+000
		867.32	4.16	1.1656E+001		5.6478E+000
		964.01	14.40	3.3011E+000		3.6707E-001
		1085.78	10.00	3.8844E+000		-6.9917E-001
		1112.02	13.30	3.0465E+000		-1.8475E+000
		1407.95	20.70	1.1379E+000		-2.3248E-001
	Eu-154	123.07	40.50	2.5210E+000	1.12E+000	4.2118E-001
		247.94	6.60	9.0638E+000		-8.9833E+000
		591.81	4.83	9.8528E+000		-7.7446E-001
		723.30	19.70	2.4143E+000		1.3366E+000
		756.87	4.33	1.0158E+001		-8.6695E+000
		873.19	11.50	4.0578E+000		7.8874E-001
		996.32	10.30	4.0495E+000		-2.3989E+000
		1004.76	17.90	2.5034E+000		9.0741E-001
		1274.45	35.50	1.1206E+000		9.6727E-001
	Eu-155	86.54	30.90	5.9684E+000	5.97E+000	1.7455E+001
		105.31	20.70	6.0088E+000		3.1659E-001
	Am-241	59.54	35.90	9.9616E+000	9.96E+000	1.8110E+000
	Cm-243	228.19	10.56	6.0758E+000	4.09E+000	-7.1923E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	4.0942E+000	4.09E+000	2.1889E-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 8/3/2006 6:58:50 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-10-02-165-F-

Sample Title: OOL-10-02-165-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 6:48:46 PM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-02-165-F-
 Title: OOL-10-02-165-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	285-	306	291.41	72.94	0.88	2.49E+002	57.87	1.32E+003
m	2	285-	306	300.05	75.10	0.89	4.80E+002	65.65	1.39E+003
	3	789-	797	792.83	198.30	0.76	5.00E+001	45.79	2.32E+002
	4	950-	960	953.62	238.50	0.69	8.63E+001	47.66	2.08E+002
	5	2375-	2388	2381.54	595.51	1.50	5.10E+001	36.49	1.07E+002
	6	2428-	2440	2435.32	608.95	0.29	4.01E+001	33.16	9.29E+001
	7	3640-	3651	3644.46	911.25	0.53	3.95E+001	26.26	5.55E+001
	8	4686-	4698	4691.59	1173.05	0.76	5.17E+001	26.07	4.73E+001
	9	5087-	5105	5095.95	1274.15	0.55	7.41E+001	26.68	3.29E+001
	10	5318-	5342	5328.67	1332.33	1.56	1.80E+002	37.04	4.29E+001
	11	5831-	5854	5842.27	1460.74	1.69	3.13E+002	40.73	2.98E+001
	12	7052-	7065	7058.17	1764.73	0.54	1.75E+001	12.54	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: 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	2.05989E+001	3.15532E+000
Co-60	0.999	1173.22*	100.00	3.31974E-001	1.69502E-001
		1332.49*	100.00	1.20083E+000	2.64296E-001
Pb-212	0.565	74.81* @	10.70	4.24058E+001	1.01323E+001
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.43959E-001	4.84780E-001
Bi-214	0.691	609.31*	46.30	4.79928E-001	4.00871E-001
		1120.29	15.10		
		1764.49*	15.80	8.61922E-001	6.24751E-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	2.059885E+001	3.155316E+000
Co-60	0.999	5.851935E-001	1.426803E-001
Pb-212 @	0.565	8.439586E-001	4.847797E-001
Bi-214	0.691	5.913330E-001	3.373893E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	4.1501E-001	23.24
3	198.30	8.3416E-002	91.49
5	595.51	8.4926E-002	71.62
7	911.25	6.5895E-002	66.42
9	1274.15	1.2353E-001	36.00

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: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	2.5394E-001	2.54E-001	3.3197E-001
		1332.49*	100.00	3.0991E-001		1.2008E+000
	Nb-94	702.63	100.00	4.5392E-001	4.54E-001	2.0325E-002
		871.10	100.00	4.9045E-001		2.5441E-001
	Ag-108m	79.20	7.10	2.7195E+001	4.83E-001	-7.3477E+000
		433.93	89.90	4.8267E-001		-1.0006E-001
		614.37	90.40	5.0469E-001		-1.4657E-001
		722.95	90.50	5.3755E-001		4.0938E-001
	Sb-125	176.33	6.89	7.8320E+000	1.47E+000	4.8509E+000
		427.89	29.33	1.4712E+000		2.3608E-001
		463.38	10.35	4.2816E+000		2.1032E+000
		600.56	17.80	2.6410E+000		8.4523E-001
		606.64	5.02	9.4501E+000		4.6627E+000
		635.90	11.32	3.9970E+000		3.8711E-001
	Cs-134	563.23	8.38	5.3317E+000	4.79E-001	-1.3939E+000
		569.32	15.43	3.0170E+000		9.2460E-001
		604.70	97.60	4.7892E-001		1.8392E-002
		795.84	85.40	5.3552E-001		3.9429E-001
		801.93	8.73	5.2284E+000		-2.5145E+000
	Cs-137	661.65	85.12	5.4704E-001	5.47E-001	1.9604E-001
	Eu-152	121.78	28.40	3.0503E+000	1.02E+000	3.2014E-001
		244.69	7.49	6.2962E+000		-2.9293E-002
		344.27	26.50	1.7069E+000		1.5302E-001
		778.89	12.74	3.4690E+000		-2.2845E+000
		867.32	4.16	1.1818E+001		3.8328E+000
		964.01	14.40	3.3323E+000		3.6153E+000
		1085.78	10.00	3.9423E+000		-4.2354E-001
		1112.02	13.30	2.8170E+000		-1.1594E+000
		1407.95	20.70	1.0170E+000		-1.2454E-001
	Eu-154	123.07	40.50	2.0992E+000	1.18E+000	-1.3636E+000
		247.94	6.60	7.0615E+000		3.5622E+000
		591.81	4.83	1.0155E+001		-2.2883E+000
		723.30	19.70	2.4422E+000		1.6195E-001
		756.87	4.33	1.0218E+001		-6.2787E+000
		873.19	11.50	4.1788E+000		-3.0952E-001
		996.32	10.30	4.2381E+000		2.3072E+000
		1004.76	17.90	2.4870E+000		-3.8429E-001
		1274.45	35.50	1.1814E+000		1.2118E+000
	Eu-155	86.54	30.90	5.2685E+000	5.22E+000	1.0387E+001
		105.31	20.70	5.2205E+000		-3.5401E+000
	Am-241	59.54	35.90	8.7549E+000	8.75E+000	-1.2684E+000
	Cm-243	228.19	10.56	4.7602E+000	3.27E+000	-1.6118E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	3.2661E+000	3.27E+000	-6.8066E-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 8/4/2006 10:21:36 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-166-F-

Sample Title: OOL-10-02-166-F-G

Description: Satulated Soil

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 10:11:34 AM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-02-166-F-
 Title: OOL-10-02-166-F-G
 Description: Satulated Soil

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	291.62	72.99	1.01	2.65E+002	62.96	1.81E+003
m	2	284-	306	299.78	75.03	1.02	5.06E+002	71.72	2.11E+003
	3	332-	344	338.96	84.83	0.95	2.43E+002	136.79	1.75E+003
	4	947-	961	954.23	238.66	0.91	8.31E+001	71.54	4.34E+002
	5	2431-	2442	2436.39	609.22	0.87	7.91E+001	28.59	5.29E+001
	6	3642-	3653	3646.56	911.78	0.45	4.16E+001	23.65	4.04E+001
	7	5322-	5340	5331.62	1333.07	1.78	1.04E+002	24.15	1.43E+001
	8	5835-	5856	5845.36	1461.51	1.21	2.58E+002	36.70	2.46E+001
	9	7056-	7069	7062.50	1765.81	0.27	2.02E+001	13.12	8.84E+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: 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	0.981	1460.81*	10.67	1.69950E+001	2.77878E+000
Pb-212	0.566	74.81* @	10.70	4.47384E+001	1.08237E+001
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60		
Bi-214	0.680	609.31*	46.30	8.13437E-001	7.11587E-001
		1120.29	15.10	9.45607E-001	3.61581E-001
		1764.49*	15.80	9.94674E-001	6.55178E-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	0.981	1.699496E+001	2.778781E+000
Pb-212 @	0.566	8.134372E-001	7.115875E-001
Bi-214	0.680	9.570623E-001	3.165714E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	4.4163E-001	23.76
3	84.83	4.0456E-001	56.35
6	911.78	6.9309E-002	56.87
7	1333.07	1.7292E-001	23.28

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: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	3.6470E-001	3.65E-001	2.3765E-001
	1332.49	100.00	3.8770E-001		5.7577E-001
Nb-94	702.63	100.00	3.6469E-001	3.36E-001	-2.8774E-003
	871.10	100.00	3.3645E-001		1.3474E-001
Ag-108m	79.20	7.10	2.9811E+001	4.03E-001	-3.9097E+000
	433.93	89.90	4.5457E-001		-2.4645E-001
	614.37	90.40	4.2055E-001		-4.8873E-001
	722.95	90.50	4.0342E-001		-7.2159E-002
Sb-125	176.33	6.89	1.0271E+001	1.47E+000	1.6107E+000
	427.89	29.33	1.4690E+000		4.7198E-001
	463.38	10.35	3.5743E+000		2.2535E+000
	600.56	17.80	2.1061E+000		-1.7008E-001
	606.64	5.02	8.5287E+000		8.7075E+000
	635.90	11.32	3.2599E+000		1.3715E+000
Cs-134	563.23	8.38	4.6884E+000	4.20E-001	2.3014E+000
	569.32	15.43	2.4658E+000		-2.1385E+000
	604.70	97.60	4.1982E-001		-1.8710E-001
	795.84	85.40	4.3364E-001		1.1327E-001
	801.93	8.73	4.0346E+000		3.8448E-001
Cs-137	661.65	85.12	4.5329E-001	4.53E-001	4.9356E-001
Eu-152	121.78	28.40	3.6918E+000	1.19E+000	-2.9689E-001
	244.69	7.49	7.9499E+000		3.6180E+000
	344.27	26.50	1.7478E+000		7.8879E-001
	778.89	12.74	2.8836E+000		-2.7382E+000
	867.32	4.16	8.1683E+000		-3.5137E+000
	964.01	14.40	2.6042E+000		-7.2566E-001
	1085.78	10.00	3.4504E+000		1.8979E+000
	1112.02	13.30	2.3868E+000		1.2948E+000
	1407.95	20.70	1.1934E+000		8.1367E-001
	Eu-154	123.07	40.50		2.5477E+000
247.94		6.60	8.9164E+000	6.0399E+000	
591.81		4.83	8.1132E+000	4.5794E+000	
723.30		19.70	1.8640E+000	-1.2363E-001	
756.87		4.33	8.5968E+000	1.6127E+000	
873.19		11.50	2.9381E+000	1.4970E+000	
996.32		10.30	3.3197E+000	-5.1907E-001	
1004.76		17.90	1.9632E+000	-2.5573E-001	
1274.45		35.50	8.3126E-001	7.5173E-003	
Eu-155		86.54	30.90	5.7162E+000	5.72E+000
	105.31	20.70	6.1100E+000	-3.5450E+000	
Am-241	59.54	35.90	9.6390E+000	9.64E+000	2.6357E+000
Cm-243	228.19	10.56	5.9931E+000	3.81E+000	-1.2299E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	3.8125E+000	3.81E+000	-2.4655E+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 8/4/2006 10:08:08 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-167-F-

Sample Title: OOL-10-02-167-F-G

Description: Satulated Soil

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 9:58:06 AM

Live Time: 600.0 seconds

Real Time: 601.5 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-167-F-
Title: OOL-10-02-167-F-G
Description: Satulated Soil

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	291.74	73.02	0.89	1.89E+002	60.72	1.35E+003
m	2	288-	306	299.91	75.07	0.89	5.13E+002	71.84	1.90E+003
	3	2038-	2052	2043.44	510.97	1.16	7.06E+001	40.78	1.25E+002
	4	2428-	2444	2435.72	609.05	1.85	1.26E+002	34.25	5.74E+001
	5	3638-	3652	3644.54	911.27	1.42	4.55E+001	24.36	3.75E+001
	6	3870-	3882	3875.65	969.06	0.36	1.77E+001	21.81	4.03E+001
	7	4688-	4700	4693.44	1173.52	0.57	2.95E+001	20.32	2.85E+001
	8	5322-	5340	5331.72	1333.09	1.46	7.67E+001	23.15	1.83E+001
	9	5834-	5857	5845.52	1461.55	1.97	2.61E+002	37.47	2.65E+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	1.000	511.00*	100.00	3.70634E-001	2.20474E-001
K-40	0.979	1460.81*	10.67	1.71366E+001	2.82879E+000
Co-60	0.991	1173.22*	100.00	1.89843E-001	1.31418E-001
		1332.49*	100.00	5.11417E-001	1.59532E-001
Bi-214	0.404	609.31*	46.30	1.50107E+000	4.50105E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.636	338.32	11.40		
		911.07*	27.70	1.00493E+000	5.50380E-001
		969.11*	16.60	6.58629E-001	8.16412E-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	3.706337E-001	2.204745E-001
K-40	0.979	1.713660E+001	2.828790E+000
Co-60	0.991	3.198443E-001	1.014333E-001
Bi-214	0.404	1.501068E+000	4.501049E-001
Ac-228	0.636	8.967215E-001	4.563628E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.1573E-001	32.05
m 2	75.07	8.5548E-001	14.00

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: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	2.0403E-001	1.92E-001	1.8984E-001
		1332.49*	100.00	1.9201E-001		5.1142E-001
	Nb-94	702.63	100.00	3.4132E-001	3.41E-001	-1.3802E-001
		871.10	100.00	3.6836E-001		2.4593E-001
	Ag-108m	79.20	7.10	2.9982E+001	4.04E-001	-1.9936E+001
		433.93	89.90	4.0440E-001		-1.3643E-001
		614.37	90.40	4.3052E-001		-3.1045E-002
		722.95	90.50	4.0686E-001		-6.1364E-002
	Sb-125	176.33	6.89	9.6691E+000	1.36E+000	-1.8547E+000
		427.89	29.33	1.3594E+000		-3.7061E-002
		463.38	10.35	3.6499E+000		-1.1961E+000
		600.56	17.80	2.1568E+000		7.5296E-001
		606.64	5.02	8.9789E+000		1.3138E+001
		635.90	11.32	2.9845E+000		-1.2819E-001
	Cs-134	563.23	8.38	4.2364E+000	4.26E-001	-1.5513E+000
		569.32	15.43	2.2777E+000		-9.2146E-002
		604.70	97.60	4.2913E-001		2.0165E-001
		795.84	85.40	4.2602E-001		1.6647E-001
		801.93	8.73	4.0475E+000		-2.5204E+000
	Cs-137	661.65	85.12	4.4323E-001	4.43E-001	-4.5131E-002
	Eu-152	121.78	28.40	3.5711E+000	1.03E+000	2.8710E+000
		244.69	7.49	7.4727E+000		-1.1013E+000
		344.27	26.50	1.6086E+000		8.5870E-001
		778.89	12.74	2.6555E+000		-2.8379E-001
		867.32	4.16	8.4574E+000		-3.0348E+000
		964.01	14.40	2.4638E+000		6.9137E-002
		1085.78	10.00	3.2456E+000		-9.1450E-002
		1112.02	13.30	2.3977E+000		1.1837E+000
		1407.95	20.70	1.0298E+000		-7.0730E-001
	Eu-154	123.07	40.50	2.4780E+000	8.73E-001	6.5851E-001
		247.94	6.60	8.3175E+000		5.0017E+000
		591.81	4.83	7.4396E+000		-2.4014E+000
		723.30	19.70	1.8535E+000		-5.1721E-001
		756.87	4.33	7.7868E+000		-6.8620E+000
		873.19	11.50	3.1455E+000		-8.4182E-001
		996.32	10.30	3.3322E+000		2.4596E+000
		1004.76	17.90	1.8321E+000		-3.1052E-001
		1274.45	35.50	8.7300E-001		-3.2682E-001
	Eu-155	86.54	30.90	5.7736E+000	5.77E+000	8.8456E+000
		105.31	20.70	5.9388E+000		-3.6666E+000
	Am-241	59.54	35.90	9.7477E+000	9.75E+000	5.6699E-001
	Cm-243	228.19	10.56	5.5776E+000	3.56E+000	1.8291E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	3.5631E+000	3.56E+000	-7.5487E-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 8/4/2006 9:53:47 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-168-F-

Sample Title: OOL-10-02-168-F-G

Description: Satulated Soil

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 9:43:45 AM

Live Time: 600.0 seconds

Real Time: 601.4 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-02-168-F-
 Title: OOL-10-02-168-F-G
 Description: Satulated Soil

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	291.41	72.94	1.05	2.91E+002	63.31	1.75E+003
m	2	284-	306	299.98	75.08	1.06	4.86E+002	70.73	2.17E+003
M	3	334-	353	338.66	84.75	0.92	2.67E+002	63.11	1.33E+003
m	4	334-	353	350.01	87.59	0.93	1.07E+002	58.54	1.53E+003
	5	950-	961	954.04	238.61	0.73	5.03E+001	56.57	3.10E+002
	6	1393-	1412	1407.55	351.99	1.26	7.11E+001	56.07	2.13E+002
	7	2035-	2052	2042.59	510.76	0.81	1.00E+002	39.91	9.66E+001
	8	2429-	2444	2436.26	609.18	1.28	1.01E+002	33.91	6.49E+001
	9	5324-	5340	5331.19	1332.96	0.90	6.70E+001	21.51	1.70E+001
	10	5835-	5856	5845.66	1461.59	1.54	2.22E+002	33.59	1.92E+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: 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	5.27130E-001	2.22324E-001
K-40	0.977	1460.81*	10.67	1.45904E+001	2.50570E+000
Pb-212	0.714	74.81* @	10.70	4.29195E+001	1.04782E+001
		77.11 @	18.00		
		87.30* @	8.00	8.42570E+000	4.90020E+000
		238.63*	44.60	4.91796E-001	5.58878E-001
Bi-214	0.405	609.31*	46.30	1.20879E+000	4.32512E-001
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.304	74.82* @	6.21	7.39514E+001	1.88355E+001
		77.11 @	10.50		
		87.30* @	4.67	1.44338E+001	8.46487E+000
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	9.07335E-001	7.31205E-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	5.271295E-001	2.223240E-001
K-40	0.977	1.459044E+001	2.505705E+000
Pb-212 @	0.714	4.917958E-001	5.588778E-001
Bi-214	0.405	1.208791E+000	4.325124E-001
PB-214 @	0.304	9.073351E-001	7.293945E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	4.8482E-001	21.76
M 3	84.75	4.4572E-001	23.60
9	1332.96	1.1167E-001	32.10

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: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	3.4620E-001	3.46E-001	3.7992E-001
	1332.49	100.00	3.5215E-001		2.6864E-001
Nb-94	702.63	100.00	3.3689E-001	3.37E-001	-2.4593E-001
	871.10	100.00	3.5337E-001		-1.7629E-001
Ag-108m	79.20	7.10	2.9717E+001	3.69E-001	-6.1956E+000
	433.93	89.90	4.1795E-001		1.3448E-001
	614.37	90.40	4.2457E-001		4.3071E-003
	722.95	90.50	3.6852E-001		7.0482E-002
Sb-125	176.33	6.89	9.4172E+000	1.27E+000	2.9077E+000
	427.89	29.33	1.2682E+000		-9.0088E-001
	463.38	10.35	3.4891E+000		2.5667E+000
	600.56	17.80	2.1717E+000		-3.3274E-001
	606.64	5.02	8.7335E+000		1.4368E+001
	635.90	11.32	2.8994E+000		-2.5284E+000
Cs-134	563.23	8.38	4.1466E+000	3.84E-001	9.9565E-002
	569.32	15.43	2.2406E+000		-1.4888E+000
	604.70	97.60	4.2153E-001		1.9896E-003
	795.84	85.40	3.8417E-001		-2.2069E-001
	801.93	8.73	3.9022E+000		-7.0466E-001
Cs-137	661.65	85.12	4.2592E-001	4.26E-001	9.8665E-002
Eu-152	121.78	28.40	3.4628E+000	9.50E-001	1.3367E+000
	244.69	7.49	6.9184E+000		1.0390E+000
	344.27	26.50	1.5548E+000		2.9066E-001
	778.89	12.74	2.4847E+000		-9.0154E-001
	867.32	4.16	8.8996E+000		4.2178E+000
	964.01	14.40	2.5556E+000		1.2265E-001
	1085.78	10.00	3.2456E+000		1.3443E+000
	1112.02	13.30	2.2278E+000		-8.0076E-001
1407.95	20.70	9.5021E-001	-3.3479E-001		
Eu-154	123.07	40.50	2.3929E+000	8.26E-001	-1.1387E+000
	247.94	6.60	7.8172E+000		4.4146E-002
	591.81	4.83	7.6899E+000		-5.9369E+000
	723.30	19.70	1.7105E+000		8.5976E-001
	756.87	4.33	7.8134E+000		9.2666E-001
	873.19	11.50	3.1555E+000		2.6573E+000
	996.32	10.30	3.0856E+000		1.2592E-003
	1004.76	17.90	1.7148E+000		8.1181E-001
1274.45	35.50	8.2648E-001	4.4247E-001		
Eu-155	86.54	30.90	5.6497E+000	5.65E+000	-1.9147E-001
	105.31	20.70	5.8668E+000		-4.3780E+000
Am-241	59.54	35.90	9.6176E+000	9.62E+000	1.6215E+000
Cm-243	228.19	10.56	5.4535E+000	3.49E+000	1.4456E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	3.4879E+000	3.49E+000	3.4554E+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 8/4/2006 9:40:51 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-10-02-169-F-

Sample Title: OOL-10-02-169-F-G

Description: Satulated Soil

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 9:30:57 AM

Live Time: 600.0 seconds

Real Time: 601.4 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-169-F-
Title: OOL-10-02-169-F-G
Description: Satulated Soil

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	306	300.10	75.11	1.03	2.50E+002	118.25	1.42E+003
2	1177-	1186	1181.84	295.56	0.70	3.55E+001	38.03	1.51E+002
3	1399-	1413	1407.52	351.98	1.17	8.93E+001	45.48	1.56E+002
4	2033-	2048	2043.75	511.05	0.82	9.69E+001	37.09	8.71E+001
5	2430-	2446	2436.43	609.23	1.55	1.29E+002	36.34	6.81E+001
6	4474-	4486	4480.85	1120.36	0.60	2.37E+001	19.71	2.93E+001
7	5323-	5340	5332.55	1333.30	1.55	7.33E+001	21.84	1.57E+001
8	5834-	5856	5845.40	1461.52	1.55	2.30E+002	34.39	2.01E+001
9	7057-	7070	7063.64	1766.10	1.33	2.75E+001	16.06	1.35E+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	1.000	511.00*	100.00	5.09062E-001	2.07542E-001
K-40	0.981	1460.81*	10.67	1.51222E+001	2.57222E+000
Bi-214	0.980	609.31*	46.30	1.54138E+000	4.74973E-001
		1120.29*	15.10	9.99120E-001	8.38060E-001
		1764.49*	15.80	1.35787E+000	8.04107E-001
		74.82* @	6.21	3.79766E+001	1.96506E+001
PB-214	0.611	77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	8.44047E-001	9.16426E-001
		351.92*	37.20	1.13879E+000	6.10642E-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	5.090616E-001	2.075422E-001
K-40	0.981	1.512221E+001	2.572219E+000
Bi-214	0.980	1.398754E+000	3.675322E-001
PB-214 @	0.611	1.048165E+000	5.081640E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1333.30	1.2222E-001	29.78

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	3.0565E-001	3.06E-001	3.6060E-001
	1332.49	100.00	3.5358E-001		2.6972E-001
Nb-94	702.63	100.00	3.2553E-001	3.24E-001	-2.2416E-001
	871.10	100.00	3.2380E-001		1.2869E-001
Ag-108m	79.20	7.10	2.7564E+001	3.74E-001	-1.5253E+001
	433.93	89.90	4.2700E-001		2.4438E-001
	614.37	90.40	4.2556E-001		5.7857E-002
	722.95	90.50	3.7354E-001		1.2805E-001
Sb-125	176.33	6.89	8.5352E+000	1.29E+000	8.3569E+000
	427.89	29.33	1.2860E+000		-6.5962E-001
	463.38	10.35	3.4098E+000		-1.7160E+000
	600.56	17.80	2.0593E+000		-1.5728E+000
	606.64	5.02	9.2470E+000		-2.6543E+000
	635.90	11.32	2.8801E+000		-5.9199E-001
Cs-134	563.23	8.38	4.3133E+000	3.61E-001	-3.0127E-001
	569.32	15.43	2.2530E+000		-1.3130E+000
	604.70	97.60	4.3825E-001		-1.5247E-001
	795.84	85.40	3.6058E-001		-4.1075E-002
	801.93	8.73	3.4427E+000		9.7193E-001
Cs-137	661.65	85.12	4.3177E-001	4.32E-001	2.3811E-001
Eu-152	121.78	28.40	3.1878E+000	9.78E-001	1.8382E+000
	244.69	7.49	6.8853E+000		9.4586E-002
	344.27	26.50	1.5774E+000		6.1628E-001
	778.89	12.74	2.4350E+000		-3.7034E-001
	867.32	4.16	7.8680E+000		-2.6728E+000
	964.01	14.40	2.4209E+000		-3.2948E-001
	1085.78	10.00	2.9649E+000		5.0491E-001
	1112.02	13.30	2.1921E+000		7.0098E-001
1407.95	20.70	9.7753E-001	-2.2417E-001		
Eu-154	123.07	40.50	2.2208E+000	7.97E-001	1.2587E+000
	247.94	6.60	7.7348E+000		-1.2382E+000
	591.81	4.83	8.0593E+000		6.3388E+000
	723.30	19.70	1.7162E+000		4.3572E-001
	756.87	4.33	7.7332E+000		-5.5691E+000
	873.19	11.50	2.7833E+000		5.0811E-001
	996.32	10.30	3.3072E+000		1.8848E+000
1004.76	17.90	1.7310E+000	1.3500E+000		
1274.45	35.50	7.9717E-001	-1.0715E-001		
Eu-155	86.54	30.90	5.2268E+000	5.23E+000	2.6910E+000
	105.31	20.70	5.4160E+000		2.1978E+000
Am-241	59.54	35.90	9.4585E+000	9.46E+000	3.1669E+000
Cm-243	228.19	10.56	5.0880E+000	3.38E+000	-1.6789E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	3.3806E+000	3.38E+000	1.5639E+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 8/4/2006 7:32:21 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-10-02-170-F-

Sample Title: OOL-10-02-170-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 7:22:18 AM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-02-170-F-
 Title: OOL-10-02-170-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	285-	304	291.96	73.08	0.80	1.89E+002	53.53	1.12E+003
m	2	285-	304	299.90	75.06	0.80	2.94E+002	59.64	1.27E+003
	3	334-	345	338.95	84.83	0.85	2.10E+002	111.01	1.20E+003
	4	1400-	1416	1407.72	352.04	1.04	8.75E+001	43.27	1.28E+002
	5	2037-	2051	2041.73	510.55	0.83	3.33E+001	37.66	1.16E+002
	6	2426-	2443	2437.00	609.37	1.50	9.78E+001	30.10	4.22E+001
	7	3869-	3881	3874.51	968.77	0.60	2.10E+001	16.54	1.90E+001
	8	4688-	4699	4693.94	1173.64	0.49	2.40E+001	16.32	1.80E+001
	9	5323-	5338	5330.93	1332.90	1.00	5.71E+001	16.94	5.89E+000
	10	5835-	5857	5845.03	1461.43	1.80	2.28E+002	33.31	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: 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	1.74659E-001	1.99301E-001
K-40	0.985	1460.81*	10.67	1.49955E+001	2.50470E+000
Co-60	0.993	1173.22*	100.00	1.54052E-001	1.05549E-001
		1332.49*	100.00	3.80837E-001	1.16821E-001
Bi-214	0.405	609.31*	46.30	1.16893E+000	3.88203E-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
ANN	0.992	1.746590E-001	1.993010E-001
K-40	0.985	1.499545E+001	2.504695E+000
Co-60	0.993	2.559784E-001	7.831736E-002
Bi-214	0.405	1.168930E+000	3.882028E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.1487E-001	28.34
m 2	75.06	4.9014E-001	20.28
3	84.83	3.5061E-001	52.77
4	352.04	1.4583E-001	49.45
7	968.77	3.5042E-002	78.67

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: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	1.5974E-001	1.10E-001	1.5405E-001
		1332.49*	100.00	1.0998E-001		3.8084E-001
	Nb-94	702.63	100.00	3.1732E-001	3.15E-001	2.5567E-001
		871.10	100.00	3.1462E-001		7.4842E-002
	Ag-108m	79.20	7.10	2.6848E+001	3.62E-001	-1.5739E+001
		433.93	89.90	3.9215E-001		3.5091E-002
		614.37	90.40	4.0928E-001		-1.2920E-002
		722.95	90.50	3.6215E-001		2.2778E-002
	Sb-125	176.33	6.89	7.9797E+000	1.27E+000	5.5494E+000
		427.89	29.33	1.2682E+000		7.1544E-001
		463.38	10.35	3.1506E+000		7.7851E-001
		600.56	17.80	2.0115E+000		1.0950E+000
		606.64	5.02	7.6882E+000		-3.0187E+000
		635.90	11.32	2.8411E+000		3.3387E-001
	Cs-134	563.23	8.38	4.0895E+000	3.51E-001	1.8848E+000
		569.32	15.43	2.0718E+000		-1.0461E+000
		604.70	97.60	3.8206E-001		-4.9586E-003
		795.84	85.40	3.5129E-001		-1.8797E-001
		801.93	8.73	3.5635E+000		-2.5346E-001
	Cs-137	661.65	85.12	4.2710E-001	4.27E-001	2.0432E-001
	Eu-152	121.78	28.40	2.8981E+000	1.14E+000	-2.5264E-001
		244.69	7.49	6.4102E+000		2.9265E+000
		344.27	26.50	1.3880E+000		-9.6991E-001
		778.89	12.74	2.4149E+000		-4.7941E-001
		867.32	4.16	7.6188E+000		6.6252E+000
		964.01	14.40	2.3235E+000		9.9886E-003
		1085.78	10.00	2.6173E+000		-4.9485E-001
		1112.02	13.30	2.1064E+000		9.7307E-001
		1407.95	20.70	1.1379E+000		3.9420E-001
	Eu-154	123.07	40.50	2.0271E+000	7.92E-001	1.1577E+000
		247.94	6.60	6.7977E+000		-7.2374E+000
		591.81	4.83	7.1394E+000		-2.3482E+000
		723.30	19.70	1.6873E+000		4.9893E-001
		756.87	4.33	6.1348E+000		-6.6625E+000
		873.19	11.50	2.7489E+000		1.1410E+000
		996.32	10.30	2.8310E+000		1.9184E+000
		1004.76	17.90	1.5971E+000		-3.0092E-001
		1274.45	35.50	7.9218E-001		1.8263E-001
	Eu-155	86.54	30.90	4.9688E+000	4.97E+000	-7.0819E-002
		105.31	20.70	5.0575E+000		-2.9773E-001
	Am-241	59.54	35.90	8.9036E+000	8.90E+000	9.5513E-001
	Cm-243	228.19	10.56	4.5772E+000	2.95E+000	1.6520E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.9541E+000	2.95E+000	3.8069E-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 8/3/2006 4:33:49 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-10-02-171-F

Sample Title: OOL-10-02-171-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 4:23:47 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-10-02-171-F
Title: OOL-10-02-171-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5828-	5855	5841.92	1460.45	2.22	2.77E+002	37.03	1.75E+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: 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	1.90364E+001	2.97154E+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	1.903636E+001	2.971542E+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	2.5595E-001	2.28E-001	8.5875E-002
	1332.49	100.00	2.2781E-001		8.7485E-002
Nb-94	702.63	100.00	2.3193E-001	2.32E-001	-3.0592E-001
	871.10	100.00	2.4566E-001		1.2132E-001
Ag-108m	79.20	7.10	2.0673E+001	2.98E-001	-7.7971E+000
	433.93	89.90	2.9753E-001		-2.0480E-002
	614.37	90.40	3.3628E-001		-1.9768E-002
	722.95	90.50	3.2651E-001		1.3852E-001
Sb-125	176.33	6.89	6.0797E+000	9.34E-001	1.7262E+000
	427.89	29.33	9.3449E-001		4.2383E-001
	463.38	10.35	2.5027E+000		-1.6317E+000
	600.56	17.80	1.6395E+000		1.8287E-001
	606.64	5.02	6.3870E+000		4.3784E+000
	635.90	11.32	2.3219E+000		1.8560E-001
Cs-134	563.23	8.38	3.5136E+000	3.10E-001	-6.4172E-001
	569.32	15.43	1.7594E+000		-3.1526E-001
	604.70	97.60	3.2099E-001		-1.1833E-001
	795.84	85.40	3.1035E-001		-4.3839E-002
	801.93	8.73	2.9844E+000		2.3468E+000
Cs-137	661.65	85.12	2.7535E-001	2.75E-001	-2.3466E-001
Eu-152	121.78	28.40	2.0473E+000	9.90E-001	-9.3108E-001
	244.69	7.49	4.4828E+000		-5.7495E+000
	344.27	26.50	1.0237E+000		-9.9242E-001
	778.89	12.74	1.9274E+000		2.7289E-001
	867.32	4.16	5.9436E+000		-1.4421E+000
	964.01	14.40	2.0489E+000		-3.1358E-001
	1085.78	10.00	2.4974E+000		-3.4903E-001
	1112.02	13.30	1.9460E+000		-4.2862E-002
	1407.95	20.70	9.9010E-001		7.9564E-001
	Eu-154	123.07	40.50		1.4407E+000
247.94		6.60	4.7890E+000	-8.0793E-001	
591.81		4.83	5.8546E+000	-3.9699E+000	
723.30		19.70	1.5348E+000	1.9783E+000	
756.87		4.33	6.0974E+000	2.6799E+000	
873.19		11.50	2.1213E+000	4.1962E-001	
996.32		10.30	2.3038E+000	-1.0378E+000	
1004.76		17.90	1.2105E+000	-6.6341E-001	
1274.45	35.50	6.3095E-001	2.7842E-001		
Eu-155	86.54	30.90	3.8462E+000	3.85E+000	6.9880E-001
	105.31	20.70	4.0122E+000		-4.6328E-001
Am-241	59.54	35.90	8.5962E+000	8.60E+000	1.0138E+000
Cm-243	228.19	10.56	3.3694E+000	2.29E+000	1.0271E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2880E+000	2.29E+000	-3.0269E-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 8/7/2006 1:54:53 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-02-172-F-G

Sample ID: OOL-10-02-172-F

Sample Title: OOL-10-02-172-F-G

Description: Asphalt--drainage stones

Sample Type:

Geometry:

Acquisition Started: 8/7/2006 9:55:10 AM

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-10-02-172-F-G
Log Number: OOL-10-02-172-F
Title: OOL-10-02-172-F-G
Description: Asphalt--drainage stones

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5834-	5859	5846.57	1461.61	1.34	2.13E+002	31.21	9.55E+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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-02-172-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	0.979	1460.81*	10.67	1.46513E+001	2.44892E+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-10-02-172-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	0.979	1.465130E+001	2.448920E+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
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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-10-02-172-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	2.1942E-001	2.04E-001	-1.0492E-001
	1332.49	100.00	2.0406E-001		1.7647E-001
Nb-94	702.63	100.00	2.2290E-001	2.23E-001	-7.4358E-002
	871.10	100.00	2.2271E-001		2.0456E-001
Ag-108m	79.20	7.10	1.7788E+001	2.60E-001	-2.6961E+001
	433.93	89.90	2.6010E-001		-9.7851E-002
	614.37	90.40	3.1803E-001		-3.1180E-001
	722.95	90.50	2.8910E-001		1.3282E-001
Sb-125	176.33	6.89	5.6932E+000	8.28E-001	1.7696E+000
	427.89	29.33	8.2831E-001		3.8799E-001
	463.38	10.35	2.3949E+000		-8.5036E-001
	600.56	17.80	1.6179E+000		4.2141E-001
	606.64	5.02	6.2236E+000		2.7862E+000
	635.90	11.32	1.8891E+000		1.3701E-001
Cs-134	563.23	8.38	2.8783E+000	2.76E-001	-1.8294E-001
	569.32	15.43	1.5686E+000		-3.1054E-001
	604.70	97.60	3.1488E-001		-1.0593E-001
	795.84	85.40	2.7622E-001		-1.5636E-001
	801.93	8.73	2.8089E+000		2.1528E+000
Cs-137	661.65	85.12	2.8325E-001	2.83E-001	8.8231E-002
Eu-152	121.78	28.40	1.8581E+000	8.99E-001	-5.0606E-001
	244.69	7.49	4.0797E+000		-4.5138E+000
	344.27	26.50	9.4624E-001		-1.1586E-001
	778.89	12.74	1.5290E+000		-1.8522E+000
	867.32	4.16	5.1510E+000		-2.1212E+000
	964.01	14.40	1.5799E+000		0.0000E+000
	1085.78	10.00	1.9639E+000		-2.1113E-001
	1112.02	13.30	1.4047E+000		-1.1613E+000
1407.95	20.70	8.9869E-001	3.8412E-001		
Eu-154	123.07	40.50	1.2708E+000	5.95E-001	-4.0293E-001
	247.94	6.60	4.5139E+000		-2.4007E+000
	591.81	4.83	5.3178E+000		2.6772E+000
	723.30	19.70	1.3362E+000		9.8839E-001
	756.87	4.33	4.7699E+000		-3.3593E+000
	873.19	11.50	1.9020E+000		-1.0140E+000
	996.32	10.30	2.1423E+000		-2.7889E+000
	1004.76	17.90	1.2350E+000		-5.9779E-001
1274.45	35.50	5.9540E-001	-4.1024E-001		
Eu-155	86.54	30.90	3.3988E+000	3.38E+000	3.9984E+000
	105.31	20.70	3.3782E+000		1.3963E-001
Am-241	59.54	35.90	8.6395E+000	8.64E+000	3.5610E+000
Cm-243	228.19	10.56	2.8249E+000	2.18E+000	-1.1898E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1826E+000	2.18E+000	1.4994E+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 8/4/2006 9:56:59 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-10-02-173-F-

Sample Title: OOL-10-02-173-F-G

Description: Satulation Soil---Pavement--Rock

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 9:46:57 AM

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: GRN7780
Log Number: OOL-10-02-173-F-
Title: OOL-10-02-173-F-G
Description: Satulation Soil---Pavement--Rocks

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5826-	5854	5839.31	1459.80	0.65	1.86E+002	26.73	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: 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	0.967	1460.81*	10.67	1.27580E+001	2.10444E+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	0.967	1.275800E+001	2.104437E+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	2.2175E-001	1.86E-001	-1.8894E-001
	1332.49	100.00	1.8637E-001		1.4225E-001
Nb-94	702.63	100.00	2.0954E-001	2.10E-001	2.9398E-002
	871.10	100.00	2.2068E-001		-8.9465E-002
Ag-108m	79.20	7.10	1.8362E+001	2.64E-001	-2.7068E+001
	433.93	89.90	2.7273E-001		2.4383E-001
	614.37	90.40	3.5224E-001		-3.7485E-001
	722.95	90.50	2.6356E-001		7.1190E-002
Sb-125	176.33	6.89	5.1886E+000	7.53E-001	6.7325E-001
	427.89	29.33	7.5331E-001		-1.0469E-001
	463.38	10.35	2.3949E+000		1.2660E+000
	600.56	17.80	1.3040E+000		-3.7564E-001
	606.64	5.02	7.1251E+000		8.1527E+000
	635.90	11.32	1.7717E+000		-1.6476E-001
Cs-134	563.23	8.38	3.0670E+000	2.70E-001	2.0682E+000
	569.32	15.43	1.5094E+000		-2.3565E+000
	604.70	97.60	3.5647E-001		2.6003E-001
	795.84	85.40	2.6972E-001		-9.9055E-002
	801.93	8.73	2.7271E+000		2.2396E+000
Cs-137	661.65	85.12	3.0022E-001	3.00E-001	2.1553E-001
Eu-152	121.78	28.40	1.8677E+000	8.31E-001	-2.1523E-001
	244.69	7.49	4.2670E+000		-4.0586E+000
	344.27	26.50	9.4624E-001		-5.2927E-001
	778.89	12.74	1.7707E+000		-1.7844E-001
	867.32	4.16	5.6775E+000		4.2020E+000
	964.01	14.40	1.7556E+000		-1.3225E-001
	1085.78	10.00	1.9382E+000		4.2512E-002
	1112.02	13.30	1.5224E+000		-1.4112E+000
1407.95	20.70	8.3148E-001	-7.2506E-001		
Eu-154	123.07	40.50	1.2889E+000	5.65E-001	2.0371E-001
	247.94	6.60	4.6421E+000		-1.7989E+000
	591.81	4.83	4.6821E+000		-3.1167E+000
	723.30	19.70	1.1841E+000		-1.5312E-001
	756.87	4.33	5.1805E+000		-1.7288E+000
	873.19	11.50	1.8288E+000		-1.4948E-001
	996.32	10.30	2.2246E+000		7.4837E-001
	1004.76	17.90	1.2350E+000		-5.4254E-001
1274.45	35.50	5.6518E-001	-3.6221E-002		
Eu-155	86.54	30.90	3.3658E+000	3.37E+000	2.6926E+000
	105.31	20.70	3.3758E+000		-1.2876E+000
Am-241	59.54	35.90	8.5309E+000	8.53E+000	1.0269E+000
Cm-243	228.19	10.56	3.0509E+000	2.17E+000	1.9587E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1655E+000	2.17E+000	-9.9499E-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 8/4/2006 1:24:24 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-174-F

Sample Title: OOL-10-02-174-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 1:14:21 AM

Live Time: 600.0 seconds

Real Time: 602.0 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-10-02-174-F
Title: OOL-10-02-174-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 8 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.989	1460.81*	10.67	2.19180E+001	3.03522E+000
Co-60	0.990	1173.22* 1332.49*	100.00	3.22736E-001 1.22721E+000	1.91515E-001 2.27534E-001
Cs-137	0.988	661.65*	85.12	4.59728E-001	2.82682E-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	0.989	2.191802E+001	3.035221E+000
Co-60	0.990	6.978004E-001	1.465210E-001
Cs-137	0.988	4.597277E-001	2.826823E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.3313E-001	27.63
m 2	74.98	6.6082E-001	15.70
3	85.05	4.2244E-001	49.99
6	1273.75	5.5328E-002	63.97

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: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	2.9799E-001	1.85E-001	3.2274E-001
		1332.49*	100.00	1.8524E-001		1.2272E+000
	Nb-94	702.63	100.00	5.0816E-001	4.84E-001	3.1432E-001
		871.10	100.00	4.8443E-001		6.7265E-001
	Ag-108m	79.20	7.10	3.2893E+001	5.57E-001	-1.6065E+001
		433.93	89.90	7.0490E-001		-8.5555E-003
		614.37	90.40	6.1600E-001		-4.5912E-001
		722.95	90.50	5.5685E-001		-6.3457E-002
	Sb-125	176.33	6.89	1.2942E+001	2.19E+000	4.8477E+000
		427.89	29.33	2.1873E+000		4.3803E-001
		463.38	10.35	5.8695E+000		-1.3055E+000
		600.56	17.80	3.2419E+000		1.5772E-002
		606.64	5.02	1.1742E+001		4.1551E+000
		635.90	11.32	4.8370E+000		6.1627E-001
	Cs-134	563.23	8.38	6.6058E+000	5.78E-001	-5.8070E+000
		569.32	15.43	3.7276E+000		3.3214E+000
		604.70	97.60	6.0773E-001		2.7171E-001
		795.84	85.40	5.7827E-001		-3.6363E-001
		801.93	8.73	5.5681E+000		-1.0203E+000
+	Cs-137	661.65*	85.12	4.4595E-001	4.46E-001	4.5973E-001
	Eu-152	121.78	28.40	3.8019E+000	1.06E+000	-3.5482E-002
		244.69	7.49	1.0168E+001		1.6006E+000
		344.27	26.50	2.4898E+000		2.8059E-001
		778.89	12.74	3.5872E+000		-4.2534E-001
		867.32	4.16	1.1376E+001		8.9315E-001
		964.01	14.40	3.2683E+000		2.1250E+000
		1085.78	10.00	3.8154E+000		6.8356E-001
		1112.02	13.30	2.9119E+000		-1.3168E+000
		1407.95	20.70	1.0597E+000		2.5954E-001
	Eu-154	123.07	40.50	2.6152E+000	1.03E+000	-1.9684E+000
		247.94	6.60	1.1342E+001		1.6269E+000
		591.81	4.83	1.1657E+001		5.1298E+000
		723.30	19.70	2.5624E+000		-1.3414E+000
		756.87	4.33	1.1464E+001		-5.7134E-002
		873.19	11.50	4.0727E+000		-1.7106E+000
		996.32	10.30	3.9232E+000		3.6508E-001
		1004.76	17.90	2.4154E+000		-8.2217E-001
		1274.45	35.50	1.0347E+000		7.4616E-001
	Eu-155	86.54	30.90	6.2582E+000	6.26E+000	8.5105E-001
		105.31	20.70	6.5228E+000		1.5319E+000
	Am-241	59.54	35.90	1.3359E+001	1.34E+001	-4.0829E+000
	Cm-243	228.19	10.56	7.2506E+000	5.18E+000	-2.1353E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	5.1835E+000	5.18E+000	-3.5559E+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 8/4/2006 9:42:20 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-10-02-175-F-

Sample Title: OOL-10-02-175-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 9:32:16 AM

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-10-02-175-F-
Title: OOL-10-02-175-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5827-	5853	5839.53	1459.85	2.49	3.10E+002	38.98	1.97E+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	0.970	1460.81*	10.67	2.12819E+001	3.18062E+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	0.970	2.128189E+001	3.180617E+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	2.8582E-001	2.45E-001	3.4237E-001
	1332.49	100.00	2.4456E-001		-1.9472E-001
Nb-94	702.63	100.00	3.0196E-001	2.96E-001	9.9969E-002
	871.10	100.00	2.9636E-001		-2.4488E-001
Ag-108m	79.20	7.10	2.2880E+001	3.36E-001	-1.8103E+001
	433.93	89.90	3.3609E-001		-1.7615E-001
	614.37	90.40	4.1077E-001		-6.5320E-001
	722.95	90.50	3.5006E-001		1.0701E-001
Sb-125	176.33	6.89	5.9183E+000	1.13E+000	1.4239E+000
	427.89	29.33	1.1339E+000		1.8748E-001
	463.38	10.35	2.8620E+000		8.3615E-001
	600.56	17.80	1.7890E+000		-1.0510E+000
	606.64	5.02	8.6908E+000		1.5299E+001
	635.90	11.32	2.8019E+000		1.8199E+000
Cs-134	563.23	8.38	3.7091E+000	3.61E-001	4.4406E+000
	569.32	15.43	1.9226E+000		-6.5256E-001
	604.70	97.60	4.4826E-001		6.7322E-001
	795.84	85.40	3.6079E-001		1.2651E-001
Cs-137	801.93	8.73	3.4224E+000	3.54E-001	-1.0960E+000
	661.65	85.12	3.5365E-001		-2.6620E-002
Eu-152	121.78	28.40	2.1686E+000	1.09E+000	-3.9402E-001
	244.69	7.49	4.9927E+000		-6.4532E+000
	344.27	26.50	1.1690E+000		-1.0545E+000
	778.89	12.74	2.2867E+000		-1.3626E+000
	867.32	4.16	7.0098E+000		-5.0800E+000
	964.01	14.40	2.3506E+000		2.0004E+000
	1085.78	10.00	2.7226E+000		1.9907E+000
	1112.02	13.30	2.1373E+000		-3.2411E+000
Eu-154	1407.95	20.70	1.0862E+000	7.72E-001	1.0709E+000
	123.07	40.50	1.5112E+000		9.8753E-001
	247.94	6.60	5.2546E+000		2.4793E-002
	591.81	4.83	6.0914E+000		1.2606E+000
	723.30	19.70	1.5820E+000		5.3816E-001
	756.87	4.33	6.4531E+000		1.2783E+000
	873.19	11.50	2.5653E+000		4.3121E-001
	996.32	10.30	2.4719E+000		-1.1286E+000
Eu-155	1004.76	17.90	1.4353E+000	4.15E+000	1.1876E+000
	1274.45	35.50	7.7225E-001		-6.2021E-001
	86.54	30.90	4.1534E+000		3.4318E+000
Am-241	105.31	20.70	4.3094E+000	9.00E+000	1.8366E+000
	59.54	35.90	9.0041E+000		-3.0892E+000
Cm-243	228.19	10.56	3.4283E+000	2.46E+000	1.8268E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4650E+000	2.46E+000	-2.1057E+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 8/3/2006 10:09:54 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-176-F

Sample Title: OOL-10-02-176-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 8/3/2006 9:59:52 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: GRN7780
Log Number: OOL-10-02-176-F
Title: OOL-10-02-176-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1175-	1188	1179.05	294.72	1.02	3.20E+001	26.32	5.30E+001
2	5829-	5856	5841.06	1460.24	1.71	3.08E+002	37.61	1.35E+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	0.989	1460.81*	10.67	2.11620E+001	3.09700E+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	0.989	2.116198E+001	3.096997E+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	294.72	5.3402E-002	82.13

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	2.4788E-001	2.01E-001	1.9817E-002
	1332.49	100.00	2.0123E-001		8.1027E-002
Nb-94	702.63	100.00	2.5383E-001	2.51E-001	-2.8216E-002
	871.10	100.00	2.5104E-001		-1.7701E-001
Ag-108m	79.20	7.10	2.2765E+001	2.91E-001	-1.7441E+001
	433.93	89.90	2.9122E-001		4.5946E-002
	614.37	90.40	3.1071E-001		-3.5442E-001
	722.95	90.50	2.9427E-001		2.6843E-001
Sb-125	176.33	6.89	5.8897E+000	9.01E-001	6.3207E+000
	427.89	29.33	9.0056E-001		3.4601E-001
	463.38	10.35	2.5720E+000		-1.0604E+000
	600.56	17.80	1.4898E+000		-1.3280E+000
	606.64	5.02	6.2708E+000		8.5736E+000
	635.90	11.32	2.2559E+000		-1.9504E+000
Cs-134	563.23	8.38	3.5565E+000	3.15E-001	1.7978E+000
	569.32	15.43	1.7679E+000		-1.3097E+000
	604.70	97.60	3.1488E-001		1.2051E-001
	795.84	85.40	3.2329E-001		4.3678E-001
	801.93	8.73	2.8687E+000		1.9174E+000
Cs-137	661.65	85.12	3.3467E-001	3.35E-001	2.0344E-001
Eu-152	121.78	28.40	2.1768E+000	1.02E+000	-1.0649E+000
	244.69	7.49	4.6797E+000		-6.0140E+000
	344.27	26.50	1.1527E+000		-8.5064E-001
	778.89	12.74	2.0204E+000		-1.0009E+000
	867.32	4.16	6.5588E+000		1.8720E+000
	964.01	14.40	2.0705E+000		1.8765E+000
	1085.78	10.00	2.3762E+000		-1.4914E+000
	1112.02	13.30	1.7801E+000		-2.5115E+000
1407.95	20.70	1.0186E+000	5.9143E-001		
Eu-154	123.07	40.50	1.5169E+000	7.02E-001	1.6609E-001
	247.94	6.60	5.0380E+000		-2.2242E+000
	591.81	4.83	6.2189E+000		6.4663E+000
	723.30	19.70	1.3753E+000		1.6709E+000
	756.87	4.33	5.9488E+000		2.0647E+000
	873.19	11.50	2.0892E+000		-9.9886E-001
	996.32	10.30	2.5077E+000		1.3930E-001
	1004.76	17.90	1.3720E+000		7.6217E-001
1274.45	35.50	7.0237E-001	-4.2751E-001		
Eu-155	86.54	30.90	4.0663E+000	4.00E+000	6.0426E-001
	105.31	20.70	4.0042E+000		2.5496E+000
Am-241	59.54	35.90	9.0196E+000	9.02E+000	-5.8216E+000
Cm-243	228.19	10.56	3.3931E+000	2.40E+000	-5.9002E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3989E+000	2.40E+000	3.7601E-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 8/4/2006 11:26:55 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-10-02-177-F-

Sample Title: OOL-10-02-177-F-G

Description: 100% Wet grass--Large Rock

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 11:16:52 AM

Live Time: 600.0 seconds

Real Time: 600.9 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-10-02-177-F-
Title: OOL-10-02-177-F-G
Description: 100% Wet grass--Large Rock

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5827-	5853	5839.39	1459.82	1.90	2.98E+002	35.34	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: 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	0.968	1460.81*	10.67	2.04086E+001	2.93350E+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	0.968	2.040860E+001	2.933505E+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	3.1268E-001	3.13E-001	9.6250E-002
	1332.49	100.00	3.5707E-001		5.5667E-001
Nb-94	702.63	100.00	3.3120E-001	3.30E-001	4.1467E-002
	871.10	100.00	3.3002E-001		2.3699E-001
Ag-108m	79.20	7.10	2.6844E+001	3.81E-001	-9.6427E+000
	433.93	89.90	3.8123E-001		2.0794E-001
	614.37	90.40	3.9956E-001		-2.5224E-001
	722.95	90.50	3.8895E-001		-3.7095E-002
Sb-125	176.33	6.89	7.3548E+000	1.11E+000	1.3406E+000
	427.89	29.33	1.1064E+000		-5.4789E-001
	463.38	10.35	3.1972E+000		7.7158E-001
	600.56	17.80	1.9443E+000		-1.4519E+000
	606.64	5.02	7.6396E+000		-2.4735E+000
	635.90	11.32	3.2078E+000		-4.7668E-001
Cs-134	563.23	8.38	4.1317E+000	3.98E-001	-1.6442E+000
	569.32	15.43	2.1571E+000		9.1540E-001
	604.70	97.60	3.9838E-001		4.4570E-002
	795.84	85.40	4.0038E-001		2.4068E-001
	801.93	8.73	3.6890E+000		-5.4601E+000
Cs-137	661.65	85.12	4.1294E-001	4.13E-001	1.9732E-001
Eu-152	121.78	28.40	2.5843E+000	9.76E-001	-6.4339E-001
	244.69	7.49	5.5645E+000		-7.5557E-001
	344.27	26.50	1.3487E+000		-7.2840E-001
	778.89	12.74	2.5338E+000		8.5471E-001
	867.32	4.16	7.8944E+000		-1.6995E+000
	964.01	14.40	2.3970E+000		1.2690E+000
	1085.78	10.00	3.1983E+000		2.8021E+000
	1112.02	13.30	2.2879E+000		-1.9692E+000
1407.95	20.70	9.7553E-001	3.3596E-001		
Eu-154	123.07	40.50	1.7932E+000	7.94E-001	2.0598E-001
	247.94	6.60	5.9801E+000		-1.2443E+000
	591.81	4.83	7.4728E+000		4.2883E-001
	723.30	19.70	1.8102E+000		1.1576E+000
	756.87	4.33	7.8187E+000		5.1679E+000
	873.19	11.50	2.8826E+000		1.6074E-001
	996.32	10.30	3.0767E+000		7.8934E-001
	1004.76	17.90	1.7900E+000		6.9318E-002
1274.45	35.50	7.9408E-001	5.4488E-001		
Eu-155	86.54	30.90	4.6679E+000	4.67E+000	9.5316E-001
	105.31	20.70	4.8288E+000		1.2846E+000
Am-241	59.54	35.90	1.0944E+001	1.09E+001	-5.5414E+000
Cm-243	228.19	10.56	4.0325E+000	2.62E+000	1.4441E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.6202E+000	2.62E+000	-1.3122E+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 8/4/2006 11:50:18 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-10-02-178-F-

Sample Title: OOL-10-02-178-F-G

Description: 100% Wet grass

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 11:40:16 AM

Live Time: 600.0 seconds

Real Time: 601.1 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-10-02-178-F-
Title: OOL-10-02-178-F-G
Description: 100% Wet grass

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	3634-	3649	3642.25	910.53	0.61	5.00E+001	26.49	4.40E+001
2	5319-	5338	5327.35	1331.81	2.11	7.65E+001	24.32	2.25E+001
3	5827-	5854	5841.10	1460.24	2.35	3.08E+002	39.28	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: 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	2.11397E+001	3.19254E+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	0.990	2.113969E+001	3.192540E+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	910.53	8.3333E-002	52.98
2	1331.81	1.2755E-001	31.78

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	3.8024E-001	3.80E-001	3.7434E-001
	1332.49	100.00	4.0314E-001		7.9380E-001
Nb-94	702.63	100.00	3.9603E-001	3.96E-001	-4.1597E-001
	871.10	100.00	4.1321E-001		2.6031E-001
Ag-108m	79.20	7.10	2.9429E+001	4.10E-001	-5.9978E+001
	433.93	89.90	4.0994E-001		-4.9320E-002
	614.37	90.40	4.8457E-001		-8.2144E-001
	722.95	90.50	4.5973E-001		2.0571E-001
Sb-125	176.33	6.89	8.3159E+000	1.34E+000	4.5038E+000
	427.89	29.33	1.3381E+000		1.5376E+000
	463.38	10.35	3.6837E+000		-1.5685E+000
	600.56	17.80	2.3374E+000		-2.0337E-001
	606.64	5.02	9.2874E+000		1.2682E+001
	635.90	11.32	3.5659E+000		1.8970E+000
Cs-134	563.23	8.38	5.0837E+000	4.52E-001	-2.0606E-001
	569.32	15.43	2.7058E+000		1.3170E-001
	604.70	97.60	4.7479E-001		5.0456E-001
	795.84	85.40	4.5177E-001		-9.5612E-002
Cs-137	801.93	8.73	4.6683E+000	4.61E-001	5.1914E-001
	661.65	85.12	4.6094E-001		6.1158E-002
Eu-152	121.78	28.40	3.0591E+000	1.07E+000	2.4558E-002
	244.69	7.49	6.7153E+000		-1.4150E+000
	344.27	26.50	1.6027E+000		-1.0730E-001
	778.89	12.74	3.1238E+000		-1.1896E+000
	867.32	4.16	9.5650E+000		-3.3642E-001
	964.01	14.40	2.9165E+000		1.0837E+000
	1085.78	10.00	3.2877E+000		-1.8157E+000
	1112.02	13.30	2.5504E+000		-4.5578E-001
	1407.95	20.70	1.0730E+000		2.6351E-001
	Eu-154	123.07	40.50		2.1203E+000
247.94		6.60	7.1806E+000	4.2979E-001	
591.81		4.83	8.6277E+000	1.4892E+000	
723.30		19.70	2.1558E+000	2.4375E+000	
756.87		4.33	9.8079E+000	4.2467E+000	
873.19		11.50	3.5211E+000	-1.4785E+000	
996.32		10.30	3.2833E+000	-3.3891E+000	
1004.76		17.90	2.0753E+000	1.6497E+000	
Eu-155	1274.45	35.50	9.1353E-001	5.40E+000	-6.0165E-001
	86.54	30.90	5.4003E+000		3.4609E+000
Am-241	105.31	20.70	5.7221E+000	1.24E+001	3.6672E+000
	59.54	35.90	1.2387E+001		-3.6540E+000
Cm-243	228.19	10.56	4.6966E+000	3.23E+000	6.5018E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.2290E+000	3.23E+000	1.5408E+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 8/4/2006 1:00:17 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-179-F-

Sample Title: OOL-10-02-179-F-G

Description: Drain stones

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 12:50:15 PM

Live Time: 600.0 seconds

Real Time: 601.1 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-02-179-F-
Title: OOL-10-02-179-F-G
Description: Drain stones

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2031-	2054	2042.94	510.69	0.36	1.43E+002	49.23	1.21E+002
2	5830-	5856	5841.36	1460.31	2.17	3.07E+002	38.70	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	0.997	511.00*	100.00	7.74183E-001	2.87313E-001
K-40	0.992	1460.81*	10.67	2.10350E+001	3.15426E+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	0.997	7.741826E-001	2.873127E-001
K-40	0.992	2.103500E+001	3.154257E+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	3.8670E-001	3.87E-001	2.9497E-002
	1332.49	100.00	4.8620E-001		1.0821E+000
Nb-94	702.63	100.00	4.2321E-001	4.23E-001	-1.1176E-001
	871.10	100.00	4.4254E-001		2.1155E-001
Ag-108m	79.20	7.10	3.1477E+001	4.54E-001	-1.1406E+001
	433.93	89.90	4.5391E-001		-2.6991E-001
	614.37	90.40	5.0641E-001		-4.6083E-001
	722.95	90.50	4.9266E-001		6.7865E-002
Sb-125	176.33	6.89	8.9074E+000	1.50E+000	-8.8336E+000
	427.89	29.33	1.5030E+000		1.3318E+000
	463.38	10.35	3.9401E+000		2.3397E+000
	600.56	17.80	2.5261E+000		-1.6550E-002
	606.64	5.02	9.1301E+000		2.8513E-001
	635.90	11.32	3.8367E+000		-1.5119E+000
Cs-134	563.23	8.38	5.1226E+000	4.73E-001	3.4752E+000
	569.32	15.43	2.7705E+000		1.2689E-001
	604.70	97.60	4.7318E-001		2.0384E-001
	795.84	85.40	4.9767E-001		-8.3329E-002
	801.93	8.73	4.8531E+000		-8.0667E-001
Cs-137	661.65	85.12	5.2498E-001	5.25E-001	1.2345E-001
Eu-152	121.78	28.40	3.1868E+000	1.05E+000	2.8551E+000
	244.69	7.49	6.4064E+000		-7.4755E+000
	344.27	26.50	1.5863E+000		7.6176E-002
	778.89	12.74	3.4572E+000		1.2251E+000
	867.32	4.16	1.0652E+001		-3.4631E-001
	964.01	14.40	3.0976E+000		3.9671E+000
	1085.78	10.00	3.7648E+000		-7.0180E-001
	1112.02	13.30	2.7374E+000		-4.1177E+000
	1407.95	20.70	1.0462E+000		-5.3218E-001
Eu-154	123.07	40.50	2.1896E+000	9.93E-001	-7.3006E-001
	247.94	6.60	7.1880E+000		-3.1205E+000
	591.81	4.83	9.6565E+000		4.6125E-002
	723.30	19.70	2.2589E+000		-7.7727E-002
	756.87	4.33	1.0071E+001		-2.1737E+000
	873.19	11.50	3.8670E+000		1.8322E+000
	996.32	10.30	3.9122E+000		9.4741E-001
	1004.76	17.90	2.3794E+000		8.2976E-001
	1274.45	35.50	9.9322E-001		1.0907E+000
Eu-155	86.54	30.90	5.7101E+000	5.71E+000	4.9443E+000
	105.31	20.70	5.8375E+000		2.3045E+000
Am-241	59.54	35.90	1.2734E+001	1.27E+001	2.6712E+000
Cm-243	228.19	10.56	4.6542E+000	3.50E+000	-8.2615E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.5015E+000	3.50E+000	-1.4731E-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 8/4/2006 1:14:05 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-179-F-

Sample Title: OOL-10-02-180-F-G

Description: Big rock--jersey barrier

Sample Type:

Geometry:

Acquisition Started: 8/4/2006 1:04:03 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-10-02-179-F-
Title: OOL-10-02-180-F-G
Description: Big rock--jersey barrier

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5828-	5857	5841.96	1460.46	1.67	3.12E+002	36.53	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	0.996	1460.81*	10.67	2.13720E+001	3.04538E+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	2.137197E+001	3.045378E+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	3.1744E-001	3.17E-001	5.9695E-002
	1332.49	100.00	3.4929E-001		5.3729E-001
Nb-94	702.63	100.00	3.5682E-001	3.46E-001	2.3303E-001
	871.10	100.00	3.4556E-001		-2.2879E-001
Ag-108m	79.20	7.10	2.7062E+001	3.71E-001	-1.6026E+001
	433.93	89.90	3.7147E-001		-1.6847E-001
	614.37	90.40	3.9151E-001		-1.3764E-001
	722.95	90.50	3.7864E-001		1.9157E-002
Sb-125	176.33	6.89	6.9262E+000	1.20E+000	-4.2382E+000
	427.89	29.33	1.1956E+000		6.3080E-001
	463.38	10.35	3.4827E+000		2.7033E+000
	600.56	17.80	2.0710E+000		-6.3777E-001
	606.64	5.02	7.7345E+000		5.6451E+000
	635.90	11.32	3.0071E+000		2.3155E-001
Cs-134	563.23	8.38	4.0829E+000	3.95E-001	-1.7731E+000
	569.32	15.43	2.2517E+000		5.9418E-001
	604.70	97.60	3.9547E-001		-4.9871E-002
	795.84	85.40	4.0469E-001		2.2219E-002
	801.93	8.73	3.8512E+000		2.3048E+000
Cs-137	661.65	85.12	4.1684E-001	4.17E-001	-2.7455E-001
Eu-152	121.78	28.40	2.5797E+000	9.30E-001	3.8841E-001
	244.69	7.49	5.0899E+000		-4.8843E+000
	344.27	26.50	1.2946E+000		-9.0702E-001
	778.89	12.74	2.7671E+000		1.8984E+000
	867.32	4.16	8.5095E+000		2.1584E+000
	964.01	14.40	2.5134E+000		2.2875E+000
	1085.78	10.00	3.4030E+000		-1.1579E+000
	1112.02	13.30	2.3942E+000		4.2959E-001
1407.95	20.70	9.3027E-001	2.3230E-001		
Eu-154	123.07	40.50	1.7908E+000	8.46E-001	4.9287E-001
	247.94	6.60	5.5870E+000		-5.0487E+000
	591.81	4.83	7.3469E+000		1.3446E+000
	723.30	19.70	1.7753E+000		1.3205E+000
	756.87	4.33	8.0135E+000		1.3574E+000
	873.19	11.50	3.0282E+000		1.8351E-001
	996.32	10.30	3.0480E+000		-1.2382E-001
	1004.76	17.90	1.7981E+000		5.6745E-001
1274.45	35.50	8.4604E-001	6.2587E-002		
Eu-155	86.54	30.90	4.9683E+000	4.97E+000	8.0737E-001
	105.31	20.70	5.0163E+000		-1.5926E+000
Am-241	59.54	35.90	1.0577E+001	1.06E+001	7.0035E+000
Cm-243	228.19	10.56	3.7880E+000	2.57E+000	1.6730E+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	-1.2149E+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 8/7/2006 7:21:57 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-181-F-

Sample Title: OOL-10-02-181-F-G-I

Description:

Sample Type:

Geometry:

Acquisition Started: 8/7/2006 7:11:53 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: 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-10-02-181-F-
Title: OOL-10-02-181-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	4680-	4705	4691.58	1172.86	1.98	1.56E+002	44.52	8.45E+001
2	5317-	5341	5329.11	1332.24	2.09	3.08E+002	42.81	4.15E+001
3	5829-	5854	5842.25	1460.53	2.19	2.95E+002	42.72	4.21E+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
K-40	0.997	1460.81*	10.67	2.02319E+001	3.35796E+000
Co-60	0.997	1173.22* 1332.49*	100.00 100.00	1.02713E+000 2.13831E+000	3.04900E-001 3.40842E-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	0.997	2.023191E+001	3.357962E+000
Co-60	0.997	1.521064E+000	2.272454E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	4.3044E-001	3.15E-001	1.0271E+000
		1332.49*	100.00	3.1489E-001		2.1383E+000
	Nb-94	702.63	100.00	5.8316E-001	5.70E-001	7.9741E-001
		871.10	100.00	5.6996E-001		5.3456E-001
	Ag-108m	79.20	7.10	3.3477E+001	5.71E-001	-1.5166E+001
		433.93	89.90	5.7083E-001		-1.6277E-001
		614.37	90.40	6.6488E-001		-5.0405E-001
		722.95	90.50	6.2979E-001		-1.0720E+000
	Sb-125	176.33	6.89	8.7609E+000	1.77E+000	2.8769E+000
		427.89	29.33	1.7655E+000		-1.3319E-001
		463.38	10.35	5.1694E+000		3.0628E+000
		600.56	17.80	3.2975E+000		3.7387E-001
		606.64	5.02	1.2420E+001		9.7623E+000
		635.90	11.32	5.2865E+000		3.0405E+000
	Cs-134	563.23	8.38	6.7823E+000	6.32E-001	-1.0022E+000
		569.32	15.43	3.8548E+000		1.0534E+000
		604.70	97.60	6.3220E-001		3.0832E-001
		795.84	85.40	6.3628E-001		-5.4941E-001
		801.93	8.73	6.4651E+000		1.0052E+000
	Cs-137	661.65	85.12	7.0083E-001	7.01E-001	5.1965E-001
	Eu-152	121.78	28.40	3.1849E+000	1.30E+000	-4.7830E+000
		244.69	7.49	6.9872E+000		-9.3217E+000
		344.27	26.50	1.9143E+000		1.0350E+000
		778.89	12.74	4.4560E+000		-3.6283E+000
		867.32	4.16	1.3471E+001		-1.7039E+000
		964.01	14.40	3.9843E+000		-1.9506E+000
		1085.78	10.00	4.9261E+000		-4.2278E+000
		1112.02	13.30	3.7806E+000		-1.8847E+000
		1407.95	20.70	1.2985E+000		-2.1026E-001
	Eu-154	123.07	40.50	2.2408E+000	1.26E+000	8.6549E-003
		247.94	6.60	7.7162E+000		-5.9004E+000
		591.81	4.83	1.2171E+001		-1.7020E-002
		723.30	19.70	2.9287E+000		-1.6145E+000
		756.87	4.33	1.3412E+001		-2.2262E+000
		873.19	11.50	4.7922E+000		-2.2571E+000
		996.32	10.30	5.1400E+000		-3.1837E+000
		1004.76	17.90	2.9583E+000		-1.2715E+000
		1274.45	35.50	1.2638E+000		1.0631E+000
	Eu-155	86.54	30.90	6.0548E+000	6.05E+000	7.9235E+000
		105.31	20.70	6.1974E+000		2.0138E+000
	Am-241	59.54	35.90	1.3486E+001	1.35E+001	5.0769E-001
	Cm-243	228.19	10.56	4.9591E+000	3.84E+000	6.8480E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.8405E+000	3.84E+000	-3.0564E-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 8/7/2006 7:08:46 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-02-182-F-

Sample Title: OOL-10-02-182-F-G-I

Description:

Sample Type:

Geometry:

Acquisition Started: 8/7/2006 6:58:41 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: 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-10-02-182-F-
Title: OOL-10-02-182-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	301-	311	304.28	76.03	0.58	9.18E+001	104.62	1.13E+003
2	5315-	5342	5327.41	1331.82	2.52	3.38E+002	45.76	4.57E+001
3	5829-	5852	5842.78	1460.66	2.69	3.19E+002	43.17	4.15E+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	0.999	1460.81*	10.67	2.19201E+001	3.45293E+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	0.999	2.192011E+001	3.452934E+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	76.03	1.5295E-001	114.00
2	1331.82	5.6384E-001	13.53

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: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	5.7025E-001	5.70E-001	9.3137E-001
	1332.49	100.00	6.8687E-001		2.3069E+000
Nb-94	702.63	100.00	5.8652E-001	5.87E-001	7.5831E-002
	871.10	100.00	6.0705E-001		3.5586E-001
Ag-108m	79.20	7.10	3.3961E+001	5.66E-001	-8.3555E+000
	433.93	89.90	5.6637E-001		-8.5257E-002
	614.37	90.40	6.6286E-001		1.1143E-002
	722.95	90.50	6.7727E-001		-1.4026E-001
Sb-125	176.33	6.89	9.0052E+000	1.80E+000	-3.1739E-001
	427.89	29.33	1.7977E+000		-1.0682E+000
	463.38	10.35	5.1418E+000		-4.8651E+000
	600.56	17.80	3.3112E+000		-9.3867E-001
	606.64	5.02	1.1888E+001		1.9617E+000
	635.90	11.32	5.2700E+000		-4.9545E-001
Cs-134	563.23	8.38	6.6429E+000	6.00E-001	-1.1734E+001
	569.32	15.43	3.7080E+000		-1.5360E+000
	604.70	97.60	5.9956E-001		-2.5781E-001
	795.84	85.40	6.8599E-001		-7.2329E-001
	801.93	8.73	6.5570E+000		-4.7310E+000
Cs-137	661.65	85.12	7.1575E-001	7.16E-001	1.1413E-001
Eu-152	121.78	28.40	3.4337E+000	1.38E+000	6.9301E-001
	244.69	7.49	7.3318E+000		-6.9593E+000
	344.27	26.50	2.0583E+000		1.0000E+000
	778.89	12.74	4.7992E+000		2.6673E+000
	867.32	4.16	1.4614E+001		7.7565E+000
	964.01	14.40	3.9407E+000		7.7527E-001
	1085.78	10.00	5.3495E+000		-2.8942E+000
	1112.02	13.30	3.6495E+000		2.5554E+000
1407.95	20.70	1.3817E+000	-4.7596E-001		
Eu-154	123.07	40.50	2.3532E+000	1.35E+000	-2.0734E+000
	247.94	6.60	7.9767E+000		-9.7554E+000
	591.81	4.83	1.2432E+001		2.1176E+000
	723.30	19.70	3.0985E+000		-7.5057E-001
	756.87	4.33	1.3348E+001		7.7945E+000
	873.19	11.50	5.3542E+000		1.9607E+000
	996.32	10.30	5.1484E+000		1.5146E+000
	1004.76	17.90	3.1176E+000		2.6547E+000
1274.45	35.50	1.3497E+000	1.1473E+000		
Eu-155	86.54	30.90	6.2827E+000	6.22E+000	7.2837E+000
	105.31	20.70	6.2192E+000		1.0060E+000
Am-241	59.54	35.90	1.4434E+001	1.44E+001	-1.6977E+000
Cm-243	228.19	10.56	5.1355E+000	3.83E+000	8.7908E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.8342E+000	3.83E+000	-9.3491E-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 8/7/2006 6:53:44 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-10-02-183-F-

Sample Title: OOL-10-02-183-F-G-I

Description:

Sample Type:

Geometry:

Acquisition Started: 8/7/2006 6:43:39 PM

Live Time: 600.0 seconds

Real Time: 601.8 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-10-02-183-F-
Title: OOL-10-02-183-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	2037-	2051	2043.37	510.80	1.28	9.81E+001	53.77	2.27E+002
2	4681-	4701	4691.23	1172.77	1.83	1.06E+002	43.11	1.04E+002
3	5317-	5343	5328.49	1332.09	2.15	3.50E+002	48.14	5.95E+001
4	5831-	5858	5842.71	1460.65	2.45	3.16E+002	42.58	3.29E+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: 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	5.30012E-001	2.99874E-001
K-40	0.999	1460.81*	10.67	2.16859E+001	3.40851E+000
Co-60	0.994	1173.22*	100.00	7.01492E-001	2.90029E-001
		1332.49*	100.00	2.42945E+000	3.84236E-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	5.300124E-001	2.998743E-001
K-40	0.999	2.168591E+001	3.408512E+000
Co-60	0.994	1.328666E+000	2.314864E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	4.4016E-001	3.81E-001	7.0149E-001
		1332.49*	100.00	3.8135E-001		2.4294E+000
	Nb-94	702.63	100.00	6.0171E-001	6.02E-001	2.9828E-001
		871.10	100.00	6.2166E-001		4.2358E-001
	Ag-108m	79.20	7.10	3.5168E+001	5.96E-001	-3.7106E+001
		433.93	89.90	5.9563E-001		-2.4496E-001
		614.37	90.40	6.8473E-001		-4.4093E-001
		722.95	90.50	6.5323E-001		1.4944E-001
	Sb-125	176.33	6.89	9.7177E+000	1.90E+000	7.7936E-001
		427.89	29.33	1.9014E+000		-6.2946E-001
		463.38	10.35	5.4113E+000		2.9647E+000
		600.56	17.80	3.6128E+000		2.3833E-001
		606.64	5.02	1.2694E+001		-2.3141E+000
		635.90	11.32	5.3030E+000		-8.4587E+000
	Cs-134	563.23	8.38	6.9612E+000	6.57E-001	-6.1889E+000
		569.32	15.43	4.0396E+000		1.2608E+000
		604.70	97.60	6.5746E-001		3.6229E-001
		795.84	85.40	7.0390E-001		-6.4917E-001
		801.93	8.73	7.3234E+000		4.5293E+000
	Cs-137	661.65	85.12	7.2237E-001	7.22E-001	8.8364E-002
	Eu-152	121.78	28.40	3.4568E+000	1.41E+000	-2.2715E-001
		244.69	7.49	7.6501E+000		1.2843E+000
		344.27	26.50	2.0798E+000		6.0281E-001
		778.89	12.74	4.7358E+000		-3.6414E+000
		867.32	4.16	1.5062E+001		7.4721E+000
		964.01	14.40	4.3660E+000		1.3700E+000
		1085.78	10.00	5.2515E+000		3.8414E+000
		1112.02	13.30	3.8725E+000		1.3135E-001
		1407.95	20.70	1.4116E+000		9.1420E-002
	Eu-154	123.07	40.50	2.3997E+000	1.42E+000	-1.5453E+000
		247.94	6.60	8.3614E+000		-9.6355E+000
		591.81	4.83	1.3229E+001		4.3772E+000
		723.30	19.70	2.9772E+000		-1.4916E+000
		756.87	4.33	1.3917E+001		-1.4374E+001
		873.19	11.50	5.3723E+000		2.8308E-001
		996.32	10.30	5.3923E+000		2.2133E+000
		1004.76	17.90	3.1130E+000		-2.2299E+000
		1274.45	35.50	1.4157E+000		1.7172E+000
	Eu-155	86.54	30.90	6.5580E+000	6.37E+000	1.3836E+001
		105.31	20.70	6.3728E+000		4.9281E-001
	Am-241	59.54	35.90	1.4960E+001	1.50E+001	-1.7569E+000
	Cm-243	228.19	10.56	5.6098E+000	4.08E+000	3.1996E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	4.0804E+000	4.08E+000	1.4829E+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 8/7/2006 6:40:01 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-10-02-184-F-

Sample Title: OOL-10-02-184-F-G-I

Description:

Sample Type:

Geometry:

Acquisition Started: 8/7/2006 6:29:57 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: 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-10-02-184-F-
Title: OOL-10-02-184-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	4680-	4703	4691.66	1172.88	1.96	1.44E+002	45.32	9.77E+001
2	5316-	5343	5328.83	1332.17	2.95	3.41E+002	45.58	4.47E+001
3	5829-	5857	5843.14	1460.75	1.83	3.47E+002	40.63	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: 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	1.000	1460.81*	10.67	2.38129E+001	3.38963E+000
Co-60	0.997	1173.22* 1332.49*	100.00 100.00	9.52879E-001 2.36625E+000	3.08565E-001 3.66383E-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	1.000	2.381287E+001	3.389629E+000
Co-60	0.997	1.539374E+000	2.360146E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	4.4730E-001	3.41E-001	9.5288E-001
		1332.49*	100.00	3.4079E-001		2.3663E+000
	Nb-94	702.63	100.00	6.0041E-001	6.00E-001	-3.0251E-001
		871.10	100.00	6.2166E-001		2.3295E-001
	Ag-108m	79.20	7.10	3.6134E+001	6.22E-001	-5.7780E+001
		433.93	89.90	6.2233E-001		-6.6347E-001
		614.37	90.40	6.8081E-001		3.7998E-001
		722.95	90.50	6.9700E-001		-1.3939E-001
	Sb-125	176.33	6.89	9.2022E+000	1.94E+000	-3.2431E+000
		427.89	29.33	1.9365E+000		1.1387E+000
		463.38	10.35	5.4113E+000		2.0852E+000
		600.56	17.80	3.5526E+000		7.9766E-001
		606.64	5.02	1.2558E+001		7.8525E+000
		635.90	11.32	5.3140E+000		2.1866E+000
	Cs-134	563.23	8.38	7.0175E+000	6.41E-001	1.5034E+000
		569.32	15.43	3.7159E+000		-2.1562E+000
		604.70	97.60	6.4113E-001		4.6446E-002
		795.84	85.40	6.9825E-001		1.4787E-001
		801.93	8.73	6.8567E+000		-5.4730E+000
	Cs-137	661.65	85.12	7.2090E-001	7.21E-001	-5.3777E-002
	Eu-152	121.78	28.40	3.6517E+000	1.40E+000	2.2130E+000
		244.69	7.49	7.5865E+000		-5.8931E+000
		344.27	26.50	2.1379E+000		3.2807E-001
		778.89	12.74	4.7091E+000		-2.9029E+000
		867.32	4.16	1.4898E+001		-7.7406E+000
		964.01	14.40	4.2965E+000		6.5532E+000
		1085.78	10.00	5.3583E+000		2.1097E+000
		1112.02	13.30	3.8933E+000		1.8597E-001
		1407.95	20.70	1.4017E+000		3.2744E-001
	Eu-154	123.07	40.50	2.5198E+000	1.47E+000	1.4201E+000
		247.94	6.60	8.5103E+000		6.6456E+000
		591.81	4.83	1.2866E+001		-4.5280E+000
		723.30	19.70	3.1863E+000		6.6959E-001
		756.87	4.33	1.4671E+001		1.6362E+001
		873.19	11.50	5.3663E+000		-3.4536E+000
		996.32	10.30	5.7826E+000		3.3952E+000
		1004.76	17.90	3.1898E+000		-1.5059E+000
		1274.45	35.50	1.4730E+000		1.7110E+000
	Eu-155	86.54	30.90	6.5224E+000	6.52E+000	4.8862E+000
		105.31	20.70	6.5965E+000		3.4145E+000
	Am-241	59.54	35.90	1.4628E+001	1.46E+001	-8.6269E+000
	Cm-243	228.19	10.56	5.5675E+000	4.10E+000	3.1756E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	4.1042E+000	4.10E+000	2.1583E+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 8/7/2006 6:26:15 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-10-02-185-F-

Sample Title: OOL-10-02-185-F-G-I

Description:

Sample Type:

Geometry:

Acquisition Started: 8/7/2006 6:16:11 PM

Live Time: 600.0 seconds

Real Time: 601.9 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-10-02-185-F-
Title: OOL-10-02-185-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	2377-	2393	2382.83	595.67	1.14	9.57E+001	53.02	1.97E+002
2	4682-	4701	4692.39	1173.06	2.05	1.18E+002	45.39	1.19E+002
3	5316-	5343	5329.78	1332.41	1.42	3.93E+002	50.34	5.93E+001
4	5829-	5855	5842.08	1460.49	3.03	3.22E+002	37.55	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
K-40	0.997	1460.81*	10.67	2.20752E+001	3.13584E+000
Co-60	1.000	1173.22* 1332.49*	100.00 100.00	7.76588E-001 2.72272E+000	3.05969E-001 4.09080E-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	0.997	2.207524E+001	3.135841E+000
Co-60	1.000	1.474737E+000	2.450165E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	595.67	1.5952E-001	55.40

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	4.6262E-001	3.91E-001	7.7659E-001
		1332.49*	100.00	3.9134E-001		2.7227E+000
	Nb-94	702.63	100.00	6.4511E-001	6.45E-001	8.8301E-003
		871.10	100.00	6.5900E-001		1.8622E-001
	Ag-108m	79.20	7.10	3.6290E+001	6.15E-001	-6.0424E+001
		433.93	89.90	6.1474E-001		3.0967E-001
		614.37	90.40	7.2951E-001		-2.3919E-001
		722.95	90.50	7.1143E-001		-7.4030E-001
	Sb-125	176.33	6.89	9.7647E+000	1.89E+000	-1.5070E+000
		427.89	29.33	1.8926E+000		1.5478E+000
		463.38	10.35	5.7474E+000		2.6948E+000
		600.56	17.80	3.8141E+000		-2.1162E+000
		606.64	5.02	1.3139E+001		4.3699E+000
		635.90	11.32	5.8160E+000		4.8399E+000
	Cs-134	563.23	8.38	7.1904E+000	6.69E-001	2.9088E+000
		569.32	15.43	3.8585E+000		-4.5924E+000
		604.70	97.60	6.6945E-001		-1.0759E-002
		795.84	85.40	7.5652E-001		4.2805E-001
		801.93	8.73	7.4117E+000		2.1037E+000
	Cs-137	661.65	85.12	7.6359E-001	7.64E-001	9.6563E-002
	Eu-152	121.78	28.40	3.6283E+000	1.24E+000	-1.0431E+000
		244.69	7.49	7.9604E+000		-3.4018E+000
		344.27	26.50	2.1994E+000		-3.4000E-001
		778.89	12.74	5.1041E+000		1.3360E+000
		867.32	4.16	1.5719E+001		5.6027E-001
		964.01	14.40	4.4586E+000		-1.7827E+000
		1085.78	10.00	5.6415E+000		2.2388E+000
		1112.02	13.30	4.1548E+000		1.8421E+000
		1407.95	20.70	1.2435E+000		-7.1789E-001
	Eu-154	123.07	40.50	2.5215E+000	1.41E+000	1.5113E+000
		247.94	6.60	8.9651E+000		2.7768E+000
		591.81	4.83	1.3990E+001		-6.5348E+000
		723.30	19.70	3.2904E+000		-1.9970E+000
		756.87	4.33	1.4918E+001		4.8135E+000
		873.19	11.50	5.6936E+000		7.1454E-001
		996.32	10.30	5.8996E+000		1.6742E+000
		1004.76	17.90	3.3121E+000		-1.4066E+000
		1274.45	35.50	1.4069E+000		1.8804E+000
	Eu-155	86.54	30.90	6.7444E+000	6.74E+000	8.7643E+000
		105.31	20.70	6.7579E+000		-3.4455E-001
	Am-241	59.54	35.90	1.5138E+001	1.51E+001	9.2134E+000
	Cm-243	228.19	10.56	5.7075E+000	4.11E+000	-1.5270E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	4.1131E+000	4.11E+000	1.2241E+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 8/8/2006 9:53:53 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-186-F

Sample Title: OOL-10-02-186-F-G-I

Description:

Sample Type:

Geometry:

Acquisition Started: 8/8/2006 9:43:50 AM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-02-186-F
 Title: OOL-10-02-186-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
M	1	284-	307	291.17	72.88	1.02	1.96E+002	53.86	1.30E+003
m	2	284-	307	300.07	75.11	1.03	3.49E+002	60.28	1.51E+003
	3	336-	344	339.46	84.95	0.62	8.90E+001	88.05	8.97E+002
	4	785-	799	793.20	198.40	0.61	5.79E+001	52.86	2.31E+002
	5	945-	960	952.31	238.17	0.93	6.68E+001	56.28	2.52E+002
	6	1399-	1412	1405.83	351.56	0.69	7.28E+001	42.03	1.40E+002
	7	4683-	4699	4690.59	1172.80	1.45	1.01E+002	30.27	4.40E+001
	8	5087-	5104	5094.25	1273.72	0.47	6.05E+001	25.04	3.15E+001
	9	5315-	5338	5327.96	1332.15	2.00	2.61E+002	37.87	2.75E+001
	10	5829-	5852	5841.01	1460.42	1.34	3.09E+002	39.97	2.67E+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: 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	0.994	1460.81*	10.67	6.56049E+000	1.00031E+000
Co-60	0.995	1173.22*	100.00	2.11751E-001	6.56103E-002
		1332.49*	100.00	5.65766E-001	9.34383E-002
Pb-212	0.576	74.81* @	10.70	1.13445E+001	2.96301E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.08143E-001	1.78466E-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	0.994	6.560489E+000	1.000314E+000
Co-60	0.995	3.286580E-001	5.369503E-002
Pb-212 @	0.576	2.081431E-001	1.784657E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.2620E-001	27.52
3	84.95	1.4830E-001	98.95
4	198.40	9.6471E-002	91.33
6	351.56	1.2129E-001	57.75
8	1273.72	1.0083E-001	41.39

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: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	8.6577E-002	8.18E-002	2.1175E-001
		1332.49*	100.00	8.1759E-002		5.6577E-001
	Nb-94	702.63	100.00	1.6221E-001	1.62E-001	3.0804E-002
		871.10	100.00	1.6225E-001		-2.5452E-003
	Ag-108m	79.20	7.10	9.1204E+000	1.62E-001	-3.0816E+000
		433.93	89.90	1.6177E-001		1.3133E-001
		614.37	90.40	1.7953E-001		-9.5619E-002
		722.95	90.50	1.8569E-001		5.2756E-002
	Sb-125	176.33	6.89	2.1515E+000	4.89E-001	8.4135E-001
		427.89	29.33	4.8882E-001		1.8887E-001
		463.38	10.35	1.3424E+000		3.2639E-001
		600.56	17.80	9.1643E-001		-4.6287E-001
		606.64	5.02	3.3983E+000		2.2462E+000
		635.90	11.32	1.3751E+000		-9.2940E-001
	Cs-134	563.23	8.38	1.7562E+000	1.73E-001	-1.0593E+000
		569.32	15.43	9.8280E-001		-4.2760E-001
		604.70	97.60	1.7308E-001		1.1915E-001
		795.84	85.40	1.7902E-001		3.6888E-002
		801.93	8.73	1.7511E+000		-5.9959E-001
	Cs-137	661.65	85.12	1.8578E-001	1.86E-001	-1.1763E-001
	Eu-152	121.78	28.40	8.5361E-001	3.90E-001	5.1512E-002
		244.69	7.49	1.8658E+000		1.9820E-001
		344.27	26.50	4.9738E-001		-4.3908E-002
		778.89	12.74	1.2445E+000		3.4164E-001
		867.32	4.16	4.0042E+000		5.6032E-001
		964.01	14.40	1.0927E+000		1.5067E-001
		1085.78	10.00	1.5340E+000		6.3834E-001
		1112.02	13.30	1.0885E+000		9.0721E-001
		1407.95	20.70	3.8991E-001		-1.6875E-001
	Eu-154	123.07	40.50	5.8266E-001	3.90E-001	-7.6948E-002
		247.94	6.60	2.0346E+000		9.4500E-001
		591.81	4.83	3.3570E+000		-9.8389E-001
		723.30	19.70	8.5073E-001		-1.1049E-002
		756.87	4.33	3.8479E+000		2.1248E+000
		873.19	11.50	1.4093E+000		-6.4430E-001
		996.32	10.30	1.3738E+000		-7.0599E-001
		1004.76	17.90	8.2939E-001		3.3180E-001
		1274.45	35.50	3.9042E-001		5.2627E-001
	Eu-155	86.54	30.90	1.6602E+000	1.58E+000	1.7890E+000
		105.31	20.70	1.5791E+000		7.9887E-002
	Am-241	59.54	35.90	3.5750E+000	3.57E+000	1.2148E+000
	Cm-243	228.19	10.56	1.3012E+000	9.08E-001	-1.5853E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.0818E-001	9.08E-001	-5.4634E-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 8/8/2006 10:10:55 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-10-02-187-F

Sample Title: OOL-10-02-187-F-G-I

Description:

Sample Type:

Geometry:

Acquisition Started: 8/8/2006 10:00:52 AM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-187-F
Title: OOL-10-02-187-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	296-	307	300.36	75.18	0.75	2.86E+002	110.03	1.14E+003
2	947-	960	953.41	238.45	1.37	8.64E+001	44.35	1.54E+002
3	1992-	2002	1996.84	499.32	0.54	1.90E+001	24.21	5.60E+001
4	2375-	2386	2380.69	595.29	1.61	5.00E+001	27.82	5.90E+001
5	2428-	2439	2434.79	608.82	0.50	2.64E+001	27.46	6.76E+001
6	3634-	3652	3641.92	910.62	0.44	5.22E+001	30.17	5.38E+001
7	4684-	4696	4689.27	1172.47	0.70	1.92E+001	21.29	3.68E+001
8	5321-	5337	5328.35	1332.25	0.87	9.44E+001	22.88	1.36E+001
9	5829-	5854	5841.01	1460.42	2.01	3.23E+002	38.86	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: 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	0.994	1460.81*	10.67	6.84131E+000	9.93058E-001
Co-60	0.988	1173.22*	100.00	4.02340E-002	4.47512E-002
		1332.49*	100.00	2.04912E-001	5.22078E-002
Pb-212	0.579	74.81* @	10.70	9.27873E+000	4.00120E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.397	238.63*	44.60	2.69497E-001	1.44614E-001
		609.31*	46.30	1.02876E-001	1.07853E-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	0.994	6.841311E+000	9.930583E-001
Co-60	0.988	1.099831E-001	3.397714E-002
Pb-212 @	0.579	2.694970E-001	1.446142E-001
Bi-214	0.397	1.028762E-001	1.078525E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	499.32	3.1694E-002	127.29
4	595.29	8.3326E-002	55.64
6	910.62	8.7075E-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: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	7.4241E-002	5.21E-002	4.0234E-002
		1332.49*	100.00	5.2095E-002		2.0491E-001
	Nb-94	702.63	100.00	1.2748E-001	1.26E-001	-3.6870E-002
		871.10	100.00	1.2556E-001		5.9151E-002
	Ag-108m	79.20	7.10	8.7764E+000	1.28E-001	-3.2390E+000
		433.93	89.90	1.2756E-001		7.2098E-003
		614.37	90.40	1.3821E-001		-5.7333E-002
		722.95	90.50	1.3015E-001		-5.0323E-003
	Sb-125	176.33	6.89	1.9150E+000	4.06E-001	8.1597E-001
		427.89	29.33	4.0550E-001		4.8120E-001
		463.38	10.35	1.0551E+000		-7.2592E-001
		600.56	17.80	7.3843E-001		-5.5051E-001
		606.64	5.02	2.7665E+000		2.6921E+000
		635.90	11.32	1.1000E+000		2.5693E-001
	Cs-134	563.23	8.38	1.4432E+000	1.40E-001	-6.8804E-001
		569.32	15.43	8.0692E-001		-3.0201E-002
		604.70	97.60	1.3971E-001		1.5490E-002
		795.84	85.40	1.4251E-001		7.6058E-003
		801.93	8.73	1.3519E+000		-7.7548E-001
	Cs-137	661.65	85.12	1.4923E-001	1.49E-001	1.1137E-001
	Eu-152	121.78	28.40	8.0962E-001	3.57E-001	-3.7452E-001
		244.69	7.49	1.5563E+000		5.4466E-001
		344.27	26.50	3.8435E-001		-1.0140E-001
		778.89	12.74	8.9197E-001		-1.7405E-001
		867.32	4.16	2.8333E+000		-4.5661E+000
		964.01	14.40	9.2013E-001		2.3893E-001
		1085.78	10.00	1.0015E+000		-1.2743E+000
		1112.02	13.30	7.8207E-001		1.4843E-001
		1407.95	20.70	3.5720E-001		1.0029E-001
	Eu-154	123.07	40.50	5.5995E-001	2.90E-001	3.9401E-003
		247.94	6.60	1.7632E+000		2.0556E-001
		591.81	4.83	2.7538E+000		-4.9580E-002
		723.30	19.70	5.9794E-001		4.9284E-002
		756.87	4.33	2.5823E+000		-1.8961E+000
		873.19	11.50	1.0985E+000		-8.7423E-001
		996.32	10.30	1.0972E+000		9.8396E-003
		1004.76	17.90	6.3938E-001		1.6235E-001
		1274.45	35.50	2.9040E-001		2.6589E-001
	Eu-155	86.54	30.90	1.5806E+000	1.52E+000	1.8779E+000
		105.31	20.70	1.5218E+000		6.2219E-001
	Am-241	59.54	35.90	3.4155E+000	3.42E+000	-3.2216E-001
	Cm-243	228.19	10.56	1.0570E+000	8.25E-001	-1.1523E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	8.2453E-001	8.25E-001	-1.4821E-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 8/8/2006 10:25:11 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-188-F

Sample Title: OOL-10-02-188-F-G-I

Description: 100% Light Grass

Sample Type:

Geometry:

Acquisition Started: 8/8/2006 10:15:08 AM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

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

Filename: BRN7722
Log Number: OOL-10-02-188-F
Title: OOL-10-02-188-F-G-I
Description: 100% Light Grass

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	306	300.61	75.24	0.77	2.98E+002	111.43	1.23E+003
2	555-	565	558.28	139.66	0.60	8.46E+001	67.84	4.63E+002
3	1402-	1414	1405.23	351.41	0.82	5.76E+001	39.89	1.34E+002
4	4679-	4700	4689.74	1172.59	1.48	1.16E+002	37.99	6.89E+001
5	5316-	5340	5327.21	1331.97	1.84	3.16E+002	43.04	4.03E+001
6	5829-	5852	5841.13	1460.45	2.00	2.82E+002	37.49	2.10E+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: 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	0.995	1460.81*	10.67	5.98174E+000	9.30939E-001
Co-60	0.987	1173.22* 1332.49*	100.00 100.00	2.43434E-001 6.85443E-001	8.19139E-002 1.07811E-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	0.995	5.981743E+000	9.309394E-001
Co-60	0.987	4.052075E-001	6.522338E-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
1	75.24	4.9658E-001	37.40
2	139.66	1.4102E-001	80.17
3	351.41	9.6076E-002	69.20

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: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	1.1682E-001	9.81E-002	2.4343E-001
		1332.49*	100.00	9.8086E-002		6.8544E-001
	Nb-94	702.63	100.00	1.7027E-001	1.70E-001	-8.0764E-002
		871.10	100.00	1.7412E-001		1.1462E-001
	Ag-108m	79.20	7.10	9.4236E+000	1.65E-001	-6.5658E+000
		433.93	89.90	1.6532E-001		6.5694E-002
		614.37	90.40	1.7677E-001		-4.2696E-001
		722.95	90.50	1.8830E-001		1.0616E-001
	Sb-125	176.33	6.89	2.1964E+000	5.00E-001	1.8255E+000
		427.89	29.33	4.9975E-001		-8.1477E-002
		463.38	10.35	1.4683E+000		2.6749E-001
		600.56	17.80	9.4695E-001		3.3847E-001
		606.64	5.02	3.5514E+000		4.0607E+000
		635.90	11.32	1.4636E+000		4.4487E-001
	Cs-134	563.23	8.38	1.8626E+000	1.81E-001	-1.0659E+000
		569.32	15.43	1.0616E+000		4.3581E-001
		604.70	97.60	1.8080E-001		9.1856E-002
		795.84	85.40	1.9494E-001		5.6321E-002
		801.93	8.73	1.8812E+000		-8.0165E-001
	Cs-137	661.65	85.12	2.0682E-001	2.07E-001	1.8625E-001
	Eu-152	121.78	28.40	9.1243E-001	4.07E-001	-4.0053E-001
		244.69	7.49	1.8865E+000		7.0483E-003
		344.27	26.50	5.0907E-001		-4.9824E-002
		778.89	12.74	1.2947E+000		-1.5031E+000
		867.32	4.16	4.0539E+000		-3.9572E-001
		964.01	14.40	1.2032E+000		2.9994E-001
		1085.78	10.00	1.5308E+000		1.1377E+000
		1112.02	13.30	1.1010E+000		-8.1128E-001
		1407.95	20.70	4.0686E-001		4.0403E-001
	Eu-154	123.07	40.50	6.2940E-001	4.20E-001	-8.3525E-002
		247.94	6.60	2.1501E+000		7.0119E-001
		591.81	4.83	3.4470E+000		-1.1711E-001
		723.30	19.70	8.7104E-001		9.8935E-001
		756.87	4.33	3.9701E+000		-2.7220E-001
		873.19	11.50	1.4930E+000		-5.5081E-001
		996.32	10.30	1.6179E+000		1.6879E+000
		1004.76	17.90	9.0275E-001		-1.0473E+000
		1274.45	35.50	4.1991E-001		2.8555E-001
	Eu-155	86.54	30.90	1.7090E+000	1.65E+000	1.9341E+000
		105.31	20.70	1.6480E+000		4.2656E-001
	Am-241	59.54	35.90	3.6421E+000	3.64E+000	1.5797E-001
	Cm-243	228.19	10.56	1.3636E+000	9.87E-001	-1.7072E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.8693E-001	9.87E-001	-5.0204E-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 8/8/2006 10:41:38 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-189-F

Sample Title: OOL-10-02-189-F-G-I

Description: 100% Light Grass

Sample Type:

Geometry:

Acquisition Started: 8/8/2006 10:31:35 AM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-189-F
Title: OOL-10-02-189-F-G-I
Description: 100% Light Grass

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Rows 1-7 with peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.991	1460.81*	10.67	6.68800E+000	9.74565E-001
Co-60	0.977	1173.22*	100.00	2.27664E-001	7.46649E-002
		1332.49*	100.00	7.09837E-001	1.06769E-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	0.991	6.687998E+000	9.745651E-001
Co-60	0.977	3.860216E-001	6.118764E-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	73.12	3.0036E-001	29.95
m 2	75.09	6.7750E-001	15.33
3	910.38	1.2532E-001	53.89
5	1273.88	1.5062E-001	33.21

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: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	1.0386E-001	8.78E-002	2.2766E-001
		1332.49*	100.00	8.7793E-002		7.0984E-001
	Nb-94	702.63	100.00	1.7370E-001	1.70E-001	-8.5021E-002
		871.10	100.00	1.6958E-001		-9.2572E-002
	Ag-108m	79.20	7.10	9.3630E+000	1.72E-001	-8.6388E+000
		433.93	89.90	1.7218E-001		-1.1807E-001
		614.37	90.40	1.9368E-001		-3.0919E-001
		722.95	90.50	1.8933E-001		4.8770E-002
	Sb-125	176.33	6.89	2.2017E+000	5.19E-001	2.7827E+000
		427.89	29.33	5.1895E-001		-2.7469E-001
		463.38	10.35	1.5123E+000		-6.7232E-002
		600.56	17.80	9.5532E-001		-9.3319E-001
		606.64	5.02	3.6667E+000		1.6888E+000
		635.90	11.32	1.4716E+000		3.9565E-001
	Cs-134	563.23	8.38	1.9756E+000	1.84E-001	-7.0745E-001
		569.32	15.43	1.0602E+000		-8.4581E-002
		604.70	97.60	1.8372E-001		5.1289E-002
		795.84	85.40	2.0241E-001		3.3857E-002
		801.93	8.73	1.9807E+000		7.4862E-001
	Cs-137	661.65	85.12	2.0451E-001	2.05E-001	-5.2922E-002
	Eu-152	121.78	28.40	9.3297E-001	3.72E-001	9.2927E-002
		244.69	7.49	1.9532E+000		6.0089E-001
		344.27	26.50	5.3576E-001		-3.3516E-001
		778.89	12.74	1.3353E+000		-4.3755E-001
		867.32	4.16	4.1695E+000		1.0114E+000
		964.01	14.40	1.2158E+000		-1.5271E-001
		1085.78	10.00	1.5648E+000		2.4763E-001
		1112.02	13.30	1.0263E+000		-4.2606E-001
		1407.95	20.70	3.7213E-001		-3.4950E-001
	Eu-154	123.07	40.50	6.4532E-001	4.36E-001	1.2840E-001
		247.94	6.60	2.1501E+000		-1.3410E-001
		591.81	4.83	3.4911E+000		-1.0285E+000
		723.30	19.70	8.7457E-001		2.1228E-001
		756.87	4.33	3.9372E+000		-4.2940E-001
		873.19	11.50	1.4864E+000		1.8112E-001
		996.32	10.30	1.5908E+000		-4.5880E-001
		1004.76	17.90	9.0594E-001		-2.6784E-001
		1274.45	35.50	4.3623E-001		8.8214E-002
	Eu-155	86.54	30.90	1.7236E+000	1.68E+000	2.7923E+000
		105.31	20.70	1.6838E+000		3.3533E-001
	Am-241	59.54	35.90	3.4858E+000	3.49E+000	-7.1124E-001
	Cm-243	228.19	10.56	1.4218E+000	1.01E+000	9.9000E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.0094E+000	1.01E+000	1.4299E-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 8/8/2006 10:58:09 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-190-F

Sample Title: OOL-10-02-190-F-G-I

Description: 100% Light Grass and small rocks

Sample Type:

Geometry:

Acquisition Started: 8/8/2006 10:48:05 AM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-190-F
Title: OOL-10-02-190-F-G-I
Description: 100% Light Grass and small rocks

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	306	299.37	74.93	0.96	1.88E+002	111.09	1.20E+003
2	3635-	3647	3640.23	910.20	0.87	3.80E+001	25.91	5.10E+001
3	4682-	4696	4689.05	1172.42	0.29	3.53E+001	26.17	4.77E+001
4	5318-	5334	5326.62	1331.82	0.59	1.15E+002	27.32	2.55E+001
5	5827-	5852	5840.35	1460.26	2.01	3.28E+002	39.04	1.62E+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	0.988	1460.81*	10.67	6.95094E+000	1.00114E+000
Co-60	0.979	1173.22* 1332.49*	100.00 100.00	7.40724E-002 2.48617E-001	5.51901E-002 6.24312E-002

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

Y A N K E E R O W E P O R T A B L E I S O C S
I N T E R 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	0.988	6.950942E+000	1.001140E+000
Co-60	0.979	1.506400E-001	4.134952E-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
1	74.93	3.1316E-001	59.12
2	910.20	6.3315E-002	68.20

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: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	8.8172E-002	6.97E-002	7.4072E-002
		1332.49*	100.00	6.9660E-002		2.4862E-001
	Nb-94	702.63	100.00	1.3387E-001	1.34E-001	-6.3282E-002
		871.10	100.00	1.4375E-001		5.0886E-002
	Ag-108m	79.20	7.10	8.8669E+000	1.30E-001	-5.1925E+000
		433.93	89.90	1.3011E-001		1.4346E-001
		614.37	90.40	1.4176E-001		-3.3315E-001
		722.95	90.50	1.5436E-001		6.0591E-002
	Sb-125	176.33	6.89	1.9232E+000	4.10E-001	8.8148E-001
		427.89	29.33	4.1050E-001		4.0980E-002
		463.38	10.35	1.1981E+000		-8.3897E-001
		600.56	17.80	7.8649E-001		-2.3882E-001
		606.64	5.02	2.9536E+000		4.5427E+000
		635.90	11.32	1.1497E+000		5.1217E-001
	Cs-134	563.23	8.38	1.4874E+000	1.49E-001	-2.2686E+000
		569.32	15.43	8.3743E-001		-5.1225E-001
		604.70	97.60	1.4871E-001		5.3269E-002
		795.84	85.40	1.5418E-001		9.1490E-003
		801.93	8.73	1.4510E+000		-8.5595E-001
	Cs-137	661.65	85.12	1.5793E-001	1.58E-001	-5.6088E-002
	Eu-152	121.78	28.40	8.3964E-001	3.25E-001	1.8104E-001
		244.69	7.49	1.6298E+000		2.1725E-001
		344.27	26.50	4.3410E-001		-9.4473E-002
		778.89	12.74	9.6950E-001		-2.2393E-001
		867.32	4.16	3.2493E+000		-6.2960E-001
		964.01	14.40	9.2252E-001		5.8573E-001
		1085.78	10.00	1.1506E+000		2.4684E-002
		1112.02	13.30	9.0369E-001		-1.8322E-001
		1407.95	20.70	3.2511E-001		1.6039E-001
	Eu-154	123.07	40.50	5.7713E-001	3.27E-001	-1.4434E-001
		247.94	6.60	1.8664E+000		4.8148E-001
		591.81	4.83	2.8419E+000		3.3036E+000
		723.30	19.70	7.0480E-001		2.8517E-001
		756.87	4.33	3.1637E+000		-6.3914E-002
		873.19	11.50	1.2586E+000		5.6965E-001
		996.32	10.30	1.2506E+000		-1.1143E-001
		1004.76	17.90	7.2890E-001		-2.9364E-001
		1274.45	35.50	3.2691E-001		2.4053E-001
	Eu-155	86.54	30.90	1.5799E+000	1.50E+000	1.5340E+000
		105.31	20.70	1.5035E+000		-6.9243E-001
	Am-241	59.54	35.90	3.4167E+000	3.42E+000	1.9126E+000
	Cm-243	228.19	10.56	1.1760E+000	8.50E-001	-1.8616E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	8.5010E-001	8.50E-001	8.3125E-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 8/8/2006 11:12:49 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-191-F

Sample Title: OOL-10-02-191-F-G-I

Description: 100% Light Grass

Sample Type:

Geometry:

Acquisition Started: 8/8/2006 11:02:45 AM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

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

Filename: BRN7722
Log Number: OOL-10-02-191-F
Title: OOL-10-02-191-F-G-I
Description: 100% Light Grass

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	306	299.72	75.02	0.83	1.91E+002	112.82	1.29E+003
2	947-	959	953.95	238.59	0.53	5.44E+001	48.21	2.09E+002
3	4679-	4698	4689.76	1172.59	1.34	9.80E+001	36.30	7.00E+001
4	5317-	5338	5326.60	1331.81	1.79	3.10E+002	39.71	2.69E+001
5	5828-	5851	5840.25	1460.23	1.82	3.56E+002	41.67	2.40E+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	0.987	1460.81*	10.67	7.54983E+000	1.07451E+000
Co-60	0.984	1173.22*	100.00	2.05499E-001	7.78173E-002
		1332.49*	100.00	6.73269E-001	1.01092E-001
Pb-212	0.581	74.81* @	10.70	6.21984E+000	3.87509E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.69581E-001	1.52671E-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	0.987	7.549829E+000	1.074513E+000
Co-60	0.984	3.795444E-001	6.166384E-002
Pb-212 @	0.581	1.695813E-001	1.526709E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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: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	1.1368E-001	7.74E-002	2.0550E-001
		1332.49*	100.00	7.7434E-002		6.7327E-001
	Nb-94	702.63	100.00	1.6723E-001	1.67E-001	-1.0475E-001
		871.10	100.00	1.7805E-001		8.4180E-003
	Ag-108m	79.20	7.10	9.3812E+000	1.65E-001	5.5334E+000
		433.93	89.90	1.6488E-001		4.0144E-002
		614.37	90.40	1.8324E-001		-2.1488E-001
		722.95	90.50	1.8517E-001		5.1020E-002
	Sb-125	176.33	6.89	2.1767E+000	4.96E-001	8.8376E-002
		427.89	29.33	4.9636E-001		-3.4979E-001
		463.38	10.35	1.4270E+000		-7.5146E-001
		600.56	17.80	9.1767E-001		-1.7009E+000
		606.64	5.02	3.4654E+000		1.5035E+000
		635.90	11.32	1.3878E+000		-2.6003E-001
	Cs-134	563.23	8.38	2.0417E+000	1.78E-001	1.6072E+000
		569.32	15.43	1.0519E+000		2.0576E-001
		604.70	97.60	1.7827E-001		1.4635E-001
		795.84	85.40	2.0605E-001		1.4417E-001
		801.93	8.73	1.7976E+000		-5.3480E-001
	Cs-137	661.65	85.12	2.0936E-001	2.09E-001	1.5153E-001
	Eu-152	121.78	28.40	8.9878E-001	4.26E-001	3.0797E-001
		244.69	7.49	1.9272E+000		-2.9652E-001
		344.27	26.50	5.4053E-001		1.9792E-001
		778.89	12.74	1.3391E+000		-5.4926E-002
		867.32	4.16	4.4253E+000		3.7298E+000
		964.01	14.40	1.1359E+000		3.7797E-001
		1085.78	10.00	1.5183E+000		-2.8695E-001
		1112.02	13.30	1.1401E+000		7.7285E-003
		1407.95	20.70	4.2624E-001		4.7108E-001
	Eu-154	123.07	40.50	6.1132E-001	3.88E-001	1.1670E-001
		247.94	6.60	2.1641E+000		4.4189E-001
		591.81	4.83	3.5733E+000		1.1566E+000
		723.30	19.70	8.5073E-001		1.3510E-001
		756.87	4.33	3.8984E+000		1.6061E+000
		873.19	11.50	1.4886E+000		-6.8981E-001
		996.32	10.30	1.5494E+000		1.8922E-001
		1004.76	17.90	8.8174E-001		-8.7782E-001
		1274.45	35.50	3.8830E-001		2.5075E-001
	Eu-155	86.54	30.90	1.7233E+000	1.63E+000	2.3291E+000
		105.31	20.70	1.6325E+000		-4.0511E-001
	Am-241	59.54	35.90	3.5880E+000	3.59E+000	6.7056E-001
	Cm-243	228.19	10.56	1.3841E+000	9.82E-001	3.8778E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	9.8213E-001	9.82E-001	2.7923E-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 8/8/2006 11:28:30 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-192-F

Sample Title: OOL-10-02-192-F-G-I

Description: 100% Light Grass

Sample Type:

Geometry:

Acquisition Started: 8/8/2006 11:18:28 AM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-192-F
Title: OOL-10-02-192-F-G-I
Description: 100% Light Grass

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	307	300.49	75.21	1.03	2.60E+002	110.48	1.16E+003
2	1400-	1409	1405.62	351.51	0.99	2.51E+001	28.06	7.99E+001
3	2322-	2335	2329.50	582.49	0.43	3.99E+001	31.64	7.91E+001
4	2427-	2441	2434.79	608.82	0.90	6.27E+001	31.38	6.73E+001
5	4681-	4695	4689.06	1172.42	1.44	3.43E+001	19.61	2.27E+001
6	5318-	5336	5326.73	1331.85	1.73	8.04E+001	22.89	1.66E+001
7	5829-	5851	5840.97	1460.41	1.56	2.99E+002	38.63	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: 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	0.994	1460.81*	10.67	6.34057E+000	9.66827E-001
Co-60	0.980	1173.22*	100.00	7.20016E-002	4.15122E-002
		1332.49*	100.00	1.74586E-001	5.15570E-002
		510.84	21.60		
TL-208	0.461	277.35	6.80		
		583.14*	84.20	8.43817E-002	6.77884E-002
		860.37	12.46		
Bi-214	0.397	609.31*	46.30	2.44633E-001	1.26033E-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	0.994	6.340570E+000	9.668272E-001
Co-60	0.980	1.123495E-001	3.233384E-002
TL-208	0.461	8.438168E-002	6.778839E-002
Bi-214	0.397	2.446333E-001	1.260326E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	75.21	4.3285E-001	42.54
2	351.51	4.1833E-002	111.80

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	6.1632E-002	5.93E-002	7.2002E-002
		1332.49*	100.00	5.9340E-002		1.7459E-001
	Nb-94	702.63	100.00	1.2934E-001	1.23E-001	-1.5274E-002
		871.10	100.00	1.2344E-001		7.3158E-002
	Ag-108m	79.20	7.10	8.9607E+000	1.20E-001	7.4431E-001
		433.93	89.90	1.1956E-001		-1.2150E-001
		614.37	90.40	1.3219E-001		-9.6797E-002
		722.95	90.50	1.3315E-001		6.2802E-003
	Sb-125	176.33	6.89	1.9089E+000	3.49E-001	8.7910E-001
		427.89	29.33	3.4854E-001		-1.0778E-001
		463.38	10.35	1.1516E+000		-4.2473E-002
		600.56	17.80	7.1795E-001		-1.0716E+000
		606.64	5.02	2.7402E+000		1.9122E+000
		635.90	11.32	1.0756E+000		2.7962E-001
	Cs-134	563.23	8.38	1.4638E+000	1.42E-001	2.0700E-001
		569.32	15.43	8.0141E-001		-4.2334E-002
		604.70	97.60	1.4242E-001		2.9708E-002
		795.84	85.40	1.4690E-001		2.4422E-002
		801.93	8.73	1.4317E+000		6.4688E-001
	Cs-137	661.65	85.12	1.4487E-001	1.45E-001	-5.5827E-002
	Eu-152	121.78	28.40	8.4617E-001	3.17E-001	3.8935E-001
		244.69	7.49	1.5763E+000		1.2262E+000
		344.27	26.50	4.1316E-001		5.1126E-002
		778.89	12.74	8.8616E-001		-2.8529E-001
		867.32	4.16	2.9128E+000		-2.2807E+000
		964.01	14.40	9.4145E-001		4.1044E-001
		1085.78	10.00	1.1379E+000		5.5648E-001
		1112.02	13.30	7.9965E-001		1.3966E-001
		1407.95	20.70	3.1653E-001		-6.1916E-002
	Eu-154	123.07	40.50	5.7364E-001	2.86E-001	-2.8637E-001
		247.94	6.60	1.7107E+000		-1.0849E+000
		591.81	4.83	2.7029E+000		1.4298E+000
		723.30	19.70	6.1343E-001		2.3176E-001
		756.87	4.33	2.7074E+000		-2.2056E-001
		873.19	11.50	1.1045E+000		9.9430E-001
		996.32	10.30	1.0932E+000		2.2635E-001
		1004.76	17.90	5.8425E-001		-1.4700E-001
		1274.45	35.50	2.8604E-001		2.0091E-001
	Eu-155	86.54	30.90	1.5986E+000	1.54E+000	1.4526E+000
		105.31	20.70	1.5437E+000		8.8415E-002
	Am-241	59.54	35.90	3.3475E+000	3.35E+000	-1.0300E+000
	Cm-243	228.19	10.56	1.1299E+000	8.10E-001	-5.2239E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	8.0997E-001	8.10E-001	1.4171E-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 8/8/2006 11:43:55 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-10-02-193-F

Sample Title: OOL-10-02-193-F-G-I

Description: 100% Light Grass

Sample Type:

Geometry:

Acquisition Started: 8/8/2006 11:33:52 AM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-193-F
Title: OOL-10-02-193-F-G-I
Description: 100% Light Grass

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	290.71	72.76	1.00	1.98E+002	56.33	1.16E+003
m	2	286-	306	299.88	75.06	1.00	3.76E+002	63.42	1.60E+003
	3	336-	344	339.63	85.00	0.96	1.51E+002	92.82	9.75E+002
	4	785-	798	793.90	198.57	0.71	8.61E+001	56.48	2.70E+002
	5	2030-	2051	2041.35	510.45	1.53	2.43E+002	64.06	2.20E+002
	6	2324-	2336	2329.02	582.37	0.62	3.58E+001	40.80	1.51E+002
	7	2377-	2389	2381.82	595.57	0.58	5.61E+001	39.88	1.36E+002
	8	4679-	4699	4689.31	1172.48	0.94	1.34E+002	37.85	6.57E+001
	9	5086-	5101	5094.36	1273.75	0.40	4.98E+001	27.85	5.02E+001
	10	5317-	5339	5327.60	1332.06	1.81	3.19E+002	43.83	4.74E+001
	11	5830-	5851	5841.59	1460.57	1.78	3.03E+002	38.47	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: 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	4.14649E-001	1.22949E-001
K-40	0.998	1460.81*	10.67	6.42823E+000	9.67714E-001
Co-60	0.986	1173.22*	100.00	2.81594E-001	8.23860E-002
		1332.49*	100.00	6.91909E-001	1.09540E-001
TL-208	0.737	277.35	6.80		
		510.84*	21.60	1.91967E+000	5.90402E-001
		583.14*	84.20	7.56808E-002	8.68299E-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: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	3.983015E-001	1.243698E-001
K-40	0.998	6.428227E+000	9.677145E-001
Co-60	0.986	4.298379E-001	6.584218E-002
TL-208	0.737	7.568078E-002	8.679485E-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	72.76	3.3013E-001	28.44
m 2	75.06	6.2668E-001	16.87
3	85.00	2.5145E-001	61.52
4	198.57	1.4344E-001	65.63
7	595.57	9.3498E-002	71.09
9	1273.75	8.3042E-002	55.89

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: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	1.1224E-001	1.02E-001	2.8159E-001
		1332.49*	100.00	1.0208E-001		6.9191E-001
	Nb-94	702.63	100.00	1.8805E-001	1.88E-001	1.4964E-001
		871.10	100.00	1.8753E-001		2.0891E-001
	Ag-108m	79.20	7.10	9.7270E+000	1.72E-001	-8.0735E+000
		433.93	89.90	1.7155E-001		1.8024E-002
		614.37	90.40	2.0553E-001		-1.9757E-001
		722.95	90.50	2.0081E-001		-6.9569E-002
	Sb-125	176.33	6.89	2.2731E+000	5.29E-001	-6.4523E-001
		427.89	29.33	5.2924E-001		-4.0026E-001
		463.38	10.35	1.5660E+000		7.0472E-001
		600.56	17.80	1.0363E+000		-1.6194E-002
		606.64	5.02	3.8012E+000		2.8571E-001
		635.90	11.32	1.5786E+000		5.3400E-001
	Cs-134	563.23	8.38	2.0633E+000	1.94E-001	2.4170E-001
		569.32	15.43	1.1218E+000		-6.0680E-001
		604.70	97.60	1.9395E-001		-2.0346E-002
		795.84	85.40	1.9929E-001		-1.4477E-001
		801.93	8.73	2.0136E+000		4.4367E-002
	Cs-137	661.65	85.12	2.2042E-001	2.20E-001	1.6078E-001
	Eu-152	121.78	28.40	9.2943E-001	4.20E-001	-3.2788E-001
		244.69	7.49	2.0819E+000		-3.5025E-001
		344.27	26.50	5.4727E-001		-3.0113E-001
		778.89	12.74	1.4201E+000		3.3098E-001
		867.32	4.16	4.5146E+000		3.0464E+000
		964.01	14.40	1.2230E+000		1.9320E-001
		1085.78	10.00	1.6653E+000		-5.2991E-001
		1112.02	13.30	1.1893E+000		-4.9047E-001
		1407.95	20.70	4.1989E-001		-9.3876E-002
	Eu-154	123.07	40.50	6.4304E-001	4.16E-001	2.2192E-001
		247.94	6.60	2.3232E+000		-9.6638E-002
		591.81	4.83	3.7485E+000		-1.0033E+000
		723.30	19.70	9.1812E-001		-5.5686E-001
		756.87	4.33	4.0352E+000		-1.6079E+000
		873.19	11.50	1.6134E+000		-1.9519E-001
		996.32	10.30	1.6988E+000		-9.6004E-002
		1004.76	17.90	9.4028E-001		-5.5750E-001
		1274.45	35.50	4.1597E-001		2.0416E-001
	Eu-155	86.54	30.90	1.7638E+000	1.68E+000	1.7425E+000
		105.31	20.70	1.6767E+000		4.1855E-001
	Am-241	59.54	35.90	3.6561E+000	3.66E+000	-1.4057E-002
	Cm-243	228.19	10.56	1.3855E+000	1.06E+000	-1.1386E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.0630E+000	1.06E+000	-1.8336E-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 8/8/2006 12:54:47 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-194-F

Sample Title: OOL-10-02-194-F-G-I

Description: 100% Light Grass

Sample Type:

Geometry:

Acquisition Started: 8/8/2006 12:44:44 PM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 8/8/2006

Calibration Efficiency: 7722_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: BRN7722
Log Number: OOL-10-02-194-F
Title: OOL-10-02-194-F-G-I
Description: 100% Light Grass

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	306	300.22	75.14	0.89	1.94E+002	125.54	1.55E+003
2	950-	962	953.74	238.53	0.61	7.58E+001	52.54	2.41E+002
3	2033-	2050	2040.81	510.32	1.65	1.50E+002	62.05	2.59E+002
4	2377-	2386	2381.47	595.49	0.51	2.77E+001	31.96	1.05E+002
5	4681-	4699	4689.66	1172.57	0.53	1.01E+002	43.70	1.17E+002
6	5089-	5103	5095.14	1273.94	1.43	8.26E+001	27.90	4.04E+001
7	5171-	5182	5176.39	1294.26	0.30	2.02E+001	18.31	2.68E+001
8	5316-	5337	5327.83	1332.12	2.07	3.83E+002	44.68	3.61E+001
9	5830-	5853	5840.91	1460.40	0.75	2.88E+002	40.77	3.60E+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
ANN	0.982	511.00*	100.00	7.92135E-001	3.44382E-001
K-40	0.993	1460.81*	10.67	1.93883E+001	3.16167E+000
Co-60	0.989	1173.22*	100.00	6.59522E-001	2.89646E-001
		1332.49*	100.00	2.61973E+000	3.68302E-001
Pb-212	0.564	74.81* @	10.70	1.68939E+001	1.14171E+001
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.40150E-001	5.25767E-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	0.982	7.921347E-001	3.443818E-001
K-40	0.993	1.938828E+001	3.161668E+000
Co-60	0.989	1.408591E+000	2.276742E-001
Pb-212 @	0.564	7.401502E-001	5.257673E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	595.49	4.6140E-002	115.43
6	1273.94	1.3762E-001	33.79
7	1294.26	3.3706E-002	90.56

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: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	4.4459E-001	2.82E-001	6.5952E-001
		1332.49*	100.00	2.8181E-001		2.6197E+000
	Nb-94	702.63	100.00	5.8393E-001	5.73E-001	1.1161E-002
		871.10	100.00	5.7251E-001		1.1839E-001
	Ag-108m	79.20	7.10	2.6718E+001	5.52E-001	-1.6996E+001
		433.93	89.90	5.5200E-001		-4.4495E-001
		614.37	90.40	6.0788E-001		-7.4454E-001
		722.95	90.50	6.0226E-001		-4.6119E-001
	Sb-125	176.33	6.89	7.2921E+000	1.68E+000	3.8856E+000
		427.89	29.33	1.6770E+000		6.7961E-001
		463.38	10.35	4.7920E+000		-8.9881E-001
		600.56	17.80	3.0050E+000		-1.3925E+000
		606.64	5.02	1.1607E+001		2.0893E+001
		635.90	11.32	4.7517E+000		2.0006E+000
	Cs-134	563.23	8.38	6.1744E+000	5.76E-001	-4.0817E+000
		569.32	15.43	3.4422E+000		-5.2640E-001
		604.70	97.60	5.7552E-001		7.7622E-002
		795.84	85.40	6.4786E-001		3.6217E-001
		801.93	8.73	6.0967E+000		-4.1893E+000
	Cs-137	661.65	85.12	6.6737E-001	6.67E-001	-6.6176E-001
	Eu-152	121.78	28.40	2.9475E+000	1.33E+000	9.5757E-002
		244.69	7.49	6.2931E+000		1.8257E+000
		344.27	26.50	1.7348E+000		-3.0233E-001
		778.89	12.74	4.4040E+000		-7.4078E-001
		867.32	4.16	1.3852E+001		-2.2180E+000
		964.01	14.40	3.8790E+000		3.6251E+000
		1085.78	10.00	5.0743E+000		-4.9422E+000
		1112.02	13.30	3.8767E+000		9.3437E-001
		1407.95	20.70	1.3289E+000		-1.0877E+000
	Eu-154	123.07	40.50	2.0152E+000	1.37E+000	-2.4155E+000
		247.94	6.60	7.1488E+000		-4.3562E-001
		591.81	4.83	1.2056E+001		4.5601E+000
		723.30	19.70	2.7670E+000		-2.1332E+000
		756.87	4.33	1.3421E+001		4.2528E+000
		873.19	11.50	5.0188E+000		2.5942E+000
		996.32	10.30	5.1659E+000		9.0678E-001
		1004.76	17.90	2.9875E+000		-2.1621E+000
		1274.45	35.50	1.3713E+000		2.5542E+000
	Eu-155	86.54	30.90	5.0648E+000	5.06E+000	7.1300E+000
		105.31	20.70	5.1090E+000		-1.5646E+000
	Am-241	59.54	35.90	8.9790E+000	8.98E+000	-4.8736E-002
	Cm-243	228.19	10.56	4.6565E+000	3.27E+000	3.2909E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	3.2746E+000	3.27E+000	2.1025E-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 8/8/2006 1:15:01 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-195-F

Sample Title: OOL-10-02-195-F-G-I

Description: 100% Light Grass

Sample Type:

Geometry:

Acquisition Started: 8/8/2006 1:04:58 PM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 8/8/2006

Calibration Efficiency: 7722_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: BRN7722
Log Number: OOL-10-02-195-F
Title: OOL-10-02-195-F-G-I
Description: 100% Light Grass

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	290.58	72.73	1.03	1.91E+002	54.45	1.05E+003
m	2	286-	305	300.46	75.20	1.04	3.22E+002	59.58	1.42E+003
	3	948-	959	953.66	238.51	0.70	8.00E+001	45.64	1.81E+002
	4	2430-	2441	2435.56	609.01	0.30	3.10E+001	33.22	1.01E+002
	5	4680-	4696	4689.24	1172.46	1.18	6.99E+001	29.73	5.11E+001
	6	5088-	5102	5096.33	1274.24	0.43	5.05E+001	23.33	3.15E+001
	7	5317-	5338	5327.08	1331.93	1.13	2.07E+002	34.80	2.93E+001
	8	5828-	5852	5841.15	1460.46	1.93	3.29E+002	40.54	2.43E+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: 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	0.995	1460.81*	10.67	2.21289E+001	3.26481E+000
Co-60	0.983	1173.22*	100.00	4.55875E-001	1.97154E-001
		1332.49*	100.00	1.41432E+000	2.62655E-001
Pb-212	0.564	74.81* @	10.70	2.79944E+001	7.54266E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.405	238.63*	44.60	7.81003E-001	4.61922E-001
		609.31*	46.30	3.72970E-001	4.02258E-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	0.995	2.212892E+001	3.264806E+000
Co-60	0.983	8.012829E-001	1.576764E-001
Pb-212 @	0.564	7.810030E-001	4.619224E-001
Bi-214	0.405	3.729704E-001	4.022575E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.1899E-001	28.45
6	1274.24	8.4126E-002	46.22

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	2.8918E-001	2.53E-001	4.5588E-001
		1332.49*	100.00	2.5303E-001		1.4143E+000
	Nb-94	702.63	100.00	4.9050E-001	4.90E-001	-2.2203E-001
		871.10	100.00	5.1687E-001		6.2446E-001
	Ag-108m	79.20	7.10	2.5054E+001	4.80E-001	-2.2701E+001
		433.93	89.90	4.8007E-001		-2.3001E-001
		614.37	90.40	5.2605E-001		-7.2772E-002
		722.95	90.50	5.4736E-001		-1.3732E-001
	Sb-125	176.33	6.89	6.3989E+000	1.52E+000	4.4086E-002
		427.89	29.33	1.5151E+000		7.0729E-001
		463.38	10.35	4.0717E+000		-6.2915E-001
		600.56	17.80	2.6975E+000		-1.7920E+000
		606.64	5.02	9.9867E+000		-2.0406E+000
		635.90	11.32	4.1466E+000		-2.8218E+000
	Cs-134	563.23	8.38	5.5665E+000	5.26E-001	-2.7159E+000
		569.32	15.43	3.0008E+000		-5.5820E-001
		604.70	97.60	5.2637E-001		-4.0637E-001
		795.84	85.40	5.5132E-001		-8.6199E-002
		801.93	8.73	5.4514E+000		7.2979E-001
	Cs-137	661.65	85.12	5.7517E-001	5.75E-001	4.6035E-001
	Eu-152	121.78	28.40	2.7099E+000	1.12E+000	8.3462E-001
		244.69	7.49	5.5214E+000		-3.2945E+000
		344.27	26.50	1.4911E+000		-9.5642E-001
		778.89	12.74	3.8767E+000		-3.5781E-001
		867.32	4.16	1.1999E+001		-3.2823E-001
		964.01	14.40	3.5925E+000		2.3015E+000
		1085.78	10.00	4.4124E+000		1.6297E+000
		1112.02	13.30	3.2142E+000		-1.2215E+000
		1407.95	20.70	1.1184E+000		5.5591E-001
	Eu-154	123.07	40.50	1.8475E+000	1.14E+000	-1.7717E+000
		247.94	6.60	6.2528E+000		-2.1940E+000
		591.81	4.83	9.9840E+000		5.7513E+000
		723.30	19.70	2.5109E+000		-6.6013E-001
		756.87	4.33	1.1219E+001		-1.1766E+001
		873.19	11.50	4.4549E+000		2.0366E+000
		996.32	10.30	4.5560E+000		5.2705E+000
		1004.76	17.90	2.5349E+000		-1.2858E+000
		1274.45	35.50	1.1386E+000		1.0687E+000
	Eu-155	86.54	30.90	4.7012E+000	4.70E+000	3.0655E+000
		105.31	20.70	4.6990E+000		-2.1293E+000
	Am-241	59.54	35.90	8.4331E+000	8.43E+000	-4.8131E-001
	Cm-243	228.19	10.56	4.0623E+000	2.95E+000	3.0975E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.9451E+000	2.95E+000	-5.3516E-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 8/8/2006 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-196-F

Sample Title: OOL-10-02-196-F-G-I

Description: 100% Light Grass

Sample Type:

Geometry:

Acquisition Started: 8/8/2006 1:22:36 PM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 8/8/2006

Calibration Efficiency: 7722_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: BRN7722
Log Number: OOL-10-02-196-F
Title: OOL-10-02-196-F-G-I
Description: 100% Light Grass

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 8 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I 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	0.995	1460.81*	10.67	2.18123E+001	3.41918E+000
Co-60	0.992	1173.22* 1332.49*	100.00 100.00	5.96438E-001 2.13257E+000	2.39293E-001 3.46002E-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	0.995	2.181230E+001	3.419181E+000
Co-60	0.992	1.093449E+000	1.968106E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	72.92	3.5936E-001	25.94
m 2	75.13	5.3061E-001	19.14
3	198.22	1.4171E-001	63.32
4	595.13	9.8951E-002	71.07
5	910.49	1.1176E-001	63.79

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: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	3.5390E-001	3.36E-001	5.9644E-001
		1332.49*	100.00	3.3572E-001		2.1326E+000
	Nb-94	702.63	100.00	5.5706E-001	5.57E-001	-1.8781E-001
		871.10	100.00	5.6595E-001		6.1909E-002
	Ag-108m	79.20	7.10	2.6417E+001	5.46E-001	-2.2739E+001
		433.93	89.90	5.4569E-001		4.2332E-001
		614.37	90.40	6.0155E-001		-6.0084E-001
		722.95	90.50	6.1895E-001		4.0826E-001
	Sb-125	176.33	6.89	6.7524E+000	1.60E+000	1.1537E+000
		427.89	29.33	1.6022E+000		-2.0607E-001
		463.38	10.35	4.5709E+000		-5.4353E-001
		600.56	17.80	2.9725E+000		-5.2847E-001
		606.64	5.02	1.1273E+001		9.8776E+000
		635.90	11.32	4.8782E+000		2.1699E-001
	Cs-134	563.23	8.38	6.3021E+000	5.63E-001	2.7021E+000
		569.32	15.43	3.4503E+000		1.9697E-001
		604.70	97.60	5.6284E-001		-1.9299E-002
		795.84	85.40	6.3683E-001		3.0625E-001
		801.93	8.73	6.1650E+000		-1.1892E+000
	Cs-137	661.65	85.12	6.8663E-001	6.87E-001	8.6571E-001
	Eu-152	121.78	28.40	2.7480E+000	1.19E+000	-1.5648E+000
		244.69	7.49	6.3231E+000		-2.2056E+000
		344.27	26.50	1.6232E+000		-4.6515E-001
		778.89	12.74	4.4695E+000		5.6742E+000
		867.32	4.16	1.3731E+001		4.1412E+000
		964.01	14.40	3.8574E+000		-2.1792E+000
		1085.78	10.00	4.8036E+000		-3.2833E+000
		1112.02	13.30	3.4447E+000		4.7172E-001
		1407.95	20.70	1.1892E+000		-4.1002E-001
	Eu-154	123.07	40.50	1.9201E+000	1.32E+000	6.3603E-001
		247.94	6.60	6.9395E+000		-5.1539E+000
		591.81	4.83	1.1233E+001		2.0365E+000
		723.30	19.70	2.8437E+000		2.1769E+000
		756.87	4.33	1.2660E+001		7.3403E+000
		873.19	11.50	4.8793E+000		9.4783E-001
		996.32	10.30	5.0845E+000		-2.2522E+000
		1004.76	17.90	2.9407E+000		1.1186E+000
		1274.45	35.50	1.3233E+000		2.3691E+000
	Eu-155	86.54	30.90	4.9683E+000	4.78E+000	6.7473E+000
		105.31	20.70	4.7816E+000		6.8735E-001
	Am-241	59.54	35.90	8.6557E+000	8.66E+000	4.3529E+000
	Cm-243	228.19	10.56	4.5399E+000	3.27E+000	-6.0899E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	3.2676E+000	3.27E+000	3.3291E-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 8/8/2006 1:47:30 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-10-02-197-F

Sample Title: OOL-10-02-197-F-G-I

Description: 100% Light Grass

Sample Type:

Geometry:

Acquisition Started: 8/8/2006 1:37:28 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 8/8/2006

Calibration Efficiency: 7722_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: BRN7722
Log Number: OOL-10-02-197-F
Title: OOL-10-02-197-F-G-I
Description: 100% Light Grass

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	291.28	72.91	1.23	1.87E+002	55.68	1.35E+003
m	2	284-	305	299.93	75.07	1.24	3.10E+002	61.34	1.75E+003
	3	554-	563	558.28	139.66	0.49	6.32E+001	57.28	3.50E+002
	4	784-	800	792.35	198.18	1.20	1.00E+002	52.29	1.96E+002
	5	947-	958	954.45	238.71	0.91	6.46E+001	39.79	1.38E+002
	6	2376-	2387	2380.93	595.35	1.07	3.56E+001	27.92	6.64E+001
	7	5320-	5338	5327.13	1331.95	1.09	8.65E+001	22.47	1.35E+001
	8	5828-	5852	5841.50	1460.55	1.74	3.52E+002	41.30	2.21E+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: 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	0.997	1460.81*	10.67	2.36927E+001	3.37782E+000
Pb-212	0.564	74.81* @	10.70	2.70221E+001	7.52958E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.30637E-001	4.00816E-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	0.997	2.369274E+001	3.377817E+000
Pb-212 @	0.564	6.306373E-001	4.008155E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.1127E-001	29.81
3	139.66	1.0541E-001	90.57
4	198.18	1.6745E-001	52.05
6	595.35	5.9412E-002	78.31
7	1331.95	1.4422E-001	25.96

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: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	3.4311E-001	3.43E-001	-2.1952E-001
	1332.49	100.00	3.8013E-001		3.6398E-001
Nb-94	702.63	100.00	3.7447E-001	3.74E-001	-1.6608E-001
	871.10	100.00	3.9823E-001		3.2224E-001
Ag-108m	79.20	7.10	2.4552E+001	3.80E-001	-1.8099E+001
	433.93	89.90	3.8028E-001		2.0299E-001
	614.37	90.40	4.2523E-001		-7.9060E-001
	722.95	90.50	4.2328E-001		-6.9948E-002
Sb-125	176.33	6.89	5.9790E+000	1.17E+000	4.6348E-001
	427.89	29.33	1.1718E+000		3.6923E-001
	463.38	10.35	3.4755E+000		7.0054E-001
	600.56	17.80	2.1597E+000		-4.8354E-001
	606.64	5.02	8.1190E+000		2.3374E+000
	635.90	11.32	3.1952E+000		-1.7961E+000
Cs-134	563.23	8.38	4.4548E+000	4.09E-001	1.6719E+000
	569.32	15.43	2.2527E+000		-2.6795E+000
	604.70	97.60	4.0924E-001		1.8491E-001
	795.84	85.40	4.2250E-001		-1.3269E-001
Cs-137	801.93	8.73	4.2419E+000	4.63E-001	2.3247E+000
	661.65	85.12	4.6320E-001		-1.2320E-001
Eu-152	121.78	28.40	2.6013E+000	9.45E-001	1.5498E+000
	244.69	7.49	4.4491E+000		-8.2473E-001
	344.27	26.50	1.3404E+000		6.6921E-001
	778.89	12.74	2.9790E+000		-7.1953E-001
	867.32	4.16	9.5122E+000		2.1968E+000
	964.01	14.40	2.6359E+000		1.1231E+000
	1085.78	10.00	3.3157E+000		-1.4115E+000
	1112.02	13.30	2.4633E+000		-2.0153E-001
1407.95	20.70	9.4489E-001	1.0357E-001		
Eu-154	123.07	40.50	1.7812E+000	9.42E-001	7.8817E-001
	247.94	6.60	5.1126E+000		-4.5397E+000
	591.81	4.83	8.5130E+000		-4.5778E+000
	723.30	19.70	1.9751E+000		6.1580E-001
	756.87	4.33	8.4612E+000		-5.1605E+000
	873.19	11.50	3.2953E+000		-2.8794E+000
	996.32	10.30	3.2765E+000		8.8716E-001
	1004.76	17.90	2.0872E+000		8.1281E-001
1274.45	35.50	9.4202E-001	-1.1717E-001		
Eu-155	86.54	30.90	4.4999E+000	4.50E+000	2.0227E+000
	105.31	20.70	4.6019E+000		8.8414E-001
Am-241	59.54	35.90	8.2894E+000	8.29E+000	-5.1042E-001
Cm-243	228.19	10.56	3.3501E+000	2.50E+000	-1.0920E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.5039E+000	2.50E+000	-4.8624E-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 8/8/2006 2:03:43 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-198-F

Sample Title: OOL-10-02-198-F-G-I

Description: 100% Light Grass

Sample Type:

Geometry:

Acquisition Started: 8/8/2006 1:53:40 PM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 8/8/2006

Calibration Efficiency: 7722_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: BRN7722
Log Number: OOL-10-02-198-F
Title: OOL-10-02-198-F-G-I
Description: 100% Light Grass

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 9 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.33595E+000	3.88025E-001
K-40	0.993	1460.81*	10.67	2.18436E+001	3.26352E+000
Co-60	0.996	1173.22*	100.00	7.26034E-001	2.68920E-001
		1332.49*	100.00	2.54741E+000	3.67071E-001
Bi-214	0.400	609.31*	46.30	5.85274E-001	5.64371E-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
ANN	0.990	1.335948E+000	3.880253E-001
K-40	0.993	2.184361E+001	3.263520E+000
Co-60	0.996	1.362171E+000	2.169331E-001
Bi-214	0.400	5.852739E-001	5.643708E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	75.17	3.9378E-001	48.74
4	910.70	5.4138E-002	111.99
6	1274.28	9.6529E-002	48.65
9	1834.95	1.5833E-002	90.57

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: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	3.9629E-001	2.99E-001	7.2603E-001
		1332.49*	100.00	2.9887E-001		2.5474E+000
	Nb-94	702.63	100.00	5.8201E-001	5.80E-001	3.1142E-002
		871.10	100.00	5.7970E-001		6.3010E-002
	Ag-108m	79.20	7.10	2.6455E+001	5.38E-001	-1.5013E+001
		433.93	89.90	5.3802E-001		-6.0694E-002
		614.37	90.40	6.2169E-001		3.2778E-001
		722.95	90.50	6.3519E-001		-4.0731E-001
	Sb-125	176.33	6.89	6.7810E+000	1.53E+000	-2.7907E+000
		427.89	29.33	1.5278E+000		-1.6533E+000
		463.38	10.35	4.9704E+000		-3.3821E+000
		600.56	17.80	3.2033E+000		-2.4224E+000
		606.64	5.02	1.1840E+001		1.4532E+000
		635.90	11.32	5.0454E+000		4.1075E+000
	Cs-134	563.23	8.38	6.5927E+000	6.21E-001	8.0904E-001
		569.32	15.43	3.5339E+000		-3.6421E-001
		604.70	97.60	6.2069E-001		1.4661E-002
		795.84	85.40	6.5121E-001		-4.5170E-002
		801.93	8.73	6.4309E+000		-1.4124E+000
	Cs-137	661.65	85.12	7.0605E-001	7.06E-001	5.8413E-001
	Eu-152	121.78	28.40	2.9094E+000	1.39E+000	2.1957E+000
		244.69	7.49	6.5354E+000		4.1279E+000
		344.27	26.50	1.7510E+000		-3.4867E-001
		778.89	12.74	4.5073E+000		1.3169E+000
		867.32	4.16	1.4074E+001		8.6336E+000
		964.01	14.40	4.1503E+000		4.1592E+000
		1085.78	10.00	5.1104E+000		1.2385E+000
		1112.02	13.30	3.7314E+000		-2.0075E+000
		1407.95	20.70	1.3883E+000		3.3782E-002
	Eu-154	123.07	40.50	1.9714E+000	1.37E+000	-2.0261E-001
		247.94	6.60	7.1899E+000		3.1656E+000
		591.81	4.83	1.2093E+001		-1.1509E+001
		723.30	19.70	2.9250E+000		-1.9790E+000
		756.87	4.33	1.3188E+001		1.7197E+000
		873.19	11.50	4.9368E+000		-4.7025E+000
		996.32	10.30	5.3011E+000		1.3918E+000
		1004.76	17.90	3.0471E+000		5.7701E-001
		1274.45	35.50	1.3654E+000		1.4349E+000
	Eu-155	86.54	30.90	5.0751E+000	4.98E+000	5.0014E+000
		105.31	20.70	4.9842E+000		2.6880E-001
	Am-241	59.54	35.90	9.1309E+000	9.13E+000	3.1911E+000
	Cm-243	228.19	10.56	4.6006E+000	3.16E+000	-6.8181E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	3.1602E+000	3.16E+000	-1.8991E-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 8/8/2006 2:19:26 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-199-F

Sample Title: OOL-10-02-199-F-G-I

Description: 100% Light Grass

Sample Type:

Geometry:

Acquisition Started: 8/8/2006 2:09:26 PM

Live Time: 600.0 seconds

Real Time: 601.4 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 8/8/2006

Calibration Efficiency: 7722_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: BRN7722
Log Number: OOL-10-02-199-F
Title: OOL-10-02-199-F-G-I
Description: 100% Light Grass

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	291.67	73.01	0.88	1.76E+002	56.54	1.28E+003
m	2	286-	304	299.91	75.07	0.88	3.77E+002	65.43	1.54E+003
	3	949-	958	953.98	238.59	1.04	7.98E+001	44.92	1.97E+002
	4	2031-	2051	2040.91	510.34	1.00	1.99E+002	68.10	2.78E+002
	5	4683-	4697	4690.29	1172.73	1.16	8.18E+001	35.76	8.52E+001
	6	5085-	5100	5094.89	1273.88	0.77	5.15E+001	28.87	5.45E+001
	7	5316-	5339	5327.23	1331.97	1.62	3.28E+002	46.83	6.11E+001
	8	5830-	5851	5841.22	1460.48	1.92	3.04E+002	39.98	2.98E+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: 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	0.983	511.00*	100.00	1.04881E+000	3.86234E-001
K-40	0.996	1460.81*	10.67	2.04774E+001	3.16119E+000
Co-60	0.990	1173.22*	100.00	5.33254E-001	2.36986E-001
		1332.49*	100.00	2.24321E+000	3.65474E-001
Pb-212	0.564	74.81* @	10.70	3.28749E+001	8.60943E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.79312E-001	4.55120E-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	0.983	1.048813E+000	3.862344E-001
K-40	0.996	2.047738E+001	3.161188E+000
Co-60	0.990	1.039411E+000	1.988416E-001
Pb-212 @	0.564	7.793122E-001	4.551204E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.9314E-001	32.15
6	1273.88	8.5877E-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: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	3.5775E-001	3.58E-001	5.3325E-001
		1332.49*	100.00	3.6934E-001		2.2432E+000
	Nb-94	702.63	100.00	5.8903E-001	5.89E-001	-5.6659E-001
		871.10	100.00	6.0555E-001		2.1344E-002
	Ag-108m	79.20	7.10	2.7525E+001	5.77E-001	-2.6399E+001
		433.93	89.90	5.7713E-001		9.8323E-002
		614.37	90.40	6.3653E-001		-7.3846E-001
		722.95	90.50	6.7129E-001		3.5184E-001
	Sb-125	176.33	6.89	7.5727E+000	1.76E+000	2.4756E+000
		427.89	29.33	1.7577E+000		9.6318E-001
		463.38	10.35	5.0194E+000		-8.8699E-001
		600.56	17.80	3.2700E+000		-2.5157E+000
		606.64	5.02	1.2034E+001		1.8585E+001
		635.90	11.32	5.0619E+000		5.9670E-001
	Cs-134	563.23	8.38	6.4708E+000	5.96E-001	-5.8727E+000
		569.32	15.43	3.5574E+000		1.5024E-001
		604.70	97.60	5.9643E-001		-3.5845E-001
		795.84	85.40	6.6935E-001		3.2886E-001
		801.93	8.73	6.4552E+000		-6.4904E+000
	Cs-137	661.65	85.12	6.9099E-001	6.91E-001	-4.2760E-001
	Eu-152	121.78	28.40	2.9148E+000	1.34E+000	7.4209E-001
		244.69	7.49	6.6617E+000		-3.6753E+000
		344.27	26.50	1.7591E+000		-1.2050E+000
		778.89	12.74	4.3598E+000		-2.5247E+000
		867.32	4.16	1.5136E+001		2.2989E+001
		964.01	14.40	4.0430E+000		-8.7112E-001
		1085.78	10.00	5.4501E+000		-1.1908E+000
		1112.02	13.30	3.8082E+000		1.5291E+000
		1407.95	20.70	1.3390E+000		5.1630E-001
	Eu-154	123.07	40.50	2.0070E+000	1.33E+000	-1.0520E+000
		247.94	6.60	7.3854E+000		1.4480E+000
		591.81	4.83	1.2283E+001		1.0182E+001
		723.30	19.70	3.0715E+000		-4.7139E-001
		756.87	4.33	1.3830E+001		1.1392E+001
		873.19	11.50	5.1847E+000		1.1544E+000
		996.32	10.30	5.5615E+000		8.7088E-001
		1004.76	17.90	3.1277E+000		-3.0955E-001
		1274.45	35.50	1.3324E+000		1.7083E+000
	Eu-155	86.54	30.90	5.1650E+000	5.17E+000	6.9411E+000
		105.31	20.70	5.2157E+000		5.6810E+000
	Am-241	59.54	35.90	9.0732E+000	9.07E+000	-1.5671E+000
	Cm-243	228.19	10.56	4.7817E+000	3.48E+000	3.3528E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	3.4787E+000	3.48E+000	8.3219E-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 8/8/2006 2:37:13 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-200-F

Sample Title: OOL-10-02-200-F-G-I

Description: 100% Light Grass

Sample Type:

Geometry:

Acquisition Started: 8/8/2006 2:27:12 PM

Live Time: 600.0 seconds

Real Time: 601.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 8/8/2006

Calibration Efficiency: 7722_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 SP E A K A N A L Y S I S R E P O R T

Filename: BRN7722
Log Number: OOL-10-02-200-F
Title: OOL-10-02-200-F-G-I
Description: 100% Light Grass

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	307	300.47	75.21	1.04	2.26E+002	119.99	1.33E+003
2	947-	958	953.74	238.53	1.00	7.85E+001	42.39	1.55E+002
3	5318-	5337	5326.78	1331.86	1.42	1.61E+002	31.72	2.91E+001
4	5831-	5854	5840.83	1460.38	1.54	2.85E+002	36.32	1.46E+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	0.993	1460.81*	10.67	1.92124E+001	2.89814E+000
Pb-212	0.564	74.81* @	10.70	1.96045E+001	1.11069E+001
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.66323E-001	4.30775E-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	0.993	1.921244E+001	2.898136E+000
Pb-212 @	0.564	7.663226E-001	4.307747E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1331.86	2.6813E-001	19.71

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	4.1219E-001	4.12E-001	4.2191E-001
	1332.49	100.00	4.9289E-001		1.0829E+000
Nb-94	702.63	100.00	4.4885E-001	4.49E-001	-4.9671E-002
	871.10	100.00	4.7577E-001		3.2979E-001
Ag-108m	79.20	7.10	2.4813E+001	4.54E-001	-1.0421E+001
	433.93	89.90	4.5399E-001		2.7270E-001
	614.37	90.40	4.6108E-001		-7.9000E-001
	722.95	90.50	4.7044E-001		-8.0753E-002
Sb-125	176.33	6.89	6.3135E+000	1.32E+000	1.2643E-001
	427.89	29.33	1.3207E+000		-6.8121E-001
	463.38	10.35	3.7713E+000		-1.8542E-001
	600.56	17.80	2.6406E+000		-1.3373E+000
	606.64	5.02	9.5084E+000		7.3704E-001
	635.90	11.32	3.8397E+000		8.3770E-001
Cs-134	563.23	8.38	5.2262E+000	4.89E-001	-2.1065E+000
	569.32	15.43	2.7324E+000		-2.8094E+000
	604.70	97.60	4.8858E-001		4.2071E-001
	795.84	85.40	4.9244E-001		-1.2721E-001
	801.93	8.73	4.9234E+000		2.5184E-002
Cs-137	661.65	85.12	5.2471E-001	5.25E-001	-1.5809E-001
Eu-152	121.78	28.40	2.6252E+000	1.18E+000	1.6122E-002
	244.69	7.49	5.2090E+000		4.6730E-001
	344.27	26.50	1.4525E+000		4.4539E-003
	778.89	12.74	3.5624E+000		-9.5681E-001
	867.32	4.16	1.1105E+001		-1.6356E+000
	964.01	14.40	2.9042E+000		-1.2700E+000
	1085.78	10.00	3.9461E+000		-3.5701E+000
	1112.02	13.30	2.7604E+000		-8.1486E-001
1407.95	20.70	1.1778E+000	3.0415E-001		
Eu-154	123.07	40.50	1.8031E+000	9.72E-001	9.7385E-002
	247.94	6.60	5.8952E+000		-2.6347E+000
	591.81	4.83	9.7173E+000		5.5151E+000
	723.30	19.70	2.1751E+000		2.8216E-003
	756.87	4.33	9.7060E+000		-1.9145E+000
	873.19	11.50	4.0312E+000		2.7604E+000
	996.32	10.30	3.9117E+000		-2.0047E+000
	1004.76	17.90	2.3641E+000		-7.6231E-001
1274.45	35.50	9.7207E-001	2.7825E-003		
Eu-155	86.54	30.90	4.7445E+000	4.71E+000	8.3962E+000
	105.31	20.70	4.7089E+000		-1.9481E+000
Am-241	59.54	35.90	8.2652E+000	8.27E+000	-4.0067E-001
Cm-243	228.19	10.56	3.9793E+000	2.66E+000	2.5266E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.6609E+000	2.66E+000	-1.2225E+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 8/8/2006 2:58:41 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-201-F

Sample Title: OOL-10-02-201-F-G-I

Description: 100% Light Grass

Sample Type:

Geometry:

Acquisition Started: 8/8/2006 2:48:39 PM

Live Time: 600.0 seconds

Real Time: 601.4 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-201-F
Title: OOL-10-02-201-F-G-I
Description: 100% Light Grass

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 7 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.994	1460.81*	10.67	2.34233E+001	3.34197E+000
Co-60	0.988	1173.22*	100.00	6.89193E-001	2.67072E-001
		1332.49*	100.00	2.94327E+000	3.91857E-001
Bi-214	0.401	609.31*	46.30	5.38694E-001	5.47249E-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	0.994	2.342332E+001	3.341969E+000
Co-60	0.988	1.404141E+000	2.206889E-001
Bi-214	0.401	5.386939E-001	5.472492E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.5484E-001	26.81
m 2	75.11	7.4577E-001	14.72
5	1274.05	1.3525E-001	39.54

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: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	3.9792E-001	2.83E-001	6.8919E-001
		1332.49*	100.00	2.8306E-001		2.9433E+000
	Nb-94	702.63	100.00	5.6367E-001	5.64E-001	-4.3810E-001
		871.10	100.00	5.7928E-001		-7.8212E-003
	Ag-108m	79.20	7.10	2.7238E+001	5.54E-001	-5.7806E+000
		433.93	89.90	5.5397E-001		4.2730E-002
		614.37	90.40	6.2921E-001		-1.3255E-001
		722.95	90.50	6.3789E-001		3.5231E-001
	Sb-125	176.33	6.89	7.9013E+000	1.68E+000	1.1314E+001
		427.89	29.33	1.6796E+000		5.9929E-002
		463.38	10.35	4.8177E+000		1.0606E+000
		600.56	17.80	3.0541E+000		-1.9928E+000
		606.64	5.02	1.1442E+001		4.9174E+000
		635.90	11.32	4.9953E+000		2.4871E+000
	Cs-134	563.23	8.38	6.7392E+000	5.88E-001	-8.5607E-001
		569.32	15.43	3.6755E+000		2.6215E+000
		604.70	97.60	5.8797E-001		-2.8498E-001
		795.84	85.40	6.8537E-001		3.1925E-001
		801.93	8.73	6.5929E+000		-4.0167E+000
	Cs-137	661.65	85.12	6.7147E-001	6.71E-001	-3.5241E-001
	Eu-152	121.78	28.40	2.8551E+000	1.31E+000	-1.6177E+000
		244.69	7.49	6.5860E+000		5.0314E-001
		344.27	26.50	1.7878E+000		5.6825E-001
		778.89	12.74	4.3951E+000		1.3422E+000
		867.32	4.16	1.4046E+001		-5.6247E-001
		964.01	14.40	3.8655E+000		1.3744E+000
		1085.78	10.00	5.0811E+000		9.6528E-002
		1112.02	13.30	3.8845E+000		-2.2331E-001
		1407.95	20.70	1.3066E+000		8.3831E-002
	Eu-154	123.07	40.50	1.9785E+000	1.34E+000	-1.5489E+000
		247.94	6.60	7.2068E+000		6.4277E-001
		591.81	4.83	1.1781E+001		1.2490E+001
		723.30	19.70	2.9308E+000		1.7629E+000
		756.87	4.33	1.3095E+001		-8.9690E+000
		873.19	11.50	4.9784E+000		6.0313E-001
		996.32	10.30	4.9929E+000		1.2624E-001
		1004.76	17.90	3.0648E+000		-3.2490E-001
		1274.45	35.50	1.3440E+000		2.0920E+000
	Eu-155	86.54	30.90	5.1416E+000	5.14E+000	4.4149E+000
		105.31	20.70	5.2231E+000		6.3576E+000
	Am-241	59.54	35.90	9.2467E+000	9.25E+000	-1.4195E+000
	Cm-243	228.19	10.56	4.7874E+000	3.36E+000	3.5623E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	3.3601E+000	3.36E+000	-8.7227E-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 8/8/2006 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-02-202-F

Sample Title: OOL-10-02-202-F-G-I

Description: CLOSE WINDOW
100% Light Grass

Sample Type:

Geometry:

Acquisition Started: 8/8/2006 3:15:08 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soil2m90170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-02-202-F
Title: OOL-10-02-202-F-G-I
Description: CLOSE WINDOW
100% Light Grass

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	209-	218	215.25	53.90	0.80	4.76E+001	36.44	1.32E+002
M 2	285-	304	291.73	73.02	0.83	5.43E+001	23.00	1.91E+002
m 3	285-	304	300.26	75.15	0.83	1.49E+002	30.09	1.88E+002
4	554-	565	558.24	139.65	1.03	6.20E+001	42.40	1.61E+002
5	789-	801	793.45	198.46	0.98	6.59E+001	43.91	1.65E+002
6	4681-	4699	4689.90	1172.63	1.13	1.31E+002	39.36	8.06E+001
7	5089-	5103	5096.11	1274.19	1.06	6.08E+001	28.08	5.03E+001
8	5317-	5339	5327.21	1331.97	1.43	3.46E+002	45.35	4.86E+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
Co-60	0.988	1173.22* 1332.49*	100.00 100.00	8.44306E-001 2.30937E+000	2.61395E-001 3.52382E-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
Co-60	0.988	1.364327E+000	2.099402E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	53.90	7.9324E-002	76.57
M 2	73.02	9.0478E-002	42.37
m 3	75.15	2.4901E-001	20.14
4	139.65	1.0338E-001	68.35
5	198.46	1.0982E-001	66.64
7	1274.19	1.0125E-001	46.23

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: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	3.6588E-001	3.19E-001	8.4431E-001
		1332.49*	100.00	3.1948E-001		2.3094E+000
	Nb-94	702.63	100.00	5.6693E-001	5.35E-001	1.3611E-001
		871.10	100.00	5.3524E-001		-1.0298E-001
	Ag-108m	79.20	7.10	9.8817E+000	5.15E-001	-1.7220E+001
		433.93	89.90	5.1457E-001		1.2502E-002
		614.37	90.40	6.0613E-001		1.9335E-001
		722.95	90.50	6.1383E-001		-9.5699E-002
	Sb-125	176.33	6.89	5.0531E+000	1.66E+000	2.1246E+000
		427.89	29.33	1.6565E+000		1.4028E+000
		463.38	10.35	4.5637E+000		1.4305E+000
		600.56	17.80	2.9035E+000		-4.4455E+000
		606.64	5.02	1.0597E+001		5.3437E+000
		635.90	11.32	4.9182E+000		4.6828E+000
	Cs-134	563.23	8.38	6.1722E+000	5.37E-001	-1.2421E-001
		569.32	15.43	3.4716E+000		6.1934E-001
		604.70	97.60	5.3730E-001		2.3512E-001
		795.84	85.40	6.2986E-001		-7.8022E-002
		801.93	8.73	6.2060E+000		8.1311E-001
	Cs-137	661.65	85.12	6.6778E-001	6.68E-001	-1.4988E-001
	Eu-152	121.78	28.40	1.2035E+000	1.00E+000	-4.5663E-001
		244.69	7.49	5.1625E+000		-2.5724E+000
		344.27	26.50	1.5931E+000		-2.5310E-001
		778.89	12.74	4.2233E+000		-3.8653E+000
		867.32	4.16	1.3162E+001		4.2529E+000
		964.01	14.40	3.7520E+000		9.1770E-001
		1085.78	10.00	5.0367E+000		5.3779E-001
		1112.02	13.30	3.5246E+000		1.8922E+000
		1407.95	20.70	1.0040E+000		4.8085E-001
	Eu-154	123.07	40.50	8.3684E-001	8.37E-001	-5.5844E-001
		247.94	6.60	5.8838E+000		-9.0835E-001
		591.81	4.83	1.0973E+001		-2.3260E+000
		723.30	19.70	2.8304E+000		4.2837E-001
		756.87	4.33	1.3250E+001		5.1577E+000
		873.19	11.50	4.6569E+000		-5.1379E-001
		996.32	10.30	5.1061E+000		2.0179E+000
		1004.76	17.90	2.9476E+000		-6.7178E-001
		1274.45	35.50	1.2882E+000		1.5217E+000
	Eu-155	86.54	30.90	2.0191E+000	1.97E+000	2.8080E+000
		105.31	20.70	1.9679E+000		9.9651E-001
	Am-241	59.54	35.90	4.0452E+000	4.05E+000	8.0155E-001
	Cm-243	228.19	10.56	3.7242E+000	2.78E+000	9.4289E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.7846E+000	2.78E+000	-3.2287E+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 6/26/2006 8:20:50 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-10-03-101-F-

Sample Title: OOL-10-03-101-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 8:10:47 AM

Live Time: 600.0 seconds

Real Time: 601.5 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-10-03-101-F-
Title: OOL-10-03-101-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	293-	308	300.03	74.91	1.23	3.82E+002	148.39	1.77E+003
2	331-	344	339.48	84.78	0.30	1.66E+002	113.99	1.15E+003
3	946-	961	953.55	238.33	1.67	2.49E+002	70.59	3.48E+002
4	1253-	1269	1264.70	316.14	0.43	4.50E+001	46.64	1.66E+002
5	1398-	1417	1406.53	351.61	1.63	1.87E+002	56.61	1.85E+002
6	2320-	2342	2331.54	582.92	0.43	1.67E+002	49.75	1.23E+002
7	2424-	2446	2435.20	608.84	1.41	1.66E+002	46.41	1.01E+002
8	2901-	2914	2907.83	727.03	1.32	4.77E+001	26.16	4.73E+001
9	3634-	3652	3643.13	910.90	2.05	1.26E+002	32.74	4.52E+001
10	3866-	3884	3874.22	968.69	1.32	1.04E+002	28.74	3.30E+001
11	5828-	5857	5842.87	1460.99	2.19	1.07E+003	68.22	3.00E+001
12	7055-	7069	7061.07	1765.62	0.65	4.34E+001	17.79	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: 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	0.999	1460.81*	10.67	1.84959E+001	1.90668E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.90932E-001	9.47377E-002
		860.37	12.46		
Bi-212	0.999	727.17*	11.80	6.31182E-001	3.54186E-001
Pb-212	0.520	74.81* @	10.70	5.67134E+000	2.46866E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.24147E-001	2.02344E-001
Bi-214	0.686	609.31*	46.30	5.34286E-001	1.63293E-001
		1120.29	15.10		
		1764.49*	15.80	5.26723E-001	2.22168E-001
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	7.43538E-001	2.11660E-001
		969.11*	16.60	1.04423E+000	3.08586E-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	0.999	1.849593E+001	1.906682E+000
TL-208	0.470	2.909321E-001	9.473770E-002
Bi-212	0.999	6.311824E-001	3.541864E-001
Pb-212 @	0.520	6.241470E-001	2.023440E-001
Bi-214	0.686	5.316335E-001	1.315755E-001
Ac-228	0.631	8.397417E-001	1.745468E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.7639E-001	68.74
4	316.14	7.4937E-002	103.72
5	351.61	3.1221E-001	30.22

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	9.6288E-002	7.75E-002	3.9486E-002
	1332.49	100.00	7.7452E-002		-3.5045E-002
Nb-94	702.63	100.00	1.0343E-001	9.27E-002	1.1947E-001
	871.10	100.00	9.2669E-002		3.6131E-002
Ag-108m	79.20	7.10	5.0882E+000	1.21E-001	-7.5937E-001
	433.93	89.90	1.2109E-001		-1.5527E-002
	614.37	90.40	1.3325E-001		-5.6945E-002
	722.95	90.50	1.2553E-001		-2.7718E-002
Sb-125	176.33	6.89	2.3721E+000	3.76E-001	1.2339E+000
	427.89	29.33	3.7558E-001		2.1380E-001
	463.38	10.35	1.0998E+000		1.8481E-001
	600.56	17.80	5.5162E-001		-2.3138E-001
	606.64	5.02	2.7133E+000		5.3735E+000
	635.90	11.32	9.0864E-001		-2.1624E-001
Cs-134	563.23	8.38	1.3199E+000	1.17E-001	8.1014E-001
	569.32	15.43	7.1518E-001		3.1363E-001
	604.70	97.60	1.3602E-001		-2.0549E-002
	795.84	85.40	1.1742E-001		-1.7511E-002
	801.93	8.73	1.1635E+000		1.2313E-002
Cs-137	661.65	85.12	1.2883E-001	1.29E-001	1.3131E-001
Eu-152	121.78	28.40	7.3523E-001	3.06E-001	-3.0685E-001
	244.69	7.49	1.9368E+000		-1.2089E+000
	344.27	26.50	4.5807E-001		-4.7814E-001
	778.89	12.74	7.7240E-001		-8.4460E-001
	867.32	4.16	2.2640E+000		-3.1293E+000
	964.01	14.40	8.7641E-001		2.9846E-001
	1085.78	10.00	9.3118E-001		-2.1083E-001
	1112.02	13.30	7.1307E-001		-4.1735E-001
1407.95	20.70	3.0634E-001	-3.4084E-001		
Eu-154	123.07	40.50	5.1157E-001	2.77E-001	-1.1252E-001
	247.94	6.60	2.1114E+000		6.9178E-001
	591.81	4.83	2.0745E+000		-3.2883E-001
	723.30	19.70	5.7674E-001		4.0202E-001
	756.87	4.33	2.2527E+000		-5.3217E-001
	873.19	11.50	7.8345E-001		-6.1100E-001
	996.32	10.30	8.1801E-001		-1.6647E-001
	1004.76	17.90	4.7822E-001		9.9481E-002
1274.45	35.50	2.7653E-001	1.4421E-001		
Eu-155	86.54	30.90	1.0456E+000	1.05E+000	4.2535E-001
	105.31	20.70	1.1781E+000		2.1651E-002
Am-241	59.54	35.90	1.2443E+000	1.24E+000	-3.6442E-001
Cm-243	228.19	10.56	1.3112E+000	9.23E-001	-7.0571E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.2254E-001	9.23E-001	-5.5947E-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 6/26/2006 8:57:42 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-102-F-

Sample Title: OOL-10-03-102-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 8:47:39 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-10-03-102-F-
 Title: OOL-10-03-102-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	284-	307	291.47	72.77	1.39	3.37E+002	64.96	1.42E+003
m	2	284-	307	300.04	74.91	1.39	6.00E+002	75.32	2.01E+003
	3	331-	346	339.16	84.70	0.94	1.27E+002	132.53	1.47E+003
	4	943-	962	953.84	238.41	1.45	3.13E+002	87.74	4.82E+002
	5	1173-	1187	1180.66	295.13	0.48	4.55E+001	53.76	2.44E+002
	6	1324-	1358	1352.07	337.99	1.72	1.03E+002	94.96	4.17E+002
	7	1394-	1415	1406.21	351.53	0.72	2.12E+002	63.16	2.20E+002
	8	2321-	2341	2331.61	582.94	1.74	1.77E+002	46.60	1.07E+002
	9	2426-	2445	2435.94	609.03	1.61	1.58E+002	44.94	1.05E+002
	10	2807-	2819	2813.29	703.39	0.46	2.05E+001	20.49	3.35E+001
	11	2900-	2917	2908.95	727.31	1.90	7.29E+001	30.96	5.41E+001
	12	3636-	3653	3643.27	910.94	0.51	1.58E+002	37.16	6.18E+001
	13	3866-	3883	3873.64	968.55	2.35	8.03E+001	32.85	6.17E+001
	14	4474-	4486	4479.91	1120.16	0.37	4.12E+001	23.45	3.88E+001
	15	5829-	5858	5843.87	1461.24	2.26	1.16E+003	69.68	2.27E+001
	16	6350-	6363	6356.14	1589.34	0.76	9.89E+000	12.89	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: 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	1.99899E+001	2.01807E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.08527E-001	9.07185E-002
		860.37	12.46		
Bi-212	0.999	727.17*	11.80	9.64536E-001	4.25302E-001
Pb-212	0.520	74.81* @	10.70	8.90675E+000	2.07347E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.84679E-001	2.52206E-001
Bi-214	0.698	609.31*	46.30	5.08794E-001	1.57694E-001
		1120.29*	15.10	4.74035E-001	2.74328E-001
		1764.49	15.80		
PB-214	0.581	74.82* @	6.21	1.53466E+001	3.74232E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	2.81909E-001	3.36282E-001
Ac-228	0.996	351.92*	37.20	7.11647E-001	2.43236E-001
		338.32*	11.40	1.12173E+000	1.04427E+000
		911.07*	27.70	9.35494E-001	2.44655E-001
		969.11*	16.60	8.06458E-001	3.40422E-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	1.998992E+001	2.018071E+000
TL-208	0.470	3.085273E-001	9.071849E-002
Bi-212	0.999	9.645363E-001	4.253018E-001
Pb-212 @	0.520	7.846787E-001	2.522060E-001
Bi-214	0.698	5.001613E-001	1.367153E-001
PB-214 @	0.581	5.640410E-001	1.970846E-001
Ac-228	0.996	8.995863E-001	1.951694E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	5.6211E-001	19.26
3	84.70	2.1149E-001	104.44
10	703.39	3.4244E-002	99.73
16	1589.34	1.6477E-002	130.42

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: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	7.99E-002	4.4210E-002
	1332.49	100.00	7.9863E-002		5.4589E-002
Nb-94	702.63	100.00	1.0805E-001	9.46E-002	1.2590E-002
	871.10	100.00	9.4581E-002		-2.6728E-002
Ag-108m	79.20	7.10	5.2176E+000	1.27E-001	-3.0690E+000
	433.93	89.90	1.3122E-001		4.1168E-002
	614.37	90.40	1.4322E-001		-1.0751E-002
	722.95	90.50	1.2738E-001		-4.7473E-002
Sb-125	176.33	6.89	2.3876E+000	3.83E-001	-1.0289E+000
	427.89	29.33	3.8342E-001		-1.9065E-001
	463.38	10.35	1.0784E+000		4.9909E-001
	600.56	17.80	6.4687E-001		2.8684E-001
	606.64	5.02	2.8266E+000		5.1872E+000
	635.90	11.32	9.0197E-001		1.8704E-001
Cs-134	563.23	8.38	1.2783E+000	1.21E-001	-1.6168E+000
	569.32	15.43	6.9092E-001		-3.9049E-001
	604.70	97.60	1.4577E-001		-1.3062E-002
	795.84	85.40	1.2072E-001		2.2414E-002
	801.93	8.73	1.0898E+000		-1.1131E+000
Cs-137	661.65	85.12	1.3079E-001	1.31E-001	1.1071E-001
Eu-152	121.78	28.40	7.4843E-001	3.43E-001	5.6596E-002
	244.69	7.49	2.0315E+000		-1.2927E+000
	344.27	26.50	4.7690E-001		-3.7802E-001
	778.89	12.74	8.1641E-001		-4.9857E-001
	867.32	4.16	2.2640E+000		-2.3876E+000
	964.01	14.40	9.2140E-001		3.3178E-001
	1085.78	10.00	9.2755E-001		-1.0235E+000
	1112.02	13.30	7.4227E-001		-5.6235E-001
1407.95	20.70	3.4302E-001	-3.8141E-002		
Eu-154	123.07	40.50	5.2141E-001	2.43E-001	-1.4474E-001
	247.94	6.60	2.1751E+000		7.2230E-001
	591.81	4.83	2.2263E+000		-1.4676E+000
	723.30	19.70	5.8524E-001		-1.4704E-001
	756.87	4.33	2.3438E+000		2.7902E-001
	873.19	11.50	8.1458E-001		-6.3744E-001
	996.32	10.30	9.5476E-001		5.6433E-001
	1004.76	17.90	5.1872E-001		-2.6478E-001
	1274.45	35.50	2.4282E-001		-7.6074E-002
	Eu-155	86.54	30.90		1.0687E+000
105.31		20.70	1.1821E+000	-4.8199E-001	
Am-241	59.54	35.90	1.2538E+000	1.25E+000	-3.0955E-002
Cm-243	228.19	10.56	1.3611E+000	1.03E+000	-4.9840E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0323E+000	1.03E+000	7.6546E-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 6/26/2006 9:47:45 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-103-F-

Sample Title: OOL-10-03-103-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 9:37:43 AM

Live Time: 600.0 seconds

Real Time: 601.4 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-10-03-103-F-
Title: OOL-10-03-103-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 12 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.971	1460.81*	10.67	1.78208E+001	1.84806E+000
TL-208	0.456	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.32205E-001	9.23231E-002
		860.37	12.46		
Bi-212	0.978	727.17*	11.80	4.83124E-001	3.29447E-001
Pb-212	0.519	74.81* @	10.70	7.66892E+000	2.43060E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.06194E-001	2.34720E-001
Bi-214	0.668	609.31*	46.30	5.89338E-001	1.62961E-001
		1120.29	15.10		
		1764.49*	15.80	3.20576E-001	2.01017E-001
Ac-228	0.968	338.32*	11.40	8.50491E-001	4.87433E-001
		911.07*	27.70	7.32535E-001	2.37055E-001
		969.11*	16.60	7.99115E-001	3.04865E-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	0.971	1.782080E+001	1.848058E+000
TL-208	0.456	3.322052E-001	9.232308E-002
Bi-212	0.978	4.831237E-001	3.294471E-001
Pb-212 @	0.519	8.061937E-001	2.347201E-001
Bi-214	0.668	4.827536E-001	1.265892E-001
Ac-228	0.968	7.695531E-001	1.747049E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.6101E-001	54.42
5	351.35	1.8500E-001	42.95

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: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	1.0435E-001	7.55E-002	-5.4104E-002
	1332.49	100.00	7.5464E-002		1.2688E-002
Nb-94	702.63	100.00	1.0023E-001	9.17E-002	5.1088E-002
	871.10	100.00	9.1697E-002		7.0341E-002
Ag-108m	79.20	7.10	4.9752E+000	1.17E-001	-6.6386E+000
	433.93	89.90	1.2548E-001		7.3180E-002
	614.37	90.40	1.2068E-001		1.9572E-002
	722.95	90.50	1.1669E-001		1.3597E-001
Sb-125	176.33	6.89	2.3263E+000	3.50E-001	1.3491E-001
	427.89	29.33	3.5032E-001		-1.3009E-001
	463.38	10.35	1.0766E+000		-3.7839E-001
	600.56	17.80	5.7527E-001		-2.7022E-001
	606.64	5.02	2.6915E+000		5.7438E+000
	635.90	11.32	8.8393E-001		8.3168E-001
Cs-134	563.23	8.38	1.2159E+000	1.20E-001	-3.6819E-001
	569.32	15.43	6.3481E-001		-1.4610E-001
	604.70	97.60	1.3922E-001		-7.2332E-002
	795.84	85.40	1.2039E-001		9.9744E-002
	801.93	8.73	1.0437E+000		-5.7904E-002
Cs-137	661.65	85.12	1.2450E-001	1.25E-001	6.7155E-003
Eu-152	121.78	28.40	7.2261E-001	3.46E-001	-2.1839E-001
	244.69	7.49	1.9042E+000		-1.3118E+000
	344.27	26.50	4.2709E-001		-3.5864E-001
	778.89	12.74	8.3124E-001		1.6283E-001
	867.32	4.16	2.1307E+000		-2.4094E+000
	964.01	14.40	8.5738E-001		-2.5458E-001
	1085.78	10.00	9.0169E-001		-7.7157E-002
	1112.02	13.30	7.6277E-001		-8.3351E-001
	1407.95	20.70	3.4566E-001		1.6157E-001
	Eu-154	123.07	40.50		5.0240E-001
247.94		6.60	2.0614E+000	-1.9558E-001	
591.81		4.83	2.1640E+000	-6.5185E-001	
723.30		19.70	5.3612E-001	4.8885E-001	
756.87		4.33	2.3181E+000	5.1747E-001	
873.19		11.50	8.0340E-001	-2.5686E-001	
996.32		10.30	8.4363E-001	-5.8138E-001	
1004.76		17.90	5.0293E-001	3.4681E-001	
1274.45	35.50	2.4282E-001	-1.4196E-001		
Eu-155	86.54	30.90	1.0218E+000	1.02E+000	-1.5734E-001
	105.31	20.70	1.1350E+000		4.5714E-001
Am-241	59.54	35.90	1.2158E+000	1.22E+000	-1.6169E-003
Cm-243	228.19	10.56	1.3441E+000	9.47E-001	9.5506E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.4652E-001	9.47E-001	7.1051E-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 6/26/2006 10:02:14 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-104-F-

Sample Title: OOL-10-03-104-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 9:52:12 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-10-03-104-F-
Title: OOL-10-03-104-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 13 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.976	511.00*	100.00	2.03543E-001	7.40539E-002
K-40	0.994	1460.81*	10.67	1.73055E+001	1.79046E+000
TL-208	0.744	277.35	6.80		
		510.84*	21.60	9.42329E-001	3.51373E-001
		583.14*	84.20	2.74897E-001	9.50625E-002
		860.37	12.46		
Pb-212	0.519	74.81* @	10.70	1.05149E+001	2.33736E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.989	238.63*	44.60	6.93595E-001	2.14187E-001
		609.31*	46.30	7.86639E-001	2.50138E-001
		1120.29*	15.10	7.74195E-001	3.10704E-001
Ac-228	0.980	1764.49*	15.80	4.49210E-001	2.16027E-001
		338.32*	11.40	6.72868E-001	5.03330E-001
		911.07*	27.70	8.49547E-001	2.36485E-001
		969.11*	16.60	6.25078E-001	3.50564E-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	0.976	1.441653E-001	7.682358E-002
K-40	0.994	1.730549E+001	1.790456E+000
TL-208	0.744	2.748968E-001	9.463941E-002
Pb-212 @	0.519	6.935946E-001	2.141875E-001
Bi-214	0.989	6.325778E-001	1.446857E-001
Ac-228	0.980	7.653194E-001	1.826796E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	5.7165E-001	18.53
5	351.62	2.4996E-001	33.34

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.0197E-001	8.88E-002	3.0229E-002
	1332.49	100.00	8.8816E-002		6.2442E-002
Nb-94	702.63	100.00	1.0499E-001	9.49E-002	-4.3146E-002
	871.10	100.00	9.4896E-002		-4.5002E-002
Ag-108m	79.20	7.10	4.9940E+000	1.20E-001	-6.4225E+000
	433.93	89.90	1.2290E-001		-5.5490E-002
	614.37	90.40	1.3755E-001		-2.8577E-003
	722.95	90.50	1.2009E-001		1.3502E-002
Sb-125	176.33	6.89	2.2870E+000	3.73E-001	7.0069E-001
	427.89	29.33	3.7314E-001		-4.2805E-001
	463.38	10.35	1.1155E+000		5.1429E-002
	600.56	17.80	6.1470E-001		-4.1688E-003
	606.64	5.02	2.8474E+000		-6.9594E-001
	635.90	11.32	8.7246E-001		-4.5360E-001
Cs-134	563.23	8.38	1.2215E+000	1.27E-001	-4.2012E-001
	569.32	15.43	6.8801E-001		5.0036E-001
	604.70	97.60	1.4683E-001		-3.2851E-002
	795.84	85.40	1.2735E-001		7.1621E-002
	801.93	8.73	1.1172E+000		-1.2454E-001
Cs-137	661.65	85.12	1.2854E-001	1.29E-001	1.5977E-001
Eu-152	121.78	28.40	7.0556E-001	3.12E-001	-3.4436E-001
	244.69	7.49	1.8603E+000		-5.7694E-001
	344.27	26.50	4.5162E-001		-2.8271E-002
	778.89	12.74	7.5636E-001		-9.7050E-001
	867.32	4.16	2.3533E+000		-1.3580E+000
	964.01	14.40	8.5912E-001		4.2556E-001
	1085.78	10.00	9.4557E-001		-1.9126E-003
	1112.02	13.30	7.1036E-001		-1.1138E-001
1407.95	20.70	3.1229E-001	-2.3912E-001		
Eu-154	123.07	40.50	4.8698E-001	2.42E-001	-3.9314E-001
	247.94	6.60	1.9842E+000		-2.7964E+000
	591.81	4.83	2.1882E+000		-1.1972E+000
	723.30	19.70	5.4398E-001		-3.2047E-001
	756.87	4.33	2.3818E+000		6.9915E-001
	873.19	11.50	8.0621E-001		-9.4679E-001
	996.32	10.30	8.2910E-001		6.2457E-001
	1004.76	17.90	4.8243E-001		3.4695E-002
1274.45	35.50	2.4161E-001	9.9743E-002		
Eu-155	86.54	30.90	9.8980E-001	9.90E-001	1.4786E+000
	105.31	20.70	1.1320E+000		2.6454E-001
Am-241	59.54	35.90	1.2074E+000	1.21E+000	-8.1832E-001
Cm-243	228.19	10.56	1.3075E+000	9.46E-001	2.5404E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.4570E-001	9.46E-001	2.1321E-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 6/26/2006 10:15:30 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-105-F-

Sample Title: OOL-10-03-105-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 10:05:26 AM

Live Time: 600.0 seconds

Real Time: 603.6 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-10-03-105-F-
Title: OOL-10-03-105-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Rows 1-13 with peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	2.97319E-001	8.73953E-002
K-40	1.000	1460.81*	10.67	1.97457E+001	1.98347E+000
TL-208	0.747	277.35	6.80		
		510.84*	21.60	1.37648E+000	4.19933E-001
		583.14*	84.20	3.59877E-001	1.01187E-001
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	8.96119E+000	3.20866E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.978	238.63*	44.60	7.22728E-001	1.58103E-001
		609.31*	46.30	5.50072E-001	1.66816E-001
		1120.29*	15.10	5.51769E-001	2.96851E-001
		1764.49*	15.80	5.23265E-001	2.34868E-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	2.195854E-001	9.005123E-002
K-40	1.000	1.974566E+001	1.983466E+000
TL-208	0.747	3.598767E-001	1.005050E-001
Pb-212 @	0.520	7.227281E-001	1.581029E-001
Bi-214	0.978	5.429369E-001	1.236437E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	85.04	2.8132E-001	68.52
M 3	235.10	7.9549E-002	62.86
5	351.52	2.2434E-001	38.13
6	409.46	5.1149E-002	98.68
10	910.60	2.4125E-001	24.08

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: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	8.45E-002	-9.0173E-002
	1332.49	100.00	8.4465E-002		-3.1511E-002
Nb-94	702.63	100.00	1.0184E-001	8.84E-002	-2.4454E-002
	871.10	100.00	8.8376E-002		3.3533E-003
Ag-108m	79.20	7.10	5.6154E+000	1.27E-001	-5.6687E+000
	433.93	89.90	1.3399E-001		1.0083E-001
	614.37	90.40	1.3777E-001		-9.7359E-002
	722.95	90.50	1.2738E-001		9.9362E-003
Sb-125	176.33	6.89	2.3824E+000	4.10E-001	-3.3805E-001
	427.89	29.33	4.1049E-001		-2.1924E-003
	463.38	10.35	1.1311E+000		1.0848E-001
	600.56	17.80	5.9533E-001		-1.6015E-001
	606.64	5.02	2.7670E+000		5.8463E+000
	635.90	11.32	9.2401E-001		3.9344E-001
Cs-134	563.23	8.38	1.4064E+000	1.20E-001	-2.1636E-001
	569.32	15.43	7.2215E-001		-3.7412E-001
	604.70	97.60	1.3792E-001		-1.1146E-001
	795.84	85.40	1.2039E-001		4.0498E-002
	801.93	8.73	1.0828E+000		-7.9672E-001
Cs-137	661.65	85.12	1.2797E-001	1.28E-001	1.0310E-001
Eu-152	121.78	28.40	7.7107E-001	3.46E-001	1.7951E-001
	244.69	7.49	2.0376E+000		-7.2342E-001
	344.27	26.50	4.8704E-001		-2.5039E-001
	778.89	12.74	7.5404E-001		1.0039E-001
	867.32	4.16	2.2023E+000		-2.9960E+000
	964.01	14.40	8.8661E-001		1.2960E+000
	1085.78	10.00	9.4557E-001		-4.1865E-001
	1112.02	13.30	7.3179E-001		5.0902E-001
1407.95	20.70	3.4566E-001	-2.7502E-001		
Eu-154	123.07	40.50	5.3502E-001	2.45E-001	-1.6331E-001
	247.94	6.60	2.2048E+000		-2.6183E-001
	591.81	4.83	2.2215E+000		-4.7974E-001
	723.30	19.70	5.8283E-001		-2.3000E-001
	756.87	4.33	2.3310E+000		-2.9211E-001
	873.19	11.50	7.8345E-001		3.0199E-001
	996.32	10.30	8.7887E-001		9.6645E-002
	1004.76	17.90	5.0092E-001		-5.0864E-001
1274.45	35.50	2.4522E-001	-2.6608E-001		
Eu-155	86.54	30.90	1.1161E+000	1.12E+000	1.3558E+000
	105.31	20.70	1.2378E+000		1.1269E+000
Am-241	59.54	35.90	1.5146E+000	1.51E+000	-1.1359E+000
Cm-243	228.19	10.56	1.4048E+000	9.75E-001	3.6634E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.7466E-001	9.75E-001	-1.9995E-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 6/26/2006 10:43:54 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-106-F-

Sample Title: OOL-10-03-106-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 10:33:52 AM

Live Time: 600.0 seconds

Real Time: 601.8 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-10-03-106-F-
 Title: OOL-10-03-106-F-G
 Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.35	72.74	1.35	3.64E+002	61.87	1.35E+003
m	2	282-	306	299.85	74.87	1.35	5.94E+002	71.13	1.56E+003
	3	945-	961	953.52	238.33	1.65	2.40E+002	74.83	3.89E+002
	4	1399-	1435	1405.83	351.43	2.51	1.80E+002	93.06	3.63E+002
	5	2321-	2342	2331.23	582.84	1.68	1.52E+002	47.96	1.19E+002
	6	2425-	2446	2435.69	608.97	1.58	1.94E+002	42.82	7.57E+001
	7	2900-	2915	2907.23	726.88	1.69	5.00E+001	28.94	5.60E+001
	8	3632-	3652	3642.33	910.71	2.39	1.66E+002	34.93	4.18E+001
	9	5828-	5856	5842.60	1460.92	2.17	1.03E+003	66.06	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: 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	1.78732E+001	1.84393E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.64654E-001	9.05206E-002
		860.37	12.46		
Bi-212	0.997	727.17*	11.80	6.61917E-001	3.90947E-001
Pb-212	0.520	74.81* @	10.70	8.82379E+000	2.02713E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.01586E-001	2.10116E-001
Bi-214	0.396	609.31*	46.30	6.25799E-001	1.57979E-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	1.000	1.787319E+001	1.843934E+000
TL-208	0.469	2.646537E-001	9.052063E-002
Bi-212	0.997	6.619175E-001	3.909469E-001
Pb-212 @	0.520	6.015864E-001	2.101158E-001
Bi-214	0.396	6.257989E-001	1.579791E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	6.0747E-001	16.97
4	351.43	2.9994E-001	51.71
8	910.71	2.7698E-001	21.02

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	1.0368E-001	7.75E-002	3.7871E-003
	1332.49	100.00	7.7452E-002		5.6642E-002
Nb-94	702.63	100.00	1.0602E-001	9.46E-002	-1.1891E-001
	871.10	100.00	9.4581E-002		-3.8231E-002
Ag-108m	79.20	7.10	4.8615E+000	1.23E-001	-9.4861E+000
	433.93	89.90	1.2330E-001		3.0485E-003
	614.37	90.40	1.3976E-001		-7.8456E-003
	722.95	90.50	1.2257E-001		2.5930E-002
Sb-125	176.33	6.89	2.4242E+000	3.71E-001	1.3263E+000
	427.89	29.33	3.7129E-001		8.7537E-002
	463.38	10.35	1.0980E+000		1.3461E+000
	600.56	17.80	5.8069E-001		-6.2167E-001
	606.64	5.02	2.7457E+000		5.2799E+000
	635.90	11.32	8.5613E-001		-6.1210E-001
Cs-134	563.23	8.38	1.3148E+000	1.17E-001	-4.8961E-001
	569.32	15.43	7.0672E-001		9.7008E-002
	604.70	97.60	1.3997E-001		-3.8604E-002
	795.84	85.40	1.1709E-001		8.4993E-002
	801.93	8.73	1.1036E+000		-3.2590E-001
Cs-137	661.65	85.12	1.2093E-001	1.21E-001	6.2052E-002
Eu-152	121.78	28.40	8.1135E-001	3.35E-001	-2.3577E-001
	244.69	7.49	1.8399E+000		-2.8646E+000
	344.27	26.50	4.4507E-001		-3.3609E-001
	778.89	12.74	7.5404E-001		-2.7105E-001
	867.32	4.16	2.2867E+000		-2.4555E+000
	964.01	14.40	8.4681E-001		9.1349E-001
	1085.78	10.00	8.7114E-001		-5.2013E-001
	1112.02	13.30	7.1307E-001		-1.6068E+000
1407.95	20.70	3.3494E-001	1.2615E-001		
Eu-154	123.07	40.50	5.7326E-001	2.56E-001	3.1554E-001
	247.94	6.60	2.0312E+000		-1.9898E+000
	591.81	4.83	2.0847E+000		-8.4475E-001
	723.30	19.70	5.6687E-001		1.5820E-001
	756.87	4.33	2.3310E+000		-1.0007E+000
	873.19	11.50	8.4183E-001		4.3884E-002
	996.32	10.30	8.7194E-001		1.6635E-001
	1004.76	17.90	4.8868E-001		1.0054E-001
1274.45	35.50	2.5573E-001	-5.3044E-002		
Eu-155	86.54	30.90	1.0015E+000	1.00E+000	1.5302E+000
	105.31	20.70	1.1977E+000		8.3563E-001
Am-241	59.54	35.90	1.1945E+000	1.19E+000	1.2027E+000
Cm-243	228.19	10.56	1.3213E+000	9.70E-001	-1.9825E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.6989E-001	9.70E-001	7.5368E-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 6/26/2006 11:12:09 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-107-F-

Sample Title: OOL-10-03-107-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 11:02:07 AM

Live Time: 600.0 seconds

Real Time: 601.5 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-10-03-107-F-
 Title: OOL-10-03-107-F-G
 Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	309	292.05	72.91	1.37	3.38E+002	64.69	1.27E+003
m	2	286-	309	300.46	75.02	1.37	6.51E+002	72.71	1.78E+003
	3	329-	343	338.43	84.51	0.99	1.29E+002	115.62	1.16E+003
	4	945-	962	954.53	238.58	1.55	2.51E+002	79.41	4.26E+002
	5	1347-	1359	1353.29	338.29	1.66	6.93E+001	40.61	1.37E+002
	6	1396-	1416	1406.79	351.67	1.49	1.14E+002	61.88	2.43E+002
	7	2030-	2053	2041.14	510.30	1.25	1.77E+002	50.21	1.20E+002
	8	2321-	2339	2330.95	582.77	1.53	1.91E+002	46.06	1.07E+002
	9	2429-	2447	2435.29	608.87	0.65	1.44E+002	42.11	9.40E+001
	10	3336-	3347	3341.70	835.53	1.15	2.13E+001	18.99	2.87E+001
	11	3436-	3450	3442.37	860.70	1.04	3.04E+001	23.21	3.76E+001
	12	3632-	3652	3642.48	910.74	1.57	1.40E+002	36.65	5.78E+001
	13	5829-	5856	5842.70	1460.94	2.15	1.11E+003	68.42	2.42E+001
	14	7054-	7067	7060.80	1765.55	1.62	3.25E+001	13.54	5.50E+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
ANN	0.985	511.00*	100.00	2.49289E-001	7.82824E-002
K-40	0.999	1460.81*	10.67	1.92191E+001	1.95514E+000
TL-208	0.898	277.35	6.80		
		510.84*	21.60	1.15412E+000	3.74474E-001
		583.14*	84.20	3.33461E-001	9.13611E-002
		860.37*	12.46	3.94549E-001	3.04994E-001
Pb-212	0.521	74.81* @	10.70	9.65589E+000	2.17804E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.687	238.63*	44.60	6.30135E-001	2.22444E-001
		609.31*	46.30	4.63826E-001	1.47151E-001
Ac-228	0.539	1120.29	15.10		
		1764.49*	15.80	3.94321E-001	1.68885E-001
		338.32*	11.40	7.50990E-001	4.55842E-001
		911.07*	27.70	8.29204E-001	2.36775E-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	0.985	1.761875E-001	8.050345E-002
K-40	0.999	1.921909E+001	1.955138E+000
TL-208	0.898	3.384342E-001	8.694178E-002
Pb-212 @	0.521	6.301350E-001	2.224444E-001
Bi-214	0.687	4.338309E-001	1.109450E-001
Ac-228	0.539	8.125853E-001	2.101200E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	5.6319E-001	19.14
3	84.51	2.1580E-001	89.29
6	351.67	1.8924E-001	54.49
10	835.53	3.5542E-002	89.07

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	9.8101E-002	7.44E-002	-1.0861E-003
	1332.49	100.00	7.4448E-002		-1.9272E-002
Nb-94	702.63	100.00	1.0050E-001	9.14E-002	7.5539E-002
	871.10	100.00	9.1371E-002		-9.2023E-003
Ag-108m	79.20	7.10	5.0128E+000	1.19E-001	-5.1630E+000
	433.93	89.90	1.2370E-001		-3.2813E-002
	614.37	90.40	1.4236E-001		-3.2003E-002
	722.95	90.50	1.1868E-001		1.3374E-001
Sb-125	176.33	6.89	2.2838E+000	3.77E-001	1.3607E+000
	427.89	29.33	3.7741E-001		1.3211E-001
	463.38	10.35	1.0838E+000		7.8969E-002
	600.56	17.80	5.4446E-001		-7.1780E-001
	606.64	5.02	2.7205E+000		5.0206E+000
	635.90	11.32	8.8165E-001		1.3165E-001
Cs-134	563.23	8.38	1.2836E+000	1.18E-001	3.8365E-001
	569.32	15.43	6.7920E-001		2.3939E-001
	604.70	97.60	1.3468E-001		-5.1531E-002
	795.84	85.40	1.1775E-001		2.0401E-002
	801.93	8.73	1.1602E+000		-4.8003E-001
Cs-137	661.65	85.12	1.2214E-001	1.22E-001	-1.9001E-002
Eu-152	121.78	28.40	7.1870E-001	3.51E-001	-3.6856E-001
	244.69	7.49	1.8950E+000		-7.0921E-001
	344.27	26.50	4.3052E-001		-4.0016E-001
	778.89	12.74	7.7691E-001		-5.3787E-001
	867.32	4.16	2.1945E+000		-1.0634E+000
	964.01	14.40	8.7641E-001		1.4022E+000
	1085.78	10.00	9.2024E-001		-2.0104E+000
	1112.02	13.30	7.5002E-001		-9.4765E-001
1407.95	20.70	3.5089E-001	-1.2401E-002		
Eu-154	123.07	40.50	5.0341E-001	2.60E-001	9.4434E-002
	247.94	6.60	2.0280E+000		-2.0224E+000
	591.81	4.83	2.1098E+000		5.6524E-002
	723.30	19.70	5.3744E-001		2.4953E-001
	756.87	4.33	2.2191E+000		-1.8217E+000
	873.19	11.50	8.1734E-001		4.5638E-001
	996.32	10.30	9.3235E-001		5.7495E-001
	1004.76	17.90	5.3024E-001		3.0654E-001
1274.45	35.50	2.6025E-001	-2.3804E-001		
Eu-155	86.54	30.90	1.0153E+000	1.02E+000	5.1096E-001
	105.31	20.70	1.1315E+000		4.7505E-001
Am-241	59.54	35.90	1.2152E+000	1.22E+000	-2.2929E-001
Cm-243	228.19	10.56	1.3195E+000	9.67E-001	1.2155E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.6670E-001	9.67E-001	-4.7271E-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 6/26/2006 11:26:44 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-10-03-108-F-

Sample Title: OOL-10-03-108-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 11:16:41 AM

Live Time: 600.0 seconds

Real Time: 601.4 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-10-03-108-F-
Title: OOL-10-03-108-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Rows 1-13 with peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.996	511.00*	100.00	1.94068E-001	7.15554E-002
K-40	1.000	1460.81*	10.67	1.93849E+001	1.96531E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	8.98464E-001	3.39303E-001
		583.14*	84.20	2.75028E-001	8.17192E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.03560E+001	2.31492E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.394	238.63*	44.60	6.63614E-001	2.02534E-001
		609.31*	46.30	6.07055E-001	1.59173E-001
		1120.29	15.10		
PB-214	0.579	1764.49	15.80		
		74.82* @	6.21	1.78436E+001	4.19372E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
Ac-228	0.632	295.21*	19.20	3.93870E-001	2.82713E-001
		351.92*	37.20	3.85261E-001	2.07230E-001
		338.32	11.40		
		911.07*	27.70	9.78115E-001	2.68517E-001
		969.11*	16.60	7.04183E-001	3.14714E-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	0.996	1.346622E-001	7.367491E-002
K-40	1.000	1.938489E+001	1.965313E+000
TL-208	0.751	2.750282E-001	8.122621E-002
Pb-212 @	0.521	6.636139E-001	2.025336E-001
Bi-214	0.394	6.070550E-001	1.591731E-001
PB-214 @	0.579	3.882703E-001	1.671376E-001
Ac-228	0.632	8.627114E-001	2.042697E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	4.9329E-001	22.52
9	794.34	4.4242E-002	92.25
13	1588.42	1.7262E-002	123.59

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	1.0300E-001	7.24E-002	-7.1115E-002
	1332.49	100.00	7.2372E-002		-2.9666E-003
Nb-94	702.63	100.00	9.9954E-002	9.14E-002	-1.0939E-001
	871.10	100.00	9.1371E-002		-1.6552E-002
Ag-108m	79.20	7.10	4.9506E+000	1.22E-001	-8.8305E+000
	433.93	89.90	1.2528E-001		1.0525E-001
	614.37	90.40	1.3371E-001		-6.9047E-002
	722.95	90.50	1.2175E-001		-4.2534E-002
Sb-125	176.33	6.89	2.3189E+000	3.73E-001	-1.1201E+000
	427.89	29.33	3.7252E-001		-6.9265E-002
	463.38	10.35	1.0694E+000		4.8102E-001
	600.56	17.80	5.9401E-001		3.5182E-001
	606.64	5.02	2.7313E+000		4.7006E+000
	635.90	11.32	8.2245E-001		-1.0293E+000
Cs-134	563.23	8.38	1.2862E+000	1.25E-001	5.7877E-001
	569.32	15.43	7.2630E-001		5.3057E-001
	604.70	97.60	1.3848E-001		2.8209E-002
	795.84	85.40	1.2487E-001		4.1866E-002
	801.93	8.73	1.1406E+000		-4.4256E-001
Cs-137	661.65	85.12	1.2683E-001	1.27E-001	3.2052E-002
Eu-152	121.78	28.40	7.1890E-001	3.66E-001	-4.5040E-001
	244.69	7.49	1.8897E+000		-2.7055E+000
	344.27	26.50	4.4726E-001		-7.3028E-001
	778.89	12.74	7.3996E-001		-1.1992E+000
	867.32	4.16	2.2023E+000		-3.1518E+000
	964.01	14.40	8.7812E-001		-1.4063E-002
	1085.78	10.00	9.1656E-001		-4.0319E-001
	1112.02	13.30	7.4227E-001		-1.1753E+000
1407.95	20.70	3.6611E-001	-1.0200E-001		
Eu-154	123.07	40.50	5.0701E-001	2.50E-001	2.6362E-001
	247.94	6.60	2.0897E+000		5.0463E-001
	591.81	4.83	2.2960E+000		1.0270E+000
	723.30	19.70	5.5427E-001		-2.7227E-001
	756.87	4.33	2.2326E+000		-1.0599E+000
	873.19	11.50	8.0340E-001		-8.0316E-002
	996.32	10.30	9.0268E-001		-4.2966E-001
	1004.76	17.90	5.2834E-001		-4.9941E-002
1274.45	35.50	2.4995E-001	1.6296E-001		
Eu-155	86.54	30.90	1.0001E+000	1.00E+000	1.6511E+000
	105.31	20.70	1.1256E+000		5.2099E-001
Am-241	59.54	35.90	1.1798E+000	1.18E+000	-1.2044E+000
Cm-243	228.19	10.56	1.3548E+000	9.61E-001	-2.9782E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.6109E-001	9.61E-001	-2.9697E-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 6/26/2006 2:57:29 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-10-03-109-F-

Sample Title: OOL-10-03-109-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 2:47:26 PM

Live Time: 600.0 seconds

Real Time: 601.4 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-10-03-109-F-
Title: OOL-10-03-109-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 11 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.91394E+001	1.95181E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.82290E-001	9.55688E-002
Pb-212	0.520	860.37	12.46		
		74.81* @	10.70	9.67144E+000	2.99550E+000
		77.11 @	18.00		
Bi-214	0.394	87.30 @	8.00		
		238.63*	44.60	7.52242E-001	2.25539E-001
		609.31*	46.30	5.77649E-001	1.52716E-001
PB-214	0.579	1120.29	15.10		
		1764.49	15.80		
		74.82* @	6.21	1.66642E+001	5.30119E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	7.03657E-001	3.62248E-001
		351.92*	37.20	6.22753E-001	2.17202E-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	1.913943E+001	1.951815E+000
TL-208	0.470	3.822899E-001	9.556877E-002
Pb-212 @	0.520	7.522420E-001	2.255393E-001
Bi-214	0.394	5.776490E-001	1.527156E-001
PB-214 @	0.579	6.441477E-001	1.862824E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	328.27	4.8960E-002	117.70
6	531.87	4.4558E-002	81.85
9	910.92	2.8233E-001	22.09
10	1411.15	1.5833E-002	128.00

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	1.0536E-001	7.84E-002	8.5035E-002
	1332.49	100.00	7.8425E-002		-1.9390E-002
Nb-94	702.63	100.00	1.0237E-001	8.87E-002	-1.6031E-001
	871.10	100.00	8.8714E-002		7.4440E-003
Ag-108m	79.20	7.10	4.9076E+000	1.23E-001	-6.3330E+000
	433.93	89.90	1.2781E-001		5.1895E-002
	614.37	90.40	1.3508E-001		-3.7296E-002
	722.95	90.50	1.2311E-001		5.7634E-002
Sb-125	176.33	6.89	2.2536E+000	3.68E-001	1.5042E-001
	427.89	29.33	3.6757E-001		1.3141E-001
	463.38	10.35	1.1464E+000		1.2159E+000
	600.56	17.80	5.6566E-001		-7.8377E-003
	606.64	5.02	2.7133E+000		3.8653E+000
	635.90	11.32	8.9300E-001		3.5684E-001
Cs-134	563.23	8.38	1.2757E+000	1.24E-001	4.0106E-001
	569.32	15.43	6.7475E-001		-2.0847E-001
	604.70	97.60	1.3848E-001		-8.5767E-003
	795.84	85.40	1.2424E-001		2.1512E-001
	801.93	8.73	1.1667E+000		-3.9314E-001
Cs-137	661.65	85.12	1.2538E-001	1.25E-001	5.9825E-002
Eu-152	121.78	28.40	6.9858E-001	3.51E-001	-4.8401E-002
	244.69	7.49	1.9134E+000		-1.1176E+000
	344.27	26.50	4.1308E-001		-7.4653E-001
	778.89	12.74	7.0346E-001		-1.1474E+000
	867.32	4.16	2.2411E+000		-1.3719E+000
	964.01	14.40	7.8412E-001		5.1462E-001
	1085.78	10.00	8.9793E-001		-9.8895E-001
	1112.02	13.30	7.3966E-001		-8.2784E-001
1407.95	20.70	3.5089E-001	5.3117E-002		
Eu-154	123.07	40.50	4.8698E-001	2.68E-001	-3.7395E-001
	247.94	6.60	2.0424E+000		-9.1937E-001
	591.81	4.83	1.9702E+000		-1.6732E+000
	723.30	19.70	5.6187E-001		-6.5353E-002
	756.87	4.33	2.2259E+000		7.6684E-001
	873.19	11.50	7.8633E-001		-7.6862E-002
	996.32	10.30	9.1599E-001		5.8440E-001
	1004.76	17.90	5.1482E-001		-2.3338E-001
1274.45	35.50	2.6798E-001	2.2286E-001		
Eu-155	86.54	30.90	9.9838E-001	9.98E-001	2.0021E+000
	105.31	20.70	1.1226E+000		6.5648E-001
Am-241	59.54	35.90	1.1753E+000	1.18E+000	-5.5753E-001
Cm-243	228.19	10.56	1.3131E+000	9.46E-001	-1.1657E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.4570E-001	9.46E-001	2.4192E-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 6/26/2006 3:12:30 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-110-F-

Sample Title: OOL-10-03-110-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 3:02:27 PM

Live Time: 600.0 seconds

Real Time: 601.4 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-10-03-110-F-
Title: OOL-10-03-110-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	295-	309	300.62	75.06	0.33	2.57E+002	136.16	1.56E+003
2	331-	345	340.53	85.04	0.44	1.97E+002	116.13	1.14E+003
3	946-	962	954.06	238.46	1.57	2.44E+002	75.02	3.88E+002
4	1400-	1415	1407.49	351.85	0.64	1.35E+002	46.45	1.42E+002
5	2030-	2051	2042.49	510.64	1.36	1.77E+002	45.00	9.34E+001
6	2323-	2341	2331.39	582.88	1.20	1.57E+002	42.15	9.05E+001
7	2424-	2446	2435.52	608.92	0.85	1.42E+002	47.05	1.12E+002
8	3632-	3656	3643.35	910.96	1.38	1.66E+002	39.69	5.93E+001
9	5829-	5859	5843.47	1461.14	2.70	9.77E+002	63.36	1.45E+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	0.996	511.00*	100.00	2.48427E-001	7.16946E-002
K-40	0.997	1460.81*	10.67	1.69126E+001	1.75401E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	1.15013E+000	3.44953E-001
		583.14*	84.20	2.74842E-001	8.18121E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	3.80246E+000	2.15032E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.395	238.63*	44.60	6.11429E-001	2.11263E-001
		609.31*	46.30	4.57106E-001	1.61622E-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	0.996	1.890614E-001	7.381500E-002
K-40	0.997	1.691264E+001	1.754015E+000
TL-208	0.750	2.748417E-001	8.132037E-002
Pb-212 @	0.520	6.114288E-001	2.112627E-001
Bi-214	0.395	4.571055E-001	1.616216E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	85.04	3.2896E-001	58.84
4	351.85	2.2529E-001	34.36
8	910.96	2.7622E-001	23.95

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: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	9.7380E-002	8.08E-002	-1.6715E-002
	1332.49	100.00	8.0805E-002		6.9330E-002
Nb-94	702.63	100.00	9.5212E-002	8.70E-002	1.9001E-002
	871.10	100.00	8.7010E-002		-9.5819E-002
Ag-108m	79.20	7.10	4.8411E+000	1.11E-001	-7.6227E+000
	433.93	89.90	1.1695E-001		-6.6165E-002
	614.37	90.40	1.3910E-001		-1.9160E-002
	722.95	90.50	1.1079E-001		-6.2933E-002
Sb-125	176.33	6.89	2.2196E+000	3.74E-001	2.1983E-001
	427.89	29.33	3.7436E-001		1.3717E-001
	463.38	10.35	1.0712E+000		9.2156E-001
	600.56	17.80	5.6427E-001		-5.1693E-001
	606.64	5.02	2.6325E+000		5.1218E+000
	635.90	11.32	8.4426E-001		1.5364E-001
Cs-134	563.23	8.38	1.2132E+000	1.21E-001	1.9897E-001
	569.32	15.43	6.4425E-001		7.6601E-003
	604.70	97.60	1.3196E-001		-4.2747E-002
	795.84	85.40	1.2104E-001		-2.0532E-002
Cs-137	801.93	8.73	1.1472E+000	1.27E-001	1.4934E-001
	661.65	85.12	1.2683E-001		-1.9956E-004
Eu-152	121.78	28.40	6.7831E-001	3.38E-001	-2.5950E-001
	244.69	7.49	1.8522E+000		-9.0734E-001
	344.27	26.50	4.2651E-001		-8.4757E-001
	778.89	12.74	7.5404E-001		-1.9511E-001
	867.32	4.16	2.3313E+000		-1.6759E-001
	964.01	14.40	8.6608E-001		1.1626E+000
	1085.78	10.00	9.3118E-001		-1.8074E-001
	1112.02	13.30	6.9102E-001		-4.8988E-001
1407.95	20.70	3.3765E-001	-5.0790E-002		
Eu-154	123.07	40.50	4.7011E-001	2.56E-001	-1.7734E-001
	247.94	6.60	2.0086E+000		-1.3074E+000
	591.81	4.83	2.2263E+000		1.9866E+000
	723.30	19.70	5.1730E-001		1.1655E-001
	756.87	4.33	2.2124E+000		5.2758E-001
	873.19	11.50	7.8056E-001		6.3831E-001
	996.32	10.30	8.9932E-001		-2.3245E-002
	1004.76	17.90	4.9484E-001		1.5804E-001
1274.45	35.50	2.5573E-001	-5.1793E-002		
Eu-155	86.54	30.90	1.0071E+000	1.01E+000	-3.1377E-002
	105.31	20.70	1.1104E+000		3.5084E-001
Am-241	59.54	35.90	1.1575E+000	1.16E+000	-3.9792E-001
Cm-243	228.19	10.56	1.2784E+000	9.32E-001	9.5975E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.3171E-001	9.32E-001	-7.6271E-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 6/26/2006 3:27:45 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-10-03-111-F-

Sample Title: OOL-10-03-111-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 3:17:42 PM

Live Time: 600.0 seconds

Real Time: 601.4 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-10-03-111-F-
Title: OOL-10-03-111-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	296-	309	301.02	75.16	1.36	3.65E+002	129.01	1.42E+003
2	943-	963	954.40	238.55	1.35	3.29E+002	86.41	4.44E+002
3	1401-	1416	1405.71	351.40	0.72	1.51E+002	48.31	1.50E+002
4	2320-	2342	2330.65	582.70	1.45	1.97E+002	47.39	9.99E+001
5	2427-	2445	2435.56	608.93	1.16	1.33E+002	42.02	9.66E+001
6	3634-	3654	3643.33	910.96	0.83	1.34E+002	37.06	6.09E+001
7	3864-	3883	3872.66	968.30	1.36	9.36E+001	34.02	5.94E+001
8	4475-	4488	4481.08	1120.45	0.87	4.55E+001	23.27	3.45E+001
9	5829-	5857	5843.55	1461.16	2.21	1.03E+003	66.39	2.54E+001
10	7052-	7066	7059.57	1765.24	0.70	4.57E+001	17.39	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
K-40	0.996	1460.81*	10.67	1.78143E+001	1.84378E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.43906E-001	9.40417E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	5.39680E+000	2.18119E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.24605E-001	2.52486E-001
Bi-214	0.994	609.31*	46.30	4.29436E-001	1.45286E-001
		1120.29*	15.10	5.23238E-001	2.73354E-001
		1764.49*	15.80	5.54053E-001	2.18118E-001
Ac-228	0.627	338.32	11.40		
		911.07*	27.70	7.92827E-001	2.37336E-001
		969.11*	16.60	9.39679E-001	3.55476E-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	0.996	1.781428E+001	1.843784E+000
TL-208	0.467	3.439060E-001	9.404170E-002
Pb-212 @	0.521	8.246050E-001	2.524857E-001
Bi-214	0.994	4.768169E-001	1.105815E-001
Ac-228	0.627	8.381051E-001	1.973850E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.5208E-001	31.94

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: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	1.0058E-001	7.89E-002	-3.9216E-002
	1332.49	100.00	7.8908E-002		1.1917E-002
Nb-94	702.63	100.00	1.0130E-001	8.53E-002	-6.5543E-002
	871.10	100.00	8.5271E-002		-8.7256E-003
Ag-108m	79.20	7.10	4.9296E+000	1.21E-001	-7.6475E+000
	433.93	89.90	1.2109E-001		2.4462E-002
	614.37	90.40	1.4257E-001		3.9755E-002
	722.95	90.50	1.2393E-001		3.6387E-002
Sb-125	176.33	6.89	2.2568E+000	3.82E-001	-6.3185E-001
	427.89	29.33	3.8163E-001		3.7321E-001
	463.38	10.35	1.0820E+000		9.7819E-001
	600.56	17.80	5.8472E-001		2.9521E-001
	606.64	5.02	2.6732E+000		4.6875E+000
	635.90	11.32	8.9300E-001		2.8675E-001
Cs-134	563.23	8.38	1.3527E+000	1.16E-001	1.0316E+000
	569.32	15.43	7.0387E-001		-3.0239E-001
	604.70	97.60	1.3391E-001		-4.8356E-002
	795.84	85.40	1.1607E-001		5.5483E-002
	801.93	8.73	1.0967E+000		-4.1784E-001
Cs-137	661.65	85.12	1.2273E-001	1.23E-001	6.2212E-003
Eu-152	121.78	28.40	7.1247E-001	3.64E-001	-3.1193E-001
	244.69	7.49	1.9381E+000		-3.2055E-001
	344.27	26.50	4.5754E-001		-7.0940E-001
	778.89	12.74	8.3751E-001		7.0961E-002
	867.32	4.16	2.2791E+000		-3.2696E+000
	964.01	14.40	8.8661E-001		5.2783E-002
	1085.78	10.00	8.9793E-001		-1.0758E-001
	1112.02	13.30	7.2915E-001		-6.1408E-001
	1407.95	20.70	3.6362E-001		3.4813E-001
Eu-154	123.07	40.50	5.0037E-001	2.49E-001	2.5312E-001
	247.94	6.60	2.0646E+000		-1.4800E+000
	591.81	4.83	2.1247E+000		4.4753E-001
	723.30	19.70	5.7183E-001		1.6821E-001
	756.87	4.33	2.3181E+000		1.3129E+000
	873.19	11.50	7.2638E-001		-4.2662E-001
	996.32	10.30	8.9594E-001		-3.0678E-002
	1004.76	17.90	4.8243E-001		3.1422E-001
	1274.45	35.50	2.4878E-001		-8.7530E-002
Eu-155	86.54	30.90	9.9508E-001	9.95E-001	2.0591E+000
	105.31	20.70	1.1312E+000		8.2191E-001
Am-241	59.54	35.90	1.1711E+000	1.17E+000	-6.9336E-001
Cm-243	228.19	10.56	1.3796E+000	9.65E-001	3.2165E-001

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	-1.6349E-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 6/26/2006 3:43:46 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-10-03-112-F-

Sample Title: OOL-10-03-112-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 3:33:43 PM

Live Time: 600.0 seconds

Real Time: 601.4 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-10-03-112-F-
Title: OOL-10-03-112-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	291-	306	300.46	75.02	1.49	5.49E+002	137.42	1.45E+003
2	946-	961	953.69	238.37	1.36	3.04E+002	70.95	3.33E+002
3	2322-	2341	2331.53	582.92	1.82	1.39E+002	45.92	1.17E+002
4	2425-	2449	2436.85	609.26	1.80	1.80E+002	47.06	9.63E+001
5	3633-	3653	3643.04	910.88	2.20	1.59E+002	34.53	4.18E+001
M 6	3852-	3882	3858.41	964.74	1.30	2.70E+001	15.59	4.88E+001
m 7	3852-	3882	3874.11	968.67	1.30	5.49E+001	19.45	5.20E+001
8	5829-	5859	5843.54	1461.15	2.23	1.11E+003	67.23	1.46E+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	0.996	1460.81*	10.67	1.91775E+001	1.94006E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.42412E-001	8.61325E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	8.13362E+000	2.58682E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.398	238.63*	44.60	7.61689E-001	2.14363E-001
		609.31*	46.30	5.78827E-001	1.67503E-001
		1120.29	15.10		
Ac-228	0.631	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	9.41475E-001	2.31144E-001
		969.11*	16.60	5.50777E-001	2.03585E-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	0.996	1.917751E+001	1.940056E+000
TL-208	0.470	2.424123E-001	8.613253E-002
Pb-212 @	0.520	7.616887E-001	2.143627E-001
Bi-214	0.398	5.788270E-001	1.675028E-001
Ac-228	0.631	7.214573E-001	1.527756E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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 6	964.74	4.4986E-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: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	9.2932E-002	7.02E-002	-9.9369E-002
	1332.49	100.00	7.0230E-002		-2.0391E-002
Nb-94	702.63	100.00	9.6913E-002	8.97E-002	-4.8855E-002
	871.10	100.00	8.9720E-002		7.1289E-002
Ag-108m	79.20	7.10	4.7717E+000	1.18E-001	-8.4869E+000
	433.93	89.90	1.1821E-001		-7.2777E-002
	614.37	90.40	1.4257E-001		4.0889E-002
	722.95	90.50	1.2257E-001		8.4126E-002
Sb-125	176.33	6.89	2.1974E+000	3.80E-001	-7.6183E-001
	427.89	29.33	3.7983E-001		3.6273E-001
	463.38	10.35	1.0511E+000		1.9084E-001
	600.56	17.80	5.4302E-001		0.0000E+000
	606.64	5.02	2.6988E+000		2.3917E-001
	635.90	11.32	9.2183E-001		6.1209E-001
Cs-134	563.23	8.38	1.1906E+000	1.22E-001	7.5132E-002
	569.32	15.43	6.5356E-001		2.7241E-001
	604.70	97.60	1.3313E-001		1.0486E-003
	795.84	85.40	1.2233E-001		-7.4273E-002
	801.93	8.73	1.1239E+000		-8.6733E-001
Cs-137	661.65	85.12	1.1311E-001	1.13E-001	-8.1738E-003
Eu-152	121.78	28.40	6.8398E-001	3.59E-001	-9.1499E-001
	244.69	7.49	1.9355E+000		4.8393E-001
	344.27	26.50	4.1604E-001		-9.5221E-001
	778.89	12.74	7.3520E-001		-3.0187E-001
	867.32	4.16	2.1787E+000		-1.3824E+000
	964.01	14.40	8.7641E-001		9.6444E-002
	1085.78	10.00	8.8273E-001		-4.8343E-001
	1112.02	13.30	7.1847E-001		-4.1696E-001
1407.95	20.70	3.5859E-001	-2.4748E-002		
Eu-154	123.07	40.50	4.8488E-001	2.37E-001	2.7030E-001
	247.94	6.60	2.0183E+000		-1.9414E+000
	591.81	4.83	2.0796E+000		-1.5526E-001
	723.30	19.70	5.6438E-001		3.9159E-001
	756.87	4.33	2.0939E+000		-1.1843E+000
	873.19	11.50	7.7473E-001		-8.3640E-002
	996.32	10.30	9.2910E-001		3.5450E-001
	1004.76	17.90	5.0693E-001		-1.4669E-001
1274.45	35.50	2.3671E-001	1.2679E-001		
Eu-155	86.54	30.90	9.6680E-001	9.67E-001	1.2569E+000
	105.31	20.70	1.0701E+000		1.3568E-001
Am-241	59.54	35.90	1.1753E+000	1.18E+000	4.6189E-001
Cm-243	228.19	10.56	1.3131E+000	9.50E-001	2.4774E-003

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.4978E-001	9.50E-001	1.0547E+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 6/26/2006 3:58:04 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-113-F-

Sample Title: OOL-10-03-113-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 3:48:01 PM

Live Time: 600.0 seconds

Real Time: 601.5 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-10-03-113-F-
 Title: OOL-10-03-113-F-G
 Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	309	291.71	72.83	1.51	3.20E+002	68.62	1.16E+003
m	2	286-	309	299.78	74.85	1.51	6.35E+002	74.64	1.81E+003
	3	331-	346	340.28	84.98	0.35	1.25E+002	123.24	1.26E+003
	4	947-	963	954.26	238.51	1.54	2.77E+002	77.03	4.02E+002
	5	1399-	1414	1406.98	351.72	1.50	1.09E+002	50.91	1.88E+002
	6	2029-	2051	2041.88	510.49	1.27	1.83E+002	52.16	1.35E+002
	7	2323-	2342	2331.70	582.96	1.96	1.84E+002	48.76	1.24E+002
	8	2425-	2444	2435.67	608.96	1.45	1.52E+002	45.03	1.07E+002
	9	3634-	3655	3644.30	911.20	0.38	1.77E+002	37.79	5.24E+001
	10	3868-	3882	3874.18	968.68	0.68	8.01E+001	30.82	5.79E+001
	11	4472-	4488	4480.12	1120.21	0.40	6.05E+001	24.71	3.15E+001
	12	5828-	5858	5843.82	1461.22	2.24	1.15E+003	69.78	2.33E+001
	13	7054-	7068	7060.95	1765.59	0.62	3.05E+001	15.99	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: 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	2.57352E-001	8.12373E-002
K-40	0.995	1460.81*	10.67	1.99619E+001	2.01730E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.19144E+000	3.88481E-001
		583.14*	84.20	3.21083E-001	9.48241E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	9.44906E+000	2.15922E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.990	238.63*	44.60	6.95398E-001	2.21935E-001
		609.31*	46.30	4.88650E-001	1.56998E-001
		1120.29*	15.10	6.95788E-001	2.93622E-001
Ac-228	0.631	1764.49*	15.80	3.70198E-001	1.97509E-001
		338.32	11.40		
		911.07*	27.70	1.04400E+000	2.53693E-001
		969.11*	16.60	8.04040E-001	3.20669E-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	1.879979E-001	8.374910E-002
K-40	0.995	1.996187E+001	2.017305E+000
TL-208	0.751	3.210835E-001	9.424498E-002
Pb-212 @	0.521	6.953977E-001	2.219351E-001
Bi-214	0.990	4.805032E-001	1.133700E-001
Ac-228	0.631	9.516231E-001	1.989583E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	5.3379E-001	21.43
3	84.98	2.0831E-001	98.60
5	351.72	1.8127E-001	46.80

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	7.84E-002	6.1049E-002
	1332.49	100.00	7.8425E-002		3.4439E-002
Nb-94	702.63	100.00	1.0473E-001	9.61E-002	1.8422E-002
	871.10	100.00	9.6145E-002		-8.1054E-003
Ag-108m	79.20	7.10	4.8798E+000	1.24E-001	-4.8261E+000
	433.93	89.90	1.2430E-001		8.1363E-002
	614.37	90.40	1.4063E-001		-2.7430E-002
	722.95	90.50	1.2553E-001		6.6854E-002
Sb-125	176.33	6.89	2.3431E+000	3.59E-001	-4.5152E-001
	427.89	29.33	3.5937E-001		-5.8085E-002
	463.38	10.35	1.1225E+000		1.4407E+000
	600.56	17.80	5.8605E-001		2.5603E-001
	606.64	5.02	2.8057E+000		5.8588E+000
	635.90	11.32	9.0642E-001		2.1138E-001
Cs-134	563.23	8.38	1.2243E+000	1.22E-001	6.6709E-001
	569.32	15.43	6.8655E-001		-4.0099E-002
	604.70	97.60	1.3997E-001		-3.1765E-002
	795.84	85.40	1.2233E-001		4.8419E-003
	801.93	8.73	1.1172E+000		-1.3685E+000
Cs-137	661.65	85.12	1.1725E-001	1.17E-001	-5.5097E-002
Eu-152	121.78	28.40	7.1870E-001	3.12E-001	6.3077E-001
	244.69	7.49	1.9536E+000		-6.7682E-001
	344.27	26.50	4.7485E-001		-4.9383E-001
	778.89	12.74	7.4938E-001		-9.2662E-001
	867.32	4.16	2.4252E+000		-2.1668E+000
	964.01	14.40	8.9335E-001		-2.9183E-001
	1085.78	10.00	9.4557E-001		-7.9064E-001
	1112.02	13.30	7.0763E-001		-3.2375E-001
1407.95	20.70	3.1229E-001	-1.5131E-002		
Eu-154	123.07	40.50	4.9965E-001	2.28E-001	-1.2480E-001
	247.94	6.60	2.0519E+000		-4.0176E-001
	591.81	4.83	2.1493E+000		-1.5666E-001
	723.30	19.70	5.7797E-001		4.7152E-001
	756.87	4.33	2.3310E+000		2.0411E+000
	873.19	11.50	8.3645E-001		5.8085E-001
	996.32	10.30	8.7194E-001		4.8521E-001
	1004.76	17.90	4.8868E-001		1.8479E-002
1274.45	35.50	2.2786E-001	-2.0318E-001		
Eu-155	86.54	30.90	9.9799E-001	9.98E-001	7.3538E-002
	105.31	20.70	1.1202E+000		-5.4071E-001
Am-241	59.54	35.90	1.1867E+000	1.19E+000	1.1308E+000
Cm-243	228.19	10.56	1.3682E+000	9.51E-001	6.9898E-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	1.5818E-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 6/26/2006 4:11:50 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: RED6264

Sample ID: OOL-10-03-114-F-

Sample Title: OOL-10-03-114-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 4:01:47 PM

Live Time: 600.0 seconds

Real Time: 601.5 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-10-03-114-F-
Title: OOL-10-03-114-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	309	290.65	72.56	1.65	3.00E+002	67.23	1.33E+003
m	2	283-	309	300.21	74.95	1.66	7.28E+002	77.01	2.07E+003
	3	943-	964	954.02	238.45	1.29	3.86E+002	93.87	5.09E+002
	4	1398-	1415	1406.58	351.62	1.48	1.77E+002	50.29	1.48E+002
	5	2322-	2343	2331.11	582.82	1.14	2.48E+002	48.95	1.01E+002
	6	2423-	2446	2435.73	608.98	1.73	2.15E+002	46.63	8.72E+001
	7	3633-	3653	3643.95	911.11	1.05	1.97E+002	38.72	5.28E+001
	8	3866-	3885	3875.36	968.98	1.71	1.13E+002	34.78	5.78E+001
	9	5828-	5858	5843.74	1461.20	1.79	1.20E+003	68.82	7.75E+000
	10	7054-	7067	7060.76	1765.54	0.34	3.85E+001	16.10	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: 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	2.06804E+001	2.05461E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.33148E-001	1.02374E-001
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.08032E+001	2.40625E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.69560E-001	2.80355E-001
Bi-214	0.689	609.31*	46.30	6.91544E-001	1.72648E-001
		1120.29	15.10		
		1764.49*	15.80	4.67118E-001	2.00902E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	1.16588E+000	2.65327E-001
		969.11*	16.60	1.13692E+000	3.68955E-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	2.068042E+001	2.054608E+000
TL-208	0.469	4.331478E-001	1.023742E-001
Pb-212 @	0.521	9.695605E-001	2.803552E-001
Bi-214	0.689	5.962092E-001	1.309404E-001
Ac-228	0.633	1.156007E+000	2.154107E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	72.56	4.9961E-001	22.43
4	351.62	2.9523E-001	28.39

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: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	1.0231E-001	8.31E-002	-7.6017E-002
	1332.49	100.00	8.3113E-002		-3.8080E-002
Nb-94	702.63	100.00	1.0473E-001	9.68E-002	-1.0069E-001
	871.10	100.00	9.6763E-002		-6.1060E-002
Ag-108m	79.20	7.10	4.9096E+000	1.25E-001	-7.2216E+000
	433.93	89.90	1.3047E-001		1.3237E-001
	614.37	90.40	1.4491E-001		7.7540E-003
	722.95	90.50	1.2500E-001		4.3536E-002
Sb-125	176.33	6.89	2.3294E+000	3.91E-001	-7.9099E-001
	427.89	29.33	3.9052E-001		4.1864E-001
	463.38	10.35	1.0511E+000		-2.4666E-001
	600.56	17.80	5.4877E-001		-3.8722E-001
	606.64	5.02	2.8370E+000		6.3814E+000
	635.90	11.32	9.6443E-001		5.5935E-001
Cs-134	563.23	8.38	1.3096E+000	1.19E-001	-1.4614E-001
	569.32	15.43	7.1798E-001		-3.2181E-001
	604.70	97.60	1.4344E-001		-1.9307E-002
	795.84	85.40	1.1875E-001		4.7474E-002
	801.93	8.73	1.1104E+000		-2.0898E+000
Cs-137	661.65	85.12	1.2243E-001	1.22E-001	-4.1853E-003
Eu-152	121.78	28.40	7.0261E-001	3.51E-001	-2.9288E-001
	244.69	7.49	1.9740E+000		-2.0319E+000
	344.27	26.50	4.5754E-001		-4.7415E-001
	778.89	12.74	8.3124E-001		1.4770E-001
	867.32	4.16	2.4742E+000		-3.6346E+000
	964.01	14.40	9.4227E-001		-2.0068E-001
	1085.78	10.00	9.7367E-001		3.9683E-001
	1112.02	13.30	7.8270E-001		-2.4189E-001
1407.95	20.70	3.5089E-001	-6.8153E-003		
Eu-154	123.07	40.50	4.8951E-001	2.57E-001	-6.5185E-002
	247.94	6.60	2.1313E+000		3.3713E-001
	591.81	4.83	2.2025E+000		-1.6766E-001
	723.30	19.70	5.7429E-001		1.5324E-001
	756.87	4.33	2.2259E+000		-1.9030E+000
	873.19	11.50	8.5511E-001		5.0678E-001
	996.32	10.30	9.7353E-001		4.6964E-001
	1004.76	17.90	5.3024E-001		-2.9357E-001
1274.45	35.50	2.5687E-001	1.6281E-002		
Eu-155	86.54	30.90	9.9078E-001	9.91E-001	8.7475E-001
	105.31	20.70	1.1167E+000		-2.3622E-001
Am-241	59.54	35.90	1.1365E+000	1.14E+000	8.2264E-001
Cm-243	228.19	10.56	1.3796E+000	9.86E-001	1.0240E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.8646E-001	9.86E-001	3.0703E-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 6/26/2006 4:26:53 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-115-F-

Sample Title: OOL-10-03-115-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 4:16:50 PM

Live Time: 600.0 seconds

Real Time: 601.4 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-10-03-115-F-
 Title: OOL-10-03-115-F-G
 Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	308	291.81	72.86	1.42	3.12E+002	63.20	1.43E+003
m	2	282-	308	299.80	74.85	1.42	5.58E+002	71.47	1.78E+003
	3	331-	345	339.22	84.71	1.15	1.47E+002	112.76	1.10E+003
	4	945-	964	954.18	238.49	1.10	2.97E+002	87.65	4.84E+002
	5	1400-	1417	1406.05	351.49	0.80	1.65E+002	50.67	1.54E+002
	6	2319-	2341	2331.48	582.91	0.75	1.54E+002	52.30	1.43E+002
	7	2423-	2445	2436.41	609.15	1.76	1.98E+002	43.69	7.73E+001
	8	2899-	2915	2907.50	726.95	1.03	5.57E+001	29.30	5.33E+001
	9	3317-	3328	3322.42	830.71	0.84	2.17E+001	18.92	2.83E+001
	10	3633-	3654	3643.43	910.98	0.42	1.60E+002	38.00	5.75E+001
	11	3865-	3884	3875.43	969.00	1.30	9.78E+001	33.22	5.42E+001
	12	5830-	5858	5843.67	1461.19	2.17	1.10E+003	67.09	1.45E+001
	13	7054-	7067	7060.82	1765.55	0.33	4.26E+001	15.91	8.43E+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	0.996	1460.81*	10.67	1.91102E+001	1.93428E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.68265E-001	9.77298E-002
		860.37	12.46		
Bi-212	0.998	727.17*	11.80	7.37384E-001	3.97456E-001
Pb-212	0.521	74.81* @	10.70	8.29327E+000	1.94205E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.691	238.63*	44.60	7.45060E-001	2.49052E-001
		609.31*	46.30	6.36698E-001	1.61076E-001
		1120.29	15.10		
Ac-228	0.633	1764.49*	15.80	5.16543E-001	1.99877E-001
		338.32	11.40		
		911.07*	27.70	9.43228E-001	2.49539E-001
		969.11*	16.60	9.81590E-001	3.49072E-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	0.996	1.911019E+001	1.934280E+000
TL-208	0.470	2.682652E-001	9.772979E-002
Bi-212	0.998	7.373843E-001	3.974557E-001
Pb-212 @	0.521	7.450604E-001	2.490516E-001
Bi-214	0.691	5.893893E-001	1.254188E-001
Ac-228	0.633	9.562024E-001	2.030028E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	5.2007E-001	20.25
3	84.71	2.4491E-001	76.73
5	351.49	2.7480E-001	30.73
9	830.71	3.6225E-002	87.04

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	9.7741E-002	7.99E-002	7.0836E-002
	1332.49	100.00	7.9863E-002		-1.8986E-003
Nb-94	702.63	100.00	9.5783E-002	9.58E-002	6.3618E-002
	871.10	100.00	9.6454E-002		8.6480E-002
Ag-108m	79.20	7.10	4.8971E+000	1.21E-001	-3.5859E+000
	433.93	89.90	1.2149E-001		2.7003E-002
	614.37	90.40	1.3417E-001		-2.8751E-002
	722.95	90.50	1.2202E-001		-1.5055E-002
Sb-125	176.33	6.89	2.2361E+000	3.68E-001	-5.6315E-001
	427.89	29.33	3.6757E-001		1.3674E-002
	463.38	10.35	1.1598E+000		4.2634E-001
	600.56	17.80	5.8605E-001		1.8267E-001
	606.64	5.02	2.6952E+000		5.7157E+000
	635.90	11.32	8.9300E-001		3.5456E-001
Cs-134	563.23	8.38	1.3122E+000	1.21E-001	6.3950E-001
	569.32	15.43	6.7624E-001		-1.5272E-001
	604.70	97.60	1.3754E-001		-5.1817E-002
	795.84	85.40	1.2104E-001		-3.2790E-002
	801.93	8.73	1.1001E+000		-6.9380E-001
Cs-137	661.65	85.12	1.2392E-001	1.24E-001	8.8541E-003
Eu-152	121.78	28.40	6.9196E-001	3.76E-001	-5.8762E-001
	244.69	7.49	1.9055E+000		-1.4760E+000
	344.27	26.50	4.6915E-001		-5.1730E-001
	778.89	12.74	7.6557E-001		-2.1554E-001
	867.32	4.16	2.3165E+000		-1.2719E-001
	964.01	14.40	8.7641E-001		-1.0770E-001
	1085.78	10.00	8.5146E-001		-5.4221E-001
	1112.02	13.30	7.2650E-001		-8.0360E-001
1407.95	20.70	3.7589E-001	1.2555E-001		
Eu-154	123.07	40.50	4.8951E-001	2.44E-001	6.9386E-002
	247.94	6.60	2.0725E+000		4.3544E-001
	591.81	4.83	2.2168E+000		-1.0320E+000
	723.30	19.70	5.6187E-001		-2.8846E-002
	756.87	4.33	2.2922E+000		7.0415E-001
	873.19	11.50	8.1180E-001		1.6657E-001
	996.32	10.30	8.8574E-001		-5.0878E-001
	1004.76	17.90	5.2834E-001		-7.0626E-002
1274.45	35.50	2.4403E-001	7.0979E-002		
Eu-155	86.54	30.90	9.8055E-001	9.81E-001	1.4561E-001
	105.31	20.70	1.0910E+000		3.3192E-001
Am-241	59.54	35.90	1.1394E+000	1.14E+000	6.3999E-002
Cm-243	228.19	10.56	1.3268E+000	9.39E-001	-9.5858E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.3914E-001	9.39E-001	-1.2819E-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 6/26/2006 4:41:39 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-10-03-116-F-

Sample Title: OOL-10-03-116-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 4:31:36 PM

Live Time: 600.0 seconds

Real Time: 601.3 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-10-03-116-F-
Title: OOL-10-03-116-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Rows 1-12 with various numerical values.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	2.52174E-001	7.50030E-002
K-40	0.993	1460.81*	10.67	1.79062E+001	1.84695E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	1.16747E+000	3.60088E-001
		583.14*	84.20	3.67182E-001	9.57743E-002
		860.37	12.46		
Bi-212	0.998	727.17*	11.80	4.83983E-001	3.44240E-001
Pb-212	0.521	74.81* @	10.70	8.33609E+000	2.73684E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.72349E-001	1.73389E-001
Bi-214	0.696	609.31*	46.30	4.03383E-001	1.50492E-001
		1120.29*	15.10	3.64763E-001	2.63182E-001
		1764.49	15.80		
PB-214	0.359	74.82* @	6.21	1.43633E+001	4.82955E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98*	7.49	9.27448E-001	4.54029E-001
		295.21	19.20		
Ac-228	0.631	351.92*	37.20	4.97413E-001	1.80718E-001
		338.32	11.40		
		911.07*	27.70	1.12685E+000	2.54559E-001
		969.11*	16.60	6.86323E-001	3.14993E-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	1.728626E-001	7.776069E-002
K-40	0.993	1.790618E+001	1.846952E+000
TL-208	0.752	3.671823E-001	9.502384E-002
Bi-212	0.998	4.839829E-001	3.442403E-001
Pb-212 @	0.521	8.723488E-001	1.733886E-001
Bi-214	0.696	3.938669E-001	1.306417E-001
PB-214 @	0.359	5.562257E-001	1.679065E-001
Ac-228	0.631	9.528096E-001	1.979883E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	9.0230E-002	7.50E-002	4.6626E-002
	1332.49	100.00	7.4958E-002		1.2990E-002
Nb-94	702.63	100.00	9.9682E-002	9.01E-002	3.1133E-002
	871.10	100.00	9.0053E-002		2.1413E-002
Ag-108m	79.20	7.10	4.6377E+000	1.13E-001	-7.5588E+000
	433.93	89.90	1.1287E-001		-2.8429E-002
	614.37	90.40	1.2761E-001		3.1427E-002
	722.95	90.50	1.1640E-001		-6.5397E-002
Sb-125	176.33	6.89	2.1705E+000	3.52E-001	6.6956E-001
	427.89	29.33	3.5163E-001		-1.8217E-001
	463.38	10.35	1.0530E+000		3.3812E-001
	600.56	17.80	5.7117E-001		2.1175E-001
	606.64	5.02	2.5797E+000		3.6907E+000
	635.90	11.32	8.5377E-001		5.8212E-001
Cs-134	563.23	8.38	1.2215E+000	1.13E-001	5.9571E-001
	569.32	15.43	6.4892E-001		-1.2136E-001
	604.70	97.60	1.3333E-001		1.7700E-002
	795.84	85.40	1.1264E-001		-1.3232E-002
	801.93	8.73	1.0652E+000		-7.6732E-002
Cs-137	661.65	85.12	1.2002E-001	1.20E-001	6.4499E-002
Eu-152	121.78	28.40	6.6682E-001	3.32E-001	-5.3883E-001
	244.69	7.49	1.8481E+000		-5.0465E-003
	344.27	26.50	4.1839E-001		-8.5105E-001
	778.89	12.74	7.6327E-001		-6.4645E-001
	867.32	4.16	2.2023E+000		-4.5866E+000
	964.01	14.40	8.5035E-001		2.1004E-001
	1085.78	10.00	8.7114E-001		4.2854E-001
	1112.02	13.30	6.5054E-001		-3.7993E-002
1407.95	20.70	3.3220E-001	5.6753E-002		
Eu-154	123.07	40.50	4.6373E-001	2.56E-001	4.7630E-002
	247.94	6.60	1.9510E+000		4.1442E-003
	591.81	4.83	2.0438E+000		-5.2239E-001
	723.30	19.70	5.3480E-001		3.7979E-001
	756.87	4.33	2.2659E+000		2.0868E+000
	873.19	11.50	8.0621E-001		1.5390E-001
	996.32	10.30	9.0936E-001		4.8427E-002
	1004.76	17.90	4.9279E-001		-2.0709E-001
1274.45	35.50	2.5573E-001	8.6401E-002		
Eu-155	86.54	30.90	9.6339E-001	9.63E-001	2.3471E+000
	105.31	20.70	1.0629E+000		5.4520E-001
Am-241	59.54	35.90	1.0915E+000	1.09E+000	-1.1673E+000
Cm-243	228.19	10.56	1.2202E+000	8.49E-001	-1.1200E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	8.4916E-001	8.49E-001	-3.2494E-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 6/26/2006 8:43:23 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-10-03-117-F-

Sample Title: OOL-10-03-117-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 8:33:20 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-10-03-117-F-
 Title: OOL-10-03-117-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	292-	309	300.91	75.13	1.25	6.95E+002	161.50	1.87E+003
2	944-	962	953.36	238.29	0.99	2.94E+002	84.08	4.56E+002
3	1077-	1087	1081.40	270.30	0.84	3.51E+001	40.80	1.66E+002
4	1347-	1362	1353.24	338.28	1.71	8.07E+001	46.38	1.59E+002
5	1401-	1413	1406.66	351.64	1.61	1.13E+002	42.62	1.34E+002
6	2030-	2054	2042.36	510.61	0.83	2.01E+002	50.30	1.11E+002
7	2320-	2342	2331.22	582.84	1.49	2.08E+002	48.32	1.03E+002
8	2428-	2447	2434.97	608.79	1.40	1.51E+002	45.29	1.09E+002
9	3632-	3655	3643.58	911.02	1.17	1.62E+002	37.56	5.11E+001
10	3867-	3885	3874.17	968.68	1.18	9.16E+001	34.66	6.54E+001
11	5829-	5859	5844.01	1461.27	1.72	1.14E+003	67.30	7.75E+000
12	7054-	7070	7061.20	1765.65	0.37	4.43E+001	16.15	7.71E+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: 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	2.82389E-001	8.04481E-002
K-40	0.993	1460.81*	10.67	1.97463E+001	1.97784E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	1.30736E+000	3.87446E-001
		583.14*	84.20	3.62724E-001	9.66559E-002
		860.37	12.46		
Pb-212	0.519	74.81* @	10.70	1.02864E+001	3.12617E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.685	238.63*	44.60	7.36929E-001	2.40512E-001
		609.31*	46.30	4.87477E-001	1.57707E-001
		1120.29	15.10		
Ac-228	0.998	1764.49*	15.80	5.37356E-001	2.03146E-001
		338.32*	11.40	8.74999E-001	5.21283E-001
		911.07*	27.70	9.57094E-001	2.47868E-001
		969.11*	16.60	9.19293E-001	3.61033E-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	2.040409E-001	8.307379E-002
K-40	0.993	1.974628E+001	1.977845E+000
TL-208	0.750	3.627243E-001	9.593032E-002
Pb-212 @	0.519	7.369293E-001	2.405116E-001
Bi-214	0.685	5.062337E-001	1.245741E-001
Ac-228	0.998	9.356622E-001	1.902488E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	270.30	5.8551E-002	116.13
5	351.64	1.8866E-001	37.66

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	1.0799E-001	7.60E-002	2.6251E-002
	1332.49	100.00	7.5966E-002		-7.5891E-002
Nb-94	702.63	100.00	9.8860E-002	9.68E-002	-8.5717E-002
	871.10	100.00	9.6763E-002		5.5868E-002
Ag-108m	79.20	7.10	5.2758E+000	1.22E-001	-4.7614E+000
	433.93	89.90	1.2230E-001		-3.6334E-002
	614.37	90.40	1.4449E-001		5.2945E-002
	722.95	90.50	1.2446E-001		6.0347E-002
Sb-125	176.33	6.89	2.3752E+000	3.85E-001	-8.4188E-001
	427.89	29.33	3.8462E-001		2.5404E-001
	463.38	10.35	1.1121E+000		1.3229E-001
	600.56	17.80	5.7934E-001		-2.4673E-001
	606.64	5.02	2.8232E+000		4.5164E+000
	635.90	11.32	8.5140E-001		-7.0771E-001
Cs-134	563.23	8.38	1.3070E+000	1.20E-001	-3.3834E-001
	569.32	15.43	7.1237E-001		8.9178E-001
	604.70	97.60	1.3978E-001		-4.1315E-002
	795.84	85.40	1.2039E-001		-1.2454E-002
	801.93	8.73	1.1172E+000		-4.9011E-001
Cs-137	661.65	85.12	1.2654E-001	1.27E-001	-3.1512E-002
Eu-152	121.78	28.40	7.8309E-001	3.40E-001	1.0114E-001
	244.69	7.49	1.9663E+000		-2.1078E+000
	344.27	26.50	4.5861E-001		1.0990E-001
	778.89	12.74	7.1339E-001		-9.5658E-001
	867.32	4.16	2.2716E+000		-2.6460E+000
	964.01	14.40	9.1324E-001		1.2097E-001
	1085.78	10.00	9.6323E-001		-2.4772E-001
	1112.02	13.30	7.5515E-001		-1.3026E+000
1407.95	20.70	3.4035E-001	-8.4478E-002		
Eu-154	123.07	40.50	5.4310E-001	2.51E-001	1.2597E-001
	247.94	6.60	2.0990E+000		-1.3217E+000
	591.81	4.83	2.0796E+000		3.3721E-001
	723.30	19.70	5.7306E-001		3.5137E-001
	756.87	4.33	2.2326E+000		-1.5085E+000
	873.19	11.50	8.4183E-001		3.2249E-001
	996.32	10.30	8.7887E-001		6.2583E-001
	1004.76	17.90	4.9890E-001		-4.5891E-001
	1274.45	35.50	2.5112E-001		4.2827E-002
	86.54	30.90	1.0718E+000		1.07E+000
105.31	20.70	1.2027E+000		-5.1183E-001	
Am-241	59.54	35.90	1.2820E+000	1.28E+000	1.2100E+000
Cm-243	228.19	10.56	1.3664E+000	9.89E-001	-4.1935E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.8881E-001	9.89E-001	-5.0168E-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 6/26/2006 11:46:17 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-118-F-

Sample Title: OOL-10-03-118-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 11:36:15 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-10-03-118-F-
Title: OOL-10-03-118-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Rows 1-15 with peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	2.45704E-001	8.48733E-002
K-40	1.000	1460.81*	10.67	2.33440E+001	2.28394E+000
TL-208	0.747	277.35	6.80		
		510.84*	21.60	1.13752E+000	4.03764E-001
		583.14*	84.20	3.92929E-001	1.03405E-001
		860.37	12.46		
Pb-212	0.519	74.81* @	10.70	1.19152E+001	2.62306E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.993	238.63*	44.60	1.01878E+000	2.76333E-001
		609.31*	46.30	4.72981E-001	1.68938E-001
		1120.29*	15.10	4.88793E-001	3.22890E-001
Ac-228	0.996	1764.49*	15.80	5.50492E-001	2.14106E-001
		338.32*	11.40	7.72934E-001	5.54272E-001
		911.07*	27.70	1.09930E+000	2.82667E-001
		969.11*	16.60	1.06835E+000	3.35505E-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	1.608310E-001	8.771944E-002
K-40	1.000	2.334402E+001	2.283939E+000
TL-208	0.747	3.929289E-001	1.026087E-001
Pb-212 @	0.519	1.018780E+000	2.763329E-001
Bi-214	0.993	5.007110E-001	1.226790E-001
Ac-228	0.996	1.045057E+000	2.013967E-001

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	7.7316E-001	15.57
3	84.74	3.9052E-001	44.19
6	351.64	1.4727E-001	60.27
10	794.33	3.9001E-002	101.87

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	1.0402E-001	8.36E-002	-3.5360E-002
	1332.49	100.00	8.3566E-002		-1.2761E-003
Nb-94	702.63	100.00	1.1126E-001	9.92E-002	-1.4191E-002
	871.10	100.00	9.9194E-002		3.8919E-002
Ag-108m	79.20	7.10	5.4801E+000	1.28E-001	-7.9729E+000
	433.93	89.90	1.2800E-001		-4.6963E-002
	614.37	90.40	1.3866E-001		1.7462E-002
	722.95	90.50	1.2972E-001		6.1661E-002
Sb-125	176.33	6.89	2.4493E+000	3.96E-001	-1.2967E+000
	427.89	29.33	3.9575E-001		1.5456E-001
	463.38	10.35	1.1345E+000		5.6008E-001
	600.56	17.80	6.4081E-001		-1.0479E-001
	606.64	5.02	2.8022E+000		4.8169E+000
	635.90	11.32	9.5817E-001		-5.7388E-002
Cs-134	563.23	8.38	1.2941E+000	1.30E-001	-9.9460E-001
	569.32	15.43	7.0672E-001		-7.1364E-001
	604.70	97.60	1.4505E-001		-4.9274E-002
	795.84	85.40	1.3008E-001		2.6608E-003
	801.93	8.73	1.1699E+000		-9.5706E-001
Cs-137	661.65	85.12	1.2995E-001	1.30E-001	9.5505E-002
Eu-152	121.78	28.40	8.0364E-001	3.40E-001	2.0645E-001
	244.69	7.49	2.0886E+000		-8.8025E-001
	344.27	26.50	4.8301E-001		-6.0796E-002
	778.89	12.74	7.5404E-001		-7.8994E-001
	867.32	4.16	2.4252E+000		-5.2106E+000
	964.01	14.40	9.8719E-001		1.0865E-001
	1085.78	10.00	9.3480E-001		-2.5872E-001
	1112.02	13.30	8.2804E-001		2.5355E-001
1407.95	20.70	3.4035E-001	-2.1772E-001		
Eu-154	123.07	40.50	5.5838E-001	2.58E-001	2.6213E-001
	247.94	6.60	2.2887E+000		-4.6300E-001
	591.81	4.83	2.4334E+000		5.9878E-001
	723.30	19.70	5.9480E-001		2.2308E-001
	756.87	4.33	2.3880E+000		4.5784E-001
	873.19	11.50	8.7077E-001		1.1015E-001
	996.32	10.30	9.5476E-001		1.8986E-001
	1004.76	17.90	5.4887E-001		-4.0919E-002
	1274.45	35.50	2.5800E-001		-1.1106E-001
Eu-155	86.54	30.90	1.1273E+000	1.13E+000	1.9721E+000
	105.31	20.70	1.2522E+000		2.5296E-001
Am-241	59.54	35.90	1.3352E+000	1.34E+000	3.0378E-001
Cm-243	228.19	10.56	1.4974E+000	1.06E+000	-9.0029E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0589E+000	1.06E+000	3.7500E-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 6/26/2006 12:52:35 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-10-03-119-F-

Sample Title: OOL-10-03-119-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 12:42:30 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-10-03-119-F-
 Title: OOL-10-03-119-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	281-	308	290.94	72.64	1.60	2.97E+002	71.94	1.83E+003
m	2	281-	308	300.00	74.90	1.60	7.62E+002	81.97	2.33E+003
	3	944-	959	954.00	238.45	1.55	2.68E+002	77.03	4.25E+002
	4	1399-	1414	1406.45	351.59	1.45	1.45E+002	48.02	1.51E+002
	5	2030-	2052	2042.62	510.67	1.27	1.72E+002	50.85	1.29E+002
	6	2320-	2342	2330.59	582.69	1.72	2.16E+002	47.94	9.87E+001
	7	2425-	2447	2436.35	609.13	2.03	1.97E+002	46.61	9.50E+001
	8	3632-	3654	3642.73	910.81	1.77	1.69E+002	36.66	4.63E+001
	9	5827-	5858	5842.57	1460.91	2.23	1.12E+003	68.41	1.99E+001
	10	7052-	7068	7059.80	1765.30	0.41	4.10E+001	18.42	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: 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	2.41614E-001	7.86698E-002
K-40	1.000	1460.81*	10.67	1.93619E+001	1.96426E+000
TL-208	0.747	277.35	6.80		
		510.84*	21.60	1.11858E+000	3.75494E-001
		583.14*	84.20	3.77455E-001	9.70269E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.13209E+001	2.53113E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.694	238.63*	44.60	6.72611E-001	2.20195E-001
		609.31*	46.30	6.34523E-001	1.69240E-001
		1120.29	15.10		
		1764.49*	15.80	4.97491E-001	2.28952E-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	1.600840E-001	8.137019E-002
K-40	1.000	1.936188E+001	1.964265E+000
TL-208	0.747	3.774551E-001	9.624401E-002
Pb-212 @	0.521	6.726106E-001	2.201951E-001
Bi-214	0.694	5.861042E-001	1.360945E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	72.64	4.9572E-001	24.19
4	351.59	2.4226E-001	33.04
8	910.81	2.8111E-001	21.73

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: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	7.84E-002	1.8613E-002
	1332.49	100.00	7.8425E-002		-3.0873E-002
Nb-94	702.63	100.00	1.0447E-001	9.80E-002	-2.7902E-002
	871.10	100.00	9.7986E-002		1.1558E-002
Ag-108m	79.20	7.10	5.3307E+000	1.24E-001	-9.1155E+000
	433.93	89.90	1.2449E-001		-4.2041E-002
	614.37	90.40	1.4107E-001		-5.8440E-002
	722.95	90.50	1.2738E-001		7.2864E-002
Sb-125	176.33	6.89	2.4393E+000	3.94E-001	1.2782E+000
	427.89	29.33	3.9402E-001		1.2299E-001
	463.38	10.35	1.1016E+000		2.1663E-001
	600.56	17.80	6.0574E-001		2.5440E-001
	606.64	5.02	2.7987E+000		5.4333E+000
	635.90	11.32	8.1999E-001		-1.7412E-001
Cs-134	563.23	8.38	1.2650E+000	1.21E-001	-2.1148E-001
	569.32	15.43	6.7920E-001		-5.6624E-001
	604.70	97.60	1.4162E-001		8.7080E-003
	795.84	85.40	1.2104E-001		1.2943E-001
	801.93	8.73	1.1036E+000		-9.7836E-001
Cs-137	661.65	85.12	1.2033E-001	1.20E-001	-9.7236E-003
Eu-152	121.78	28.40	7.8366E-001	3.56E-001	-1.9044E-001
	244.69	7.49	2.0401E+000		-5.7027E+000
	344.27	26.50	4.4890E-001		-4.9193E-001
	778.89	12.74	7.2801E-001		-4.8212E-001
	867.32	4.16	2.4252E+000		-5.0851E+000
	964.01	14.40	9.1652E-001		1.4675E+000
	1085.78	10.00	9.0169E-001		-4.2761E-001
	1112.02	13.30	7.1036E-001		-1.5714E+000
1407.95	20.70	3.5604E-001	-5.5331E-002		
Eu-154	123.07	40.50	5.4457E-001	2.64E-001	-2.0946E-001
	247.94	6.60	2.1450E+000		-7.6513E-001
	591.81	4.83	2.1785E+000		9.9885E-001
	723.30	19.70	5.8404E-001		4.6826E-001
	756.87	4.33	2.3438E+000		6.1825E-001
	873.19	11.50	8.5774E-001		6.7020E-001
	996.32	10.30	9.4202E-001		1.4481E+000
	1004.76	17.90	4.9074E-001		1.7100E-001
1274.45	35.50	2.6359E-001	-2.1295E-001		
Eu-155	86.54	30.90	1.0918E+000	1.09E+000	2.3548E+000
	105.31	20.70	1.2046E+000		5.6895E-001
Am-241	59.54	35.90	1.2925E+000	1.29E+000	1.3176E-001
Cm-243	228.19	10.56	1.4473E+000	1.01E+000	2.5676E-002

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	-1.0497E-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 6/26/2006 1:14:08 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-120-F-

Sample Title: OOL-10-03-120-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 1:04:03 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-10-03-120-F-
 Title: OOL-10-03-120-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	291-	309	300.54	75.04	1.72	8.10E+002	169.75	1.98E+003
2	332-	345	340.25	84.97	1.11	1.94E+002	120.07	1.29E+003
3	943-	963	953.91	238.42	1.38	3.02E+002	90.71	5.05E+002
4	1345-	1362	1351.21	337.77	1.72	1.01E+002	53.56	1.98E+002
5	1395-	1417	1406.72	351.66	0.84	1.78E+002	58.99	1.87E+002
6	2321-	2343	2330.76	582.73	1.73	2.14E+002	49.72	1.11E+002
7	2424-	2446	2434.70	608.72	2.07	1.88E+002	49.22	1.14E+002
8	3634-	3656	3643.20	910.92	2.03	1.68E+002	38.65	5.69E+001
M 9	3852-	3882	3857.68	964.56	1.62	2.40E+001	15.94	5.05E+001
m 10	3852-	3882	3874.48	968.76	1.62	9.86E+001	23.16	5.89E+001
11	4472-	4489	4479.69	1120.10	1.71	7.00E+001	26.43	3.40E+001
12	5828-	5858	5843.13	1461.05	2.16	1.14E+003	69.34	2.26E+001
13	6346-	6359	6352.29	1588.38	0.36	1.95E+001	14.61	1.25E+001
14	7053-	7067	7060.46	1765.46	0.69	4.71E+001	16.85	8.93E+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: 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	1.97822E+001	2.00116E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.72867E-001	9.94329E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.19964E+001	3.44335E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.58223E-001	2.56798E-001
Bi-214	0.987	609.31*	46.30	6.04127E-001	1.75076E-001
		1120.29*	15.10	8.05270E-001	3.15743E-001
		1764.49*	15.80	5.71110E-001	2.12232E-001
Ac-228	0.997	338.32*	11.40	1.09933E+000	6.05546E-001
		911.07*	27.70	9.93792E-001	2.55544E-001
		969.11*	16.60	9.90003E-001	2.54659E-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	0.998	1.978223E+001	2.001156E+000
TL-208	0.467	3.728666E-001	9.943288E-002
Pb-212 @	0.520	7.582229E-001	2.567983E-001
Bi-214	0.987	6.239334E-001	1.241718E-001
Ac-228	0.997	1.000648E+000	1.728763E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.97	3.2405E-001	61.76
5	351.66	2.9627E-001	33.18
M 9	964.56	3.9990E-002	66.43
13	1588.38	3.2448E-002	75.05

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	1.0368E-001	7.79E-002	3.5497E-002
	1332.49	100.00	7.7940E-002		3.4559E-003
Nb-94	702.63	100.00	1.0211E-001	9.61E-002	3.0251E-002
	871.10	100.00	9.6145E-002		1.1650E-001
Ag-108m	79.20	7.10	5.3210E+000	1.21E-001	-7.0953E+000
	433.93	89.90	1.2781E-001		2.2494E-002
	614.37	90.40	1.3888E-001		-3.2266E-002
	722.95	90.50	1.2064E-001		3.6208E-002
Sb-125	176.33	6.89	2.4731E+000	3.86E-001	5.1322E-001
	427.89	29.33	3.8640E-001		1.5393E-001
	463.38	10.35	1.1033E+000		6.4539E-001
	600.56	17.80	6.2478E-001		5.1605E-001
	606.64	5.02	2.9487E+000		7.6997E+000
	635.90	11.32	9.4763E-001		-5.0794E-001
Cs-134	563.23	8.38	1.2730E+000	1.23E-001	3.3286E-001
	569.32	15.43	6.8655E-001		3.6350E-001
	604.70	97.60	1.4996E-001		6.1306E-002
	795.84	85.40	1.2329E-001		8.0669E-002
	801.93	8.73	1.1001E+000		-4.3969E-001
Cs-137	661.65	85.12	1.2654E-001	1.27E-001	1.5795E-001
Eu-152	121.78	28.40	7.8120E-001	3.71E-001	7.8992E-001
	244.69	7.49	2.0042E+000		-7.8737E-001
	344.27	26.50	4.5807E-001		-1.0460E-001
	778.89	12.74	8.0996E-001		-9.0854E-001
	867.32	4.16	2.3091E+000		-2.1384E+000
	964.01	14.40	9.4702E-001		7.4932E-002
	1085.78	10.00	9.5621E-001		-1.8724E-001
	1112.02	13.30	7.6277E-001		-1.1207E-001
1407.95	20.70	3.7103E-001	-1.3569E-001		
Eu-154	123.07	40.50	5.4056E-001	2.60E-001	1.6104E-001
	247.94	6.60	2.1465E+000		-1.4859E+000
	591.81	4.83	2.2404E+000		2.5392E+000
	723.30	19.70	5.5044E-001		4.9510E-002
	756.87	4.33	2.5099E+000		1.3912E+000
	873.19	11.50	8.0059E-001		-4.1709E-001
	996.32	10.30	8.9594E-001		4.0289E-001
	1004.76	17.90	5.0494E-001		-2.7585E-001
1274.45	35.50	2.6025E-001	2.0791E-001		
Eu-155	86.54	30.90	1.0950E+000	1.10E+000	2.5170E+000
	105.31	20.70	1.1893E+000		-2.0461E-001
Am-241	59.54	35.90	1.2884E+000	1.29E+000	-8.4949E-001
Cm-243	228.19	10.56	1.4040E+000	1.02E+000	-8.7968E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0157E+000	1.02E+000	-1.8266E-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 6/26/2006 1:29:13 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-10-03-121-F-

Sample Title: OOL-10-03-121-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 1:19:09 PM

Live Time: 600.0 seconds

Real Time: 601.5 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-10-03-121-F-
Title: OOL-10-03-121-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	297-	309	300.51	75.03	1.49	4.12E+002	125.21	1.37E+003
2	943-	964	954.32	238.53	1.73	3.80E+002	88.74	4.45E+002
3	1398-	1412	1406.98	351.72	0.66	1.11E+002	49.58	1.83E+002
4	2320-	2340	2331.33	582.87	1.66	2.07E+002	45.98	9.45E+001
5	2426-	2446	2435.58	608.94	1.06	1.71E+002	46.83	1.10E+002
6	3067-	3079	3072.28	768.16	0.81	2.05E+001	23.78	4.75E+001
7	3494-	3505	3499.92	875.09	0.27	1.31E+001	16.84	2.39E+001
8	3633-	3655	3643.72	911.05	0.79	1.32E+002	40.37	7.56E+001
9	3869-	3885	3874.64	968.80	0.48	7.13E+001	28.82	4.57E+001
10	4680-	4691	4685.44	1171.55	0.36	2.07E+001	16.97	2.13E+001
11	5829-	5857	5843.46	1461.13	2.40	1.14E+003	68.52	1.81E+001
12	7053-	7068	7059.22	1765.15	0.77	4.64E+001	17.01	9.64E+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	1.97060E+001	1.98774E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.62099E-001	9.30700E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	6.10239E+000	2.20791E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.52884E-001	2.68184E-001
Bi-214	0.693	609.31*	46.30	5.49826E-001	1.65304E-001
		1120.29	15.10		
		1764.49*	15.80	5.62424E-001	2.13896E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	7.83131E-001	2.55131E-001
		969.11*	16.60	7.15945E-001	2.98899E-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	1.970603E+001	1.987739E+000
TL-208	0.470	3.620991E-001	9.306999E-002
Pb-212 @	0.521	9.528842E-001	2.681843E-001
Bi-214	0.693	5.545367E-001	1.307964E-001
Ac-228	0.633	7.548128E-001	1.940521E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.72	1.8513E-001	44.63
6	768.16	3.4240E-002	115.76
7	875.09	2.1892E-002	128.19
10	1171.55	3.4504E-002	81.99

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: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	3.6723E-002
	1332.49	100.00	7.6465E-002		5.3017E-002
Nb-94	702.63	100.00	1.0653E-001	9.80E-002	6.5352E-003
	871.10	100.00	9.7986E-002		1.8827E-002
Ag-108m	79.20	7.10	5.0798E+000	1.23E-001	-8.9875E+000
	433.93	89.90	1.2330E-001		-9.7054E-002
	614.37	90.40	1.4300E-001		-7.0057E-002
	722.95	90.50	1.2659E-001		1.7198E-001
Sb-125	176.33	6.89	2.4161E+000	3.72E-001	1.0405E+000
	427.89	29.33	3.7191E-001		-5.0141E-002
	463.38	10.35	1.0381E+000		1.0856E-001
	600.56	17.80	6.1724E-001		1.7589E-001
	606.64	5.02	2.8577E+000		5.0354E+000
	635.90	11.32	8.6083E-001		-2.9108E-001
Cs-134	563.23	8.38	1.2888E+000	1.23E-001	1.0869E-001
	569.32	15.43	7.1937E-001		-5.6187E-001
	604.70	97.60	1.4272E-001		3.0481E-003
	795.84	85.40	1.2265E-001		9.0215E-002
	801.93	8.73	1.1827E+000		4.5402E-001
Cs-137	661.65	85.12	1.2683E-001	1.27E-001	-1.0356E-002
Eu-152	121.78	28.40	7.3986E-001	3.18E-001	1.0852E-001
	244.69	7.49	1.9727E+000		-2.4409E+000
	344.27	26.50	4.5270E-001		-7.2054E-001
	778.89	12.74	7.5171E-001		-1.5997E+000
	867.32	4.16	2.3679E+000		1.6834E-001
	964.01	14.40	8.8661E-001		-9.4574E-001
	1085.78	10.00	9.9420E-001		-4.3509E-001
	1112.02	13.30	7.8516E-001		7.0281E-002
1407.95	20.70	3.1811E-001	1.5245E-001		
Eu-154	123.07	40.50	5.0872E-001	2.43E-001	-4.0232E-001
	247.94	6.60	2.1646E+000		-4.0573E-002
	591.81	4.83	2.2215E+000		2.3204E-002
	723.30	19.70	5.8162E-001		8.9910E-001
	756.87	4.33	2.2659E+000		1.9036E+000
	873.19	11.50	8.3645E-001		-7.0516E-002
	996.32	10.30	9.5476E-001		-2.2924E-001
	1004.76	17.90	5.2834E-001		-6.0895E-001
	1274.45	35.50	2.4282E-001		-5.9226E-002
	Eu-155	86.54	30.90		1.0415E+000
105.31		20.70	1.1832E+000	4.1145E-001	
Am-241	59.54	35.90	1.2064E+000	1.21E+000	-1.0841E-001
Cm-243	228.19	10.56	1.3699E+000	9.79E-001	-1.7208E-001

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	-1.9445E-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 6/26/2006 1:48:53 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-122-F-

Sample Title: OOL-10-03-122-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 1:38:49 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-10-03-122-F-
 Title: OOL-10-03-122-F-G
 Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	309	291.57	72.79	1.59	4.38E+002	73.39	1.56E+003
m	2	282-	309	300.08	74.92	1.59	8.30E+002	81.14	2.10E+003
	3	332-	343	338.19	84.45	0.47	1.41E+002	104.19	1.06E+003
	4	947-	960	954.34	238.53	0.94	2.30E+002	71.60	4.00E+002
	5	1348-	1358	1353.11	338.25	0.57	6.23E+001	39.69	1.45E+002
	6	1397-	1417	1406.59	351.62	2.26	1.88E+002	60.64	2.12E+002
	7	2032-	2054	2042.31	510.60	1.77	1.50E+002	50.88	1.35E+002
	8	2318-	2340	2331.19	582.83	1.41	2.11E+002	49.33	1.09E+002
	9	2424-	2447	2434.80	608.74	1.74	1.77E+002	49.87	1.17E+002
	10	2901-	2917	2907.99	727.07	0.63	4.11E+001	32.46	7.29E+001
	11	3634-	3657	3643.61	911.02	1.98	1.62E+002	41.11	6.98E+001
	12	3866-	3884	3874.26	968.70	0.87	9.36E+001	32.68	5.44E+001
	13	4473-	4488	4480.08	1120.20	0.93	5.29E+001	26.73	4.41E+001
	14	5830-	5858	5843.10	1461.04	2.31	1.19E+003	72.29	3.75E+001
	15	7052-	7066	7058.63	1765.01	0.67	2.78E+001	18.81	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: 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	2.11064E-001	7.70813E-002
K-40	0.998	1460.81*	10.67	2.06493E+001	2.08792E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	9.77149E-001	3.65671E-001
		583.14*	84.20	3.68183E-001	9.85379E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	5.44021E-001	4.34449E-001
Pb-212	0.521	74.81* @	10.70	1.23329E+001	2.70097E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.78079E-001	2.01256E-001
Bi-214	0.992	609.31*	46.30	5.69308E-001	1.75221E-001
		1120.29*	15.10	6.08731E-001	3.14092E-001
		1764.49*	15.80	3.37597E-001	2.30717E-001
Ac-228	0.998	338.32*	11.40	6.75000E-001	4.43197E-001
		911.07*	27.70	9.58849E-001	2.66948E-001
		969.11*	16.60	9.39809E-001	3.42531E-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	1.315367E-001	7.992387E-002
K-40	0.998	2.064929E+001	2.087915E+000
TL-208	0.750	3.681828E-001	9.780462E-002
Bi-212	1.000	5.440207E-001	4.344488E-001
Pb-212 @	0.521	5.780793E-001	2.012556E-001
Bi-214	0.992	5.050184E-001	1.275221E-001
Ac-228	0.998	9.007098E-001	1.901847E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	7.3016E-001	16.75
3	84.45	2.3559E-001	73.71
6	351.62	3.1295E-001	32.29

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: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	1.0766E-001	8.92E-002	2.9527E-002
	1332.49	100.00	8.9239E-002		4.0012E-002
Nb-94	702.63	100.00	1.0880E-001	9.71E-002	1.6152E-002
	871.10	100.00	9.7070E-002		-3.3576E-003
Ag-108m	79.20	7.10	5.1914E+000	1.24E-001	-7.2395E+000
	433.93	89.90	1.2449E-001		-8.1939E-002
	614.37	90.40	1.4343E-001		3.1078E-002
	722.95	90.50	1.3427E-001		-4.7415E-002
Sb-125	176.33	6.89	2.4252E+000	3.83E-001	-2.3328E+000
	427.89	29.33	3.8342E-001		2.9437E-002
	463.38	10.35	1.1497E+000		7.0637E-001
	600.56	17.80	6.0186E-001		-2.5082E-001
	606.64	5.02	2.8057E+000		5.1094E+000
	635.90	11.32	9.1964E-001		9.1015E-001
Cs-134	563.23	8.38	1.3301E+000	1.30E-001	3.8920E-001
	569.32	15.43	7.2630E-001		-9.4266E-002
	604.70	97.60	1.4126E-001		-5.2466E-002
	795.84	85.40	1.3038E-001		1.3813E-001
	801.93	8.73	1.1570E+000		-1.4750E+000
Cs-137	661.65	85.12	1.2273E-001	1.23E-001	3.9155E-002
Eu-152	121.78	28.40	7.8139E-001	3.81E-001	4.2783E-001
	244.69	7.49	2.0278E+000		-2.6219E+000
	344.27	26.50	4.7894E-001		-2.1254E-001
	778.89	12.74	8.1426E-001		-5.5358E-001
	867.32	4.16	2.4181E+000		-1.2078E+000
	964.01	14.40	8.8830E-001		-1.7856E-001
	1085.78	10.00	9.5268E-001		-5.5297E-001
	1112.02	13.30	7.4227E-001		-1.0979E+000
1407.95	20.70	3.8068E-001	9.9064E-002		
Eu-154	123.07	40.50	5.4096E-001	2.61E-001	-1.4476E-001
	247.94	6.60	2.0740E+000		-2.1861E+000
	591.81	4.83	2.2730E+000		3.6693E-001
	723.30	19.70	6.1230E-001		-1.5019E-001
	756.87	4.33	2.3502E+000		-4.5460E-001
	873.19	11.50	8.5774E-001		-1.3751E-001
	996.32	10.30	9.1929E-001		-2.2043E-001
	1004.76	17.90	5.3964E-001		1.6226E-001
1274.45	35.50	2.6137E-001	-2.7224E-001		
Eu-155	86.54	30.90	1.0633E+000	1.06E+000	2.3667E+000
	105.31	20.70	1.1935E+000		1.0639E+000
Am-241	59.54	35.90	1.2172E+000	1.22E+000	-5.1206E-001
Cm-243	228.19	10.56	1.4531E+000	1.00E+000	4.5651E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0028E+000	1.00E+000	7.9439E-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 6/26/2006 2:04:18 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-123-F-

Sample Title: OOL-10-03-123-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 1:54:26 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-10-03-123-F-
Title: OOL-10-03-123-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 10 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	2.29470E+001	2.26893E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.98220E-001	8.85345E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	6.68257E+000	2.49236E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.80796E-001	2.60242E-001
Bi-214	0.694	609.31*	46.30	5.90049E-001	1.63779E-001
		1120.29	15.10		
		1764.49*	15.80	5.73098E-001	2.38051E-001
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	8.43782E-001	2.50898E-001
		969.11*	16.60	7.55250E-001	3.17155E-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	0.998	2.294704E+001	2.268935E+000
TL-208	0.470	2.982205E-001	8.853453E-002
Pb-212 @	0.521	7.807957E-001	2.602416E-001
Bi-214	0.694	5.846033E-001	1.349296E-001
Ac-228	0.631	8.097036E-001	1.967710E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.49	2.5166E-001	41.44
8	1238.22	5.5767E-002	71.36

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	1.1024E-001	7.99E-002	7.4338E-002
	1332.49	100.00	7.9863E-002		5.9780E-002
Nb-94	702.63	100.00	1.1366E-001	1.01E-001	6.4663E-002
	871.10	100.00	1.0068E-001		-5.2807E-002
Ag-108m	79.20	7.10	5.1515E+000	1.21E-001	-6.2803E+000
	433.93	89.90	1.2469E-001		-2.4849E-002
	614.37	90.40	1.4575E-001		-3.0681E-002
	722.95	90.50	1.2064E-001		5.2004E-002
Sb-125	176.33	6.89	2.4383E+000	3.84E-001	1.8403E+000
	427.89	29.33	3.8402E-001		2.2644E-001
	463.38	10.35	1.0511E+000		4.6825E-001
	600.56	17.80	5.7798E-001		-9.2639E-002
	606.64	5.02	2.8301E+000		5.3624E+000
	635.90	11.32	8.6317E-001		-4.2404E-001
Cs-134	563.23	8.38	1.2516E+000	1.19E-001	7.8838E-002
	569.32	15.43	6.8068E-001		4.0092E-001
	604.70	97.60	1.4326E-001		4.0814E-003
	795.84	85.40	1.1941E-001		-9.9410E-003
	801.93	8.73	1.1439E+000		-1.6265E+000
Cs-137	661.65	85.12	1.2303E-001	1.23E-001	-1.0650E-001
Eu-152	121.78	28.40	7.4803E-001	3.51E-001	5.9162E-004
	244.69	7.49	2.0179E+000		-2.2579E+000
	344.27	26.50	4.7996E-001		-2.0109E-001
	778.89	12.74	7.6327E-001		-1.2219E+000
	867.32	4.16	2.5357E+000		-3.0570E+000
	964.01	14.40	8.8323E-001		1.1749E-001
	1085.78	10.00	9.9420E-001		-9.1998E-001
	1112.02	13.30	7.9972E-001		4.7674E-002
1407.95	20.70	3.5089E-001	-1.2436E-002		
Eu-154	123.07	40.50	5.2141E-001	2.37E-001	-2.4106E-001
	247.94	6.60	2.2033E+000		-1.2302E+000
	591.81	4.83	2.1395E+000		1.2342E+000
	723.30	19.70	5.5808E-001		3.4804E-001
	756.87	4.33	2.3502E+000		-1.1346E+000
	873.19	11.50	8.6559E-001		-9.5197E-002
	996.32	10.30	9.6419E-001		2.2368E-001
	1004.76	17.90	5.1286E-001		-1.0359E-001
1274.45	35.50	2.3671E-001	4.2164E-002		
Eu-155	86.54	30.90	1.0493E+000	1.05E+000	1.6934E+000
	105.31	20.70	1.1668E+000		-7.5114E-001
Am-241	59.54	35.90	1.2212E+000	1.22E+000	-8.1020E-001
Cm-243	228.19	10.56	1.4489E+000	1.01E+000	7.1168E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0074E+000	1.01E+000	-2.3372E-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 6/26/2006 2:20:36 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-124-F-

Sample Title: OOL-10-03-124-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 2:10:33 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-10-03-124-F-
 Title: OOL-10-03-124-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	283-	309	292.07	72.92	1.55	3.78E+002	70.01	1.54E+003
m	2	283-	309	300.54	75.04	1.55	6.84E+002	77.58	2.11E+003
	3	331-	344	339.76	84.85	1.25	1.09E+002	119.08	1.29E+003
	4	946-	962	954.32	238.53	1.45	2.49E+002	79.90	4.50E+002
	5	1400-	1416	1406.46	351.59	0.91	1.48E+002	53.49	1.90E+002
	6	2028-	2052	2040.72	510.20	1.75	1.60E+002	57.45	1.69E+002
	7	2323-	2340	2331.14	582.82	1.50	1.77E+002	42.58	9.08E+001
	8	2425-	2446	2435.72	608.97	1.51	1.66E+002	48.11	1.16E+002
	9	3171-	3183	3177.51	794.47	0.50	2.71E+001	25.08	5.09E+001
	10	3301-	3314	3306.72	826.78	0.39	2.49E+001	19.60	2.71E+001
	11	3632-	3654	3642.73	910.81	1.85	1.57E+002	39.07	6.23E+001
M	12	3848-	3885	3854.28	963.71	2.24	2.93E+001	17.64	5.95E+001
m	13	3848-	3885	3874.79	968.84	2.24	1.05E+002	22.56	7.58E+001
	14	5828-	5859	5843.66	1461.18	2.27	1.37E+003	74.56	1.60E+001
	15	7054-	7067	7060.57	1765.49	0.37	3.01E+001	17.89	1.89E+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	2.24936E-001	8.63500E-002
K-40	0.996	1460.81*	10.67	2.36520E+001	2.30891E+000
TL-208	0.747	277.35	6.80		
		510.84*	21.60	1.04137E+000	4.08715E-001
		583.14*	84.20	3.09309E-001	8.45206E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.01389E+001	2.29587E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.690	238.63*	44.60	6.25496E-001	2.23222E-001
		609.31*	46.30	5.34974E-001	1.68351E-001
		1120.29	15.10		
Ac-228	0.632	1764.49*	15.80	3.65596E-001	2.20158E-001
		338.32	11.40		
		911.07*	27.70	9.26572E-001	2.54428E-001
		969.11*	16.60	1.05056E+000	2.51865E-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	1.581252E-001	8.823198E-002
K-40	0.996	2.365200E+001	2.308906E+000
TL-208	0.747	3.093086E-001	8.391736E-002
Pb-212 @	0.521	6.254958E-001	2.232221E-001
Bi-214	0.690	4.724767E-001	1.337327E-001
Ac-228	0.632	9.891952E-001	1.789948E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	72.92	6.3003E-001	18.52
3	84.85	1.8204E-001	109.02
5	351.59	2.4731E-001	36.05
9	794.47	4.5182E-002	92.53
10	826.78	4.1474E-002	78.78
M 12	963.71	4.8892E-002	60.12

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.1429E-001	8.22E-002	-5.9530E-002
	1332.49	100.00	8.2198E-002		3.5059E-002
Nb-94	702.63	100.00	1.0473E-001	9.74E-002	4.1458E-002
	871.10	100.00	9.7376E-002		-7.6787E-004
Ag-108m	79.20	7.10	5.1996E+000	1.21E-001	-3.3822E+000
	433.93	89.90	1.2149E-001		-4.2378E-002
	614.37	90.40	1.4617E-001		-3.4379E-002
	722.95	90.50	1.2633E-001		2.0529E-002
Sb-125	176.33	6.89	2.4820E+000	3.92E-001	-2.9734E+000
	427.89	29.33	3.9169E-001		1.9810E-001
	463.38	10.35	1.1276E+000		1.0003E+000
	600.56	17.80	6.3223E-001		-5.6421E-001
	606.64	5.02	2.8611E+000		4.5581E+000
	635.90	11.32	9.4551E-001		-1.4927E-001
Cs-134	563.23	8.38	1.3326E+000	1.27E-001	-2.5775E-001
	569.32	15.43	7.1798E-001		-4.7402E-001
	604.70	97.60	1.4577E-001		-7.7979E-003
	795.84	85.40	1.2704E-001		-7.9532E-002
	801.93	8.73	1.2048E+000		-7.1374E-002
Cs-137	661.65	85.12	1.3023E-001	1.30E-001	1.0801E-002
Eu-152	121.78	28.40	7.7030E-001	3.71E-001	1.4060E-001
	244.69	7.49	2.0596E+000		-1.8452E-001
	344.27	26.50	4.8804E-001		-1.6822E-001
	778.89	12.74	7.9031E-001		-8.4508E-002
	867.32	4.16	2.4533E+000		-3.0465E+000
	964.01	14.40	9.4702E-001		1.0169E-001
	1085.78	10.00	9.4913E-001		-2.0917E-001
	1112.02	13.30	8.2804E-001		-1.0081E+000
1407.95	20.70	3.7103E-001	-6.2407E-002		
Eu-154	123.07	40.50	5.3746E-001	2.64E-001	1.9430E-001
	247.94	6.60	2.2486E+000		-7.1547E-001
	591.81	4.83	2.2073E+000		4.7196E-001
	723.30	19.70	5.8524E-001		4.0847E-001
	756.87	4.33	2.5917E+000		1.0604E+000
	873.19	11.50	8.4183E-001		-4.9314E-002
	996.32	10.30	9.0602E-001		2.5602E-001
	1004.76	17.90	5.0494E-001		-1.3123E-001
1274.45	35.50	2.6359E-001	-2.3531E-001		
Eu-155	86.54	30.90	1.0598E+000	1.06E+000	-4.5179E-001
	105.31	20.70	1.1891E+000		5.5188E-001
Am-241	59.54	35.90	1.2473E+000	1.25E+000	5.7007E-003
Cm-243	228.19	10.56	1.4100E+000	9.90E-001	-1.9894E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.8959E-001	9.90E-001	-6.3787E-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 6/26/2006 10:55:34 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-125-F-

Sample Title: OOL-10-03-125-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 10:45:31 PM

Live Time: 600.0 seconds

Real Time: 601.0 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-125-F-
Title: OOL-10-03-125-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 10 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.993	1460.81*	10.67	2.05564E+001	2.23744E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.67555E-001	1.05750E-001
		860.37	12.46		
Bi-212	0.998	727.17*	11.80	6.20391E-001	4.12076E-001
Pb-212	0.576	74.81* @	10.70	3.91484E+000	3.71386E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.27965E-001	2.51361E-001
Bi-214	0.692	609.31*	46.30	5.16570E-001	1.52435E-001
		1120.29	15.10		
		1764.49*	15.80	6.46751E-001	2.95427E-001
Ac-228	0.622	338.32	11.40		
		911.07*	27.70	1.31918E+000	3.05550E-001
		969.11*	16.60	1.09842E+000	4.12893E-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	0.993	2.055643E+001	2.237439E+000
TL-208	0.468	3.675554E-001	1.057504E-001
Bi-212	0.998	6.203913E-001	4.120760E-001
Pb-212 @	0.576	7.279647E-001	2.513607E-001
Bi-214	0.692	5.439413E-001	1.354649E-001
Ac-228	0.622	1.241065E+000	2.456112E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.87	1.9500E-001	39.72

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: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	1.1837E-001	9.57E-002	6.2723E-002
	1332.49	100.00	9.5677E-002		-1.1148E-002
Nb-94	702.63	100.00	1.2670E-001	1.17E-001	4.1417E-002
	871.10	100.00	1.1730E-001		3.9076E-002
Ag-108m	79.20	7.10	1.0745E+001	1.40E-001	-5.7522E+000
	433.93	89.90	1.4891E-001		-9.6141E-002
	614.37	90.40	1.5057E-001		-5.6410E-002
	722.95	90.50	1.4046E-001		-6.5790E-002
Sb-125	176.33	6.89	2.9597E+000	4.72E-001	1.7633E+000
	427.89	29.33	4.7158E-001		-1.3575E-002
	463.38	10.35	1.3680E+000		9.3449E-001
	600.56	17.80	7.0042E-001		1.7341E-001
	606.64	5.02	3.2126E+000		3.2654E+000
	635.90	11.32	1.0695E+000		-8.1884E-001
Cs-134	563.23	8.38	1.5556E+000	1.37E-001	-1.7664E-001
	569.32	15.43	8.5603E-001		6.0389E-001
	604.70	97.60	1.6503E-001		-3.4430E-002
	795.84	85.40	1.3666E-001		-5.3207E-002
	801.93	8.73	1.3981E+000		3.4104E-001
Cs-137	661.65	85.12	1.4449E-001	1.44E-001	1.1021E-001
Eu-152	121.78	28.40	1.0619E+000	3.93E-001	5.3727E-001
	244.69	7.49	2.4364E+000		-2.5264E+000
	344.27	26.50	5.2593E-001		-6.9445E-001
	778.89	12.74	9.4911E-001		-5.0745E-002
	867.32	4.16	2.8272E+000		-1.2431E+000
	964.01	14.40	1.0861E+000		-8.3239E-001
	1085.78	10.00	1.1526E+000		-1.2304E-001
	1112.02	13.30	8.6434E-001		-9.6332E-001
1407.95	20.70	3.9293E-001	-4.1899E-003		
Eu-154	123.07	40.50	7.3372E-001	3.12E-001	-2.5306E-001
	247.94	6.60	2.6035E+000		-7.3911E-001
	591.81	4.83	2.3361E+000		-7.5240E-001
	723.30	19.70	6.4351E-001		6.2631E-002
	756.87	4.33	2.8284E+000		-9.0708E-001
	873.19	11.50	9.7948E-001		-8.4559E-001
	996.32	10.30	1.0596E+000		2.0264E-001
	1004.76	17.90	5.7177E-001		-1.1437E-002
1274.45	35.50	3.1191E-001	2.4260E-001		
Eu-155	86.54	30.90	1.9305E+000	1.93E+000	4.9720E-001
	105.31	20.70	2.0081E+000		1.4152E+000
Am-241	59.54	35.90	3.3746E+000	3.37E+000	-5.5029E-001
Cm-243	228.19	10.56	1.7605E+000	1.15E+000	7.1071E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1468E+000	1.15E+000	-1.1480E-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 6/26/2006 10:41:05 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-126-F-

Sample Title: OOL-10-03-126-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 10:31:02 PM

Live Time: 600.0 seconds

Real Time: 601.0 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-126-F-
Title: OOL-10-03-126-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	297-	306	300.53	75.16	0.54	1.18E+002	100.34	1.09E+003
2	948-	961	954.64	238.70	1.10	2.35E+002	65.44	3.19E+002
3	1399-	1414	1407.83	352.01	1.17	9.32E+001	47.89	1.68E+002
4	2034-	2053	2042.57	510.71	0.72	1.06E+002	47.96	1.40E+002
5	2322-	2338	2330.92	582.80	1.28	1.49E+002	41.33	9.44E+001
6	2427-	2443	2435.73	609.01	1.66	1.41E+002	38.29	7.64E+001
7	2901-	2912	2906.65	726.75	0.81	3.18E+001	22.42	3.92E+001
8	3633-	3653	3642.00	910.60	0.83	1.20E+002	36.62	6.30E+001
9	3864-	3883	3872.02	968.11	0.81	5.22E+001	32.74	6.48E+001
10	5828-	5855	5841.07	1460.42	2.17	7.94E+002	59.54	2.96E+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: 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	0.997	511.00*	100.00	1.87849E-001	8.87270E-002
K-40	0.995	1460.81*	10.67	1.83461E+001	2.02409E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	8.69672E-001	4.16868E-001
		583.14*	84.20	3.29470E-001	1.01193E-001
		860.37	12.46		
Bi-212	0.994	727.17*	11.80	5.39230E-001	3.85792E-001
Pb-212	0.576	74.81* @	10.70	3.66344E+000	3.19460E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.25878E-001	2.32007E-001
Bi-214	0.405	609.31*	46.30	5.76701E-001	1.72425E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.614	338.32	11.40		
		911.07*	27.70	9.10416E-001	2.96974E-001
		969.11*	16.60	6.70377E-001	4.26413E-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	0.997	1.166837E-001	9.135019E-002
K-40	0.995	1.834608E+001	2.024091E+000
TL-208	0.749	3.294699E-001	1.006213E-001
Bi-212	0.994	5.392295E-001	3.857922E-001
Pb-212 @	0.576	7.258777E-001	2.320072E-001
Bi-214	0.405	5.767011E-001	1.724247E-001
Ac-228	0.614	8.320152E-001	2.436964E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	352.01	1.5526E-001	51.41

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: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	1.1643E-001	8.79E-002	6.3689E-002
	1332.49	100.00	8.7898E-002		-2.0668E-002
Nb-94	702.63	100.00	1.2055E-001	1.17E-001	-1.0588E-001
	871.10	100.00	1.1730E-001		1.0783E-001
Ag-108m	79.20	7.10	1.0226E+001	1.43E-001	-2.1892E+000
	433.93	89.90	1.4261E-001		-1.0740E-003
	614.37	90.40	1.5802E-001		-1.4253E-001
	722.95	90.50	1.4357E-001		5.0197E-002
Sb-125	176.33	6.89	2.9045E+000	4.39E-001	-1.3609E+000
	427.89	29.33	4.3877E-001		-9.6146E-002
	463.38	10.35	1.3205E+000		5.9101E-001
	600.56	17.80	6.8015E-001		1.1044E-001
	606.64	5.02	3.2225E+000		4.8465E+000
	635.90	11.32	1.0848E+000		-1.4099E-001
Cs-134	563.23	8.38	1.4430E+000	1.41E-001	-1.5959E+000
	569.32	15.43	8.4462E-001		4.5359E-001
	604.70	97.60	1.5798E-001		-5.2990E-002
	795.84	85.40	1.4086E-001		1.4831E-001
	801.93	8.73	1.2671E+000		-2.6649E-001
Cs-137	661.65	85.12	1.5139E-001	1.51E-001	-3.1820E-002
Eu-152	121.78	28.40	1.0317E+000	4.61E-001	-3.9630E-002
	244.69	7.49	2.4066E+000		7.4696E-001
	344.27	26.50	5.7097E-001		-3.6572E-001
	778.89	12.74	9.7902E-001		-5.2577E-001
	867.32	4.16	2.8070E+000		-4.1347E-001
	964.01	14.40	9.9374E-001		5.4042E-001
	1085.78	10.00	1.1090E+000		-4.8683E-002
	1112.02	13.30	8.8934E-001		-6.3405E-001
1407.95	20.70	4.6050E-001	-2.1843E-001		
Eu-154	123.07	40.50	7.2084E-001	2.92E-001	3.0352E-001
	247.94	6.60	2.5654E+000		-8.7236E-001
	591.81	4.83	2.4852E+000		-1.6201E+000
	723.30	19.70	6.5784E-001		3.2241E-001
	756.87	4.33	2.7035E+000		-2.4747E-001
	873.19	11.50	1.0564E+000		6.5991E-001
	996.32	10.30	1.0919E+000		5.1196E-002
	1004.76	17.90	6.1899E-001		4.3866E-001
1274.45	35.50	2.9249E-001	7.9550E-002		
Eu-155	86.54	30.90	1.9266E+000	1.93E+000	4.2947E-001
	105.31	20.70	1.9674E+000		-1.1024E+000
Am-241	59.54	35.90	3.2331E+000	3.23E+000	-5.4995E+000
Cm-243	228.19	10.56	1.7470E+000	1.11E+000	4.2623E-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	-5.9444E-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 6/26/2006 9:50:27 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-10-03-127-F-

Sample Title: OOL-10-03-127-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 9:40:25 PM

Live Time: 600.0 seconds

Real Time: 601.8 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-10-03-127-F-
Title: OOL-10-03-127-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 13 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	3.35177E-001	8.71547E-002
K-40	0.999	1460.81*	10.67	2.03220E+001	2.05678E+000
TL-208	0.897	277.35	6.80		
		510.84*	21.60	1.55175E+000	4.22927E-001
		583.14*	84.20	3.46225E-001	9.76343E-002
		860.37*	12.46	5.56859E-001	3.40929E-001
Pb-212	0.520	74.81* @	10.70	1.22880E+001	3.54902E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.992	238.63*	44.60	8.27163E-001	2.78397E-001
		609.31*	46.30	7.77230E-001	1.84394E-001
		1120.29*	15.10	5.41802E-001	3.29295E-001
		1764.49*	15.80	9.39730E-001	2.60834E-001
PB-214	0.580	74.82* @	6.21	2.11725E+001	6.30525E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.38544E-001	3.06170E-001
Ac-228	0.630	351.92*	37.20	6.13577E-001	2.39711E-001
		338.32	11.40		
		911.07*	27.70	1.30094E+000	2.85149E-001
		969.11*	16.60	9.54175E-001	3.68995E-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	2.569774E-001	8.945286E-002
K-40	0.999	2.032196E+001	2.056779E+000
TL-208	0.897	3.620354E-001	9.326939E-002
Pb-212 @	0.520	8.271634E-001	2.783969E-001
Bi-214	0.992	7.813054E-001	1.369332E-001
PB-214 @	0.580	5.090560E-001	1.887437E-001
Ac-228	0.630	1.171285E+000	2.256294E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.0162E-001	7.75E-002	-8.8150E-002
	1332.49	100.00	7.7452E-002		5.0703E-003
Nb-94	702.63	100.00	1.1247E-001	9.86E-002	9.2350E-002
	871.10	100.00	9.8592E-002		-3.6095E-002
Ag-108m	79.20	7.10	5.4603E+000	1.30E-001	-9.3298E+000
	433.93	89.90	1.2971E-001		-1.0631E-001
	614.37	90.40	1.4763E-001		-3.1131E-002
	722.95	90.50	1.3327E-001		8.7687E-002
Sb-125	176.33	6.89	2.5596E+000	4.19E-001	-2.4913E-002
	427.89	29.33	4.1929E-001		-5.8869E-002
	463.38	10.35	1.2135E+000		7.7249E-001
	600.56	17.80	5.9925E-001		-1.1892E-001
	606.64	5.02	3.0079E+000		7.5805E+000
	635.90	11.32	9.5186E-001		-4.8377E-002
Cs-134	563.23	8.38	1.4064E+000	1.33E-001	2.2781E-001
	569.32	15.43	7.6783E-001		1.3069E-001
	604.70	97.60	1.5371E-001		-1.7837E-002
	795.84	85.40	1.3306E-001		1.1033E-001
	801.93	8.73	1.1239E+000		-2.5410E+000
Cs-137	661.65	85.12	1.3544E-001	1.35E-001	7.6350E-002
Eu-152	121.78	28.40	7.8837E-001	3.69E-001	1.7537E-001
	244.69	7.49	2.0241E+000		-1.0937E+000
	344.27	26.50	4.8553E-001		-3.0181E-001
	778.89	12.74	8.4785E-001		-3.3352E-001
	867.32	4.16	2.4811E+000		-2.5204E+000
	964.01	14.40	9.0501E-001		1.2160E-001
	1085.78	10.00	8.7114E-001		-7.3168E-001
	1112.02	13.30	8.0212E-001		-7.4705E-001
1407.95	20.70	3.6858E-001	-1.3058E-001		
Eu-154	123.07	40.50	5.5106E-001	2.82E-001	2.8126E-001
	247.94	6.60	2.2341E+000		-3.5921E-001
	591.81	4.83	2.2025E+000		-3.3945E-001
	723.30	19.70	6.1115E-001		4.1389E-001
	756.87	4.33	2.3818E+000		6.0201E-001
	873.19	11.50	8.8105E-001		-3.6982E-001
	996.32	10.30	9.7971E-001		3.9959E-001
	1004.76	17.90	5.5614E-001		8.2666E-002
1274.45	35.50	2.8173E-001	2.7272E-001		
Eu-155	86.54	30.90	1.1185E+000	1.12E+000	2.3497E+000
	105.31	20.70	1.2512E+000		5.5718E-001
Am-241	59.54	35.90	1.3118E+000	1.31E+000	2.2781E-001
Cm-243	228.19	10.56	1.4581E+000	1.06E+000	-4.5701E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0603E+000	1.06E+000	4.3329E-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 6/26/2006 9:10:42 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-128-F-

Sample Title: OOL-10-03-128-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 9:00:40 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-10-03-128-F-
 Title: OOL-10-03-128-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	282-	309	292.07	72.92	1.44	4.11E+002	68.07	1.56E+003
m	2	282-	309	300.30	74.98	1.44	6.69E+002	75.75	1.92E+003
	3	332-	346	340.55	85.04	0.52	2.57E+002	124.39	1.30E+003
	4	944-	963	954.54	238.58	1.35	3.48E+002	88.26	4.79E+002
	5	1346-	1359	1351.76	337.91	0.84	9.64E+001	49.65	1.94E+002
	6	1397-	1415	1406.48	351.60	0.83	1.16E+002	61.41	2.56E+002
	7	2320-	2340	2330.72	582.72	1.78	2.06E+002	48.23	1.10E+002
	8	2424-	2444	2435.60	608.94	1.73	1.75E+002	41.88	7.75E+001
	9	2899-	2915	2908.27	727.14	0.62	5.80E+001	32.07	6.50E+001
	10	3630-	3653	3643.71	911.05	0.60	1.91E+002	41.75	6.57E+001
M	11	3852-	3883	3857.72	964.57	1.48	2.15E+001	15.95	5.47E+001
m	12	3852-	3883	3874.49	968.76	1.48	8.52E+001	22.04	5.66E+001
	13	5828-	5857	5843.02	1461.03	2.29	1.15E+003	71.92	4.10E+001
	14	7054-	7069	7060.82	1765.55	1.31	5.29E+001	17.89	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: 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	0.999	1460.81*	10.67	1.99313E+001	2.03769E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.59040E-001	9.62836E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	7.67531E-001	4.34032E-001
Pb-212	0.521	74.81* @	10.70	9.92389E+000	2.24643E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.689	238.63*	44.60	8.72312E-001	2.60324E-001
		609.31*	46.30	5.64963E-001	1.51757E-001
		1120.29	15.10		
Ac-228	0.998	1764.49*	15.80	6.42181E-001	2.26359E-001
		338.32*	11.40	1.04518E+000	5.62606E-001
		911.07*	27.70	1.13136E+000	2.79073E-001
		969.11*	16.60	8.55831E-001	2.38791E-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	0.999	1.993135E+001	2.037686E+000
TL-208	0.467	3.590404E-001	9.628357E-002
Bi-212	1.000	7.675308E-001	4.340321E-001
Pb-212 @	0.521	8.723118E-001	2.603240E-001
Bi-214	0.689	5.889077E-001	1.260505E-001
Ac-228	0.998	9.791603E-001	1.726793E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	72.92	6.8463E-001	16.57
3	85.04	4.2831E-001	48.40
6	351.60	1.9288E-001	53.06
M 11	964.57	3.5767E-002	74.33

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	1.0864E-001	7.99E-002	7.7092E-002
	1332.49	100.00	7.9863E-002		-1.2304E-002
Nb-94	702.63	100.00	9.7474E-002	9.75E-002	1.3344E-002
	871.10	100.00	9.8290E-002		6.5661E-002
Ag-108m	79.20	7.10	5.2944E+000	1.30E-001	-5.1467E+000
	433.93	89.90	1.2990E-001		-3.0711E-002
	614.37	90.40	1.4236E-001		-5.3028E-002
	722.95	90.50	1.3227E-001		-2.7653E-002
Sb-125	176.33	6.89	2.4592E+000	3.95E-001	8.4852E-001
	427.89	29.33	3.9459E-001		1.9071E-001
	463.38	10.35	1.1086E+000		-1.3333E-002
	600.56	17.80	6.0315E-001		9.1713E-002
	606.64	5.02	2.7313E+000		4.4588E+000
	635.90	11.32	8.7477E-001		-2.0176E-001
Cs-134	563.23	8.38	1.3452E+000	1.29E-001	-3.8090E-002
	569.32	15.43	7.2354E-001		-4.1989E-001
	604.70	97.60	1.3885E-001		-5.4862E-002
	795.84	85.40	1.2888E-001		1.5502E-001
	801.93	8.73	1.1827E+000		4.7335E-002
Cs-137	661.65	85.12	1.2123E-001	1.21E-001	5.3531E-002
Eu-152	121.78	28.40	7.5690E-001	3.97E-001	-2.3977E-001
	244.69	7.49	2.0584E+000		-1.9938E-001
	344.27	26.50	4.9351E-001		-3.7579E-001
	778.89	12.74	8.0564E-001		-9.1298E-001
	867.32	4.16	2.3091E+000		-3.6695E+000
	964.01	14.40	9.1324E-001		-1.2521E-001
	1085.78	10.00	9.5973E-001		1.1433E-001
	1112.02	13.30	7.2116E-001		-1.0630E+000
1407.95	20.70	3.9695E-001	5.3795E-001		
Eu-154	123.07	40.50	5.2571E-001	2.46E-001	-2.9586E-001
	247.94	6.60	2.1541E+000		-2.0659E+000
	591.81	4.83	2.1688E+000		-9.9377E-001
	723.30	19.70	6.0420E-001		-1.5023E-001
	756.87	4.33	2.1988E+000		8.8863E-001
	873.19	11.50	8.3914E-001		-7.7568E-001
	996.32	10.30	8.7542E-001		-4.2181E-001
	1004.76	17.90	4.8033E-001		2.7416E-002
1274.45	35.50	2.4641E-001	8.8427E-003		
Eu-155	86.54	30.90	1.0696E+000	1.07E+000	2.0516E+000
	105.31	20.70	1.1930E+000		5.0250E-001
Am-241	59.54	35.90	1.2285E+000	1.23E+000	-5.7325E-001
Cm-243	228.19	10.56	1.4473E+000	1.03E+000	-6.7123E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0278E+000	1.03E+000	6.2810E-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 6/26/2006 8:52:02 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-10-03-129-F-

Sample Title: OOL-10-03-129-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 8:41:54 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-10-03-129-F-
Title: OOL-10-03-129-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	291-	309	300.73	75.08	1.36	8.34E+002	169.24	1.96E+003
2	944-	962	954.56	238.58	1.10	3.06E+002	89.07	5.20E+002
3	1172-	1188	1179.92	294.94	1.13	6.01E+001	59.73	2.77E+002
4	1345-	1356	1351.76	337.91	0.39	3.73E+001	43.88	1.85E+002
5	1395-	1417	1406.35	351.56	1.23	1.80E+002	58.59	1.82E+002
6	2033-	2052	2042.12	510.55	2.08	1.74E+002	46.17	1.09E+002
7	2321-	2342	2331.00	582.79	1.42	2.09E+002	51.94	1.32E+002
8	2427-	2447	2435.24	608.85	0.56	1.80E+002	48.59	1.18E+002
9	2899-	2914	2908.43	727.18	1.00	5.43E+001	31.33	6.47E+001
10	3633-	3654	3642.48	910.74	1.83	1.72E+002	40.80	6.90E+001
11	3866-	3884	3873.87	968.61	1.50	9.20E+001	33.82	6.10E+001
12	5829-	5857	5843.00	1461.02	2.31	1.22E+003	71.21	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: 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	2.44928E-001	7.29388E-002
K-40	0.999	1460.81*	10.67	2.10951E+001	2.10591E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	1.13393E+000	3.50147E-001
		583.14*	84.20	3.65117E-001	1.02361E-001
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	7.19159E-001	4.23372E-001
Pb-212	0.521	74.81* @	10.70	1.23532E+001	3.48449E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.394	238.63*	44.60	7.67565E-001	2.53881E-001
		609.31*	46.30	5.78123E-001	1.71918E-001
		1120.29	15.10		
PB-214	0.580	1764.49	15.80		
		74.82* @	6.21	2.12849E+001	6.19951E+000
		77.11 @	10.50		
		87.30 @	4.67		
Ac-228	0.995	241.98	7.49		
		295.21*	19.20	3.72412E-001	3.75108E-001
		351.92*	37.20	6.03372E-001	2.21146E-001
		338.32*	11.40	4.04726E-001	4.79873E-001
		911.07*	27.70	1.01682E+000	2.68134E-001
		969.11*	16.60	9.23866E-001	3.53062E-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	0.994	1.660630E-001	7.617294E-002
K-40	0.999	2.109514E+001	2.105906E+000
TL-208	0.749	3.651174E-001	1.016667E-001
Bi-212	1.000	7.191593E-001	4.233715E-001
Pb-212 @	0.521	7.675647E-001	2.538809E-001
Bi-214	0.394	5.781233E-001	1.719177E-001
PB-214 @	0.580	5.438022E-001	1.905034E-001
Ac-228	0.995	8.872681E-001	1.950916E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.0536E-001	7.89E-002	3.8275E-002
	1332.49	100.00	7.8908E-002		-6.5323E-004
Nb-94	702.63	100.00	1.0551E-001	9.92E-002	-3.2158E-002
	871.10	100.00	9.9194E-002		4.0270E-003
Ag-108m	79.20	7.10	5.2847E+000	1.26E-001	-9.1291E+000
	433.93	89.90	1.2781E-001		-6.2460E-002
	614.37	90.40	1.4763E-001		9.8190E-003
	722.95	90.50	1.2606E-001		-9.4619E-002
Sb-125	176.33	6.89	2.4652E+000	3.92E-001	5.6165E-001
	427.89	29.33	3.9227E-001		-4.9477E-002
	463.38	10.35	1.1548E+000		1.9608E-001
	600.56	17.80	5.9795E-001		-8.0250E-001
	606.64	5.02	2.8577E+000		5.8074E+000
	635.90	11.32	9.8502E-001		1.1290E+000
Cs-134	563.23	8.38	1.3199E+000	1.25E-001	-1.3394E+000
	569.32	15.43	7.3453E-001		-3.0712E-001
	604.70	97.60	1.4344E-001		-6.0174E-002
	795.84	85.40	1.2487E-001		4.7047E-002
Cs-137	801.93	8.73	1.0898E+000	1.27E-001	-1.4971E+000
	661.65	85.12	1.2654E-001		-1.1888E-001
Eu-152	121.78	28.40	7.6972E-001	3.61E-001	1.4724E-001
	244.69	7.49	2.0645E+000		-2.3681E+000
	344.27	26.50	4.8047E-001		-3.0444E-001
	778.89	12.74	7.8364E-001		-4.3416E-002
	867.32	4.16	2.4603E+000		-2.9640E+000
	964.01	14.40	8.8830E-001		5.0011E-001
	1085.78	10.00	9.8399E-001		5.3361E-001
	1112.02	13.30	7.5002E-001		-1.6692E+000
1407.95	20.70	3.6111E-001	-3.9805E-002		
Eu-154	123.07	40.50	5.3651E-001	2.61E-001	2.1019E-001
	247.94	6.60	2.2077E+000		-8.6726E-001
	591.81	4.83	2.3900E+000		1.0206E+000
	723.30	19.70	5.7797E-001		-2.6821E-001
	756.87	4.33	2.4920E+000		-1.0395E+000
	873.19	11.50	8.8105E-001		2.5740E-001
	996.32	10.30	9.6106E-001		7.1545E-001
	1004.76	17.90	5.5070E-001		1.0500E-001
1274.45	35.50	2.6137E-001	5.0530E-003		
Eu-155	86.54	30.90	1.0720E+000	1.07E+000	1.4168E+000
	105.31	20.70	1.1974E+000		-3.6853E-001
Am-241	59.54	35.90	1.2364E+000	1.24E+000	-5.5598E-001
Cm-243	228.19	10.56	1.4397E+000	1.01E+000	6.8897E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0150E+000	1.01E+000	5.6386E-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 6/26/2006 8:32:11 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-10-03-130-F-

Sample Title: OOL-10-03-130-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 8:22:09 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-10-03-130-F-
Title: OOL-10-03-130-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	295-	309	300.60	75.05	1.22	3.83E+002	144.14	1.73E+003
2	331-	344	338.67	84.57	1.17	2.32E+002	114.81	1.16E+003
3	943-	963	953.97	238.44	0.66	2.60E+002	96.68	5.99E+002
4	1174-	1189	1180.95	295.20	1.14	9.39E+001	53.53	2.17E+002
5	1345-	1362	1352.50	338.10	1.37	8.14E+001	53.15	2.01E+002
6	1395-	1417	1407.12	351.76	0.35	1.65E+002	61.66	2.13E+002
7	2031-	2050	2040.51	510.14	1.47	1.41E+002	50.23	1.47E+002
8	2320-	2343	2330.72	582.72	1.12	2.19E+002	54.76	1.40E+002
9	2426-	2446	2435.25	608.85	1.72	1.61E+002	46.38	1.10E+002
10	3632-	3655	3642.72	910.80	1.86	2.33E+002	40.77	5.02E+001
11	3868-	3884	3875.33	968.97	1.83	8.49E+001	32.37	6.00E+001
12	5829-	5858	5842.88	1460.99	2.10	1.14E+003	68.06	1.45E+001
13	7052-	7066	7058.49	1764.97	0.33	4.60E+001	17.89	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: 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	0.977	511.00*	100.00	1.97605E-001	7.55503E-002
K-40	0.999	1460.81*	10.67	1.96983E+001	1.98240E+000
TL-208	0.745	277.35	6.80		
		510.84*	21.60	9.14839E-001	3.57660E-001
		583.14*	84.20	3.81413E-001	1.07699E-001
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	5.67872E+000	2.40813E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.693	238.63*	44.60	6.53010E-001	2.63328E-001
		609.31*	46.30	5.17661E-001	1.62379E-001
		1120.29	15.10		
PB-214	0.582	1764.49*	15.80	5.57977E-001	2.24137E-001
		74.82* @	6.21	9.78459E+000	4.20964E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
Ac-228	0.998	295.21*	19.20	5.81703E-001	3.45714E-001
		351.92*	37.20	5.55208E-001	2.27015E-001
		338.32*	11.40	8.82748E-001	5.92538E-001
		911.07*	27.70	1.37649E+000	2.88472E-001
		969.11*	16.60	8.52934E-001	3.37095E-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	0.977	1.152201E-001	7.900503E-002
K-40	0.999	1.969834E+001	1.982403E+000
TL-208	0.745	3.814129E-001	1.069789E-001
Pb-212 @	0.520	6.530104E-001	2.633285E-001
Bi-214	0.693	5.315375E-001	1.314971E-001
PB-214 @	0.582	5.631908E-001	1.897601E-001
Ac-228	0.998	1.122379E+000	2.055624E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.57	3.8707E-001	49.43

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: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	1.0093E-001	6.80E-002	-9.4872E-002
	1332.49	100.00	6.8015E-002		1.1223E-002
Nb-94	702.63	100.00	1.0779E-001	9.36E-002	2.7833E-002
	871.10	100.00	9.3630E-002		-9.5860E-002
Ag-108m	79.20	7.10	5.2077E+000	1.22E-001	-3.4328E+000
	433.93	89.90	1.3197E-001		6.6955E-002
	614.37	90.40	1.3822E-001		-1.9435E-002
	722.95	90.50	1.2202E-001		2.3262E-002
Sb-125	176.33	6.89	2.4211E+000	4.02E-001	-4.0076E-001
	427.89	29.33	4.0205E-001		-4.8106E-002
	463.38	10.35	1.1293E+000		3.3335E-001
	600.56	17.80	6.1597E-001		-2.5384E-001
	606.64	5.02	2.8508E+000		6.9035E+000
	635.90	11.32	9.2618E-001		2.1132E-001
Cs-134	563.23	8.38	1.2836E+000	1.31E-001	-1.4701E-001
	569.32	15.43	6.8947E-001		3.4415E-001
	604.70	97.60	1.4523E-001		1.1181E-002
	795.84	85.40	1.3128E-001		2.0181E-001
	801.93	8.73	1.1406E+000		-1.2646E+000
Cs-137	661.65	85.12	1.2712E-001	1.27E-001	6.1639E-002
Eu-152	121.78	28.40	7.4863E-001	3.76E-001	1.9511E-001
	244.69	7.49	2.0560E+000		9.4710E-002
	344.27	26.50	4.7433E-001		-3.0115E-002
	778.89	12.74	8.1426E-001		-5.2114E-001
	867.32	4.16	2.2867E+000		-6.8187E+000
	964.01	14.40	9.1815E-001		-3.2086E-002
	1085.78	10.00	9.8741E-001		-1.1045E-001
	1112.02	13.30	7.0763E-001		-1.0265E+000
1407.95	20.70	3.7589E-001	2.0337E-001		
Eu-154	123.07	40.50	5.2197E-001	2.55E-001	7.1394E-002
	247.94	6.60	2.1885E+000		-1.0858E+000
	591.81	4.83	2.2451E+000		6.8561E-001
	723.30	19.70	5.6312E-001		2.5971E-001
	756.87	4.33	2.4005E+000		-7.5285E-001
	873.19	11.50	8.0621E-001		2.0740E-001
	996.32	10.30	8.9256E-001		5.8705E-001
	1004.76	17.90	5.1872E-001		2.3518E-001
1274.45	35.50	2.5458E-001	9.0112E-002		
Eu-155	86.54	30.90	1.0649E+000	1.06E+000	1.9886E-001
	105.31	20.70	1.1921E+000		3.5762E-001
Am-241	59.54	35.90	1.1979E+000	1.20E+000	-3.1368E-001
Cm-243	228.19	10.56	1.4498E+000	1.03E+000	9.4931E-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	-2.3418E-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 6/26/2006 7:34:33 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-131-F-

Sample Title: OOL-10-03-131-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 7:24:32 PM

Live Time: 600.0 seconds

Real Time: 601.4 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-10-03-131-F-
Title: OOL-10-03-131-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	294-	309	300.79	75.10	1.75	3.76E+002	141.66	1.60E+003
2	946-	961	954.68	238.61	1.19	2.48E+002	67.60	3.14E+002
3	1399-	1413	1406.90	351.70	1.23	1.20E+002	46.72	1.56E+002
4	2034-	2053	2041.39	510.36	1.36	1.62E+002	41.53	8.17E+001
5	2319-	2343	2331.34	582.87	1.82	2.37E+002	47.41	8.44E+001
6	2427-	2447	2435.26	608.86	2.18	1.65E+002	44.64	9.77E+001
7	2900-	2913	2905.94	726.56	0.99	2.54E+001	24.10	4.56E+001
8	3632-	3652	3643.10	910.90	0.46	1.44E+002	38.77	6.78E+001
9	3866-	3882	3874.14	968.67	0.60	6.13E+001	30.68	5.87E+001
10	4473-	4486	4480.33	1120.26	0.35	1.85E+001	23.05	4.35E+001
11	5830-	5857	5843.39	1461.12	2.23	9.00E+002	63.33	3.17E+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	2.28255E-001	6.60983E-002
K-40	0.997	1460.81*	10.67	1.55772E+001	1.67063E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	1.05674E+000	3.17947E-001
		583.14*	84.20	4.12872E-001	9.86758E-002
		860.37	12.46		
Bi-212	0.988	727.17*	11.80	3.36522E-001	3.21409E-001
Pb-212	0.521	74.81* @	10.70	5.56693E+000	2.36379E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.23247E-001	1.95790E-001
Bi-214	0.696	609.31*	46.30	5.32276E-001	1.57992E-001
		1120.29*	15.10	2.12811E-001	2.66068E-001
		1764.49	15.80		
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	8.52336E-001	2.49342E-001
		969.11*	16.60	6.15090E-001	3.14680E-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	1.390744E-001	6.938894E-002
K-40	0.997	1.557719E+001	1.670631E+000
TL-208	0.749	4.128725E-001	9.775415E-002
Bi-212	0.988	3.365220E-001	3.214094E-001
Pb-212 @	0.521	6.232474E-001	1.957898E-001
Bi-214	0.696	4.489958E-001	1.358470E-001
Ac-228	0.631	7.608324E-001	1.954292E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.70	2.0052E-001	38.83

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	9.7741E-002	6.80E-002	-3.7972E-002
	1332.49	100.00	6.8015E-002		6.2671E-002
Nb-94	702.63	100.00	1.0077E-001	8.42E-002	4.0722E-002
	871.10	100.00	8.4209E-002		-3.6908E-003
Ag-108m	79.20	7.10	4.9940E+000	1.15E-001	-5.1138E+000
	433.93	89.90	1.1568E-001		-2.9254E-002
	614.37	90.40	1.3440E-001		-2.4291E-002
	722.95	90.50	1.1466E-001		8.7576E-002
Sb-125	176.33	6.89	2.2633E+000	3.58E-001	-1.8509E-001
	427.89	29.33	3.5809E-001		-9.4018E-002
	463.38	10.35	1.0325E+000		3.0420E-002
	600.56	17.80	5.5162E-001		-4.3548E-002
	606.64	5.02	2.7278E+000		6.3670E+000
	635.90	11.32	8.4187E-001		6.0901E-001
Cs-134	563.23	8.38	1.2462E+000	1.11E-001	9.0592E-001
	569.32	15.43	6.8068E-001		-2.5236E-001
	604.70	97.60	1.3583E-001		-2.3241E-002
	795.84	85.40	1.1123E-001		-1.5954E-002
	801.93	8.73	1.0217E+000		-4.8246E-001
Cs-137	661.65	85.12	1.1662E-001	1.17E-001	5.6808E-002
Eu-152	121.78	28.40	7.0430E-001	3.18E-001	-3.2595E-001
	244.69	7.49	1.8317E+000		-1.4736E+000
	344.27	26.50	4.3052E-001		-2.0098E-001
	778.89	12.74	7.7691E-001		-1.5338E-001
	867.32	4.16	2.0564E+000		-3.6956E+000
	964.01	14.40	8.1793E-001		2.7196E-002
	1085.78	10.00	8.5146E-001		-6.3135E-001
	1112.02	13.30	6.7110E-001		2.3484E-001
Eu-154	1407.95	20.70	3.1811E-001	2.34E-001	1.6170E-001
	123.07	40.50	4.9143E-001		-6.3298E-002
	247.94	6.60	1.9989E+000		-2.0743E+000
	591.81	4.83	2.0335E+000		-1.8025E+000
	723.30	19.70	5.2948E-001		5.7431E-001
	756.87	4.33	2.1435E+000		-8.8419E-001
	873.19	11.50	7.5398E-001		5.6179E-001
	996.32	10.30	8.4003E-001		2.4346E-001
Eu-155	1004.76	17.90	4.8243E-001	1.00E+000	-2.9398E-001
	1274.45	35.50	2.3422E-001		-1.1117E-001
	86.54	30.90	1.0028E+000		1.5624E+000
	105.31	20.70	1.1089E+000		-3.3794E-002
Am-241	59.54	35.90	1.2508E+000	1.25E+000	9.2983E-001
Cm-243	228.19	10.56	1.3001E+000	8.96E-001	1.2950E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	8.9617E-001	8.96E-001	-1.6813E-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 6/26/2006 7:12:41 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-132-F-

Sample Title: OOL-10-03-132-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 7:02:40 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-10-03-132-F-
 Title: OOL-10-03-132-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	282-	309	291.39	72.75	1.49	4.00E+002	67.75	1.54E+003
m	2	282-	309	300.24	74.96	1.49	7.68E+002	76.92	2.01E+003
	3	329-	344	338.81	84.61	1.03	2.26E+002	125.33	1.28E+003
	4	946-	960	953.90	238.42	1.43	2.67E+002	72.09	3.77E+002
	5	1400-	1414	1407.47	351.84	1.20	1.27E+002	47.45	1.59E+002
	6	2034-	2054	2042.20	510.57	0.89	1.31E+002	48.51	1.32E+002
	7	2322-	2342	2331.22	582.84	1.42	1.39E+002	52.65	1.61E+002
	8	2425-	2446	2434.37	608.64	1.43	1.80E+002	44.62	9.03E+001
	9	2899-	2914	2906.64	726.73	0.25	3.30E+001	31.30	7.40E+001
	10	3435-	3448	3441.34	860.44	0.45	3.55E+001	24.88	4.55E+001
	11	3630-	3653	3643.07	910.89	1.47	1.89E+002	41.67	6.57E+001
	12	3867-	3885	3874.43	968.75	0.73	9.59E+001	27.46	3.01E+001
	13	4201-	4212	4206.26	1051.73	0.32	1.44E+001	15.65	1.96E+001
	14	5828-	5859	5843.48	1461.14	2.43	1.20E+003	70.62	1.95E+001
	15	7049-	7064	7057.86	1764.82	0.48	2.43E+001	17.14	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: 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	1.84763E-001	7.26809E-002
K-40	0.997	1460.81*	10.67	2.08055E+001	2.08099E+000
TL-208	0.901	277.35	6.80		
		510.84*	21.60	8.55384E-001	3.43660E-001
		583.14*	84.20	2.43369E-001	9.71983E-002
		860.37*	12.46	4.60701E-001	3.27808E-001
Bi-212	0.994	727.17*	11.80	4.37126E-001	4.17483E-001
Pb-212	0.520	74.81* @	10.70	1.13900E+001	2.50735E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.689	238.63*	44.60	6.71132E-001	2.09264E-001
		609.31*	46.30	5.78425E-001	1.60360E-001
		1120.29	15.10		
Ac-228	0.632	1764.49*	15.80	2.95088E-001	2.10046E-001
		338.32	11.40		
		911.07*	27.70	1.11906E+000	2.77993E-001
		969.11*	16.60	9.63061E-001	2.93636E-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	0.994	1.284174E-001	7.539975E-002
K-40	0.997	2.080554E+001	2.080988E+000
TL-208	0.901	2.608596E-001	9.289433E-002
Bi-212	0.994	4.371257E-001	4.174826E-001
Pb-212 @	0.520	6.711321E-001	2.092640E-001
Bi-214	0.689	4.740909E-001	1.274603E-001
Ac-228	0.632	1.045325E+000	2.018745E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	6.6690E-001	16.93
3	84.61	3.7726E-001	55.37
5	351.84	2.1087E-001	37.50
13	1051.73	2.3995E-002	108.73

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: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	9.5922E-002	7.70E-002	-2.4356E-002
	1332.49	100.00	7.6960E-002		1.7337E-002
Nb-94	702.63	100.00	9.9408E-002	9.94E-002	-3.0641E-002
	871.10	100.00	1.0273E-001		8.9764E-002
Ag-108m	79.20	7.10	5.0780E+000	1.24E-001	-3.7772E+000
	433.93	89.90	1.2723E-001		4.0417E-002
	614.37	90.40	1.3621E-001		-4.4206E-002
	722.95	90.50	1.2365E-001		6.7633E-002
Sb-125	176.33	6.89	2.4242E+000	3.92E-001	-1.1603E+000
	427.89	29.33	3.9227E-001		-6.5914E-003
	463.38	10.35	1.0927E+000		7.1063E-002
	600.56	17.80	5.3866E-001		-7.3648E-002
	606.64	5.02	2.6806E+000		5.2012E+000
	635.90	11.32	8.6317E-001		-4.9099E-001
Cs-134	563.23	8.38	1.2543E+000	1.26E-001	8.4763E-001
	569.32	15.43	6.5816E-001		-6.3044E-002
	604.70	97.60	1.3430E-001		-3.4220E-002
	795.84	85.40	1.2642E-001		3.4697E-002
	801.93	8.73	1.1406E+000		-1.8494E+000
Cs-137	661.65	85.12	1.2567E-001	1.26E-001	3.0719E-002
Eu-152	121.78	28.40	7.5218E-001	3.48E-001	3.7522E-001
	244.69	7.49	2.1100E+000		-1.0749E+000
	344.27	26.50	4.6126E-001		-5.5444E-001
	778.89	12.74	7.7240E-001		-3.3231E-001
	867.32	4.16	2.5154E+000		-9.5346E-001
	964.01	14.40	8.6087E-001		8.0077E-002
	1085.78	10.00	9.4200E-001		-2.3875E-001
	1112.02	13.30	7.0489E-001		-3.6895E-001
1407.95	20.70	3.4829E-001	1.9869E-001		
Eu-154	123.07	40.50	5.1862E-001	2.33E-001	-1.0179E-001
	247.94	6.60	2.2457E+000		-9.3510E-001
	591.81	4.83	2.1493E+000		-7.2676E-001
	723.30	19.70	5.6812E-001		4.0877E-001
	756.87	4.33	2.2856E+000		-8.4134E-001
	873.19	11.50	8.7336E-001		-7.5596E-001
	996.32	10.30	9.2910E-001		1.4469E-001
	1004.76	17.90	5.2259E-001		-1.0334E-001
1274.45	35.50	2.3296E-001	-1.8570E-001		
Eu-155	86.54	30.90	1.0469E+000	1.05E+000	2.4304E-002
	105.31	20.70	1.1605E+000		2.4472E-001
Am-241	59.54	35.90	1.2525E+000	1.25E+000	7.3171E-001
Cm-243	228.19	10.56	1.4040E+000	9.93E-001	1.4474E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.9270E-001	9.93E-001	-5.2738E-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 6/27/2006 1:10:19 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-133-F-

Sample Title: OOL-10-03-133-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/27/2006 1:00:15 AM

Live Time: 600.0 seconds

Real Time: 601.9 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-133-F-
Title: OOL-10-03-133-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	950-	963	956.79	239.24	1.22	2.16E+002	73.88	4.37E+002
2	1402-	1418	1407.70	351.97	1.31	9.57E+001	47.44	1.56E+002
3	2038-	2055	2044.09	511.09	1.53	7.63E+001	41.87	1.16E+002
4	2322-	2344	2333.64	583.48	1.15	1.59E+002	44.00	8.90E+001
5	2430-	2446	2438.11	609.60	1.18	1.08E+002	34.44	6.38E+001
6	3635-	3654	3643.55	910.99	0.92	1.06E+002	32.95	5.00E+001
7	3867-	3883	3876.01	969.11	0.99	5.70E+001	27.07	4.20E+001
8	5830-	5855	5842.71	1460.83	2.05	7.12E+002	60.65	5.87E+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	1.000	1460.81*	10.67	1.64518E+001	1.93303E+000
TL-208	0.748	277.35	6.80		
		510.84*	21.60	6.25773E-001	3.57627E-001
		583.14*	84.20	3.52690E-001	1.07869E-001
		860.37	12.46		
Pb-212	0.412	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.66815E-001	2.51166E-001
Bi-214	0.405	609.31*	46.30	4.44334E-001	1.51599E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.628	338.32	11.40		
		911.07*	27.70	8.04282E-001	2.66610E-001
		969.11*	16.60	7.32303E-001	3.56154E-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
X	ANN	1.000		
	K-40	1.000	1.645182E+001	1.933028E+000
	TL-208	0.748	3.754622E-001	1.032731E-001
	Pb-212 @	0.412	6.668147E-001	2.511657E-001
	Bi-214	0.405	4.443338E-001	1.515986E-001
	Ac-228	0.628	7.784324E-001	2.134333E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.97	1.5956E-001	49.56

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: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	1.3280E-001	8.79E-002	6.3321E-002
	1332.49	100.00	8.7898E-002		6.9682E-002
Nb-94	702.63	100.00	1.1561E-001	1.14E-001	-7.9724E-002
	871.10	100.00	1.1432E-001		7.4862E-003
Ag-108m	79.20	7.10	1.1339E+001	1.42E-001	-2.0263E+001
	433.93	89.90	1.4261E-001		3.6405E-002
	614.37	90.40	1.5612E-001		6.5685E-002
	722.95	90.50	1.4202E-001		-1.0676E-002
Sb-125	176.33	6.89	3.7203E+000	4.37E-001	8.1030E-001
	427.89	29.33	4.3714E-001		3.7362E-003
	463.38	10.35	1.2616E+000		1.8114E-001
	600.56	17.80	6.8574E-001		2.4556E-002
	606.64	5.02	3.0335E+000		-5.6999E-001
	635.90	11.32	1.0726E+000		-7.9807E-001
Cs-134	563.23	8.38	1.4278E+000	1.45E-001	4.4628E-001
	569.32	15.43	7.7245E-001		-3.3820E-002
	604.70	97.60	1.4487E-001		-9.3040E-002
	795.84	85.40	1.4847E-001		6.8534E-002
	801.93	8.73	1.3981E+000		-9.3029E-001
Cs-137	661.65	85.12	1.3545E-001	1.35E-001	5.8918E-002
Eu-152	121.78	28.40	1.5719E+000	3.49E-001	-1.2398E+000
	244.69	7.49	2.7575E+000		-1.0193E+000
	344.27	26.50	5.3230E-001		-1.4492E+000
	778.89	12.74	7.8905E-001		-3.5141E-001
	867.32	4.16	2.7867E+000		-5.5517E-001
	964.01	14.40	9.9126E-001		2.5783E-001
	1085.78	10.00	1.1286E+000		4.5468E-001
	1112.02	13.30	7.8428E-001		-4.8100E-001
1407.95	20.70	3.4924E-001	-5.3258E-001		
Eu-154	123.07	40.50	1.0808E+000	3.06E-001	-4.5536E-001
	247.94	6.60	3.0155E+000		9.0321E-002
	591.81	4.83	2.2766E+000		-9.4632E-001
	723.30	19.70	6.4893E-001		-3.6971E-001
	756.87	4.33	2.7488E+000		7.5372E-001
	873.19	11.50	9.5631E-001		2.1352E-001
	996.32	10.30	9.4526E-001		-7.9629E-001
	1004.76	17.90	5.8040E-001		2.5006E-002
1274.45	35.50	3.0558E-001	1.2829E-002		
Eu-155	86.54	30.90	2.5596E+000	2.56E+000	-7.4606E-001
	105.31	20.70	3.5975E+000		-4.9870E-001
Am-241	59.54	35.90	4.4704E+000	4.47E+000	-3.0183E+000
Cm-243	228.19	10.56	1.9423E+000	1.26E+000	-1.8168E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2646E+000	1.26E+000	9.9070E-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 6/26/2006 11:45:33 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-134-F-

Sample Title: OOL-10-03-134-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 11:35:31 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: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-134-F-
Title: OOL-10-03-134-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	944-	961	954.66	238.70	1.51	2.23E+002	69.81	3.21E+002
2	1403-	1413	1407.05	351.81	1.12	9.40E+001	36.91	1.08E+002
3	2318-	2340	2330.56	582.71	0.43	1.41E+002	42.86	8.63E+001
4	2424-	2442	2435.22	608.88	0.81	1.15E+002	37.04	7.19E+001
5	3635-	3653	3642.72	910.78	1.01	1.17E+002	30.20	3.60E+001
6	3869-	3881	3875.72	969.04	0.34	5.06E+001	23.72	3.64E+001
7	4948-	4959	4953.55	1238.52	0.83	2.23E+001	14.84	1.37E+001
8	5829-	5855	5841.69	1460.58	2.26	8.53E+002	59.05	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: 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	1.97042E+001	2.09881E+000
TL-208	0.465	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.11950E-001	1.03343E-001
		860.37	12.46		
Pb-212	0.420	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.403	238.63*	44.60	6.88101E-001	2.41155E-001
		609.31*	46.30	4.72187E-001	1.62722E-001
		1120.29	15.10		
Ac-228	0.627	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	8.87586E-001	2.50897E-001
		969.11*	16.60	6.50613E-001	3.12312E-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	1.970420E+001	2.098809E+000
TL-208	0.465	3.119499E-001	1.033427E-001
Pb-212 @	0.420	6.881013E-001	2.411554E-001
Bi-214	0.403	4.721868E-001	1.627218E-001
Ac-228	0.627	7.946359E-001	1.955974E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.81	1.5658E-001	39.29
7	1238.52	3.7222E-002	66.44

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: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	1.1643E-001	9.70E-002	2.5810E-002
	1332.49	100.00	9.7020E-002		7.1922E-002
Nb-94	702.63	100.00	1.1366E-001	1.01E-001	-4.0675E-002
	871.10	100.00	1.0149E-001		2.0078E-002
Ag-108m	79.20	7.10	7.6264E+000	1.32E-001	-1.6674E+001
	433.93	89.90	1.3343E-001		-2.9871E-002
	614.37	90.40	1.4342E-001		-1.9461E-001
	722.95	90.50	1.3151E-001		4.7669E-002
Sb-125	176.33	6.89	2.6708E+000	4.25E-001	1.1627E+000
	427.89	29.33	4.2474E-001		3.6083E-001
	463.38	10.35	1.2047E+000		-8.0704E-001
	600.56	17.80	6.7639E-001		4.1129E-001
	606.64	5.02	3.0017E+000		4.2398E+000
	635.90	11.32	1.0254E+000		-8.5748E-001
Cs-134	563.23	8.38	1.4840E+000	1.48E-001	1.5970E-001
	569.32	15.43	7.5328E-001		-1.3862E-001
	604.70	97.60	1.5031E-001		9.1810E-003
	795.84	85.40	1.4760E-001		1.4415E-001
	801.93	8.73	1.3436E+000		-1.1586E+000
Cs-137	661.65	85.12	1.4490E-001	1.45E-001	-4.0357E-003
Eu-152	121.78	28.40	8.4258E-001	4.21E-001	1.9130E-001
	244.69	7.49	2.1373E+000		-5.7501E-001
	344.27	26.50	5.0408E-001		-5.5580E-001
	778.89	12.74	8.5619E-001		-3.1763E-001
	867.32	4.16	2.3899E+000		-3.0326E+000
	964.01	14.40	9.6089E-001		-6.4887E-001
	1085.78	10.00	1.0478E+000		-1.0398E+000
	1112.02	13.30	8.4971E-001		-1.7175E+000
	1407.95	20.70	4.2061E-001		1.2830E-001
	Eu-154	123.07	40.50		5.8434E-001
247.94		6.60	2.3608E+000	5.8101E-001	
591.81		4.83	2.4852E+000	-1.4680E+000	
723.30		19.70	6.0227E-001	2.9531E-001	
756.87		4.33	2.4939E+000	-1.2525E+000	
873.19		11.50	8.7868E-001	3.8498E-001	
996.32		10.30	1.0116E+000	2.3450E-001	
1004.76		17.90	6.0002E-001	6.0091E-002	
1274.45	35.50	2.3440E-001	-1.2867E-001		
Eu-155	86.54	30.90	1.3886E+000	1.39E+000	1.9661E+000
	105.31	20.70	1.4803E+000		2.3794E-001
Am-241	59.54	35.90	2.7619E+000	2.76E+000	-3.1096E+000
Cm-243	228.19	10.56	1.5725E+000	1.03E+000	-5.1419E-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	-2.5751E-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 6/26/2006 11:30:47 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-135-F-

Sample Title: OOL-10-03-135-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 11:20:45 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: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-135-F-
Title: OOL-10-03-135-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	295-	308	300.11	75.05	0.72	2.16E+002	102.91	9.18E+002
2	947-	964	954.65	238.70	1.32	2.51E+002	70.89	3.25E+002
3	1402-	1415	1408.18	352.09	1.69	1.14E+002	41.00	1.17E+002
4	2324-	2340	2331.73	583.00	1.22	1.43E+002	38.75	7.75E+001
5	2424-	2446	2436.73	609.25	1.54	1.71E+002	40.50	6.61E+001
6	3632-	3654	3643.63	911.01	0.44	1.44E+002	32.08	3.17E+001
7	3866-	3884	3874.32	968.69	0.87	6.50E+001	29.78	4.80E+001
8	5829-	5855	5842.17	1460.69	2.22	8.36E+002	58.68	1.36E+001
9	7051-	7064	7057.25	1764.49	0.35	2.33E+001	14.36	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: 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	1.000	1460.81*	10.67	1.93180E+001	2.06964E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.18152E-001	9.53968E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	6.71512E+000	3.46597E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.75731E-001	2.50507E-001
Bi-214	0.695	609.31*	46.30	7.01383E-001	1.87308E-001
		1120.29	15.10		
		1764.49*	15.80	3.96226E-001	2.47611E-001
Ac-228	0.626	338.32	11.40		
		911.07*	27.70	1.09457E+000	2.74032E-001
		969.11*	16.60	8.34899E-001	3.92451E-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	1.000	1.931801E+001	2.069640E+000
TL-208	0.469	3.181521E-001	9.539679E-002
Pb-212 @	0.576	7.757315E-001	2.505066E-001
Bi-214	0.695	5.903179E-001	1.493819E-001
Ac-228	0.626	1.009458E+000	2.246791E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	352.09	1.9076E-001	35.82

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: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	1.1396E-001	9.15E-002	-1.0044E-001
	1332.49	100.00	9.1522E-002		5.1494E-002
Nb-94	702.63	100.00	1.2018E-001	9.54E-002	2.3332E-002
	871.10	100.00	9.5427E-002		-6.2119E-002
Ag-108m	79.20	7.10	7.7622E+000	1.38E-001	-4.1076E+000
	433.93	89.90	1.3824E-001		-1.0497E-001
	614.37	90.40	1.5483E-001		5.6320E-003
	722.95	90.50	1.3808E-001		5.6171E-002
Sb-125	176.33	6.89	2.6472E+000	4.22E-001	3.2392E+000
	427.89	29.33	4.2222E-001		3.6762E-001
	463.38	10.35	1.2568E+000		3.5276E-001
	600.56	17.80	6.4355E-001		2.3085E-001
	606.64	5.02	3.2026E+000		2.0476E-001
	635.90	11.32	1.0382E+000		6.5258E-001
Cs-134	563.23	8.38	1.4543E+000	1.37E-001	-1.9115E-001
	569.32	15.43	7.8702E-001		-1.7983E-002
	604.70	97.60	1.5502E-001		-2.6204E-002
	795.84	85.40	1.3666E-001		1.8274E-002
	801.93	8.73	1.2867E+000		2.2210E-001
Cs-137	661.65	85.12	1.4407E-001	1.44E-001	8.3929E-002
Eu-152	121.78	28.40	8.4806E-001	4.09E-001	2.1637E-001
	244.69	7.49	2.1391E+000		-1.1297E+000
	344.27	26.50	5.0557E-001		-4.6091E-001
	778.89	12.74	8.2510E-001		-1.1705E-001
	867.32	4.16	2.6290E+000		-7.9154E-001
	964.01	14.40	1.0327E+000		7.9280E-001
	1085.78	10.00	1.0319E+000		-1.4965E-001
	1112.02	13.30	8.5706E-001		-8.2999E-001
1407.95	20.70	4.0899E-001	9.1812E-002		
Eu-154	123.07	40.50	5.8925E-001	2.82E-001	-5.5369E-002
	247.94	6.60	2.3271E+000		7.2919E-001
	591.81	4.83	2.3434E+000		-8.3492E-001
	723.30	19.70	6.2884E-001		9.7254E-002
	756.87	4.33	2.9057E+000		2.0532E+000
	873.19	11.50	8.0248E-001		-4.9904E-001
	996.32	10.30	1.0454E+000		8.0926E-001
	1004.76	17.90	5.4501E-001		-8.2124E-002
1274.45	35.50	2.8224E-001	1.5922E-001		
Eu-155	86.54	30.90	1.4032E+000	1.40E+000	2.0586E+000
	105.31	20.70	1.4961E+000		2.8510E-001
Am-241	59.54	35.90	2.8026E+000	2.80E+000	2.4387E-001
Cm-243	228.19	10.56	1.5667E+000	1.10E+000	7.2400E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1018E+000	1.10E+000	1.0344E+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 6/26/2006 10:38:14 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: YEL7810

Sample ID: OOL-10-03-136-F-

Sample Title: OOL-10-03-136-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 10:28:12 AM

Live Time: 600.0 seconds

Real Time: 600.6 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-136-F-
Title: OOL-10-03-136-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	944-	963	954.46	238.65	0.79	1.89E+002	72.49	3.36E+002
2	1176-	1189	1180.36	295.13	0.46	6.19E+001	42.86	1.50E+002
3	1348-	1358	1353.15	338.34	0.84	2.80E+001	31.37	9.60E+001
4	2323-	2342	2334.36	583.66	1.99	1.20E+002	37.87	7.23E+001
5	2430-	2447	2437.71	609.50	1.23	1.14E+002	33.58	5.55E+001
6	3635-	3656	3646.39	911.70	1.03	1.18E+002	31.66	3.82E+001
7	5834-	5861	5848.10	1462.18	2.06	6.94E+002	55.04	2.10E+001
8	6369-	6382	6375.67	1594.08	0.52	1.63E+001	8.97	1.65E+000
9	7059-	7072	7065.24	1766.49	0.65	3.54E+001	13.29	3.63E+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	0.935	1460.81*	10.67	1.60370E+001	1.81751E+000
TL-208	0.463	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.65535E-001	9.08411E-002
		860.37	12.46		
Pb-212	0.420	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.666	238.63*	44.60	5.84099E-001	2.41941E-001
		609.31*	46.30	4.66023E-001	1.49304E-001
		1120.29	15.10		
Ac-228	0.535	1764.49*	15.80	6.02359E-001	2.34169E-001
		338.32*	11.40	3.74763E-001	4.24613E-001
		911.07*	27.70	8.93650E-001	2.61286E-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: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	0.935	1.603700E+001	1.817511E+000
TL-208	0.463	2.655354E-001	9.084109E-002
Pb-212 @	0.420	5.840990E-001	2.419413E-001
Bi-214	0.666	5.054279E-001	1.258918E-001
Ac-228	0.535	7.511348E-001	2.225296E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	295.13	1.0325E-001	69.19
8	1594.08	2.7245E-002	54.87

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: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	1.0989E-001	8.25E-002	9.4767E-002
	1332.49	100.00	8.2534E-002		4.4055E-002
Nb-94	702.63	100.00	1.0839E-001	1.01E-001	6.6974E-002
	871.10	100.00	1.0149E-001		3.3892E-002
Ag-108m	79.20	7.10	7.1569E+000	1.27E-001	-2.2533E+001
	433.93	89.90	1.2723E-001		-2.3105E-002
	614.37	90.40	1.4789E-001		-4.6960E-002
	722.95	90.50	1.3109E-001		4.1009E-002
Sb-125	176.33	6.89	2.4232E+000	3.99E-001	-1.5226E+000
	427.89	29.33	3.9875E-001		5.6067E-002
	463.38	10.35	1.1556E+000		6.0060E-001
	600.56	17.80	6.0675E-001		-8.9987E-002
	606.64	5.02	2.8931E+000		-3.9543E-002
	635.90	11.32	9.5528E-001		4.3293E-001
Cs-134	563.23	8.38	1.3572E+000	1.26E-001	7.1254E-001
	569.32	15.43	6.9480E-001		-9.3754E-001
	604.70	97.60	1.3361E-001		-1.5276E-002
	795.84	85.40	1.2575E-001		1.1031E-001
	801.93	8.73	1.1256E+000		-9.4525E-001
Cs-137	661.65	85.12	1.3137E-001	1.31E-001	6.7484E-002
Eu-152	121.78	28.40	8.2870E-001	3.25E-001	2.4160E-001
	244.69	7.49	1.9973E+000		-1.2797E+000
	344.27	26.50	4.8587E-001		-3.2203E-001
	778.89	12.74	8.0005E-001		-2.1692E-001
	867.32	4.16	2.4018E+000		3.6788E-001
	964.01	14.40	8.3380E-001		-4.0494E-001
	1085.78	10.00	1.0211E+000		2.1309E-001
	1112.02	13.30	7.7213E-001		-2.1107E-001
	1407.95	20.70	3.2496E-001		1.0333E-001
Eu-154	123.07	40.50	5.7634E-001	2.32E-001	3.0242E-001
	247.94	6.60	2.2115E+000		8.2840E-001
	591.81	4.83	2.2841E+000		1.6908E+000
	723.30	19.70	6.1571E-001		4.9771E-001
	756.87	4.33	2.5528E+000		1.0066E+000
	873.19	11.50	8.7868E-001		1.6706E-001
	996.32	10.30	1.0262E+000		-3.4315E-001
	1004.76	17.90	5.6005E-001		-3.0045E-003
	1274.45	35.50	2.3226E-001		-2.7188E-001
Eu-155	86.54	30.90	1.3019E+000	1.30E+000	1.8479E+000
	105.31	20.70	1.3633E+000		3.1833E-001
Am-241	59.54	35.90	2.7148E+000	2.71E+000	-2.3753E+000
Cm-243	228.19	10.56	1.4774E+000	9.15E-001	-1.2236E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.1473E-001	9.15E-001	7.2488E-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 6/26/2006 10:10:55 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-10-03-137-F-

Sample Title: OOL-10-03-137-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 10:00:52 AM

Live Time: 600.0 seconds

Real Time: 600.6 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-137-F-
Title: OOL-10-03-137-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	946-	962	955.16	238.83	1.08	2.32E+002	69.86	3.32E+002
2	2032-	2055	2044.26	511.13	1.31	1.35E+002	49.08	1.23E+002
3	2325-	2343	2333.67	583.49	1.39	1.36E+002	37.86	7.04E+001
4	2428-	2448	2438.03	609.58	0.86	1.62E+002	38.16	5.86E+001
5	3639-	3656	3646.54	911.74	1.68	8.00E+001	29.56	4.50E+001
6	3869-	3885	3876.91	969.33	1.32	3.97E+001	25.28	3.93E+001
7	5834-	5861	5847.35	1461.99	1.62	7.72E+002	57.24	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: 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	0.999	511.00*	100.00	2.39346E-001	9.28481E-002
K-40	0.951	1460.81*	10.67	1.78456E+001	1.95872E+000
TL-208	0.748	277.35	6.80		
		510.84*	21.60	1.10808E+000	4.39275E-001
		583.14*	84.20	3.00880E-001	9.26632E-002
		860.37	12.46		
Pb-212	0.419	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.405	238.63*	44.60	7.17519E-001	2.43412E-001
		609.31*	46.30	6.66421E-001	1.76835E-001
		1120.29	15.10		
Ac-228	0.620	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	6.07124E-001	2.34926E-001
		969.11*	16.60	5.09660E-001	3.29182E-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	0.999	1.743559E-001	9.495734E-002
K-40	0.951	1.784557E+001	1.958722E+000
TL-208	0.748	3.008797E-001	9.214291E-002
Pb-212 @	0.419	7.175187E-001	2.434120E-001
Bi-214	0.405	6.664208E-001	1.768348E-001
Ac-228	0.620	5.742349E-001	1.912231E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	9.8922E-002	8.86E-002	-1.7336E-001
	1332.49	100.00	8.8635E-002		4.1337E-002
Nb-94	702.63	100.00	1.1166E-001	1.02E-001	2.5704E-002
	871.10	100.00	1.0198E-001		-2.7086E-002
Ag-108m	79.20	7.10	7.3706E+000	1.31E-001	-1.5727E+001
	433.93	89.90	1.3285E-001		-3.3140E-002
	614.37	90.40	1.5897E-001		-2.0244E-003
	722.95	90.50	1.3109E-001		-7.6291E-002
Sb-125	176.33	6.89	2.4262E+000	4.01E-001	-6.4526E-001
	427.89	29.33	4.0053E-001		-2.1129E-001
	463.38	10.35	1.1713E+000		-9.4493E-001
	600.56	17.80	6.5534E-001		5.1030E-001
	606.64	5.02	3.1269E+000		-5.2761E-002
	635.90	11.32	9.9601E-001		-7.0296E-001
Cs-134	563.23	8.38	1.3369E+000	1.28E-001	-1.3248E-001
	569.32	15.43	7.4895E-001		3.1799E-001
	604.70	97.60	1.4251E-001		-9.0032E-003
	795.84	85.40	1.2831E-001		-1.0598E-002
	801.93	8.73	1.1748E+000		-1.2408E+000
Cs-137	661.65	85.12	1.3896E-001	1.39E-001	1.1980E-001
Eu-152	121.78	28.40	8.1109E-001	3.72E-001	1.3772E-001
	244.69	7.49	2.0759E+000		-1.5337E+000
	344.27	26.50	4.7333E-001		-6.9952E-001
	778.89	12.74	8.3907E-001		-3.1903E-001
	867.32	4.16	2.5068E+000		-3.0835E+000
	964.01	14.40	9.1877E-001		5.7861E-001
	1085.78	10.00	9.8252E-001		-7.1763E-001
	1112.02	13.30	7.4294E-001		-6.3887E-001
1407.95	20.70	3.7179E-001	-3.1064E-001		
Eu-154	123.07	40.50	5.5710E-001	2.79E-001	-1.1919E-001
	247.94	6.60	2.2842E+000		7.4720E-001
	591.81	4.83	2.1841E+000		5.5013E-001
	723.30	19.70	6.0033E-001		-4.3938E-001
	756.87	4.33	2.4334E+000		-6.3336E-001
	873.19	11.50	8.9562E-001		3.3948E-001
	996.32	10.30	1.0359E+000		-1.5613E-001
	1004.76	17.90	5.1678E-001		-6.5859E-001
1274.45	35.50	2.7874E-001	-2.1861E-002		
Eu-155	86.54	30.90	1.3251E+000	1.33E+000	2.1719E+000
	105.31	20.70	1.4284E+000		-7.5892E-002
Am-241	59.54	35.90	2.7420E+000	2.74E+000	2.7333E-001
Cm-243	228.19	10.56	1.4574E+000	1.02E+000	-7.4002E-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	8.0414E-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 6/26/2006 10:24:03 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-138-F-

Sample Title: OOL-10-03-138-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 10:14:01 AM

Live Time: 600.0 seconds

Real Time: 600.6 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-138-F-
Title: OOL-10-03-138-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 13 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.000	511.00*	100.00	2.30292E-001	8.59967E-002
K-40	0.942	1460.81*	10.67	1.67183E+001	1.85400E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	1.06617E+000	4.07542E-001
		583.14*	84.20	2.74775E-001	9.20554E-002
		860.37	12.46		
Pb-212	0.574	74.81* @	10.70	9.70563E+000	2.45968E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.699	238.63*	44.60	7.86705E-001	2.36632E-001
		609.31*	46.30	4.73495E-001	1.68289E-001
		1120.29*	15.10	4.02536E-001	2.88308E-001
Ac-228	0.993	1764.49	15.80		
		338.32*	11.40	9.60300E-001	4.39168E-001
		911.07*	27.70	8.59135E-001	2.53993E-001
		969.11*	16.60	9.82337E-001	3.73165E-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	1.000	1.709404E-001	8.824431E-002
K-40	0.942	1.671826E+001	1.853999E+000
TL-208	0.749	2.747748E-001	9.161879E-002
Pb-212 @	0.574	7.867049E-001	2.366318E-001
Bi-214	0.699	4.554620E-001	1.453408E-001
Ac-228	0.993	9.097066E-001	1.894327E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.7716E-001	20.09
3	84.73	1.5603E-001	104.74
6	352.16	2.0540E-001	31.37

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: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	1.1143E-001	7.85E-002	1.6750E-002
	1332.49	100.00	7.8460E-002		-3.3509E-003
Nb-94	702.63	100.00	1.1085E-001	1.04E-001	-5.3299E-002
	871.10	100.00	1.0438E-001		-9.0048E-002
Ag-108m	79.20	7.10	7.0982E+000	1.30E-001	-3.6105E+000
	433.93	89.90	1.2993E-001		-8.7415E-002
	614.37	90.40	1.5928E-001		-7.2314E-002
	722.95	90.50	1.3606E-001		2.3584E-002
Sb-125	176.33	6.89	2.3801E+000	3.88E-001	-7.5296E-001
	427.89	29.33	3.8784E-001		-4.5146E-001
	463.38	10.35	1.1449E+000		-5.9890E-002
	600.56	17.80	6.0675E-001		3.9067E-002
	606.64	5.02	3.0177E+000		-5.7831E-001
	635.90	11.32	9.4481E-001		-4.1220E-001
Cs-134	563.23	8.38	1.3531E+000	1.24E-001	2.5405E-001
	569.32	15.43	7.3581E-001		8.8011E-002
	604.70	97.60	1.3487E-001		-4.6804E-002
	795.84	85.40	1.2365E-001		5.0202E-002
	801.93	8.73	1.1694E+000		-7.4835E-001
Cs-137	661.65	85.12	1.3809E-001	1.38E-001	1.0133E-001
Eu-152	121.78	28.40	8.0822E-001	3.45E-001	-1.7089E-001
	244.69	7.49	2.0087E+000		-2.7257E+000
	344.27	26.50	4.7886E-001		-3.9639E-001
	778.89	12.74	7.7035E-001		-1.0707E+000
	867.32	4.16	2.7143E+000		9.1062E-001
	964.01	14.40	9.5831E-001		-5.1154E-001
	1085.78	10.00	1.0634E+000		-1.2091E+000
	1112.02	13.30	7.6803E-001		8.9718E-002
	1407.95	20.70	3.4453E-001		-6.2605E-002
	Eu-154	123.07	40.50		5.6314E-001
247.94		6.60	2.1708E+000	-1.4493E+000	
591.81		4.83	2.1283E+000	9.3180E-002	
723.30		19.70	6.3439E-001	5.9849E-001	
756.87		4.33	2.3922E+000	5.6919E-002	
873.19		11.50	9.2851E-001	5.9317E-001	
996.32		10.30	9.0188E-001	-8.2389E-001	
1004.76		17.90	5.5408E-001	-6.8275E-002	
1274.45		35.50	2.5078E-001	-1.3530E-001	
Eu-155		86.54	30.90	1.3263E+000	1.33E+000
	105.31	20.70	1.3684E+000	-8.3014E-001	
Am-241	59.54	35.90	2.6344E+000	2.63E+000	8.6009E-001
Cm-243	228.19	10.56	1.4737E+000	9.95E-001	-6.5316E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.9512E-001	9.95E-001	1.4680E-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 6/26/2006 3:11:42 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-139-F-

Sample Title: OOL-10-03-139-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 3:01:39 PM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-139-F-
Title: OOL-10-03-139-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	294-	307	300.18	75.07	0.90	1.94E+002	94.88	7.76E+002
2	943-	963	953.52	238.42	1.37	2.19E+002	74.17	3.34E+002
3	1399-	1416	1406.70	351.72	0.87	1.03E+002	46.76	1.42E+002
4	2323-	2339	2330.52	582.70	1.31	1.13E+002	36.31	7.28E+001
5	2423-	2445	2435.47	608.94	0.56	1.41E+002	36.83	5.46E+001
6	3633-	3652	3641.76	910.54	0.43	1.16E+002	27.75	2.33E+001
7	5828-	5855	5840.76	1460.34	2.16	7.18E+002	56.21	2.36E+001
8	7052-	7065	7058.73	1764.86	0.39	2.18E+001	14.58	1.22E+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	0.992	1460.81*	10.67	1.65904E+001	1.86799E+000
TL-208	0.465	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.50934E-001	8.68851E-002
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	6.03055E+000	3.18173E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.77844E-001	2.52496E-001
Bi-214	0.691	609.31*	46.30	5.80069E-001	1.67150E-001
		1120.29	15.10		
		1764.49*	15.80	3.71358E-001	2.50969E-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	0.992	1.659041E+001	1.867985E+000
TL-208	0.465	2.509339E-001	8.688511E-002
Pb-212 @	0.575	6.778442E-001	2.524958E-001
Bi-214	0.691	5.159368E-001	1.391189E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.72	1.7088E-001	45.60
6	910.54	1.9284E-001	23.98

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: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	1.0346E-001	8.33E-002	5.5950E-002
	1332.49	100.00	8.3324E-002		-9.9666E-002
Nb-94	702.63	100.00	1.1085E-001	8.66E-002	2.3113E-002
	871.10	100.00	8.6644E-002		-3.9058E-002
Ag-108m	79.20	7.10	6.9892E+000	1.22E-001	-7.7221E+000
	433.93	89.90	1.3600E-001		-4.1733E-002
	614.37	90.40	1.2221E-001		-4.8093E-002
	722.95	90.50	1.2766E-001		4.7244E-002
Sb-125	176.33	6.89	2.3283E+000	3.81E-001	-7.0276E-002
	427.89	29.33	3.8132E-001		-4.0758E-001
	463.38	10.35	1.1124E+000		2.6986E-001
	600.56	17.80	5.9611E-001		2.6485E-001
	606.64	5.02	2.8931E+000		4.8916E+000
	635.90	11.32	8.6780E-001		-6.2521E-001
Cs-134	563.23	8.38	1.3079E+000	1.27E-001	1.7330E-001
	569.32	15.43	6.8533E-001		-5.1203E-001
	604.70	97.60	1.4487E-001		1.8311E-002
	795.84	85.40	1.2678E-001		-1.0635E-001
	801.93	8.73	1.1748E+000		3.3468E-001
Cs-137	661.65	85.12	1.3455E-001	1.35E-001	-6.1987E-002
Eu-152	121.78	28.40	7.7131E-001	3.40E-001	-8.3266E-002
	244.69	7.49	2.0049E+000		-1.0176E+000
	344.27	26.50	4.6126E-001		-2.2241E-001
	778.89	12.74	7.6274E-001		-8.2786E-001
	867.32	4.16	2.2282E+000		-2.1885E+000
	964.01	14.40	8.9417E-001		1.3736E-001
	1085.78	10.00	1.0265E+000		-1.0019E+000
	1112.02	13.30	7.8428E-001		1.4255E-001
1407.95	20.70	3.3975E-001	6.7762E-002		
Eu-154	123.07	40.50	5.3316E-001	2.60E-001	1.7373E-001
	247.94	6.60	2.1176E+000		-1.1588E+000
	591.81	4.83	2.1444E+000		-6.5217E-001
	723.30	19.70	5.8452E-001		3.9584E-001
	756.87	4.33	2.5334E+000		-5.0659E-001
	873.19	11.50	7.9775E-001		2.6546E-001
	996.32	10.30	9.5054E-001		6.2759E-001
	1004.76	17.90	4.8680E-001		-3.8522E-001
1274.45	35.50	2.6046E-001	-1.6257E-001		
Eu-155	86.54	30.90	1.3006E+000	1.30E+000	1.4876E+000
	105.31	20.70	1.3664E+000		3.5030E-001
Am-241	59.54	35.90	2.6727E+000	2.67E+000	4.9874E-001
Cm-243	228.19	10.56	1.4060E+000	9.97E-001	-7.3842E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.9749E-001	9.97E-001	8.7046E-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 6/26/2006 3:48:08 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: YEL7810

Sample ID: OOL-10-03-140-F-

Sample Title: OOL-10-03-140-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 3:38:04 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-140-F-
Title: OOL-10-03-140-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 12 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.77318E+001	1.95160E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.26005E-001	7.77652E-002
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	1.16739E+001	4.08065E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.19446E-001	2.64226E-001
Bi-214	0.693	609.31*	46.30	5.72588E-001	1.52151E-001
		1120.29	15.10		
		1764.49*	15.80	5.02075E-001	2.14657E-001
PB-214	0.614	74.82* @	6.21	2.01144E+001	7.18108E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.36878E-001	3.09311E-001
		351.92*	37.20	4.68675E-001	2.20821E-001
Ac-228	0.993	338.32*	11.40	8.64091E-001	5.54843E-001
		911.07*	27.70	7.19996E-001	2.48424E-001
		969.11*	16.60	1.07493E+000	3.81182E-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	0.997	1.773178E+001	1.951602E+000
TL-208	0.468	2.260050E-001	7.776516E-002
Pb-212 @	0.575	7.194462E-001	2.642263E-001
Bi-214	0.693	5.490078E-001	1.241312E-001
PB-214 @	0.614	4.917007E-001	1.797210E-001
Ac-228	0.993	8.305307E-001	1.948675E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
10	1350.80	1.7115E-002	80.24

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: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	1.1643E-001	6.95E-002	2.3494E-002
	1332.49	100.00	6.9526E-002		-8.9115E-002
Nb-94	702.63	100.00	1.1326E-001	1.04E-001	-5.3824E-002
	871.10	100.00	1.0390E-001		-4.2905E-002
Ag-108m	79.20	7.10	7.3327E+000	1.38E-001	-2.8730E+000
	433.93	89.90	1.4071E-001		-4.5114E-002
	614.37	90.40	1.3771E-001		-1.6291E-002
	722.95	90.50	1.3768E-001		1.8059E-002
Sb-125	176.33	6.89	2.5333E+000	4.15E-001	-1.8809E+000
	427.89	29.33	4.1455E-001		-3.2349E-002
	463.38	10.35	1.2664E+000		1.7619E-001
	600.56	17.80	6.6882E-001		1.5125E-001
	606.64	5.02	3.0017E+000		4.8927E+000
	635.90	11.32	1.0818E+000		5.9749E-001
Cs-134	563.23	8.38	1.3732E+000	1.37E-001	1.1380E+000
	569.32	15.43	7.6399E-001		5.3390E-001
	604.70	97.60	1.5171E-001		-1.6024E-001
	795.84	85.40	1.3713E-001		7.4804E-002
	801.93	8.73	1.2116E+000		-2.7274E-001
Cs-137	661.65	85.12	1.3809E-001	1.38E-001	3.3943E-002
Eu-152	121.78	28.40	8.3489E-001	3.72E-001	2.6815E-001
	244.69	7.49	2.1014E+000		-8.7336E-001
	344.27	26.50	5.0408E-001		-2.5107E-001
	778.89	12.74	8.7295E-001		-1.1007E-002
	867.32	4.16	2.4256E+000		-2.6247E+000
	964.01	14.40	1.0085E+000		3.3686E-002
	1085.78	10.00	1.0788E+000		5.4836E-001
	1112.02	13.30	8.3855E-001		-4.6511E-001
1407.95	20.70	3.7179E-001	-8.6963E-002		
Eu-154	123.07	40.50	5.7938E-001	2.97E-001	-4.5293E-001
	247.94	6.60	2.2360E+000		-2.0795E+000
	591.81	4.83	2.3140E+000		-3.7650E-001
	723.30	19.70	6.2699E-001		-2.9143E-001
	756.87	4.33	2.3396E+000		-2.6531E+000
	873.19	11.50	8.9980E-001		3.5759E-001
	996.32	10.30	1.0502E+000		1.0248E-001
	1004.76	17.90	6.1899E-001		-1.2564E-003
1274.45	35.50	2.9747E-001	1.2835E-002		
Eu-155	86.54	30.90	1.3578E+000	1.36E+000	2.8029E+000
	105.31	20.70	1.4103E+000		-3.6434E-001
Am-241	59.54	35.90	2.7477E+000	2.75E+000	-1.9851E+000
Cm-243	228.19	10.56	1.5227E+000	1.06E+000	-3.9266E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0638E+000	1.06E+000	7.6640E-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 6/26/2006 4:06:32 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-141-F-

Sample Title: OOL-10-03-141-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 3:56:30 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-141-F-
 Title: OOL-10-03-141-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	296-	309	300.47	75.14	0.57	2.05E+002	99.52	8.54E+002
2	926-	961	953.71	238.46	1.04	2.19E+002	131.54	7.72E+002
3	1398-	1415	1406.09	351.57	0.88	1.25E+002	49.21	1.55E+002
4	2320-	2341	2331.54	582.95	1.61	1.49E+002	45.09	1.01E+002
5	2428-	2447	2435.30	608.90	0.83	1.37E+002	37.75	6.70E+001
6	3633-	3651	3642.74	910.79	1.99	1.18E+002	30.73	3.78E+001
7	5830-	5854	5841.02	1460.41	1.85	8.19E+002	58.54	1.80E+001
8	7051-	7064	7057.09	1764.45	0.83	3.21E+001	13.00	3.88E+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: 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	1.89141E+001	2.04270E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.29769E-001	1.08815E-001
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	6.35178E+000	3.33091E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.692	238.63*	44.60	6.77446E-001	4.19889E-001
		609.31*	46.30	5.61887E-001	1.69628E-001
		1120.29	15.10		
		1764.49*	15.80	5.46777E-001	2.27883E-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	0.994	1.891414E+001	2.042697E+000
TL-208	0.469	3.297694E-001	1.088146E-001
Pb-212 @	0.575	6.774464E-001	4.198887E-001
Bi-214	0.692	5.564999E-001	1.360696E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.57	2.0765E-001	39.50
6	910.79	1.9692E-001	26.01

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: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	1.0726E-001	8.33E-002	1.2834E-002
	1332.49	100.00	8.3324E-002		-7.9419E-003
Nb-94	702.63	100.00	1.2915E-001	1.01E-001	6.5114E-002
	871.10	100.00	1.0100E-001		-1.9620E-002
Ag-108m	79.20	7.10	7.4833E+000	1.36E-001	-9.3446E+000
	433.93	89.90	1.3628E-001		-1.1894E-002
	614.37	90.40	1.4446E-001		-5.9468E-002
	722.95	90.50	1.4007E-001		1.4117E-001
Sb-125	176.33	6.89	2.6290E+000	4.09E-001	2.0381E+000
	427.89	29.33	4.0935E-001		2.0237E-001
	463.38	10.35	1.2616E+000		1.6189E+000
	600.56	17.80	6.6308E-001		-8.3143E-002
	606.64	5.02	3.1371E+000		-6.2651E-001
	635.90	11.32	9.8599E-001		-2.0235E-001
Cs-134	563.23	8.38	1.4430E+000	1.39E-001	-6.1286E-001
	569.32	15.43	7.5973E-001		-3.0642E-002
	604.70	97.60	1.5718E-001		-5.0544E-003
	795.84	85.40	1.3854E-001		-1.2796E-002
	801.93	8.73	1.3529E+000		2.3908E-001
Cs-137	661.65	85.12	1.3091E-001	1.31E-001	-1.4360E-001
Eu-152	121.78	28.40	8.6936E-001	4.05E-001	4.0144E-001
	244.69	7.49	2.1691E+000		-1.7992E+000
	344.27	26.50	5.0853E-001		-3.6699E-001
	778.89	12.74	8.4938E-001		-3.6415E-001
	867.32	4.16	2.5519E+000		-5.2579E+000
	964.01	14.40	1.0036E+000		9.4322E-001
	1085.78	10.00	1.0372E+000		-7.7789E-001
	1112.02	13.30	8.5339E-001		-6.9756E-001
1407.95	20.70	4.0504E-001	9.9618E-003		
Eu-154	123.07	40.50	6.0124E-001	2.87E-001	2.9831E-001
	247.94	6.60	2.2928E+000		-4.8327E+000
	591.81	4.83	2.3214E+000		-1.2769E+000
	723.30	19.70	6.3988E-001		4.6234E-001
	756.87	4.33	2.8021E+000		-4.1232E-001
	873.19	11.50	8.6140E-001		-8.5686E-001
	996.32	10.30	9.6100E-001		-6.3305E-001
	1004.76	17.90	5.5707E-001		-4.0206E-001
1274.45	35.50	2.8741E-001	2.2637E-001		
Eu-155	86.54	30.90	1.3562E+000	1.36E+000	1.3592E+000
	105.31	20.70	1.4332E+000		-5.3868E-001
Am-241	59.54	35.90	2.7148E+000	2.71E+000	3.4459E-001
Cm-243	228.19	10.56	1.5667E+000	1.09E+000	-2.4375E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0868E+000	1.09E+000	2.9903E-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 6/26/2006 4:16:01 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-10-03-142-F-

Sample Title: OOL-10-03-142-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 4:05:58 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-142-F-
 Title: OOL-10-03-142-F-G
 Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	306	292.26	73.07	1.06	1.48E+002	43.08	7.51E+002
m	2	283-	306	300.90	75.23	1.06	2.89E+002	51.73	8.00E+002
	3	334-	344	339.78	84.95	0.93	9.81E+001	74.87	5.70E+002
	4	945-	961	955.13	238.80	1.00	3.01E+002	71.46	3.28E+002
	5	1174-	1188	1180.43	295.12	1.43	4.91E+001	51.36	2.21E+002
	6	1346-	1357	1352.59	338.17	0.93	3.95E+001	38.29	1.36E+002
	7	1398-	1415	1407.32	351.85	1.30	1.28E+002	50.73	1.67E+002
	8	2030-	2053	2041.91	510.51	0.96	1.37E+002	50.54	1.32E+002
	9	2322-	2342	2332.31	583.12	1.29	1.85E+002	48.36	1.16E+002
	10	2427-	2448	2436.22	609.10	1.23	1.54E+002	41.95	8.14E+001
	11	3635-	3653	3644.03	911.07	1.51	1.61E+002	34.73	4.52E+001
	12	3868-	3884	3875.06	968.83	1.75	8.38E+001	25.94	2.92E+001
	13	4471-	4489	4480.91	1120.31	1.33	6.30E+001	28.76	4.50E+001
	14	4949-	4960	4954.61	1238.74	0.96	2.94E+001	18.98	2.56E+001
	15	5832-	5858	5844.19	1461.15	1.82	8.24E+002	60.71	3.32E+001
	16	7053-	7066	7059.68	1765.05	0.57	2.70E+001	13.34	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
ANN	0.992	511.00*	100.00	2.46733E-001	9.67344E-002
K-40	0.996	1460.81*	10.67	1.87240E+001	2.04987E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	1.14228E+000	4.57457E-001
		583.14*	84.20	4.12927E-001	1.20579E-001
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.11606E+001	2.96210E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.997	238.63*	44.60	9.82559E-001	2.79584E-001
		609.31*	46.30	6.33003E-001	1.89607E-001
		1120.29*	15.10	9.28763E-001	4.35597E-001
PB-214	0.627	1764.49*	15.80	4.39090E-001	2.21332E-001
		74.82* @	6.21	1.92301E+001	5.29125E+000
		77.11 @	10.50		
		87.30 @	4.67		
Ac-228	0.999	241.98	7.49		
		295.21*	19.20	3.91481E-001	4.15088E-001
		351.92*	37.20	5.47834E-001	2.36448E-001
		338.32*	11.40	5.47892E-001	5.38639E-001
		911.07*	27.70	1.22370E+000	2.99482E-001
		969.11*	16.60	1.08168E+000	3.53581E-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	0.992	1.575408E-001	1.001371E-001
K-40	0.996	1.872405E+001	2.049868E+000
TL-208	0.752	4.129268E-001	1.198262E-001
Pb-212 @	0.593	9.825588E-001	2.795836E-001
Bi-214	0.997	5.881489E-001	1.367182E-001
PB-214 @	0.627	5.095296E-001	2.054534E-001
Ac-228	0.999	1.070338E+000	2.103748E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.4644E-001	29.14
3	84.95	1.6357E-001	76.29
14	1238.74	4.8992E-002	64.58

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	9.95E-002	-1.6999E-001
	1332.49	100.00	9.9464E-002		7.6627E-003
Nb-94	702.63	100.00	1.2170E-001	1.21E-001	-7.3554E-002
	871.10	100.00	1.2090E-001		-3.8583E-002
Ag-108m	79.20	7.10	9.4688E+000	1.55E-001	-8.3833E+000
	433.93	89.90	1.5457E-001		1.5702E-001
	614.37	90.40	1.6542E-001		-5.1105E-002
	722.95	90.50	1.5895E-001		7.4700E-002
Sb-125	176.33	6.89	2.9350E+000	4.71E-001	3.7409E+000
	427.89	29.33	4.7071E-001		2.0078E-001
	463.38	10.35	1.3382E+000		2.8516E-001
	600.56	17.80	7.3763E-001		-2.9964E-001
	606.64	5.02	3.4059E+000		8.3544E-001
	635.90	11.32	1.0838E+000		-9.4287E-002
Cs-134	563.23	8.38	1.6508E+000	1.42E-001	-2.1576E-001
	569.32	15.43	8.8142E-001		-1.9806E-001
	604.70	97.60	1.7156E-001		-2.1623E-002
	795.84	85.40	1.4200E-001		2.0161E-002
Cs-137	801.93	8.73	1.3081E+000	1.49E-001	-1.1040E+000
	661.65	85.12	1.4895E-001		8.6243E-002
Eu-152	121.78	28.40	9.7743E-001	4.12E-001	5.1188E-001
	244.69	7.49	2.3438E+000		-8.8820E-001
	344.27	26.50	5.5757E-001		-6.3109E-001
	778.89	12.74	9.7736E-001		9.4824E-002
	867.32	4.16	2.9035E+000		-2.6014E+000
	964.01	14.40	1.0729E+000		-5.2052E-001
	1085.78	10.00	1.2089E+000		2.2193E-001
	1112.02	13.30	9.2169E-001		-1.2050E-001
1407.95	20.70	4.1245E-001	9.3828E-002		
Eu-154	123.07	40.50	6.7821E-001	2.98E-001	-2.9475E-002
	247.94	6.60	2.6414E+000		-2.4602E+000
	591.81	4.83	2.5061E+000		-3.3260E+000
	723.30	19.70	7.3978E-001		7.3870E-001
	756.87	4.33	2.8832E+000		-2.7974E-001
	873.19	11.50	1.0303E+000		1.0420E-001
	996.32	10.30	1.0466E+000		4.1920E-001
	1004.76	17.90	5.8955E-001		3.1951E-002
1274.45	35.50	2.9819E-001	-1.0116E-001		
Eu-155	86.54	30.90	1.6027E+000	1.60E+000	2.2062E+000
	105.31	20.70	1.6077E+000		-1.0333E+000
Am-241	59.54	35.90	3.7394E+000	3.74E+000	3.3909E-001
Cm-243	228.19	10.56	1.7313E+000	1.20E+000	7.6995E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1962E+000	1.20E+000	2.4803E-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 6/26/2006 3:20:07 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-143-F-

Sample Title: OOL-10-03-143-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 3:10:05 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-143-F-
Title: OOL-10-03-143-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-	306	300.94	75.24	1.04	1.90E+002	75.38	5.66E+002
2	332-	345	340.68	85.17	1.10	1.30E+002	88.21	6.88E+002
3	947-	961	954.68	238.68	1.07	1.85E+002	63.78	3.04E+002
4	1346-	1361	1352.91	338.25	0.93	6.72E+001	44.11	1.46E+002
5	1400-	1413	1407.59	351.92	1.25	1.32E+002	39.96	1.03E+002
6	2031-	2053	2043.46	510.90	1.08	1.34E+002	49.49	1.29E+002
7	2323-	2340	2332.32	583.12	1.27	1.29E+002	40.83	9.29E+001
8	2428-	2446	2436.09	609.06	1.25	1.37E+002	38.72	7.49E+001
9	3635-	3651	3644.10	911.09	0.99	1.32E+002	28.90	2.75E+001
10	3869-	3883	3876.46	969.18	0.56	6.20E+001	26.29	4.10E+001
11	5831-	5857	5844.45	1461.22	2.22	8.44E+002	57.43	3.41E+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: 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	2.40065E-001	9.46662E-002
K-40	0.995	1460.81*	10.67	1.91743E+001	2.02830E+000
TL-208	0.753	277.35	6.80		
		510.84*	21.60	1.11141E+000	4.47569E-001
		583.14*	84.20	2.88152E-001	9.85490E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	7.34885E+000	3.24621E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.401	238.63*	44.60	6.04536E-001	2.28757E-001
		609.31*	46.30	5.64741E-001	1.74039E-001
		1120.29	15.10		
Ac-228	1.000	1764.49	15.80		
		338.32*	11.40	9.32961E-001	6.29894E-001
		911.07*	27.70	1.00108E+000	2.48292E-001
		969.11*	16.60	8.00216E-001	3.49679E-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	1.778244E-001	9.700872E-002
K-40	0.995	1.917426E+001	2.028299E+000
TL-208	0.753	2.881520E-001	9.810059E-002
Pb-212 @	0.593	6.045361E-001	2.287568E-001
Bi-214	0.401	5.647411E-001	1.740387E-001
Ac-228	1.000	9.336780E-001	1.927373E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	85.17	2.1606E-001	68.04
5	351.92	2.2044E-001	30.21

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: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	9.68E-002	-1.4094E-002
	1332.49	100.00	9.6842E-002		-3.1500E-002
Nb-94	702.63	100.00	1.1170E-001	1.12E-001	-1.1784E-001
	871.10	100.00	1.1417E-001		5.5337E-002
Ag-108m	79.20	7.10	9.2493E+000	1.41E-001	-4.9985E+000
	433.93	89.90	1.5353E-001		1.2334E-001
	614.37	90.40	1.6903E-001		-1.1475E-002
	722.95	90.50	1.4133E-001		2.9936E-002
Sb-125	176.33	6.89	2.7892E+000	4.61E-001	2.4238E+000
	427.89	29.33	4.6113E-001		-1.0344E-001
	463.38	10.35	1.2653E+000		-9.5896E-002
	600.56	17.80	6.7014E-001		-8.7989E-002
	606.64	5.02	3.2214E+000		3.9982E+000
	635.90	11.32	1.1138E+000		6.3705E-001
Cs-134	563.23	8.38	1.5614E+000	1.36E-001	5.6164E-001
	569.32	15.43	8.2959E-001		-4.3321E-001
	604.70	97.60	1.6135E-001		-1.1503E-001
	795.84	85.40	1.3639E-001		-4.6370E-002
	801.93	8.73	1.3176E+000		-6.5224E-001
Cs-137	661.65	85.12	1.3935E-001	1.39E-001	-6.0114E-002
Eu-152	121.78	28.40	9.0793E-001	4.24E-001	-1.1057E+000
	244.69	7.49	2.2666E+000		-7.7603E-001
	344.27	26.50	5.2949E-001		3.0861E-001
	778.89	12.74	8.8073E-001		-1.0658E+000
	867.32	4.16	2.8035E+000		-2.2865E+000
	964.01	14.40	1.0936E+000		-7.9796E-002
	1085.78	10.00	1.2135E+000		-3.7914E-001
	1112.02	13.30	7.7481E-001		-4.5075E-001
1407.95	20.70	4.2372E-001	-2.3167E-002		
Eu-154	123.07	40.50	6.4487E-001	2.88E-001	6.3169E-001
	247.94	6.60	2.4805E+000		-7.1708E-001
	591.81	4.83	2.5335E+000		-2.7010E+000
	723.30	19.70	6.4389E-001		9.0999E-002
	756.87	4.33	2.9425E+000		2.6174E+000
	873.19	11.50	9.6646E-001		-5.2635E-001
	996.32	10.30	1.0321E+000		-7.0523E-001
	1004.76	17.90	6.0080E-001		-1.8010E-001
1274.45	35.50	2.8811E-001	2.0144E-001		
Eu-155	86.54	30.90	1.5784E+000	1.58E+000	1.8694E+000
	105.31	20.70	1.5855E+000		4.4270E-002
Am-241	59.54	35.90	3.5546E+000	3.55E+000	2.1665E-001
Cm-243	228.19	10.56	1.6708E+000	1.19E+000	1.1043E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1887E+000	1.19E+000	1.9290E-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 6/26/2006 2:42:25 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-144-F-

Sample Title: OOL-10-03-144-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 2:32:23 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-144-F-
 Title: OOL-10-03-144-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	296-	306	300.54	75.14	0.75	1.53E+002	80.09	6.35E+002
2	950-	962	955.05	238.78	0.87	1.95E+002	58.25	2.58E+002
3	1105-	1115	1110.22	277.57	0.52	3.91E+001	37.00	1.33E+002
4	1349-	1359	1354.21	338.57	0.39	4.58E+001	34.21	1.08E+002
5	1399-	1413	1407.20	351.82	1.37	1.04E+002	42.52	1.27E+002
6	2325-	2343	2332.63	583.20	1.43	1.79E+002	40.57	7.37E+001
7	2398-	2409	2404.15	601.08	0.56	2.42E+001	20.83	3.48E+001
8	2427-	2449	2436.65	609.20	1.42	1.51E+002	39.62	6.67E+001
9	2901-	2915	2908.33	727.13	1.24	4.73E+001	27.31	4.97E+001
10	3336-	3347	3341.74	835.49	0.83	1.52E+001	18.76	2.98E+001
11	3637-	3656	3644.28	911.13	0.79	1.45E+002	31.55	3.20E+001
12	3869-	3887	3876.10	969.09	1.17	8.31E+001	27.68	3.39E+001
13	4474-	4489	4481.04	1120.34	0.39	4.82E+001	23.01	2.98E+001
14	5830-	5858	5844.43	1461.21	1.66	8.49E+002	59.37	1.46E+001
15	7056-	7069	7062.13	1765.66	1.02	3.11E+001	14.25	7.92E+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: 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	0.995	1460.81*	10.67	1.93067E+001	2.06496E+000
TL-208	0.568	277.35*	6.80	8.67130E-001	8.36003E-001
		510.84	21.60		
		583.14*	84.20	4.00194E-001	1.04476E-001
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	8.03598E-001	4.73334E-001
Pb-212	0.593	74.81* @	10.70	5.92200E+000	3.31504E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.35638E-001	2.14697E-001
Bi-214	0.991	609.31*	46.30	6.23351E-001	1.80398E-001
		1120.29*	15.10	7.10467E-001	3.47719E-001
		1764.49*	15.80	5.05445E-001	2.37217E-001
Ac-228	0.999	338.32*	11.40	6.35863E-001	4.85583E-001
		911.07*	27.70	1.10369E+000	2.71626E-001
		969.11*	16.60	1.07237E+000	3.74626E-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	0.995	1.930671E+001	2.064961E+000
TL-208	0.568	4.073747E-001	1.036699E-001
Bi-212	1.000	8.035977E-001	4.733339E-001
Pb-212 @	0.593	6.356375E-001	2.146971E-001
Bi-214	0.991	5.991346E-001	1.327215E-001
Ac-228	0.999	1.015118E+000	2.003204E-001
X Cm-243	0.303		

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.82	1.7340E-001	40.87
7	601.08	4.0304E-002	86.16
10	835.49	2.5333E-002	123.42

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: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	9.75E-002	8.8125E-003
	1332.49	100.00	9.7505E-002		5.0256E-002
Nb-94	702.63	100.00	1.1604E-001	1.10E-001	9.7080E-002
	871.10	100.00	1.1019E-001		4.0410E-002
Ag-108m	79.20	7.10	9.0474E+000	1.43E-001	-9.5350E+000
	433.93	89.90	1.4328E-001		1.1301E-002
	614.37	90.40	1.6633E-001		9.2008E-002
	722.95	90.50	1.5004E-001		-3.6083E-002
Sb-125	176.33	6.89	2.7800E+000	4.51E-001	1.2500E+000
	427.89	29.33	4.5051E-001		3.8906E-002
	463.38	10.35	1.2273E+000		2.8562E-001
	600.56	17.80	7.3414E-001		-1.9252E-001
	606.64	5.02	3.3004E+000		-1.4994E-001
	635.90	11.32	1.1198E+000		4.7500E-002
Cs-134	563.23	8.38	1.4925E+000	1.35E-001	-7.4123E-002
	569.32	15.43	8.3157E-001		-2.5537E-002
	604.70	97.60	1.6653E-001		5.6644E-002
	795.84	85.40	1.3495E-001		3.8924E-002
	801.93	8.73	1.1979E+000		-1.1771E+000
Cs-137	661.65	85.12	1.5253E-001	1.53E-001	2.5159E-002
Eu-152	121.78	28.40	9.1138E-001	4.31E-001	5.0589E-002
	244.69	7.49	2.3128E+000		1.5594E+000
	344.27	26.50	5.2949E-001		-1.0021E-001
	778.89	12.74	9.2255E-001		-1.7747E-001
	867.32	4.16	2.6784E+000		-1.4919E+000
	964.01	14.40	1.0424E+000		-4.4264E-002
	1085.78	10.00	1.2407E+000		2.4375E-001
	1112.02	13.30	8.2684E-001		-3.7581E-001
	1407.95	20.70	4.3105E-001		7.6295E-002
	Eu-154	123.07	40.50		6.2764E-001
247.94		6.60	2.6351E+000	1.7779E-001	
591.81		4.83	2.6074E+000	3.2999E-001	
723.30		19.70	6.9272E-001	-1.9622E-001	
756.87		4.33	2.7606E+000	8.2212E-001	
873.19		11.50	9.4681E-001	5.2925E-002	
996.32		10.30	9.9224E-001	-3.4805E-001	
1004.76		17.90	5.6634E-001	-2.2080E-001	
1274.45	35.50	3.0310E-001	-1.5017E-001		
Eu-155	86.54	30.90	1.5461E+000	1.55E+000	3.2761E+000
	105.31	20.70	1.5703E+000		4.8722E-001
Am-241	59.54	35.90	3.6411E+000	3.64E+000	2.0147E+000
Cm-243	228.19	10.56	1.6510E+000	6.61E-001	5.1844E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60*	14.00	6.6115E-001	6.61E-001	4.2118E-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 6/26/2006 2:27:06 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-145-F-

Sample Title: OOL-10-03-145-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 2:17:04 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-145-F-
Title: OOL-10-03-145-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	295-	305	300.67	75.17	0.75	1.08E+002	80.21	6.58E+002
2	334-	346	340.17	85.04	0.71	9.66E+001	82.97	6.44E+002
3	946-	962	955.25	238.82	1.22	2.58E+002	70.17	3.27E+002
4	1176-	1185	1180.68	295.19	0.72	7.26E+001	34.69	1.06E+002
5	1400-	1412	1407.33	351.86	0.54	9.45E+001	40.11	1.23E+002
6	2320-	2343	2332.33	583.12	0.91	1.55E+002	49.75	1.21E+002
7	2429-	2446	2437.09	609.31	0.69	8.54E+001	35.68	7.56E+001
8	3637-	3654	3644.80	911.26	1.03	1.21E+002	31.36	4.09E+001
9	3867-	3885	3874.73	968.75	1.24	7.61E+001	28.67	4.09E+001
10	4294-	4305	4299.06	1074.84	0.25	1.38E+001	16.44	2.22E+001
11	5833-	5856	5844.62	1461.26	1.92	8.31E+002	57.27	5.80E+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	0.993	1460.81*	10.67	1.88927E+001	2.00857E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.46604E-001	1.19856E-001
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	4.19047E+000	3.21211E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.41091E-001	2.64323E-001
Bi-214	0.403	609.31*	46.30	3.51932E-001	1.53295E-001
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.627	74.82* @	6.21	7.22030E+000	5.55931E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.79643E-001	2.93549E-001
		351.92*	37.20	4.06132E-001	1.85214E-001
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	9.21706E-001	2.61159E-001
		969.11*	16.60	9.82170E-001	3.84165E-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	0.993	1.889274E+001	2.008570E+000
TL-208	0.472	3.466045E-001	1.198562E-001
Pb-212 @	0.593	8.410908E-001	2.643230E-001
Bi-214	0.403	3.519316E-001	1.532950E-001
PB-214 @	0.627	4.555373E-001	1.566410E-001
Ac-228	0.631	9.408171E-001	2.159783E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	85.04	1.6108E-001	85.85
10	1074.84	2.3021E-002	119.05

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: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	1.1615E-001	9.06E-002	9.0202E-003
	1332.49	100.00	9.0643E-002		1.7443E-002
Nb-94	702.63	100.00	1.2279E-001	1.14E-001	6.2042E-003
	871.10	100.00	1.1417E-001		-3.1960E-002
Ag-108m	79.20	7.10	9.0531E+000	1.44E-001	-8.6340E+000
	433.93	89.90	1.4904E-001		6.2149E-002
	614.37	90.40	1.6663E-001		5.5694E-002
	722.95	90.50	1.4365E-001		1.3594E-002
Sb-125	176.33	6.89	2.8075E+000	4.51E-001	-7.0329E-001
	427.89	29.33	4.5134E-001		1.9180E-001
	463.38	10.35	1.2827E+000		3.5316E-001
	600.56	17.80	7.0745E-001		6.9396E-002
	606.64	5.02	3.0146E+000		4.0281E+000
	635.90	11.32	1.0776E+000		4.6394E-001
Cs-134	563.23	8.38	1.5183E+000	1.32E-001	4.4325E-002
	569.32	15.43	8.3157E-001		-7.0657E-001
	604.70	97.60	1.5351E-001		-4.0456E-002
	795.84	85.40	1.3152E-001		1.2270E-002
Cs-137	801.93	8.73	1.2442E+000	1.35E-001	-9.9543E-001
	661.65	85.12	1.3541E-001		-6.7359E-002
Eu-152	121.78	28.40	9.2232E-001	4.20E-001	-5.0515E-001
	244.69	7.49	2.1866E+000		-1.4792E+000
	344.27	26.50	5.3777E-001		-7.6215E-001
	778.89	12.74	8.9705E-001		-7.0678E-001
	867.32	4.16	2.7521E+000		-2.0010E+000
	964.01	14.40	1.0328E+000		3.3726E-001
	1085.78	10.00	1.1130E+000		7.9006E-001
	1112.02	13.30	9.3198E-001		2.5453E-001
1407.95	20.70	4.2000E-001	1.3644E-002		
Eu-154	123.07	40.50	6.4440E-001	2.93E-001	-4.7882E-001
	247.94	6.60	2.5048E+000		-6.7219E-001
	591.81	4.83	2.5808E+000		-7.2181E-001
	723.30	19.70	6.6703E-001		4.1762E-001
	756.87	4.33	2.8746E+000		1.6919E+000
	873.19	11.50	9.9328E-001		4.5375E-002
	996.32	10.30	1.0562E+000		2.0084E-001
	1004.76	17.90	6.0634E-001		-5.7785E-001
1274.45	35.50	2.9320E-001	3.5585E-002		
Eu-155	86.54	30.90	1.5481E+000	1.55E+000	5.6232E-001
	105.31	20.70	1.5843E+000		1.4374E+000
Am-241	59.54	35.90	3.5878E+000	3.59E+000	-5.1644E+000
Cm-243	228.19	10.56	1.6322E+000	1.17E+000	1.8230E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1667E+000	1.17E+000	1.3549E+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 6/26/2006 9:52:33 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-146-F-

Sample Title: OOL-10-03-146-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 9:42:31 AM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-146-F-
 Title: OOL-10-03-146-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	285-	307	291.81	72.95	1.08	1.18E+002	40.15	6.22E+002
m	2	285-	307	300.67	75.17	1.08	2.30E+002	48.47	8.07E+002
	3	331-	347	339.08	84.77	1.01	1.25E+002	96.99	7.42E+002
	4	944-	962	954.84	238.72	0.59	2.40E+002	73.90	3.49E+002
	5	1170-	1187	1181.03	295.28	0.38	1.08E+002	48.50	1.55E+002
	6	1342-	1360	1353.66	338.44	1.50	7.94E+001	44.70	1.31E+002
	7	1399-	1414	1407.16	351.81	0.99	1.12E+002	43.02	1.23E+002
	8	2324-	2342	2333.29	583.36	1.26	1.47E+002	37.87	6.67E+001
	9	2429-	2447	2436.79	609.24	1.70	1.37E+002	36.85	6.44E+001
	10	3636-	3653	3644.41	911.17	1.38	1.14E+002	31.84	4.63E+001
	11	3870-	3884	3875.75	969.01	1.79	6.93E+001	23.41	2.47E+001
	12	4475-	4489	4480.83	1120.29	0.58	3.84E+001	20.55	2.46E+001
	13	5831-	5858	5844.94	1461.34	1.84	7.53E+002	56.47	1.73E+001
	14	7052-	7067	7060.88	1765.35	1.15	5.00E+001	13.86	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	0.991	1460.81*	10.67	1.71099E+001	1.88844E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.28848E-001	9.47492E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	8.89410E+000	2.56117E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.84406E-001	2.70798E-001
Bi-214	0.995	609.31*	46.30	5.62752E-001	1.66890E-001
		1120.29*	15.10	5.66896E-001	3.09145E-001
		1764.49*	15.80	8.13173E-001	2.39611E-001
PB-214	0.627	74.82* @	6.21	1.53248E+001	4.55103E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	8.59994E-001	4.13268E-001
		351.92*	37.20	4.80079E-001	2.01512E-001
Ac-228	1.000	338.32*	11.40	1.10344E+000	6.44612E-001
		911.07*	27.70	8.65242E-001	2.62002E-001
		969.11*	16.60	8.94405E-001	3.16470E-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	1.710990E+001	1.888438E+000
TL-208	0.470	3.288476E-001	9.474921E-002
Pb-212 @	0.593	7.844057E-001	2.707979E-001
Bi-214	0.995	6.318138E-001	1.252108E-001
PB-214 @	0.627	5.530571E-001	1.811271E-001
Ac-228	1.000	8.973071E-001	1.925965E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.9737E-001	33.91
3	84.77	2.0779E-001	77.80

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	9.62E-002	9.9303E-002
	1332.49	100.00	9.6174E-002		-1.9830E-002
Nb-94	702.63	100.00	1.1448E-001	1.06E-001	-4.7263E-002
	871.10	100.00	1.0558E-001		1.3108E-001
Ag-108m	79.20	7.10	9.0128E+000	1.34E-001	-1.7964E-001
	433.93	89.90	1.3432E-001		-1.0375E-001
	614.37	90.40	1.6205E-001		-7.2837E-002
	722.95	90.50	1.4133E-001		1.3154E-001
Sb-125	176.33	6.89	2.7446E+000	4.23E-001	-5.7395E-002
	427.89	29.33	4.2319E-001		-1.5964E-001
	463.38	10.35	1.2925E+000		6.8836E-001
	600.56	17.80	7.2181E-001		5.2219E-001
	606.64	5.02	3.3101E+000		7.6929E+000
	635.90	11.32	9.6394E-001		-6.1139E-001
Cs-134	563.23	8.38	1.5507E+000	1.42E-001	1.7757E+000
	569.32	15.43	7.7626E-001		-6.0906E-001
	604.70	97.60	1.6551E-001		6.5537E-002
	795.84	85.40	1.4154E-001		7.3329E-002
	801.93	8.73	1.2692E+000		8.4449E-001
Cs-137	661.65	85.12	1.3674E-001	1.37E-001	-1.1407E-002
Eu-152	121.78	28.40	8.9890E-001	3.41E-001	-2.1004E-001
	244.69	7.49	2.2251E+000		-4.7552E-001
	344.27	26.50	4.9573E-001		2.7884E-002
	778.89	12.74	8.3322E-001		-1.1915E+000
	867.32	4.16	2.5241E+000		-3.1247E+000
	964.01	14.40	1.0133E+000		-1.0394E-001
	1085.78	10.00	1.0721E+000		-2.3662E-001
	1112.02	13.30	8.2297E-001		-3.5729E-001
	1407.95	20.70	3.4096E-001		-1.5006E-002
Eu-154	123.07	40.50	6.1934E-001	2.93E-001	-8.2749E-001
	247.94	6.60	2.4403E+000		-2.6534E+000
	591.81	4.83	2.4643E+000		-1.1546E-001
	723.30	19.70	6.5110E-001		7.4829E-001
	756.87	4.33	2.5941E+000		1.0857E+000
	873.19	11.50	8.7654E-001		-8.3363E-001
	996.32	10.30	9.2363E-001		-8.5708E-002
	1004.76	17.90	5.8955E-001		-2.7226E-001
	1274.45	35.50	2.9320E-001		-2.8199E-001
Eu-155	86.54	30.90	1.5028E+000	1.50E+000	3.2216E-003
	105.31	20.70	1.5566E+000		1.1953E-001
Am-241	59.54	35.90	3.3969E+000	3.40E+000	-3.5388E+000
Cm-243	228.19	10.56	1.5651E+000	1.08E+000	-2.7573E-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	1.4128E-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 6/26/2006 10:08:30 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-147-F-

Sample Title: OOL-10-03-147-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 9:58:28 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-147-F-
 Title: OOL-10-03-147-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	282-	306	291.24	72.81	1.14	1.54E+002	41.51	7.18E+002
m	2	282-	306	300.75	75.19	1.14	2.33E+002	47.83	7.43E+002
	3	947-	962	955.02	238.77	0.97	1.96E+002	70.22	3.60E+002
	4	1176-	1192	1181.54	295.40	0.36	7.09E+001	52.90	2.09E+002
	5	1349-	1358	1353.25	338.33	0.51	3.60E+001	32.15	1.03E+002
	6	1402-	1415	1408.79	352.22	0.61	8.22E+001	40.97	1.29E+002
	7	2033-	2048	2042.27	510.60	1.28	7.73E+001	39.05	1.06E+002
	8	2325-	2341	2332.27	583.11	1.56	1.49E+002	39.10	7.95E+001
	9	2430-	2447	2437.41	609.39	1.25	1.15E+002	37.12	7.50E+001
	10	3635-	3654	3644.23	911.12	1.71	1.17E+002	33.11	4.77E+001
	11	3867-	3886	3876.43	969.18	0.52	7.13E+001	30.48	4.87E+001
	12	5833-	5858	5844.88	1461.33	1.85	8.58E+002	59.62	1.60E+001
	13	7056-	7069	7062.09	1765.65	0.29	2.70E+001	13.36	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
ANN	0.995	511.00*	100.00	1.38778E-001	7.26184E-002
K-40	0.991	1460.81*	10.67	1.95029E+001	2.08084E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	6.42493E-001	3.40266E-001
		583.14*	84.20	3.33671E-001	9.74795E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	9.01026E+000	2.55758E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.688	238.63*	44.60	6.40549E-001	2.50290E-001
		609.31*	46.30	4.74092E-001	1.63738E-001
		1120.29	15.10		
PB-214	0.625	1764.49*	15.80	4.39136E-001	2.21702E-001
		74.82* @	6.21	1.55249E+001	4.54861E+000
		77.11 @	10.50		
		87.30 @	4.67		
Ac-228	1.000	241.98	7.49		
		295.21*	19.20	5.65799E-001	4.32842E-001
		351.92*	37.20	3.53267E-001	1.85706E-001
		338.32*	11.40	4.99593E-001	4.53329E-001
		911.07*	27.70	8.92640E-001	2.72151E-001
		969.11*	16.60	9.20606E-001	4.05143E-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	6.670553E-002	7.557284E-002
K-40	0.991	1.950291E+001	2.080842E+000
TL-208	0.752	3.336710E-001	9.687112E-002
Pb-212 @	0.593	6.405491E-001	2.502903E-001
Bi-214	0.688	4.617544E-001	1.317107E-001
PB-214 @	0.625	3.863067E-001	1.706617E-001
Ac-228	1.000	8.214128E-001	2.021966E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.5738E-001	26.88

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: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	1.2104E-001	9.41E-002	1.3623E-001
	1332.49	100.00	9.4141E-002		5.2221E-003
Nb-94	702.63	100.00	1.2096E-001	1.12E-001	1.9391E-002
	871.10	100.00	1.1242E-001		2.2426E-002
Ag-108m	79.20	7.10	8.9665E+000	1.38E-001	-7.9950E+000
	433.93	89.90	1.5143E-001		-8.4801E-002
	614.37	90.40	1.6298E-001		-5.0800E-002
	722.95	90.50	1.3776E-001		6.7786E-002
Sb-125	176.33	6.89	2.7196E+000	4.64E-001	-5.3924E-001
	427.89	29.33	4.6354E-001		-5.9219E-001
	463.38	10.35	1.3095E+000		9.3485E-001
	600.56	17.80	7.1825E-001		3.6440E-001
	606.64	5.02	3.1761E+000		4.4336E+000
	635.90	11.32	1.0591E+000		6.7141E-002
Cs-134	563.23	8.38	1.5036E+000	1.47E-001	5.7701E-001
	569.32	15.43	8.2959E-001		-2.3607E-001
	604.70	97.60	1.6161E-001		-6.8015E-002
	795.84	85.40	1.4650E-001		2.1035E-001
	801.93	8.73	1.2492E+000		-7.6377E-001
Cs-137	661.65	85.12	1.4569E-001	1.46E-001	-1.1466E-002
Eu-152	121.78	28.40	9.3045E-001	4.12E-001	1.8002E-001
	244.69	7.49	2.2478E+000		4.9982E-001
	344.27	26.50	5.3852E-001		-4.4954E-001
	778.89	12.74	9.0028E-001		1.9074E-001
	867.32	4.16	2.6569E+000		-4.1662E+000
	964.01	14.40	1.0566E+000		2.6878E-001
	1085.78	10.00	1.0978E+000		9.8218E-001
	1112.02	13.30	7.9525E-001		-7.4838E-001
	1407.95	20.70	4.1245E-001		1.3240E-001
	Eu-154	123.07	40.50		6.4416E-001
247.94		6.60	2.4716E+000	-7.9219E-001	
591.81		4.83	2.5471E+000	-7.1970E-001	
723.30		19.70	6.3843E-001	3.4141E-001	
756.87		4.33	2.6879E+000	-5.5683E-002	
873.19		11.50	9.8949E-001	2.3998E-001	
996.32		10.30	1.0173E+000	-1.0481E-001	
1004.76		17.90	6.2800E-001	-3.1411E-002	
1274.45	35.50	3.1109E-001	2.4848E-001		
Eu-155	86.54	30.90	1.5855E+000	1.56E+000	2.5126E+000
	105.31	20.70	1.5618E+000		-5.0636E-001
Am-241	59.54	35.90	3.5651E+000	3.57E+000	-3.5722E+000
Cm-243	228.19	10.56	1.6384E+000	1.16E+000	4.5173E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1634E+000	1.16E+000	1.4686E+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 6/26/2006 10:28:48 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-148-F-

Sample Title: OOL-10-03-148-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 10:18:46 AM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-148-F-
 Title: OOL-10-03-148-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	282-	306	291.19	72.80	1.03	1.43E+002	38.93	5.65E+002
m	2	282-	306	300.48	75.12	1.03	2.58E+002	48.03	6.74E+002
	3	336-	347	340.01	85.00	0.64	1.01E+002	71.50	4.87E+002
	4	947-	962	954.69	238.68	1.28	2.54E+002	64.54	2.76E+002
	5	1345-	1364	1353.27	338.34	0.83	9.90E+001	46.23	1.30E+002
	6	1402-	1414	1407.44	351.88	1.06	8.85E+001	37.15	1.03E+002
	7	2033-	2054	2042.90	510.76	1.68	1.17E+002	40.74	8.42E+001
	8	2325-	2340	2333.12	583.32	1.05	1.03E+002	34.45	6.84E+001
	9	2428-	2446	2436.99	609.29	0.43	9.65E+001	38.64	8.65E+001
	10	2902-	2917	2908.49	727.17	0.38	4.69E+001	22.20	2.71E+001
	11	3635-	3654	3643.82	911.02	0.68	1.28E+002	31.71	3.77E+001
	12	3870-	3884	3875.70	968.99	0.85	4.91E+001	25.60	4.09E+001
	13	5830-	5857	5844.52	1461.24	1.94	6.85E+002	53.09	1.06E+001
	14	7054-	7067	7060.63	1765.29	0.73	2.81E+001	12.70	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: 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	2.09831E-001	7.85140E-002
K-40	0.994	1460.81*	10.67	1.55782E+001	1.74552E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	9.71440E-001	3.72048E-001
		583.14*	84.20	2.29054E-001	8.24829E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	7.96617E-001	3.88494E-001
Pb-212	0.594	74.81* @	10.70	1.00292E+001	2.70877E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.28097E-001	2.47475E-001
Bi-214	0.693	609.31*	46.30	3.97508E-001	1.66568E-001
		1120.29	15.10		
		1764.49*	15.80	4.56480E-001	2.11456E-001
Ac-228	1.000	338.32*	11.40	1.37505E+000	6.77406E-001
		911.07*	27.70	9.76280E-001	2.66243E-001
		969.11*	16.60	6.33934E-001	3.37090E-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	1.603553E-001	8.049389E-002
K-40	0.994	1.557821E+001	1.745520E+000
TL-208	0.752	2.290543E-001	8.214447E-002
Bi-212	1.000	7.966171E-001	3.884941E-001
Pb-212 @	0.594	8.280970E-001	2.474755E-001
Bi-214	0.693	4.200886E-001	1.308482E-001
Ac-228	1.000	8.908251E-001	1.996527E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.3901E-001	27.15
3	85.00	1.6895E-001	70.53
6	351.88	1.4746E-001	41.99

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: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	1.0837E-001	8.00E-002	4.9451E-002
	1332.49	100.00	7.9970E-002		-3.9139E-002
Nb-94	702.63	100.00	1.0925E-001	9.51E-002	8.0488E-002
	871.10	100.00	9.5134E-002		-6.5738E-002
Ag-108m	79.20	7.10	8.6232E+000	1.39E-001	-7.6245E+000
	433.93	89.90	1.3931E-001		-5.5230E-002
	614.37	90.40	1.6205E-001		7.4703E-003
	722.95	90.50	1.3975E-001		1.5547E-002
Sb-125	176.33	6.89	2.5994E+000	4.20E-001	6.3283E-001
	427.89	29.33	4.1965E-001		3.5483E-001
	463.38	10.35	1.2247E+000		2.9602E-001
	600.56	17.80	6.4267E-001		-3.6205E-001
	606.64	5.02	3.0519E+000		5.8914E+000
	635.90	11.32	9.3946E-001		-1.7312E-001
Cs-134	563.23	8.38	1.4202E+000	1.30E-001	-3.2339E-001
	569.32	15.43	7.3248E-001		-3.0202E-001
	604.70	97.60	1.5295E-001		-6.7001E-002
	795.84	85.40	1.2952E-001		-1.0338E-001
	801.93	8.73	1.2187E+000		-2.3221E+000
Cs-137	661.65	85.12	1.4319E-001	1.43E-001	-1.7234E-002
Eu-152	121.78	28.40	8.4601E-001	4.09E-001	-5.8666E-001
	244.69	7.49	2.1455E+000		-1.3479E+000
	344.27	26.50	4.6812E-001		-2.3395E-001
	778.89	12.74	8.2619E-001		-2.4153E-001
	867.32	4.16	2.5241E+000		-3.6611E+000
	964.01	14.40	9.7317E-001		-2.9013E-001
	1085.78	10.00	1.0616E+000		1.3551E-001
	1112.02	13.30	7.4950E-001		1.2180E-001
1407.95	20.70	4.0862E-001	-9.3911E-002		
Eu-154	123.07	40.50	5.9500E-001	2.78E-001	1.3437E-001
	247.94	6.60	2.4108E+000		1.4508E-001
	591.81	4.83	2.3712E+000		1.0414E-001
	723.30	19.70	6.3843E-001		1.8258E-002
	756.87	4.33	2.3947E+000		9.8813E-001
	873.19	11.50	8.4131E-001		3.3722E-002
	996.32	10.30	9.1258E-001		-7.5533E-001
	1004.76	17.90	5.1000E-001		-5.4402E-002
1274.45	35.50	2.7764E-001	5.8089E-002		
Eu-155	86.54	30.90	1.4189E+000	1.42E+000	1.8478E+000
	105.31	20.70	1.4955E+000		1.5010E+000
Am-241	59.54	35.90	3.3151E+000	3.32E+000	-2.8000E+000
Cm-243	228.19	10.56	1.5532E+000	1.01E+000	7.4457E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0137E+000	1.01E+000	1.6329E-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 6/26/2006 12:48:13 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-149-F-

Sample Title: OOL-10-03-149-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 12:38:10 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-149-F-
Title: OOL-10-03-149-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	306	300.18	75.07	0.82	3.85E+002	114.80	1.01E+003
2	947-	961	954.79	238.73	0.75	2.08E+002	66.12	3.22E+002
3	1403-	1414	1407.33	351.88	1.24	6.06E+001	36.79	1.15E+002
4	2031-	2053	2041.64	510.47	0.92	1.32E+002	45.24	1.04E+002
5	2324-	2341	2331.88	583.04	2.11	1.18E+002	39.22	8.66E+001
6	2428-	2445	2436.01	609.08	1.62	1.31E+002	36.22	6.46E+001
7	2517-	2528	2521.04	630.34	0.51	2.00E+001	16.96	2.10E+001
8	2576-	2588	2581.14	645.36	0.79	1.48E+001	19.08	2.93E+001
9	3634-	3651	3643.44	910.96	1.79	1.06E+002	34.16	6.08E+001
10	3870-	3882	3876.87	969.32	0.42	5.67E+001	22.89	3.03E+001
11	5828-	5855	5841.85	1460.61	1.99	8.16E+002	58.03	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: 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	0.990	511.00*	100.00	2.32998E-001	8.61623E-002
K-40	0.999	1460.81*	10.67	1.88556E+001	2.03151E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	1.07869E+000	4.08511E-001
		583.14*	84.20	2.62569E-001	9.34531E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	1.19793E+001	4.27638E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.405	238.63*	44.60	6.43386E-001	2.27829E-001
		609.31*	46.30	5.39255E-001	1.62800E-001
		1120.29	15.10		
Ac-228	0.628	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	8.06014E-001	2.75315E-001
		969.11*	16.60	7.28972E-001	3.03846E-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	0.990	1.762826E-001	8.847594E-002
K-40	0.999	1.885561E+001	2.031507E+000
TL-208	0.750	2.625692E-001	9.306055E-002
Pb-212 @	0.576	6.433855E-001	2.278286E-001
Bi-214	0.405	5.392553E-001	1.628001E-001
Ac-228	0.628	7.712793E-001	2.040198E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.88	1.0100E-001	60.70
7	630.34	3.3394E-002	84.66
8	645.36	2.4583E-002	129.38

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: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	1.2535E-001	8.86E-002	2.0785E-002
	1332.49	100.00	8.8635E-002		1.1810E-002
Nb-94	702.63	100.00	1.1943E-001	1.12E-001	5.4296E-002
	871.10	100.00	1.1214E-001		5.2883E-002
Ag-108m	79.20	7.10	7.9332E+000	1.29E-001	-7.7560E+000
	433.93	89.90	1.3052E-001		6.7038E-003
	614.37	90.40	1.4687E-001		-2.1188E-002
	722.95	90.50	1.2896E-001		-8.1478E-002
Sb-125	176.33	6.89	2.6694E+000	4.20E-001	-4.5446E-001
	427.89	29.33	4.1968E-001		-7.7603E-002
	463.38	10.35	1.2926E+000		1.7455E-001
	600.56	17.80	6.8574E-001		1.8467E-001
	606.64	5.02	3.1064E+000		3.9115E+000
	635.90	11.32	9.9601E-001		2.0240E-001
Cs-134	563.23	8.38	1.4354E+000	1.33E-001	1.2837E+000
	569.32	15.43	7.6186E-001		-3.3600E-001
	604.70	97.60	1.5529E-001		-1.6155E-002
	795.84	85.40	1.3280E-001		-1.5386E-002
	801.93	8.73	1.2012E+000		-4.8039E-001
Cs-137	661.65	85.12	1.4818E-001	1.48E-001	5.8918E-002
Eu-152	121.78	28.40	8.8347E-001	3.30E-001	6.9980E-001
	244.69	7.49	2.1176E+000		-1.6136E+000
	344.27	26.50	5.0631E-001		-8.9759E-001
	778.89	12.74	9.0230E-001		-5.7574E-001
	867.32	4.16	2.7143E+000		-2.9040E+000
	964.01	14.40	9.4794E-001		-5.0224E-001
	1085.78	10.00	1.0940E+000		-1.0363E+000
	1112.02	13.30	7.9228E-001		-4.8381E-001
1407.95	20.70	3.2997E-001	-5.7804E-001		
Eu-154	123.07	40.50	6.0787E-001	3.17E-001	-1.1399E-001
	247.94	6.60	2.3121E+000		-8.9639E-001
	591.81	4.83	2.3797E+000		3.6964E-001
	723.30	19.70	5.9642E-001		-6.8510E-002
	756.87	4.33	2.5528E+000		-1.1822E+000
	873.19	11.50	9.2851E-001		5.1240E-001
	996.32	10.30	1.1320E+000		6.1155E-001
	1004.76	17.90	6.2693E-001		-2.7918E-003
1274.45	35.50	3.1657E-001	2.1819E-001		
Eu-155	86.54	30.90	1.4093E+000	1.41E+000	6.0121E-001
	105.31	20.70	1.5295E+000		1.0165E+000
Am-241	59.54	35.90	2.9119E+000	2.91E+000	5.0221E-001
Cm-243	228.19	10.56	1.5478E+000	1.08E+000	-6.6197E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0770E+000	1.08E+000	-3.5428E-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 6/26/2006 1:02:38 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-10-03-150-F-

Sample Title: OOL-10-03-150-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 12:52:36 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-150-F-
Title: OOL-10-03-150-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	309	300.55	75.16	1.27	1.76E+002	105.30	9.35E+002
2	944-	962	954.08	238.56	0.45	2.27E+002	73.72	3.51E+002
3	1400-	1417	1406.80	351.75	0.59	1.23E+002	47.38	1.40E+002
4	2033-	2049	2041.90	510.54	1.47	9.17E+001	40.24	1.04E+002
5	2321-	2338	2331.40	582.92	1.40	1.05E+002	40.76	9.94E+001
6	2430-	2446	2435.07	608.84	1.07	1.29E+002	31.44	4.15E+001
7	3635-	3651	3643.03	910.86	1.22	8.68E+001	28.17	3.83E+001
8	3866-	3882	3874.78	968.80	1.80	6.55E+001	21.80	1.85E+001
9	5118-	5129	5123.37	1280.98	0.26	1.53E+001	12.84	1.07E+001
10	5827-	5853	5841.72	1460.58	2.07	7.55E+002	59.33	3.69E+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	1.62399E-001	7.46172E-002
K-40	0.998	1460.81*	10.67	1.74395E+001	1.96762E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	7.51846E-001	3.50864E-001
		583.14*	84.20	2.31963E-001	9.52981E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	5.46030E+000	3.43721E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.402	238.63*	44.60	6.99658E-001	2.52757E-001
		609.31*	46.30	5.27303E-001	1.44419E-001
		1120.29	15.10		
Ac-228	0.626	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	6.58199E-001	2.26752E-001
		969.11*	16.60	8.41899E-001	2.93635E-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	0.992	1.122947E-001	7.738719E-002
K-40	0.998	1.743953E+001	1.967622E+000
TL-208	0.750	2.319629E-001	9.499778E-002
Pb-212 @	0.576	6.996580E-001	2.527566E-001
Bi-214	0.402	5.273031E-001	1.444185E-001
Ac-228	0.626	7.268224E-001	1.794690E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.75	2.0490E-001	38.54
9	1280.98	2.5449E-002	84.12

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.1296E-001	8.17E-002	4.2691E-002
	1332.49	100.00	8.1737E-002		-2.2905E-002
Nb-94	702.63	100.00	1.1484E-001	1.02E-001	6.8138E-002
	871.10	100.00	1.0198E-001		-7.2839E-003
Ag-108m	79.20	7.10	7.6469E+000	1.35E-001	-8.5420E-001
	433.93	89.90	1.3543E-001		2.8538E-002
	614.37	90.40	1.3587E-001		1.1293E-002
	722.95	90.50	1.4241E-001		4.1191E-003
Sb-125	176.33	6.89	2.5623E+000	4.20E-001	4.6526E-001
	427.89	29.33	4.1968E-001		2.7285E-001
	463.38	10.35	1.1894E+000		2.7492E-001
	600.56	17.80	5.9395E-001		-3.3665E-002
	606.64	5.02	2.8597E+000		-2.0056E+000
	635.90	11.32	9.1264E-001		-4.7526E-001
Cs-134	563.23	8.38	1.3811E+000	1.27E-001	2.9385E-001
	569.32	15.43	7.2914E-001		-5.5125E-001
	604.70	97.60	1.3951E-001		-1.7326E-001
	795.84	85.40	1.2678E-001		-4.3030E-002
	801.93	8.73	1.2721E+000		-2.9550E-001
Cs-137	661.65	85.12	1.3722E-001	1.37E-001	-4.4598E-002
Eu-152	121.78	28.40	8.4502E-001	3.40E-001	1.1460E-001
	244.69	7.49	2.0537E+000		-1.2940E+000
	344.27	26.50	5.0109E-001		-7.7593E-001
	778.89	12.74	8.6293E-001		-6.3335E-001
	867.32	4.16	2.5407E+000		-2.3651E+000
	964.01	14.40	9.1607E-001		-4.3116E-002
	1085.78	10.00	1.1237E+000		2.3219E-002
	1112.02	13.30	7.4294E-001		-6.7833E-001
1407.95	20.70	3.3975E-001	-1.4266E-002		
Eu-154	123.07	40.50	5.8712E-001	2.66E-001	1.5739E-001
	247.94	6.60	2.2755E+000		1.1454E+000
	591.81	4.83	2.2690E+000		-2.0968E-001
	723.30	19.70	6.5784E-001		1.0570E-001
	756.87	4.33	2.4436E+000		-7.3716E-001
	873.19	11.50	8.7008E-001		-1.1121E-001
	996.32	10.30	9.9167E-001		-8.8873E-001
	1004.76	17.90	5.5707E-001		-4.8728E-001
1274.45	35.50	2.6608E-001	-3.7474E-001		
Eu-155	86.54	30.90	1.3657E+000	1.37E+000	1.1049E+000
	105.31	20.70	1.4686E+000		3.9228E-002
Am-241	59.54	35.90	2.8523E+000	2.85E+000	-1.2721E+000
Cm-243	228.19	10.56	1.5070E+000	1.10E+000	-9.2884E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0976E+000	1.10E+000	1.2051E+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 6/26/2006 10:56:15 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-10-03-151-F-

Sample Title: OOL-10-03-151-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 10:46:12 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: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-151-F-
Title: OOL-10-03-151-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	308	299.78	74.97	1.18	2.26E+002	101.40	8.86E+002
2	332-	343	337.86	84.49	0.90	1.37E+002	82.47	6.48E+002
3	943-	964	954.00	238.54	1.38	3.16E+002	84.27	4.05E+002
4	1397-	1418	1407.37	351.89	1.74	1.60E+002	54.40	1.63E+002
5	2323-	2341	2331.71	583.00	1.60	1.52E+002	40.76	8.30E+001
6	3634-	3652	3643.18	910.90	1.44	1.07E+002	31.47	4.47E+001
7	3867-	3882	3873.97	968.60	0.67	4.88E+001	26.48	4.42E+001
8	3911-	3922	3916.30	979.18	0.48	1.10E+001	13.69	1.50E+001
9	5829-	5856	5842.27	1460.72	1.98	8.68E+002	60.74	2.07E+001
10	7052-	7065	7058.21	1764.73	1.10	3.06E+001	15.82	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: 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	1.000	1460.81*	10.67	2.00565E+001	2.14591E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.37093E-001	1.00479E-001
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	7.07252E+000	3.45966E+000
		77.11 @	18.00		
		87.30 @	8.00		
Ac-228	0.625	238.63*	44.60	9.74466E-001	3.01805E-001
		338.32	11.40		
		911.07*	27.70	8.14458E-001	2.56526E-001
		969.11*	16.60	6.26392E-001	3.46451E-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	1.000	2.005651E+001	2.145914E+000
TL-208	0.469	3.370933E-001	1.004794E-001
Pb-212 @	0.576	9.744656E-001	3.018052E-001
Ac-228	0.625	7.478621E-001	2.061630E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.49	2.2838E-001	60.18
4	351.89	2.6705E-001	33.95
8	979.18	1.8333E-002	124.43
10	1764.73	5.1008E-002	51.71

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: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	1.1789E-001	9.77E-002	1.8413E-002
	1332.49	100.00	9.7684E-002		1.2401E-002
Nb-94	702.63	100.00	1.0756E-001	1.08E-001	-6.5301E-002
	871.10	100.00	1.1475E-001		1.1529E-001
Ag-108m	79.20	7.10	7.5713E+000	1.40E-001	-7.0358E+000
	433.93	89.90	1.4527E-001		4.0231E-002
	614.37	90.40	1.4024E-001		-2.0192E-001
	722.95	90.50	1.4548E-001		1.1555E-001
Sb-125	176.33	6.89	2.6927E+000	4.33E-001	8.4262E-001
	427.89	29.33	4.3305E-001		-9.1614E-002
	463.38	10.35	1.2495E+000		-3.2131E-001
	600.56	17.80	6.8202E-001		1.7483E-001
	606.64	5.02	2.9261E+000		2.1099E+000
	635.90	11.32	1.0848E+000		4.7484E-001
Cs-134	563.23	8.38	1.4840E+000	1.32E-001	3.1844E-001
	569.32	15.43	8.1337E-001		1.7515E-001
	604.70	97.60	1.4661E-001		-6.2453E-002
	795.84	85.40	1.3182E-001		4.2757E-002
	801.93	8.73	1.2572E+000		8.2054E-001
Cs-137	661.65	85.12	1.5020E-001	1.50E-001	1.0372E-001
Eu-152	121.78	28.40	8.4258E-001	3.85E-001	1.0617E-002
	244.69	7.49	2.2228E+000		-2.3658E+000
	344.27	26.50	5.0705E-001		-7.1374E-001
	778.89	12.74	8.2157E-001		-3.1743E-001
	867.32	4.16	2.6933E+000		-2.5434E+000
	964.01	14.40	9.9126E-001		1.6549E-001
	1085.78	10.00	1.1715E+000		4.4129E-001
	1112.02	13.30	8.5339E-001		-1.8264E-001
1407.95	20.70	3.8462E-001	-5.1976E-002		
Eu-154	123.07	40.50	5.8690E-001	3.18E-001	1.1999E-001
	247.94	6.60	2.4512E+000		1.6483E+000
	591.81	4.83	2.4783E+000		1.1036E+000
	723.30	19.70	6.7703E-001		7.3465E-001
	756.87	4.33	2.5625E+000		-6.0393E-001
	873.19	11.50	9.7566E-001		3.6934E-001
	996.32	10.30	1.0873E+000		-1.2866E-001
	1004.76	17.90	5.7754E-001		2.5769E-001
1274.45	35.50	3.1811E-001	3.3779E-001		
Eu-155	86.54	30.90	1.3844E+000	1.38E+000	-2.7143E-001
	105.31	20.70	1.5145E+000		9.3039E-001
Am-241	59.54	35.90	2.8537E+000	2.85E+000	-6.8377E-002
Cm-243	228.19	10.56	1.5371E+000	1.05E+000	3.8345E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0527E+000	1.05E+000	7.0650E-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 6/26/2006 9:56:42 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: YEL7810

Sample ID: OOL-10-03-152-F-

Sample Title: OOL-10-03-152-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 9:46:39 AM

Live Time: 600.0 seconds

Real Time: 600.6 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-152-F-
Title: OOL-10-03-152-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	307	300.34	75.11	0.79	1.76E+002	85.87	6.90E+002
2	945-	961	955.28	238.86	0.86	1.72E+002	65.68	3.03E+002
3	1401-	1418	1409.30	352.37	1.51	1.28E+002	49.55	1.57E+002
4	2324-	2340	2332.95	583.31	1.02	1.06E+002	32.75	5.54E+001
5	2431-	2446	2437.77	609.51	1.71	1.09E+002	34.99	6.87E+001
6	3639-	3656	3646.64	911.76	0.86	7.84E+001	28.42	4.06E+001
7	3873-	3888	3879.72	970.04	0.46	2.99E+001	25.42	4.51E+001
8	5834-	5860	5847.32	1461.98	1.99	7.42E+002	56.48	2.03E+001
9	7058-	7071	7064.52	1766.31	0.43	2.69E+001	15.20	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: 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	0.952	1460.81*	10.67	1.71394E+001	1.90492E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.34275E-001	7.87852E-002
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	5.48157E+000	2.87727E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.671	238.63*	44.60	5.30398E-001	2.19315E-001
		609.31*	46.30	4.48425E-001	1.53854E-001
		1120.29	15.10		
Ac-228	0.611	1764.49*	15.80	4.58025E-001	2.62930E-001
		338.32	11.40		
		911.07*	27.70	5.95074E-001	2.26255E-001
		969.11*	16.60	3.84002E-001	3.29198E-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	0.952	1.713936E+001	1.904917E+000
TL-208	0.469	2.342754E-001	7.878523E-002
Pb-212 @	0.575	5.303980E-001	2.193152E-001
Bi-214	0.671	4.508738E-001	1.327906E-001
Ac-228	0.611	5.273575E-001	1.864618E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	352.37	2.1395E-001	38.60

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: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	1.1040E-001	8.64E-002	1.5574E-002
	1332.49	100.00	8.6402E-002		1.8406E-002
Nb-94	702.63	100.00	1.0587E-001	9.85E-002	-4.4204E-002
	871.10	100.00	9.8507E-002		5.7253E-002
Ag-108m	79.20	7.10	7.3327E+000	1.25E-001	-3.7363E+000
	433.93	89.90	1.2510E-001		-9.0111E-002
	614.37	90.40	1.5580E-001		-9.9663E-002
	722.95	90.50	1.3277E-001		6.5486E-002
Sb-125	176.33	6.89	2.4863E+000	3.96E-001	1.7606E+000
	427.89	29.33	3.9605E-001		1.8133E-001
	463.38	10.35	1.1396E+000		3.4457E-001
	600.56	17.80	6.2748E-001		3.2600E-001
	606.64	5.02	2.9910E+000		-2.3164E-001
	635.90	11.32	9.5181E-001		-1.7406E-001
Cs-134	563.23	8.38	1.4316E+000	1.22E-001	2.3813E-001
	569.32	15.43	7.4678E-001		3.6865E-001
	604.70	97.60	1.3706E-001		-2.9426E-002
	795.84	85.40	1.2206E-001		1.0959E-001
	801.93	8.73	1.1144E+000		-1.1075E+000
Cs-137	661.65	85.12	1.3455E-001	1.35E-001	2.7089E-002
Eu-152	121.78	28.40	8.0854E-001	3.58E-001	1.4694E-001
	244.69	7.49	1.9915E+000		-1.4033E+000
	344.27	26.50	4.8199E-001		-6.2184E-001
	778.89	12.74	8.6293E-001		-1.4559E-001
	867.32	4.16	2.4256E+000		-3.3456E+000
	964.01	14.40	8.5732E-001		-6.6064E-002
	1085.78	10.00	1.0737E+000		4.1999E-002
	1112.02	13.30	8.0411E-001		3.3967E-001
1407.95	20.70	3.5844E-001	-2.0809E-001		
Eu-154	123.07	40.50	5.6225E-001	2.49E-001	5.2770E-001
	247.94	6.60	2.0822E+000		-5.2943E-001
	591.81	4.83	2.3140E+000		1.0149E+000
	723.30	19.70	6.1190E-001		3.2215E-001
	756.87	4.33	2.4839E+000		1.2860E+000
	873.19	11.50	8.6575E-001		6.2715E-001
	996.32	10.30	9.2925E-001		-3.8754E-001
	1004.76	17.90	5.3578E-001		-1.6603E-001
1274.45	35.50	2.4879E-001	-7.6984E-002		
Eu-155	86.54	30.90	1.3515E+000	1.35E+000	2.1060E+000
	105.31	20.70	1.4429E+000		8.6405E-001
Am-241	59.54	35.90	2.7858E+000	2.79E+000	-2.1386E+000
Cm-243	228.19	10.56	1.4910E+000	9.95E-001	1.2643E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.9512E-001	9.95E-001	-5.9840E-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 6/23/2006 1:32:50 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-153-F-

Sample Title: OOL-10-03-153-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 1:23:06 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-153-F-
Title: OOL-10-03-153-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 8 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.988	1460.81*	10.67	2.38877E+001	2.44736E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.48829E-001	8.87140E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	5.93397E+000	3.27045E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.92831E-001	2.39395E-001
Bi-214	0.407	609.31*	46.30	5.02567E-001	1.69247E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.623	338.32	11.40		
		911.07*	27.70	7.47717E-001	2.47814E-001
		969.11*	16.60	4.96781E-001	3.44291E-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	0.988	2.388774E+001	2.447358E+000
TL-208	0.469	2.488289E-001	8.871402E-002
Pb-212 @	0.576	5.928312E-001	2.393953E-001
Bi-214	0.407	5.025666E-001	1.692470E-001
Ac-228	0.623	6.620788E-001	2.011306E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.94	2.3897E-001	35.37

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: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	1.1837E-001	8.64E-002	2.3082E-003
	1332.49	100.00	8.6402E-002		7.7325E-003
Nb-94	702.63	100.00	1.1868E-001	1.16E-001	-2.6304E-002
	871.10	100.00	1.1603E-001		3.8989E-002
Ag-108m	79.20	7.10	7.7150E+000	1.39E-001	-5.3724E+000
	433.93	89.90	1.3934E-001		5.6256E-002
	614.37	90.40	1.5707E-001		1.1831E-002
	722.95	90.50	1.4357E-001		-4.1374E-002
Sb-125	176.33	6.89	2.6832E+000	4.18E-001	-1.0918E+000
	427.89	29.33	4.1798E-001		-3.4682E-001
	463.38	10.35	1.3320E+000		2.5423E-001
	600.56	17.80	6.8388E-001		-1.9901E-001
	606.64	5.02	3.1320E+000		4.5574E-001
	635.90	11.32	1.1059E+000		-1.2516E-001
Cs-134	563.23	8.38	1.4047E+000	1.42E-001	-1.4335E-001
	569.32	15.43	7.6824E-001		1.7919E-001
	604.70	97.60	1.4947E-001		4.8525E-003
	795.84	85.40	1.4178E-001		3.1077E-002
Cs-137	801.93	8.73	1.3155E+000	1.52E-001	-1.2688E+000
	661.65	85.12	1.5179E-001		6.1112E-002
Eu-152	121.78	28.40	8.7468E-001	3.97E-001	-3.7105E-001
	244.69	7.49	2.2952E+000		-7.0740E-001
	344.27	26.50	4.9658E-001		-9.9193E-001
	778.89	12.74	9.1819E-001		-1.3587E-001
	867.32	4.16	2.6933E+000		-2.4719E+000
	964.01	14.40	9.9374E-001		5.3551E-001
	1085.78	10.00	1.1574E+000		5.8323E-001
	1112.02	13.30	9.0676E-001		4.8975E-001
1407.95	20.70	3.9701E-001	2.3469E-001		
Eu-154	123.07	40.50	6.1178E-001	2.89E-001	2.1071E-001
	247.94	6.60	2.4673E+000		-2.9003E+000
	591.81	4.83	2.4506E+000		-1.4690E+000
	723.30	19.70	6.6838E-001		1.8985E-001
	756.87	4.33	2.8973E+000		8.9984E-001
	873.19	11.50	1.0169E+000		4.7528E-001
	996.32	10.30	1.0736E+000		-6.3953E-002
Eu-155	1004.76	17.90	6.2430E-001	1.40E+000	-8.6230E-001
	1274.45	35.50	2.8912E-001		-1.7358E-001
	86.54	30.90	1.4024E+000		2.2547E+000
Am-241	105.31	20.70	1.4934E+000	2.80E+000	-1.3499E-001
	59.54	35.90	2.7956E+000		-1.3092E+000
Cm-243	228.19	10.56	1.6309E+000	1.05E+000	1.2047E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0459E+000	1.05E+000	-4.0044E-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 6/23/2006 1:18:54 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-154-F-

Sample Title: OOL-10-03-154-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 1:08:50 PM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

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

Filename: YEL7810
Log Number: OOL-10-03-154-F-
Title: OOL-10-03-154-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	291-	305	300.21	75.07	1.39	2.05E+002	97.04	7.73E+002
2	945-	963	953.79	238.48	1.26	2.00E+002	70.26	3.19E+002
3	2320-	2341	2332.38	583.17	1.33	1.30E+002	37.83	6.47E+001
4	2429-	2446	2436.26	609.14	0.92	1.14E+002	33.26	5.35E+001
5	3634-	3652	3643.91	911.08	1.73	9.12E+001	27.37	3.08E+001
6	4477-	4490	4482.86	1120.84	0.29	4.09E+001	19.86	2.21E+001
7	5831-	5858	5845.03	1461.41	1.83	5.95E+002	49.70	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: 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	0.987	1460.81*	10.67	1.37569E+001	1.59963E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.88888E-001	9.19570E-002
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	6.36723E+000	3.26811E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.18012E-001	2.37649E-001
Bi-214	0.708	609.31*	46.30	4.65916E-001	1.48061E-001
		1120.29*	15.10	5.98435E-001	2.97195E-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: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	0.987	1.375689E+001	1.599633E+000
TL-208	0.470	2.888878E-001	9.195701E-002
Pb-212 @	0.575	6.180121E-001	2.376490E-001
Bi-214	0.708	4.922668E-001	1.325254E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	911.08	1.5202E-001	30.01

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: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	9.4766E-002	7.68E-002	7.0168E-003
	1332.49	100.00	7.6764E-002		-8.4416E-002
Nb-94	702.63	100.00	1.1286E-001	9.85E-002	1.0078E-001
	871.10	100.00	9.8507E-002		9.2858E-003
Ag-108m	79.20	7.10	6.9113E+000	1.20E-001	-1.2831E+001
	433.93	89.90	1.2039E-001		-4.6200E-002
	614.37	90.40	1.2981E-001		-5.1440E-002
	722.95	90.50	1.2853E-001		9.8216E-002
Sb-125	176.33	6.89	2.3299E+000	3.72E-001	1.8343E+000
	427.89	29.33	3.7181E-001		-3.8230E-001
	463.38	10.35	1.0500E+000		-6.5658E-001
	600.56	17.80	5.6744E-001		-2.5998E-001
	606.64	5.02	2.8653E+000		-5.9583E-001
	635.90	11.32	9.3776E-001		-6.3112E-001
Cs-134	563.23	8.38	1.3572E+000	1.21E-001	7.1554E-001
	569.32	15.43	6.9948E-001		1.1092E-001
	604.70	97.60	1.3613E-001		-6.9658E-002
	795.84	85.40	1.2098E-001		7.8071E-002
	801.93	8.73	1.1694E+000		1.2485E-001
Cs-137	661.65	85.12	1.2280E-001	1.23E-001	-1.7513E-001
Eu-152	121.78	28.40	7.6661E-001	3.89E-001	1.8709E-002
	244.69	7.49	1.9154E+000		-1.6961E-001
	344.27	26.50	4.3433E-001		-1.0930E+000
	778.89	12.74	7.8535E-001		-4.4903E-001
	867.32	4.16	2.4839E+000		-1.0413E-001
	964.01	14.40	8.7168E-001		1.0841E-002
	1085.78	10.00	8.7492E-001		-5.3326E-001
	1112.02	13.30	7.4294E-001		-2.3182E-001
1407.95	20.70	3.8880E-001	1.2236E-001		
Eu-154	123.07	40.50	5.3222E-001	2.43E-001	1.3430E-001
	247.94	6.60	1.9995E+000		1.9179E-001
	591.81	4.83	2.1998E+000		9.4395E-001
	723.30	19.70	5.8452E-001		2.2686E-001
	756.87	4.33	2.5137E+000		1.3667E-001
	873.19	11.50	8.4818E-001		-3.8978E-002
	996.32	10.30	8.6782E-001		-5.8110E-001
	1004.76	17.90	5.8889E-001		3.7827E-001
1274.45	35.50	2.4274E-001	-3.2823E-001		
Eu-155	86.54	30.90	1.2668E+000	1.27E+000	1.2562E+000
	105.31	20.70	1.2869E+000		-4.5289E-001
Am-241	59.54	35.90	2.4940E+000	2.49E+000	2.2321E-002
Cm-243	228.19	10.56	1.3769E+000	9.17E-001	-1.0109E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.1732E-001	9.17E-001	4.9199E-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 6/23/2006 1:02:18 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-155-F-

Sample Title: OOL-10-03-155-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 12:52:03 PM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-155-F-
Title: OOL-10-03-155-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	295-	307	300.86	75.24	1.12	1.45E+002	90.84	7.57E+002
2	950-	962	954.86	238.75	1.63	2.05E+002	53.34	2.02E+002
3	1348-	1363	1352.78	338.24	0.34	7.13E+001	41.62	1.26E+002
4	2324-	2340	2332.94	583.31	1.58	1.35E+002	36.20	6.59E+001
5	2427-	2447	2437.65	609.48	1.05	1.52E+002	36.20	5.23E+001
6	3634-	3653	3645.60	911.50	0.71	8.08E+001	33.28	5.93E+001
7	5833-	5859	5845.67	1461.57	2.06	7.00E+002	55.64	2.39E+001
8	7057-	7070	7063.17	1765.97	0.39	1.79E+001	13.26	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: 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	0.980	1460.81*	10.67	1.61755E+001	1.83507E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.99702E-001	8.92651E-002
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	4.49419E+000	2.94373E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.679	238.63*	44.60	6.32381E-001	1.92333E-001
		609.31*	46.30	6.22721E-001	1.67184E-001
		1120.29	15.10		
Ac-228	0.539	1764.49*	15.80	3.05271E-001	2.27838E-001
		338.32*	11.40	9.55530E-001	5.77623E-001
		911.07*	27.70	6.12778E-001	2.62158E-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: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	0.980	1.617553E+001	1.835069E+000
TL-208	0.469	2.997022E-001	8.926508E-002
Pb-212 @	0.575	6.323814E-001	1.923326E-001
Bi-214	0.679	5.116163E-001	1.347891E-001
Ac-228	0.539	6.713208E-001	2.387215E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.0832E-001	8.56E-002	1.6532E-002
	1332.49	100.00	8.5644E-002		-1.3809E-002
Nb-94	702.63	100.00	1.1166E-001	1.08E-001	5.0560E-002
	871.10	100.00	1.0765E-001		-2.4922E-002
Ag-108m	79.20	7.10	7.1154E+000	1.27E-001	-3.8766E+000
	433.93	89.90	1.2693E-001		2.5956E-003
	614.37	90.40	1.4890E-001		-9.4895E-003
	722.95	90.50	1.3443E-001		1.2252E-001
Sb-125	176.33	6.89	2.4534E+000	3.87E-001	1.9375E+000
	427.89	29.33	3.8691E-001		-3.2016E-001
	463.38	10.35	1.1529E+000		-1.2097E+000
	600.56	17.80	5.9825E-001		1.0786E-001
	606.64	5.02	2.9910E+000		-8.7851E-001
	635.90	11.32	9.3422E-001		-1.3211E+000
Cs-134	563.23	8.38	1.2389E+000	1.35E-001	-1.4606E-001
	569.32	15.43	7.1788E-001		1.3463E-001
	604.70	97.60	1.4192E-001		7.0898E-003
	795.84	85.40	1.3474E-001		1.8529E-001
	801.93	8.73	1.0915E+000		-9.1298E-001
Cs-137	661.65	85.12	1.2858E-001	1.29E-001	-6.2372E-002
Eu-152	121.78	28.40	8.0950E-001	3.72E-001	-1.8049E-001
	244.69	7.49	1.9877E+000		-4.5312E-001
	344.27	26.50	4.6370E-001		-2.9495E-001
	778.89	12.74	7.3543E-001		-2.2731E-001
	867.32	4.16	2.5631E+000		-1.3856E+000
	964.01	14.40	8.9693E-001		4.7583E-001
	1085.78	10.00	1.0478E+000		-7.3406E-001
	1112.02	13.30	7.9228E-001		5.5436E-002
1407.95	20.70	3.7179E-001	-7.3157E-002		
Eu-154	123.07	40.50	5.6758E-001	2.73E-001	-1.2167E-002
	247.94	6.60	2.1844E+000		-2.3620E+000
	591.81	4.83	2.1998E+000		-7.9071E-001
	723.30	19.70	6.2137E-001		5.6873E-001
	756.87	4.33	2.2967E+000		-2.4598E+000
	873.19	11.50	9.1222E-001		-2.7745E-001
	996.32	10.30	9.8663E-001		1.3685E-001
	1004.76	17.90	5.8040E-001		4.1769E-001
1274.45	35.50	2.7339E-001	8.8958E-002		
Eu-155	86.54	30.90	1.2803E+000	1.28E+000	5.2105E-001
	105.31	20.70	1.3664E+000		4.3190E-001
Am-241	59.54	35.90	2.6344E+000	2.63E+000	-1.1441E-001
Cm-243	228.19	10.56	1.4306E+000	9.69E-001	-5.8824E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.6868E-001	9.69E-001	-1.3819E-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 6/23/2006 11:59:46 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-10-03-156-F-

Sample Title: OOL-10-03-156-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 11:49:40 AM

Live Time: 600.0 seconds

Real Time: 600.6 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-156-F-
Title: OOL-10-03-156-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	291-	308	300.25	75.08	0.83	3.72E+002	113.09	9.08E+002
2	946-	963	954.94	238.77	1.01	1.50E+002	73.57	3.86E+002
3	1397-	1416	1407.85	352.01	1.06	1.03E+002	50.78	1.62E+002
4	2323-	2341	2332.68	583.24	1.15	1.19E+002	41.88	9.98E+001
5	2427-	2446	2437.09	609.34	0.89	1.12E+002	37.55	7.22E+001
6	3435-	3448	3441.54	860.48	0.80	3.36E+001	17.70	1.74E+001
7	3634-	3656	3645.08	911.37	1.79	1.28E+002	30.35	2.88E+001
8	3868-	3884	3876.16	969.15	1.05	6.25E+001	27.41	4.25E+001
9	4476-	4487	4481.18	1120.42	0.34	2.34E+001	19.13	2.86E+001
10	5833-	5858	5845.68	1461.57	1.75	7.65E+002	57.40	2.22E+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	0.979	1460.81*	10.67	1.76699E+001	1.95077E+000
TL-208	0.620	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.64501E-001	9.90671E-002
Pb-212	0.575	860.37*	12.46	5.59704E-001	3.02760E-001
		74.81* @	10.70	1.15732E+001	4.18647E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.711	238.63*	44.60	4.64277E-001	2.38673E-001
		609.31*	46.30	4.58702E-001	1.64130E-001
		1120.29*	15.10	3.42097E-001	2.82095E-001
Ac-228	0.627	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	9.73203E-001	2.56062E-001
		969.11*	16.60	8.03042E-001	3.62069E-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	0.979	1.766991E+001	1.950769E+000
TL-208	0.620	2.930510E-001	9.415469E-002
Pb-212 @	0.575	4.642774E-001	2.386733E-001
Bi-214	0.711	4.292121E-001	1.418650E-001
Ac-228	0.627	9.164706E-001	2.090629E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	352.01	1.7096E-001	49.50

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: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	1.0290E-001	8.94E-002	4.8743E-002
	1332.49	100.00	8.9366E-002		7.4406E-002
Nb-94	702.63	100.00	1.1326E-001	9.90E-002	-4.4091E-002
	871.10	100.00	9.9010E-002		4.6260E-002
Ag-108m	79.20	7.10	7.1006E+000	1.22E-001	-8.0860E+000
	433.93	89.90	1.2417E-001		-3.1864E-002
	614.37	90.40	1.4446E-001		-1.7227E-002
	722.95	90.50	1.2233E-001		5.3646E-002
Sb-125	176.33	6.89	2.4818E+000	4.10E-001	1.8402E+000
	427.89	29.33	4.1022E-001		5.1661E-001
	463.38	10.35	1.1997E+000		2.7946E-002
	600.56	17.80	5.9395E-001		-4.2499E-001
	606.64	5.02	2.9041E+000		1.1943E-001
	635.90	11.32	9.7587E-001		-2.4622E-001
Cs-134	563.23	8.38	1.4124E+000	1.23E-001	9.2437E-001
	569.32	15.43	7.3359E-001		-3.5230E-001
	604.70	97.60	1.3644E-001		2.4544E-002
	795.84	85.40	1.2312E-001		4.8789E-003
	801.93	8.73	1.2167E+000		-1.6663E+000
Cs-137	661.65	85.12	1.3500E-001	1.35E-001	1.2453E-001
Eu-152	121.78	28.40	8.2088E-001	3.85E-001	-4.9134E-001
	244.69	7.49	2.0759E+000		1.5251E+000
	344.27	26.50	4.8742E-001		-1.0976E+000
	778.89	12.74	8.4938E-001		-5.8902E-001
	867.32	4.16	2.2918E+000		-2.6418E+000
	964.01	14.40	9.4270E-001		-2.0607E-001
	1085.78	10.00	1.0530E+000		-7.1890E-001
	1112.02	13.30	7.7620E-001		-5.1641E-002
1407.95	20.70	3.8462E-001	2.0721E-001		
Eu-154	123.07	40.50	5.7547E-001	2.68E-001	2.0402E-001
	247.94	6.60	2.1547E+000		-2.6515E+000
	591.81	4.83	2.2385E+000		-2.5436E+000
	723.30	19.70	5.6203E-001		1.7418E-001
	756.87	4.33	2.4839E+000		4.5017E-001
	873.19	11.50	8.7439E-001		6.5068E-003
	996.32	10.30	9.5054E-001		-1.6252E-001
	1004.76	17.90	5.4501E-001		1.2068E-001
1274.45	35.50	2.6793E-001	-3.4280E-001		
Eu-155	86.54	30.90	1.3388E+000	1.34E+000	1.9043E+000
	105.31	20.70	1.4409E+000		3.8929E-001
Am-241	59.54	35.90	2.6624E+000	2.66E+000	1.1411E+000
Cm-243	228.19	10.56	1.4886E+000	9.88E-001	-1.3164E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.8799E-001	9.88E-001	-5.8612E-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 6/23/2006 10:33:17 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-10-03-157-F-

Sample Title: OOL-10-03-157-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 10:23:14 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-157-F-
Title: OOL-10-03-157-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	297-	309	300.21	75.05	1.07	2.47E+002	87.31	6.54E+002
2	947-	962	954.13	238.55	1.04	1.99E+002	63.99	2.86E+002
3	1399-	1413	1406.72	351.70	1.01	7.68E+001	44.00	1.47E+002
4	2323-	2339	2330.25	582.60	1.50	9.64E+001	34.91	7.06E+001
5	2426-	2444	2434.84	608.75	1.10	1.17E+002	39.01	8.26E+001
6	3633-	3651	3642.03	910.57	1.40	8.63E+001	32.02	5.27E+001
7	3865-	3881	3871.61	967.97	1.51	6.06E+001	24.44	3.04E+001
8	5826-	5853	5839.88	1460.08	1.96	7.73E+002	59.23	3.13E+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: 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	0.982	1460.81*	10.67	1.75581E+001	1.95764E+000
TL-208	0.465	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.15205E-001	8.27791E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	9.61071E+000	3.88540E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.49711E-001	2.32383E-001
Bi-214	0.396	609.31*	46.30	4.83637E-001	1.71390E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.616	338.32	11.40		
		911.07*	27.70	6.56468E-001	2.55176E-001
		969.11*	16.60	7.82391E-001	3.25997E-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	0.982	1.755815E+001	1.957637E+000
TL-208	0.465	2.152048E-001	8.277914E-002
Pb-212 @	0.594	6.497114E-001	2.323832E-001
Bi-214	0.396	4.836373E-001	1.713895E-001
Ac-228	0.616	7.043092E-001	2.009380E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.70	1.2798E-001	57.30

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: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	1.0997E-001	1.02E-001	1.4025E-002
	1332.49	100.00	1.0202E-001		-2.9557E-002
Nb-94	702.63	100.00	1.1795E-001	1.03E-001	3.5412E-002
	871.10	100.00	1.0319E-001		-4.2601E-003
Ag-108m	79.20	7.10	9.0761E+000	1.45E-001	-6.3590E+000
	433.93	89.90	1.4660E-001		-1.0021E-001
	614.37	90.40	1.5860E-001		-4.8528E-002
	722.95	90.50	1.4480E-001		4.2901E-002
Sb-125	176.33	6.89	2.7739E+000	4.53E-001	1.6149E+000
	427.89	29.33	4.5298E-001		2.9421E-002
	463.38	10.35	1.2503E+000		1.7607E-001
	600.56	17.80	6.7967E-001		-1.5104E-001
	606.64	5.02	3.2064E+000		4.7268E+000
	635.90	11.32	9.7764E-001		-6.5271E-001
Cs-134	563.23	8.38	1.5109E+000	1.43E-001	-5.9346E-001
	569.32	15.43	8.2760E-001		-2.3822E-001
	604.70	97.60	1.6266E-001		5.2191E-002
	795.84	85.40	1.4337E-001		1.7797E-001
	801.93	8.73	1.3129E+000		-2.5811E-001
Cs-137	661.65	85.12	1.5794E-001	1.58E-001	9.7815E-002
Eu-152	121.78	28.40	9.0273E-001	4.20E-001	4.9571E-001
	244.69	7.49	2.1788E+000		-9.8559E-001
	344.27	26.50	5.3025E-001		-8.1682E-001
	778.89	12.74	8.7742E-001		-3.1051E-001
	867.32	4.16	2.4666E+000		-8.4167E-001
	964.01	14.40	9.8337E-001		2.0295E-001
	1085.78	10.00	1.1029E+000		4.4675E-001
	1112.02	13.30	7.8714E-001		-1.0035E+000
1407.95	20.70	4.2000E-001	2.0400E-001		
Eu-154	123.07	40.50	6.2351E-001	2.90E-001	-4.3453E-001
	247.94	6.60	2.4649E+000		-1.7884E+000
	591.81	4.83	2.5875E+000		-3.3957E-002
	723.30	19.70	6.6000E-001		-3.8429E-002
	756.87	4.33	2.6971E+000		-1.1512E+000
	873.19	11.50	9.3482E-001		3.3528E-001
	996.32	10.30	1.0843E+000		-7.6117E-001
	1004.76	17.90	5.9520E-001		-3.3246E-001
1274.45	35.50	2.8981E-001	-2.7717E-001		
Eu-155	86.54	30.90	1.5428E+000	1.54E+000	1.5921E+000
	105.31	20.70	1.5595E+000		1.6823E-003
Am-241	59.54	35.90	3.6996E+000	3.70E+000	-1.2786E+000
Cm-243	228.19	10.56	1.6296E+000	1.13E+000	4.5250E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1342E+000	1.13E+000	-3.5587E-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 6/23/2006 8:36:14 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-158-F-

Sample Title: OOL-10-03-158-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 8:26:12 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-158-F-
Title: OOL-10-03-158-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	296-	309	301.07	75.27	0.57	1.86E+002	92.60	7.31E+002
2	946-	959	953.83	238.47	1.12	2.17E+002	62.12	2.85E+002
3	1398-	1417	1406.80	351.72	0.90	1.74E+002	52.75	1.57E+002
4	2321-	2341	2330.50	582.67	1.55	1.61E+002	39.74	6.93E+001
5	2425-	2445	2435.49	608.92	1.68	1.67E+002	42.07	8.09E+001
6	3632-	3651	3641.99	910.56	0.96	1.35E+002	34.17	4.77E+001
7	3864-	3881	3873.05	968.33	1.37	7.10E+001	30.77	5.40E+001
8	5825-	5854	5840.26	1460.17	1.86	8.19E+002	57.87	1.12E+001
9	7049-	7065	7056.57	1764.27	0.78	4.75E+001	16.88	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: 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	0.987	1460.81*	10.67	1.86072E+001	1.99968E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.58511E-001	1.00226E-001
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	7.18418E+000	3.83616E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.694	238.63*	44.60	7.09241E-001	2.31221E-001
		609.31*	46.30	6.88455E-001	1.92964E-001
		1120.29	15.10		
Ac-228	0.623	1764.49*	15.80	7.72370E-001	2.85152E-001
		338.32	11.40		
		911.07*	27.70	1.02934E+000	2.85813E-001
		969.11*	16.60	9.16520E-001	4.08706E-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	0.987	1.860719E+001	1.999675E+000
TL-208	0.467	3.585114E-001	1.002255E-001
Pb-212 @	0.593	7.092409E-001	2.312212E-001
Bi-214	0.694	7.148126E-001	1.598115E-001
Ac-228	0.623	9.922863E-001	2.342230E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.72	2.9004E-001	30.31

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: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	1.2294E-001	8.77E-002	-1.5585E-002
	1332.49	100.00	8.7736E-002		3.2419E-002
Nb-94	702.63	100.00	1.2568E-001	1.10E-001	2.7034E-002
	871.10	100.00	1.1019E-001		2.5623E-002
Ag-108m	79.20	7.10	9.0847E+000	1.45E-001	-4.3293E+000
	433.93	89.90	1.4467E-001		7.0680E-002
	614.37	90.40	1.6663E-001		-3.7081E-003
	722.95	90.50	1.4518E-001		1.0100E-001
Sb-125	176.33	6.89	2.8226E+000	4.59E-001	1.7733E-001
	427.89	29.33	4.5870E-001		5.1010E-001
	463.38	10.35	1.2901E+000		1.0067E+000
	600.56	17.80	7.0015E-001		9.2419E-002
	606.64	5.02	3.3822E+000		6.5743E+000
	635.90	11.32	1.0898E+000		8.2517E-001
Cs-134	563.23	8.38	1.5183E+000	1.33E-001	-5.0586E-001
	569.32	15.43	7.8890E-001		-5.4131E-001
	604.70	97.60	1.7450E-001		-1.1255E-002
	795.84	85.40	1.3251E-001		-2.9226E-002
	801.93	8.73	1.2790E+000		7.1385E-001
Cs-137	661.65	85.12	1.4150E-001	1.41E-001	-1.0149E-001
Eu-152	121.78	28.40	9.3750E-001	3.97E-001	-7.8888E-001
	244.69	7.49	2.3329E+000		-3.2267E-001
	344.27	26.50	5.5901E-001		-4.1056E-001
	778.89	12.74	8.7742E-001		-1.9218E+000
	867.32	4.16	2.5692E+000		-4.5361E+000
	964.01	14.40	1.0613E+000		3.5625E-001
	1085.78	10.00	1.1524E+000		-1.6123E-001
	1112.02	13.30	8.2684E-001		-1.6907E+000
1407.95	20.70	3.9689E-001	1.3945E-001		
Eu-154	123.07	40.50	6.5377E-001	2.81E-001	2.0452E-001
	247.94	6.60	2.5697E+000		-4.3215E-002
	591.81	4.83	2.4643E+000		-7.7675E-001
	723.30	19.70	6.6703E-001		2.1783E-001
	756.87	4.33	2.8832E+000		-1.6235E-001
	873.19	11.50	1.0083E+000		5.4841E-001
	996.32	10.30	1.1602E+000		5.3569E-001
	1004.76	17.90	5.9520E-001		-4.4634E-001
1274.45	35.50	2.8117E-001	2.1971E-001		
Eu-155	86.54	30.90	1.5985E+000	1.59E+000	1.9718E+000
	105.31	20.70	1.5905E+000		-1.3824E-001
Am-241	59.54	35.90	3.5275E+000	3.53E+000	-6.6161E-001
Cm-243	228.19	10.56	1.6819E+000	1.13E+000	-1.4320E-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	-5.1451E-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 6/23/2006 8:48:58 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-159-F-

Sample Title: OOL-10-03-159-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 8:38:57 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-159-F-
Title: OOL-10-03-159-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	293-	306	300.85	75.21	0.86	2.09E+002	94.40	7.64E+002
2	945-	961	953.82	238.47	1.09	1.95E+002	71.89	3.68E+002
3	1175-	1185	1180.04	295.03	0.65	3.26E+001	38.00	1.44E+002
4	1348-	1358	1352.72	338.20	0.77	4.46E+001	35.47	1.18E+002
5	1399-	1417	1406.42	351.63	1.88	1.88E+002	53.52	1.60E+002
6	2320-	2340	2330.54	582.68	1.05	1.60E+002	43.48	9.15E+001
7	2422-	2444	2435.06	608.81	1.51	1.54E+002	45.47	9.94E+001
8	3632-	3651	3641.52	910.45	1.70	1.44E+002	32.00	3.50E+001
9	4203-	4214	4208.07	1052.09	0.57	1.68E+001	14.60	1.52E+001
10	4474-	4486	4479.34	1119.91	0.34	2.87E+001	23.56	4.33E+001
11	5828-	5853	5840.48	1460.23	1.85	7.97E+002	58.63	2.29E+001
12	7049-	7063	7055.03	1763.89	1.25	4.10E+001	15.29	7.01E+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: 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	0.989	1460.81*	10.67	1.81144E+001	1.98144E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.58106E-001	1.07650E-001
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	8.06154E+000	3.97474E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.37341E-001	2.55015E-001
Bi-214	0.992	609.31*	46.30	6.32641E-001	2.02878E-001
		1120.29*	15.10	4.23671E-001	3.50461E-001
		1764.49*	15.80	6.66463E-001	2.57435E-001
PB-214	0.625	74.82* @	6.21	1.38903E+001	6.92241E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	2.59917E-001	3.06385E-001
		351.92*	37.20	8.06664E-001	2.66549E-001
Ac-228	0.534	338.32*	11.40	6.18722E-001	5.02100E-001
		911.07*	27.70	1.09586E+000	2.74271E-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: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	0.989	1.811441E+001	1.981437E+000
TL-208	0.467	3.581056E-001	1.076502E-001
Pb-212 @	0.593	6.373409E-001	2.550153E-001
Bi-214	0.992	6.075804E-001	1.450544E-001
PB-214 @	0.625	5.711221E-001	2.010979E-001
Ac-228	0.534	9.862083E-001	2.407010E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
9	1052.09	2.8047E-002	86.73

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: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	6.8216E-002
	1332.49	100.00	9.6842E-002		4.5742E-002
Nb-94	702.63	100.00	1.2460E-001	1.15E-001	7.2502E-002
	871.10	100.00	1.1460E-001		-5.9609E-002
Ag-108m	79.20	7.10	9.0244E+000	1.40E-001	-6.0823E+000
	433.93	89.90	1.4328E-001		-1.0408E-001
	614.37	90.40	1.7429E-001		-3.5031E-002
	722.95	90.50	1.3975E-001		-1.6034E-002
Sb-125	176.33	6.89	2.7938E+000	4.51E-001	7.2863E-001
	427.89	29.33	4.5051E-001		-3.4628E-001
	463.38	10.35	1.2925E+000		3.3679E-001
	600.56	17.80	7.0563E-001		3.0693E-001
	606.64	5.02	3.4012E+000		6.7338E+000
	635.90	11.32	1.0528E+000		2.9600E-001
Cs-134	563.23	8.38	1.4925E+000	1.32E-001	1.4948E-001
	569.32	15.43	8.2561E-001		1.5122E-001
	604.70	97.60	1.7255E-001		2.0950E-002
	795.84	85.40	1.3152E-001		-7.7812E-003
	801.93	8.73	1.1767E+000		-9.9962E-001
Cs-137	661.65	85.12	1.4895E-001	1.49E-001	1.6000E-001
Eu-152	121.78	28.40	9.1652E-001	4.16E-001	-4.5068E-001
	244.69	7.49	2.2981E+000		7.2584E-001
	344.27	26.50	5.2568E-001		-2.2179E-001
	778.89	12.74	9.0989E-001		-7.5318E-001
	867.32	4.16	2.8238E+000		1.4730E+000
	964.01	14.40	1.0328E+000		6.7537E-001
	1085.78	10.00	1.0978E+000		-1.6900E+000
	1112.02	13.30	9.0778E-001		-4.2461E-001
1407.95	20.70	4.1624E-001	4.0486E-002		
Eu-154	123.07	40.50	6.3679E-001	3.17E-001	6.8368E-002
	247.94	6.60	2.5569E+000		-1.6790E+000
	591.81	4.83	2.6468E+000		5.8662E-001
	723.30	19.70	6.5289E-001		2.5685E-001
	756.87	4.33	2.8226E+000		1.3446E+000
	873.19	11.50	1.0194E+000		-2.1089E-001
	996.32	10.30	1.1162E+000		-4.5683E-001
	1004.76	17.90	6.4373E-001		-8.2853E-001
1274.45	35.50	3.1734E-001	1.2737E-001		
Eu-155	86.54	30.90	1.5967E+000	1.57E+000	2.3243E+000
	105.31	20.70	1.5725E+000		-4.2934E-001
Am-241	59.54	35.90	3.6268E+000	3.63E+000	-1.7921E+000
Cm-243	228.19	10.56	1.6867E+000	1.13E+000	-3.7747E-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	2.9972E-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 6/24/2006 12:00:52 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-160-F-

Sample Title: OOL-10-03-160-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 11:50:51 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-160-F-
Title: OOL-10-03-160-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	297-	316	300.91	75.23	1.19	1.89E+002	121.58	1.03E+003
2	945-	960	953.78	238.46	1.36	2.80E+002	67.67	3.04E+002
3	1177-	1188	1181.94	295.50	0.84	6.51E+001	38.55	1.27E+002
4	1347-	1357	1351.97	338.01	0.39	5.26E+001	35.40	1.13E+002
5	1398-	1415	1406.25	351.58	0.88	1.34E+002	49.35	1.53E+002
6	2322-	2341	2330.61	582.69	1.54	1.64E+002	41.38	8.06E+001
7	2426-	2444	2434.94	608.78	1.22	1.14E+002	37.55	7.50E+001
8	3632-	3650	3641.03	910.32	1.47	1.29E+002	34.47	5.27E+001
9	3863-	3882	3872.23	968.13	1.91	8.69E+001	29.98	4.21E+001
10	5825-	5853	5839.39	1459.95	1.97	8.22E+002	57.86	1.07E+001
11	7049-	7062	7055.25	1763.94	0.41	2.86E+001	12.50	4.39E+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	0.976	1460.81*	10.67	1.86852E+001	2.00425E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.66890E-001	1.03979E-001
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	7.31421E+000	4.90751E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.15088E-001	2.63364E-001
Bi-214	0.690	609.31*	46.30	4.69628E-001	1.65140E-001
		1120.29	15.10		
		1764.49*	15.80	4.65243E-001	2.08526E-001
PB-214	0.625	74.82* @	6.21	1.26026E+001	8.50512E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.19975E-001	3.19927E-001
		351.92*	37.20	5.75658E-001	2.32841E-001
Ac-228	0.981	338.32*	11.40	7.30239E-001	5.04670E-001
		911.07*	27.70	9.83660E-001	2.85763E-001
		969.11*	16.60	1.12187E+000	4.04549E-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	0.976	1.868519E+001	2.004246E+000
TL-208	0.467	3.668901E-001	1.039787E-001
Pb-212 @	0.593	9.150880E-001	2.633641E-001
Bi-214	0.690	4.679380E-001	1.294600E-001
PB-214 @	0.625	5.563766E-001	1.882603E-001
Ac-228	0.981	9.769057E-001	2.118455E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.2008E-001	1.01E-001	1.1670E-001
	1332.49	100.00	1.0138E-001		9.4224E-002
Nb-94	702.63	100.00	1.1795E-001	1.07E-001	1.5302E-002
	871.10	100.00	1.0745E-001		-2.6086E-002
Ag-108m	79.20	7.10	9.0531E+000	1.49E-001	-5.0700E-001
	433.93	89.90	1.4930E-001		-5.3379E-002
	614.37	90.40	1.5668E-001		4.2858E-002
	722.95	90.50	1.4894E-001		1.5797E-001
Sb-125	176.33	6.89	2.8586E+000	4.54E-001	6.9169E-001
	427.89	29.33	4.5381E-001		-1.1811E-001
	463.38	10.35	1.3476E+000		6.7246E-001
	600.56	17.80	7.0745E-001		-2.7807E-001
	606.64	5.02	3.1404E+000		4.3575E+000
	635.90	11.32	1.0011E+000		-8.0237E-001
Cs-134	563.23	8.38	1.5146E+000	1.51E-001	-7.7568E-002
	569.32	15.43	8.2362E-001		-7.2423E-002
	604.70	97.60	1.6214E-001		-3.8994E-002
	795.84	85.40	1.5130E-001		1.2330E-001
	801.93	8.73	1.3318E+000		-1.5102E-001
Cs-137	661.65	85.12	1.4403E-001	1.44E-001	3.4771E-002
Eu-152	121.78	28.40	9.2808E-001	4.12E-001	-2.2435E-001
	244.69	7.49	2.2078E+000		-1.7187E+000
	344.27	26.50	5.3025E-001		-5.6402E-001
	778.89	12.74	9.2568E-001		0.0000E+000
	867.32	4.16	2.5914E+000		-2.3647E+000
	964.01	14.40	1.0798E+000		3.9605E-001
	1085.78	10.00	1.0456E+000		1.7529E-002
	1112.02	13.30	7.8305E-001		-1.6639E+000
1407.95	20.70	4.1245E-001	-4.4829E-001		
Eu-154	123.07	40.50	6.5261E-001	2.88E-001	2.1137E-001
	247.94	6.60	2.4290E+000		-1.4864E+000
	591.81	4.83	2.4713E+000		1.1200E-001
	723.30	19.70	6.8257E-001		4.5319E-001
	756.87	4.33	2.6971E+000		-7.2380E-001
	873.19	11.50	9.4681E-001		1.6825E-001
	996.32	10.30	1.0797E+000		1.5932E-001
	1004.76	17.90	6.1183E-001		-4.8925E-001
1274.45	35.50	2.8811E-001	-2.1167E-001		
Eu-155	86.54	30.90	1.5437E+000	1.54E+000	2.0668E+000
	105.31	20.70	1.5782E+000		-9.5838E-001
Am-241	59.54	35.90	3.5421E+000	3.54E+000	-9.7981E-001
Cm-243	228.19	10.56	1.6384E+000	1.13E+000	-4.7128E-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	6.0725E-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 6/23/2006 1:23:30 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-161-F-

Sample Title: OOL-10-03-161-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 1:13:28 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-161-F-
 Title: OOL-10-03-161-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	287-	307	292.02	73.01	0.99	1.56E+002	40.61	4.57E+002
m	2	287-	307	300.19	75.05	1.00	2.75E+002	48.68	6.93E+002
	3	396-	403	399.10	99.78	0.64	4.90E+001	51.54	3.19E+002
	4	947-	964	953.90	238.49	1.01	2.44E+002	71.46	3.31E+002
	5	1345-	1358	1352.59	338.17	0.74	3.91E+001	41.03	1.45E+002
	6	1399-	1412	1406.03	351.53	0.97	9.46E+001	40.10	1.17E+002
	7	2323-	2338	2330.35	582.63	1.27	1.34E+002	36.18	6.85E+001
	8	2427-	2442	2434.71	608.72	1.26	1.21E+002	33.16	5.45E+001
	9	3632-	3653	3640.92	910.29	1.77	1.51E+002	33.85	4.00E+001
M	10	3849-	3881	3855.49	963.94	1.64	3.32E+001	15.19	3.33E+001
m	11	3849-	3881	3872.71	968.25	1.64	6.89E+001	20.14	5.00E+001
	12	5827-	5850	5839.09	1459.88	2.06	8.39E+002	58.78	1.50E+001
	13	7048-	7061	7054.37	1763.72	0.63	2.55E+001	15.55	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: 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	0.972	1460.81*	10.67	1.90636E+001	2.04106E+000
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.97971E-001	8.95736E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.07040E+001	2.82730E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.96336E-001	2.64548E-001
Bi-214	0.686	609.31*	46.30	4.96579E-001	1.49676E-001
		1120.29	15.10		
		1764.49*	15.80	4.13852E-001	2.56200E-001
Ac-228	0.983	338.32*	11.40	5.43170E-001	5.76086E-001
		911.07*	27.70	1.14892E+000	2.89601E-001
		969.11*	16.60	8.88764E-001	2.76195E-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	0.972	1.906363E+001	2.041055E+000
TL-208	0.466	2.979711E-001	8.957361E-002
Pb-212 @	0.593	7.963358E-001	2.645483E-001
Bi-214	0.686	4.755282E-001	1.292372E-001
Ac-228	0.983	9.622383E-001	1.888288E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.6033E-001	26.00
3	99.78	8.1694E-002	105.14
6	351.53	1.5772E-001	42.37
M 10	963.94	5.5416E-002	45.67

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: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	1.1155E-001	9.48E-002	4.1696E-003
	1332.49	100.00	9.4824E-002		-2.4775E-002
Nb-94	702.63	100.00	1.1290E-001	1.10E-001	5.6464E-002
	871.10	100.00	1.1019E-001		-3.9115E-002
Ag-108m	79.20	7.10	8.7698E+000	1.41E-001	-7.9541E+000
	433.93	89.90	1.4495E-001		-1.5396E-002
	614.37	90.40	1.5145E-001		-1.1429E-001
	722.95	90.50	1.4093E-001		1.0690E-001
Sb-125	176.33	6.89	2.7923E+000	4.41E-001	7.0434E-001
	427.89	29.33	4.4132E-001		3.4583E-002
	463.38	10.35	1.2628E+000		1.3278E-001
	600.56	17.80	6.9092E-001		1.5815E-001
	606.64	5.02	3.1404E+000		5.0158E+000
	635.90	11.32	1.0241E+000		6.0989E-002
Cs-134	563.23	8.38	1.5036E+000	1.42E-001	-1.3123E+000
	569.32	15.43	7.9927E-001		4.6569E-002
	604.70	97.60	1.5949E-001		-1.0363E-003
	795.84	85.40	1.4200E-001		5.9783E-002
Cs-137	801.93	8.73	1.2290E+000	1.50E-001	-2.0772E+000
	661.65	85.12	1.4975E-001		6.3516E-002
Eu-152	121.78	28.40	9.0550E-001	3.93E-001	-1.7002E-001
	244.69	7.49	2.2136E+000		-1.0650E-002
	344.27	26.50	5.3777E-001		-2.2432E-001
	778.89	12.74	8.8729E-001		-1.3873E+000
	867.32	4.16	2.7103E+000		-2.0112E+000
	964.01	14.40	1.0752E+000		-1.1846E-001
	1085.78	10.00	1.0825E+000		-1.0614E+000
	1112.02	13.30	8.4596E-001		-1.3159E+000
1407.95	20.70	3.9289E-001	4.3439E-002		
Eu-154	123.07	40.50	6.2448E-001	2.98E-001	-1.7249E-001
	247.94	6.60	2.4694E+000		-1.5347E-001
	591.81	4.83	2.5941E+000		-1.4861E+000
	723.30	19.70	6.4208E-001		2.8450E-001
	756.87	4.33	2.6787E+000		2.0547E+000
	873.19	11.50	9.7805E-001		6.3923E-001
	996.32	10.30	1.0562E+000		-7.1288E-001
	1004.76	17.90	6.0634E-001		3.3246E-001
1274.45	35.50	2.9819E-001	7.9621E-002		
Eu-155	86.54	30.90	1.5552E+000	1.55E+000	3.0210E+000
	105.31	20.70	1.5503E+000		4.7054E-001
Am-241	59.54	35.90	3.5816E+000	3.58E+000	6.4052E-001
Cm-243	228.19	10.56	1.5372E+000	1.08E+000	-9.6682E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0805E+000	1.08E+000	-5.2433E-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 6/23/2006 11:31:42 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-162-F-

Sample Title: OOL-10-03-162-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 11:21:40 AM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-162-F-
 Title: OOL-10-03-162-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	283-	307	291.86	72.97	0.92	8.72E+001	37.43	5.80E+002
m	2	283-	307	300.15	75.04	0.92	2.24E+002	46.71	6.02E+002
	3	946-	959	954.17	238.56	1.05	2.36E+002	56.86	2.20E+002
	4	1345-	1356	1351.26	337.84	0.79	6.33E+001	33.12	8.77E+001
	5	1400-	1414	1406.81	351.72	1.30	8.95E+001	42.53	1.32E+002
	6	2030-	2051	2041.57	510.43	1.77	1.17E+002	41.92	9.07E+001
	7	2321-	2340	2329.61	582.44	0.76	1.44E+002	42.77	9.46E+001
	8	2424-	2444	2434.75	608.73	1.64	1.13E+002	40.48	8.65E+001
	9	3634-	3650	3641.11	910.34	1.35	9.55E+001	28.98	3.75E+001
	10	3865-	3883	3872.41	968.17	0.83	7.63E+001	26.78	3.27E+001
	11	5826-	5852	5839.56	1459.99	1.59	7.22E+002	57.79	3.37E+001
	12	7048-	7061	7054.29	1763.70	1.02	3.39E+001	13.55	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: 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	0.989	511.00*	100.00	2.10693E-001	8.05098E-002
K-40	0.978	1460.81*	10.67	1.64137E+001	1.86834E+000
TL-208	0.741	277.35	6.80		
		510.84*	21.60	9.75430E-001	3.81148E-001
		583.14*	84.20	3.22180E-001	1.04246E-001
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	8.70776E+000	2.49464E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.686	238.63*	44.60	7.69112E-001	2.21330E-001
		609.31*	46.30	4.63488E-001	1.76267E-001
		1120.29	15.10		
Ac-228	0.981	1764.49*	15.80	5.51340E-001	2.27133E-001
		338.32*	11.40	8.78306E-001	4.79976E-001
		911.07*	27.70	7.26447E-001	2.35908E-001
		969.11*	16.60	9.85343E-001	3.60799E-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	0.989	1.411019E-001	8.356864E-002
K-40	0.978	1.641372E+001	1.868341E+000
TL-208	0.741	3.221803E-001	1.037163E-001
Pb-212 @	0.594	7.691123E-001	2.213305E-001
Bi-214	0.686	4.965100E-001	1.392530E-001
Ac-228	0.981	8.147393E-001	1.826010E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.4539E-001	42.91
5	351.72	1.4919E-001	47.52

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: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	1.1615E-001	8.92E-002	3.5784E-002
	1332.49	100.00	8.9202E-002		-1.0579E-002
Nb-94	702.63	100.00	1.1526E-001	1.08E-001	1.7677E-002
	871.10	100.00	1.0791E-001		2.9314E-002
Ag-108m	79.20	7.10	8.6623E+000	1.35E-001	-2.5188E+000
	433.93	89.90	1.4495E-001		4.1818E-002
	614.37	90.40	1.5311E-001		-2.6911E-002
	722.95	90.50	1.3492E-001		8.1803E-002
Sb-125	176.33	6.89	2.7601E+000	4.46E-001	-1.8681E+000
	427.89	29.33	4.4636E-001		7.1043E-002
	463.38	10.35	1.2925E+000		3.7355E-001
	600.56	17.80	6.6435E-001		-3.7586E-001
	606.64	5.02	3.0939E+000		5.4137E+000
	635.90	11.32	9.9448E-001		-6.5096E-002
Cs-134	563.23	8.38	1.4738E+000	1.31E-001	1.7730E-001
	569.32	15.43	8.0133E-001		2.7416E-001
	604.70	97.60	1.5516E-001		6.9043E-003
	795.84	85.40	1.3103E-001		3.9739E-002
	801.93	8.73	1.2392E+000		-3.1086E-001
Cs-137	661.65	85.12	1.3718E-001	1.37E-001	-3.3097E-002
Eu-152	121.78	28.40	8.9294E-001	3.76E-001	-9.9611E-003
	244.69	7.49	2.2098E+000		-3.7887E-001
	344.27	26.50	5.1485E-001		-2.7885E-001
	778.89	12.74	8.6407E-001		-8.5446E-001
	867.32	4.16	2.5692E+000		-6.2624E-002
	964.01	14.40	1.0182E+000		-2.4684E-002
	1085.78	10.00	1.0825E+000		4.5972E-001
	1112.02	13.30	7.6647E-001		-5.5798E-001
1407.95	20.70	3.7645E-001	-2.7589E-001		
Eu-154	123.07	40.50	6.2057E-001	3.01E-001	-4.5627E-001
	247.94	6.60	2.4153E+000		-1.6886E+000
	591.81	4.83	2.4853E+000		-4.1887E-001
	723.30	19.70	6.2362E-001		3.3655E-001
	756.87	4.33	2.5845E+000		2.8301E-001
	873.19	11.50	9.7420E-001		8.4534E-001
	996.32	10.30	1.0223E+000		-1.6080E-001
	1004.76	17.90	6.0358E-001		-1.1417E-001
1274.45	35.50	3.0147E-001	2.0924E-001		
Eu-155	86.54	30.90	1.5112E+000	1.51E+000	1.4850E+000
	105.31	20.70	1.5061E+000		-3.0293E-001
Am-241	59.54	35.90	3.4034E+000	3.40E+000	2.4075E-001
Cm-243	228.19	10.56	1.5532E+000	1.10E+000	-7.4023E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1042E+000	1.10E+000	5.5770E-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 6/23/2006 3:27:52 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-10-03-163-F-

Sample Title: OOL-10-03-163-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 3:17:49 PM

Live Time: 600.0 seconds

Real Time: 601.4 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-10-03-163-F-
 Title: OOL-10-03-163-F-G
 Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	309	300.73	75.08	1.48	9.03E+002	156.47	1.62E+003
2	943-	962	954.17	238.49	1.36	2.82E+002	85.97	4.69E+002
3	1176-	1186	1180.28	295.03	0.69	6.67E+001	40.81	1.53E+002
4	1400-	1416	1406.95	351.71	1.69	1.76E+002	47.72	1.33E+002
5	2324-	2342	2332.62	583.19	1.31	1.82E+002	47.55	1.18E+002
6	2428-	2447	2437.34	609.38	2.03	1.66E+002	45.41	1.06E+002
7	3065-	3077	3071.32	767.92	0.64	2.55E+001	23.04	4.25E+001
8	3635-	3655	3644.27	911.19	1.20	1.52E+002	38.59	6.51E+001
9	3867-	3885	3875.75	969.08	0.66	9.76E+001	31.85	4.94E+001
10	5831-	5861	5845.68	1461.69	2.04	1.10E+003	67.96	2.16E+001
11	6349-	6362	6355.15	1589.09	0.38	1.30E+001	14.14	1.40E+001
12	7056-	7072	7062.81	1766.05	0.49	4.58E+001	16.85	9.23E+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	0.976	1460.81*	10.67	1.90756E+001	1.94110E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.17895E-001	9.27526E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.33733E+001	3.49822E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.07517E-001	2.42585E-001
Bi-214	0.683	609.31*	46.30	5.34468E-001	1.60387E-001
		1120.29	15.10		
		1764.49*	15.80	5.55390E-001	2.11884E-001
PB-214	0.582	74.82* @	6.21	2.30425E+001	6.25533E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.13118E-001	2.62113E-001
		351.92*	37.20	5.92722E-001	1.88466E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	8.98403E-001	2.50475E-001
		969.11*	16.60	9.80303E-001	3.35895E-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	0.976	1.907562E+001	1.941104E+000
TL-208	0.471	3.178947E-001	9.275260E-002
Pb-212 @	0.521	7.075171E-001	2.425852E-001
Bi-214	0.683	5.420893E-001	1.278814E-001
PB-214 @	0.582	5.315129E-001	1.530172E-001
Ac-228	0.633	9.276702E-001	2.007943E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	767.92	4.2549E-002	90.26
11	1589.09	2.1667E-002	108.76

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	1.0635E-001	7.99E-002	-1.9354E-002
	1332.49	100.00	7.9863E-002		2.6162E-002
Nb-94	702.63	100.00	1.0369E-001	9.71E-002	5.0326E-002
	871.10	100.00	9.7070E-002		4.3688E-002
Ag-108m	79.20	7.10	4.9420E+000	1.18E-001	-7.2378E+000
	433.93	89.90	1.2489E-001		-9.2017E-002
	614.37	90.40	1.4907E-001		-1.3463E-002
	722.95	90.50	1.1755E-001		1.1854E-001
Sb-125	176.33	6.89	2.2892E+000	3.76E-001	-1.7116E+000
	427.89	29.33	3.7619E-001		-1.8102E-001
	463.38	10.35	1.1086E+000		1.8276E+000
	600.56	17.80	5.7934E-001		1.2611E-001
	606.64	5.02	2.8301E+000		5.3016E+000
	635.90	11.32	8.7936E-001		3.5405E-001
Cs-134	563.23	8.38	1.2730E+000	1.26E-001	-6.0198E-001
	569.32	15.43	7.0387E-001		2.9557E-001
	604.70	97.60	1.4034E-001		-3.9179E-002
	795.84	85.40	1.2580E-001		2.7219E-002
	801.93	8.73	1.2141E+000		-1.6481E+000
Cs-137	661.65	85.12	1.2214E-001	1.22E-001	6.6778E-002
Eu-152	121.78	28.40	7.2302E-001	3.56E-001	-4.4068E-001
	244.69	7.49	1.9186E+000		-3.5528E-001
	344.27	26.50	4.4120E-001		-7.4948E-001
	778.89	12.74	7.8809E-001		-4.0423E-001
	867.32	4.16	2.5289E+000		1.5852E+000
	964.01	14.40	9.0169E-001		-2.2800E-001
	1085.78	10.00	9.9081E-001		-4.9831E-001
	1112.02	13.30	7.4745E-001		-3.6205E-001
1407.95	20.70	3.5604E-001	2.6130E-001		
Eu-154	123.07	40.50	5.0915E-001	2.28E-001	-7.7848E-002
	247.94	6.60	2.0551E+000		-1.2610E+000
	591.81	4.83	2.1591E+000		2.0317E-001
	723.30	19.70	5.4006E-001		4.6641E-001
	756.87	4.33	2.2460E+000		-1.6868E+000
	873.19	11.50	8.0059E-001		-6.0009E-001
	996.32	10.30	9.6732E-001		4.3656E-001
	1004.76	17.90	5.4887E-001		-3.2755E-001
1274.45	35.50	2.2786E-001	-6.4897E-002		
Eu-155	86.54	30.90	1.0155E+000	1.02E+000	2.4715E+000
	105.31	20.70	1.1229E+000		5.1440E-001
Am-241	59.54	35.90	1.1617E+000	1.16E+000	-7.2943E-001
Cm-243	228.19	10.56	1.3094E+000	9.61E-001	-1.3292E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.6109E-001	9.61E-001	-1.9122E-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 6/27/2006 10:30:37 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: RED6264

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-03-164-F-G

Sample ID: OOL-10-03-164-F-

Sample Title: OOL-10-03-164-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 3:39:38 PM

Live Time: 600.0 seconds

Real Time: 601.3 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-03-164-F-G
 Log Number: OOL-10-03-164-F-
 Title: OOL-10-03-164-F-G
 Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	309	300.56	75.04	1.20	6.97E+002	151.18	1.55E+003
2	943-	963	953.77	238.39	1.49	2.94E+002	86.73	4.56E+002
3	1171-	1188	1179.70	294.88	1.47	7.98E+001	54.03	2.09E+002
4	1348-	1357	1352.65	338.13	0.51	6.40E+001	36.46	1.25E+002
5	1400-	1412	1406.99	351.72	1.20	1.10E+002	43.91	1.49E+002
6	2032-	2054	2042.80	510.72	0.96	1.58E+002	51.39	1.37E+002
7	2322-	2342	2332.56	583.18	1.72	1.92E+002	44.91	9.18E+001
8	2428-	2448	2436.39	609.14	0.83	1.55E+002	43.20	9.12E+001
9	2901-	2919	2908.58	727.22	1.48	7.62E+001	27.96	3.78E+001
10	3636-	3655	3643.86	911.09	1.58	1.63E+002	37.30	5.56E+001
11	3866-	3884	3875.26	968.95	0.48	9.22E+001	32.03	5.18E+001
12	4474-	4487	4480.25	1120.24	0.99	3.72E+001	23.07	3.68E+001
13	5832-	5860	5845.86	1461.74	2.32	1.03E+003	63.55	3.77E+000
14	7056-	7072	7063.47	1766.22	1.20	5.48E+001	17.54	8.16E+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-10-03-164-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	0.997	511.00*	100.00	2.22916E-001	7.83522E-002
K-40	0.973	1460.81*	10.67	1.78784E+001	1.81778E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	1.03202E+000	3.72404E-001
		583.14*	84.20	3.35560E-001	8.97443E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	1.00871E+000	3.88738E-001
Pb-212	0.520	74.81* @	10.70	1.03270E+001	3.01911E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.38335E-001	2.46487E-001
Bi-214	0.980	609.31*	46.30	4.98497E-001	1.52058E-001
		1120.29*	15.10	4.28052E-001	2.69137E-001
		1764.49*	15.80	6.65389E-001	2.23018E-001
PB-214	0.581	74.82* @	6.21	1.77938E+001	5.35998E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
Ac-228	1.000	295.21*	19.20	4.94129E-001	3.44710E-001
		351.92*	37.20	3.68561E-001	1.59861E-001
		338.32*	11.40	6.93841E-001	4.09984E-001
		911.07*	27.70	9.65932E-001	2.46960E-001
		969.11*	16.60	9.25736E-001	3.35866E-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-10-03-164-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	0.997	1.504349E-001	8.067997E-002
K-40	0.973	1.787837E+001	1.817778E+000
TL-208	0.752	3.355603E-001	8.907553E-002
Bi-212	1.000	1.008708E+000	3.887383E-001
Pb-212 @	0.520	7.383353E-001	2.464872E-001
Bi-214	0.980	5.293800E-001	1.138415E-001
PB-214 @	0.581	3.907863E-001	1.450245E-001
Ac-228	1.000	9.026491E-001	1.789989E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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-10-03-164-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	9.3689E-002	7.70E-002	1.9533E-003
	1332.49	100.00	7.6960E-002		-2.2849E-002
Nb-94	702.63	100.00	9.5783E-002	9.04E-002	-1.4942E-002
	871.10	100.00	9.0384E-002		3.0595E-002
Ag-108m	79.20	7.10	4.7519E+000	1.22E-001	-7.1674E+000
	433.93	89.90	1.2210E-001		-3.9501E-002
	614.37	90.40	1.3976E-001		-6.6185E-002
	722.95	90.50	1.2338E-001		-3.1466E-002
Sb-125	176.33	6.89	2.1862E+000	3.69E-001	-5.1705E-001
	427.89	29.33	3.6944E-001		2.5959E-001
	463.38	10.35	1.0712E+000		6.5828E-001
	600.56	17.80	5.8338E-001		1.5782E-001
	606.64	5.02	2.7599E+000		5.4569E-001
	635.90	11.32	8.4903E-001		1.0827E-001
Cs-134	563.23	8.38	1.1471E+000	1.19E-001	-1.2659E+000
	569.32	15.43	6.4581E-001		7.1871E-002
	604.70	97.60	1.3697E-001		1.1774E-002
	795.84	85.40	1.1941E-001		7.4489E-002
	801.93	8.73	1.1172E+000		-4.7163E-001
Cs-137	661.65	85.12	1.2740E-001	1.27E-001	1.1112E-001
Eu-152	121.78	28.40	6.8311E-001	2.97E-001	-4.1679E-001
	244.69	7.49	1.8508E+000		-4.1409E-001
	344.27	26.50	4.2651E-001		-7.8310E-001
	778.89	12.74	8.0996E-001		1.7544E-001
	867.32	4.16	2.2867E+000		-2.3367E+000
	964.01	14.40	8.5387E-001		-6.8703E-002
	1085.78	10.00	9.3118E-001		-8.5007E-002
	1112.02	13.30	7.3179E-001		-9.8021E-002
1407.95	20.70	2.9718E-001	1.9828E-001		
Eu-154	123.07	40.50	4.7366E-001	2.39E-001	-3.1297E-001
	247.94	6.60	1.9544E+000		-1.1737E+000
	591.81	4.83	2.0073E+000		-3.0181E-001
	723.30	19.70	5.7059E-001		-1.0095E-001
	756.87	4.33	2.2393E+000		1.1686E+000
	873.19	11.50	7.4490E-001		4.9744E-001
	996.32	10.30	8.1429E-001		-1.0969E-001
	1004.76	17.90	4.8452E-001		-4.4364E-002
1274.45	35.50	2.3918E-001	6.9094E-002		
Eu-155	86.54	30.90	9.7539E-001	9.75E-001	1.1297E+000
	105.31	20.70	1.0809E+000		1.0300E+000
Am-241	59.54	35.90	1.1224E+000	1.12E+000	7.0912E-001
Cm-243	228.19	10.56	1.2775E+000	9.02E-001	-7.7441E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.0220E-001	9.02E-001	3.1573E-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 6/26/2006 1:20:22 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-10-03-165-F-

Sample Title: OOL-10-03-165-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 1:10:20 PM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-165-F-
Title: OOL-10-03-165-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	310	301.47	75.39	0.85	2.00E+002	100.36	8.31E+002
2	949-	962	954.08	238.56	1.02	1.25E+002	56.76	2.58E+002
3	1402-	1417	1406.58	351.69	1.44	1.18E+002	40.16	9.90E+001
M 4	2015-	2050	2020.91	505.29	1.22	2.19E+001	14.72	4.60E+001
m 5	2015-	2050	2041.97	510.56	1.94	8.71E+001	21.83	8.82E+001
6	2321-	2341	2332.18	583.12	1.62	1.22E+002	36.18	6.01E+001
7	2424-	2445	2435.94	609.06	0.56	1.33E+002	36.13	5.48E+001
8	3632-	3651	3643.15	910.89	0.87	1.04E+002	30.62	4.00E+001
9	5827-	5854	5841.03	1460.41	2.28	6.23E+002	50.13	6.96E+000
10	7052-	7066	7058.17	1764.72	0.74	3.51E+001	12.83	2.92E+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: 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	0.993	511.00*	100.00	1.54265E-001	4.39735E-002
K-40	0.994	1460.81*	10.67	1.43893E+001	1.64251E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	7.14191E-001	2.11772E-001
		583.14*	84.20	2.70322E-001	8.76135E-002
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	6.13152E+000	3.30986E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.694	238.63*	44.60	3.86711E-001	1.85500E-001
		609.31*	46.30	5.46519E-001	1.62825E-001
		1120.29	15.10		
		1764.49*	15.80	5.97096E-001	2.26468E-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	0.993	9.587581E-002	4.783501E-002
K-40	0.994	1.438932E+001	1.642512E+000
TL-208	0.751	2.703218E-001	8.716943E-002
Pb-212 @	0.575	3.867106E-001	1.855004E-001
Bi-214	0.694	5.637542E-001	1.322021E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.69	1.9663E-001	34.04
M 4	505.29	3.6550E-002	67.10
8	910.89	1.7333E-001	29.44

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: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	1.2307E-001	9.29E-002	7.0380E-002
	1332.49	100.00	9.2929E-002		4.0727E-002
Nb-94	702.63	100.00	1.1045E-001	9.49E-002	-6.9109E-002
	871.10	100.00	9.4903E-002		-6.3535E-003
Ag-108m	79.20	7.10	7.3041E+000	1.29E-001	-2.0140E+000
	433.93	89.90	1.2904E-001		7.1324E-002
	614.37	90.40	1.3020E-001		1.1082E-002
	722.95	90.50	1.2939E-001		1.6474E-001
Sb-125	176.33	6.89	2.4094E+000	3.92E-001	1.6378E+000
	427.89	29.33	3.9151E-001		-3.2257E-001
	463.38	10.35	1.1608E+000		6.5466E-001
	600.56	17.80	5.5136E-001		-6.2073E-002
	606.64	5.02	2.8484E+000		5.8845E+000
	635.90	11.32	8.8301E-001		-1.1707E-001
Cs-134	563.23	8.38	1.2075E+000	1.22E-001	-2.3756E-001
	569.32	15.43	6.5857E-001		1.6541E-001
	604.70	97.60	1.3951E-001		-2.4263E-002
	795.84	85.40	1.2206E-001		7.7361E-002
	801.93	8.73	1.1477E+000		2.5499E-001
Cs-137	661.65	85.12	1.2476E-001	1.25E-001	-1.9848E-003
Eu-152	121.78	28.40	8.0406E-001	3.76E-001	6.4981E-001
	244.69	7.49	2.0163E+000		-6.9880E-001
	344.27	26.50	4.5135E-001		-3.9579E-001
	778.89	12.74	7.7413E-001		1.9286E-001
	867.32	4.16	2.3043E+000		-3.0656E+000
	964.01	14.40	8.2781E-001		2.6128E-001
	1085.78	10.00	9.3633E-001		-1.4376E-001
	1112.02	13.30	7.5559E-001		-1.4254E+000
1407.95	20.70	3.7612E-001	3.0916E-001		
Eu-154	123.07	40.50	5.6091E-001	2.82E-001	3.7502E-001
	247.94	6.60	2.2271E+000		-4.4960E-001
	591.81	4.83	2.1283E+000		9.9558E-002
	723.30	19.70	5.8851E-001		5.3563E-001
	756.87	4.33	2.4334E+000		-5.0539E-001
	873.19	11.50	8.4818E-001		1.0371E-001
	996.32	10.30	8.5614E-001		-9.2572E-001
	1004.76	17.90	5.2000E-001		-1.1164E-001
1274.45	35.50	2.8224E-001	2.4625E-001		
Eu-155	86.54	30.90	1.3239E+000	1.32E+000	1.4552E+000
	105.31	20.70	1.3770E+000		-9.3511E-001
Am-241	59.54	35.90	2.7032E+000	2.70E+000	3.1103E-001
Cm-243	228.19	10.56	1.4460E+000	9.89E-001	3.8420E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.8918E-001	9.89E-001	-1.8059E-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 6/26/2006 11:10:18 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-10-03-166-F-

Sample Title: OOL-10-03-166-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 11:00:15 AM

Live Time: 600.0 seconds

Real Time: 600.6 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-166-F-
Title: OOL-10-03-166-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 9 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.000	1460.81*	10.67	1.65558E+001	1.83918E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.54135E-001	8.85992E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	4.18754E+000	3.18812E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.00908E-001	2.12668E-001
Bi-214	0.403	609.31*	46.30	3.52232E-001	1.42825E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.996	338.32*	11.40	9.80895E-001	5.13225E-001
		911.07*	27.70	7.37527E-001	2.24953E-001
		969.11*	16.60	4.82058E-001	2.68692E-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	1.000	1.655582E+001	1.839179E+000
TL-208	0.469	2.541350E-001	8.859915E-002
Pb-212 @	0.576	6.009077E-001	2.126682E-001
Bi-214	0.403	3.522318E-001	1.428246E-001
Ac-228	0.996	6.676343E-001	1.634976E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.46	1.4555E-001	40.00

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: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	1.0290E-001	7.59E-002	2.1723E-002
	1332.49	100.00	7.5900E-002		-1.6417E-002
Nb-94	702.63	100.00	1.0881E-001	1.04E-001	3.6054E-002
	871.10	100.00	1.0390E-001		3.1479E-002
Ag-108m	79.20	7.10	7.2754E+000	1.19E-001	-3.3370E+000
	433.93	89.90	1.2632E-001		-9.1515E-003
	614.37	90.40	1.1886E-001		-1.6157E-002
	722.95	90.50	1.3024E-001		1.4056E-001
Sb-125	176.33	6.89	2.4624E+000	3.87E-001	2.9251E-001
	427.89	29.33	3.8691E-001		1.6053E-001
	463.38	10.35	1.1124E+000		2.4786E-001
	600.56	17.80	6.2951E-001		1.6445E-001
	606.64	5.02	2.7452E+000		3.6144E+000
	635.90	11.32	9.6563E-001		-1.5542E-002
	722.95	90.50	1.3024E-001		1.4056E-001
Cs-134	563.23	8.38	1.2566E+000	1.21E-001	-7.0937E-001
	569.32	15.43	7.0181E-001		-1.8510E-001
	604.70	97.60	1.4042E-001		-6.5034E-003
	795.84	85.40	1.2098E-001		-7.5754E-002
	801.93	8.73	1.1030E+000		-6.4188E-001
Cs-137	661.65	85.12	1.4069E-001	1.41E-001	2.4956E-002
Eu-152	121.78	28.40	8.0886E-001	3.63E-001	1.4163E-002
	244.69	7.49	1.9645E+000		-5.1253E-001
	344.27	26.50	4.4884E-001		-2.5151E-001
	778.89	12.74	8.5957E-001		-4.3866E-002
	867.32	4.16	2.5631E+000		-3.4665E-001
	964.01	14.40	8.5732E-001		-4.1420E-001
	1085.78	10.00	1.0211E+000		8.0910E-001
	1112.02	13.30	6.9443E-001		-3.8167E-001
1407.95	20.70	3.6295E-001	1.9772E-001		
Eu-154	123.07	40.50	5.6336E-001	2.34E-001	3.3618E-001
	247.94	6.60	2.1246E+000		-1.0134E+000
	591.81	4.83	2.3434E+000		5.2253E-001
	723.30	19.70	5.9838E-001		4.1635E-001
	756.87	4.33	2.3503E+000		-1.4188E+000
	873.19	11.50	8.8295E-001		-5.4290E-001
	996.32	10.30	9.8156E-001		-1.4849E-001
	1004.76	17.90	5.5108E-001		3.0821E-001
1274.45	35.50	2.3440E-001	-3.6961E-001		
Eu-155	86.54	30.90	1.3311E+000	1.33E+000	1.8063E+000
	105.31	20.70	1.4005E+000		-6.7997E-001
Am-241	59.54	35.90	2.7119E+000	2.71E+000	-1.1992E+000
Cm-243	228.19	10.56	1.4447E+000	9.44E-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	9.4399E-001	9.44E-001	-5.6751E-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 6/26/2006 9:43:33 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-167-F-

Sample Title: OOL-10-03-167-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 9:33:30 AM

Live Time: 600.0 seconds

Real Time: 600.6 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

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

Filename: YEL7810
Log Number: OOL-10-03-167-F-
Title: OOL-10-03-167-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	944-	963	954.03	238.55	0.53	1.68E+002	68.80	3.02E+002
2	2325-	2342	2333.08	583.34	1.65	1.01E+002	35.31	6.87E+001
3	3638-	3656	3646.45	911.71	0.86	8.63E+001	30.20	4.47E+001
4	5834-	5861	5847.45	1462.02	2.12	7.77E+002	57.20	1.69E+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	0.949	1460.81*	10.67	1.79553E+001	1.96474E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.24706E-001	8.36077E-002
		860.37	12.46		
Pb-212	0.420	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.19234E-001	2.27567E-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	0.949	1.795529E+001	1.964741E+000
TL-208	0.469	2.247055E-001	8.360769E-002
Pb-212 @	0.420	5.192339E-001	2.275669E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	911.71	1.4390E-001	34.98

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: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	1.0989E-001	8.86E-002	-2.7676E-003
	1332.49	100.00	8.8635E-002		8.7207E-002
Nb-94	702.63	100.00	1.1004E-001	1.02E-001	1.1034E-001
	871.10	100.00	1.0198E-001		5.7982E-002
Ag-108m	79.20	7.10	7.0908E+000	1.21E-001	-1.6190E+001
	433.93	89.90	1.2103E-001		-3.6704E-002
	614.37	90.40	1.4446E-001		-3.8417E-002
	722.95	90.50	1.2233E-001		5.9452E-002
Sb-125	176.33	6.89	2.3692E+000	4.02E-001	-5.7430E-001
	427.89	29.33	4.0231E-001		1.0203E-001
	463.38	10.35	1.1476E+000		4.6304E-001
	600.56	17.80	6.0675E-001		-1.2305E-001
	606.64	5.02	2.7510E+000		3.5424E+000
	635.90	11.32	9.5875E-001		2.4824E-001
Cs-134	563.23	8.38	1.2211E+000	1.31E-001	6.7732E-003
	569.32	15.43	6.8295E-001		4.0656E-001
	604.70	97.60	1.3136E-001		-8.0089E-002
	795.84	85.40	1.3231E-001		-2.5213E-004
	801.93	8.73	1.1960E+000		-8.7072E-001
Cs-137	661.65	85.12	1.2716E-001	1.27E-001	8.4687E-002
Eu-152	121.78	28.40	7.8917E-001	3.80E-001	3.5338E-001
	244.69	7.49	1.9509E+000		-1.1363E+000
	344.27	26.50	4.7014E-001		-5.7929E-001
	778.89	12.74	7.7413E-001		-3.1163E-001
	867.32	4.16	2.5295E+000		-2.6194E+000
	964.01	14.40	8.0337E-001		-9.6004E-002
	1085.78	10.00	1.0211E+000		-1.2347E-001
	1112.02	13.30	8.2724E-001		9.3954E-001
Eu-154	1407.95	20.70	3.8040E-001	2.84E-001	1.9149E-001
	123.07	40.50	5.3831E-001		-1.9958E-001
	247.94	6.60	2.0534E+000		-1.5291E+000
	591.81	4.83	2.0625E+000		3.7211E-001
	723.30	19.70	5.6411E-001		3.3753E-001
	756.87	4.33	2.3713E+000		2.9428E-001
	873.19	11.50	8.7439E-001		6.7520E-002
	996.32	10.30	9.1293E-001		-9.5856E-001
Eu-155	1004.76	17.90	5.2319E-001	1.25E+000	6.8207E-002
	1274.45	35.50	2.8398E-001		-1.5499E-001
	86.54	30.90	1.2489E+000		8.1299E-001
Am-241	105.31	20.70	1.3800E+000	2.72E+000	-5.8762E-001
	59.54	35.90	2.7177E+000		-1.0568E+000
Cm-243	228.19	10.56	1.3995E+000	9.35E-001	-9.4081E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.3518E-001	9.35E-001	-2.5336E-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 6/23/2006 4:17:10 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-168-F-

Sample Title: OOL-10-03-168-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 4:07:05 PM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-168-F-
 Title: OOL-10-03-168-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	284-	313	291.63	72.91	1.23	1.79E+002	40.44	5.15E+002
m	2	284-	313	300.76	75.19	1.23	3.43E+002	48.76	7.00E+002
	3	947-	959	954.70	238.69	1.13	1.80E+002	54.25	2.23E+002
	4	1347-	1361	1353.62	338.43	0.42	4.56E+001	39.52	1.24E+002
	5	1401-	1416	1407.51	351.90	1.48	1.22E+002	42.97	1.19E+002
	6	2325-	2343	2332.02	583.04	1.27	1.32E+002	35.37	5.74E+001
	7	2429-	2445	2436.20	609.09	1.56	8.45E+001	33.75	6.75E+001
	8	3634-	3652	3643.62	910.97	1.43	1.05E+002	31.87	4.74E+001
	9	3868-	3883	3874.96	968.81	0.53	5.44E+001	22.45	2.56E+001
	10	4474-	4487	4480.65	1120.24	0.33	3.96E+001	20.81	2.64E+001
	11	5830-	5856	5843.54	1460.99	2.23	7.77E+002	57.68	2.03E+001
	12	7054-	7067	7060.64	1765.29	0.37	2.38E+001	14.86	1.22E+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	0.999	1460.81*	10.67	1.76530E+001	1.93936E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.93709E-001	8.77174E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.32616E+001	3.21115E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.89129E-001	1.99721E-001
Bi-214	0.995	609.31*	46.30	3.48206E-001	1.45537E-001
		1120.29*	15.10	5.84484E-001	3.13160E-001
		1764.49*	15.80	3.86705E-001	2.44671E-001
Ac-228	0.999	338.32*	11.40	6.33519E-001	5.57867E-001
		911.07*	27.70	7.96484E-001	2.59315E-001
		969.11*	16.60	7.02489E-001	2.99018E-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	0.999	1.765295E+001	1.939359E+000
TL-208	0.471	2.937094E-001	8.771737E-002
Pb-212 @	0.593	5.891290E-001	1.997210E-001
Bi-214	0.995	3.893914E-001	1.161586E-001
Ac-228	0.999	7.426752E-001	1.848412E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.9896E-001	22.54
5	351.90	2.0307E-001	35.27

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: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	1.0783E-001	8.47E-002	-4.3338E-002
	1332.49	100.00	8.4722E-002		5.4124E-002
Nb-94	702.63	100.00	1.1329E-001	9.30E-002	-8.9496E-003
	871.10	100.00	9.3003E-002		3.2516E-003
Ag-108m	79.20	7.10	8.8024E+000	1.33E-001	-1.4328E+000
	433.93	89.90	1.3402E-001		3.8263E-002
	614.37	90.40	1.4741E-001		-4.5441E-002
	722.95	90.50	1.3285E-001		8.2380E-002
Sb-125	176.33	6.89	2.6109E+000	4.12E-001	1.2487E+000
	427.89	29.33	4.1156E-001		-3.6260E-001
	463.38	10.35	1.1852E+000		3.9368E-001
	600.56	17.80	6.9463E-001		2.6875E-001
	606.64	5.02	2.9606E+000		5.1187E+000
	635.90	11.32	9.6394E-001		2.4701E-001
Cs-134	563.23	8.38	1.4663E+000	1.37E-001	1.5049E+000
	569.32	15.43	7.8890E-001		-5.2735E-001
	604.70	97.60	1.4785E-001		-9.1906E-002
	795.84	85.40	1.3734E-001		2.0949E-002
	801.93	8.73	1.2290E+000		-1.1346E+000
Cs-137	661.65	85.12	1.3849E-001	1.38E-001	-2.6354E-002
Eu-152	121.78	28.40	8.8198E-001	3.81E-001	-2.7264E-001
	244.69	7.49	2.2174E+000		-7.8591E-003
	344.27	26.50	4.9654E-001		-3.2978E-002
	778.89	12.74	8.5392E-001		-2.5046E-001
	867.32	4.16	2.3223E+000		-1.5918E+000
	964.01	14.40	9.3924E-001		5.3025E-001
	1085.78	10.00	1.0927E+000		-5.7475E-001
	1112.02	13.30	8.2684E-001		5.3593E-001
1407.95	20.70	3.8063E-001	-1.9506E-001		
Eu-154	123.07	40.50	6.1267E-001	2.95E-001	-8.7903E-002
	247.94	6.60	2.3577E+000		-7.1982E-001
	591.81	4.83	2.4147E+000		1.2566E+000
	723.30	19.70	6.1035E-001		1.3583E-001
	756.87	4.33	2.4865E+000		-7.0421E-001
	873.19	11.50	8.2310E-001		8.4269E-003
	996.32	10.30	1.0074E+000		3.9526E-001
	1004.76	17.90	6.1997E-001		3.2045E-001
1274.45	35.50	2.9487E-001	4.8963E-002		
Eu-155	86.54	30.90	1.5283E+000	1.50E+000	2.1664E+000
	105.31	20.70	1.5026E+000		-1.7687E-001
Am-241	59.54	35.90	3.6492E+000	3.65E+000	5.7342E-001
Cm-243	228.19	10.56	1.5372E+000	1.10E+000	-6.1637E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0995E+000	1.10E+000	9.2722E-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 6/23/2006 4:02:26 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-169-F-

Sample Title: OOL-10-03-169-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 3:52:05 PM

Live Time: 600.0 seconds

Real Time: 600.6 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-169-F-
Title: OOL-10-03-169-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	297-	306	300.63	75.16	0.80	8.57E+001	69.24	5.10E+002
2	948-	964	954.31	238.59	0.77	1.09E+002	62.71	2.86E+002
3	1397-	1415	1407.90	352.00	1.47	1.23E+002	42.80	1.05E+002
4	2324-	2342	2331.61	582.94	0.82	1.11E+002	34.18	5.57E+001
5	2427-	2446	2436.89	609.26	1.06	1.40E+002	35.47	5.26E+001
6	3436-	3447	3441.73	860.49	0.52	2.50E+001	14.90	1.30E+001
7	3637-	3651	3644.27	911.13	0.99	6.11E+001	24.74	3.39E+001
8	3869-	3883	3875.60	968.97	0.58	4.22E+001	21.61	2.68E+001
9	4475-	4488	4481.65	1120.49	0.36	3.85E+001	18.91	1.95E+001
10	5832-	5857	5843.88	1461.08	2.04	6.07E+002	49.36	6.50E+000
11	7053-	7066	7059.60	1765.03	0.69	3.36E+001	12.88	3.41E+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: 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	0.998	1460.81*	10.67	1.37849E+001	1.58251E+000
TL-208	0.621	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.48498E-001	8.28713E-002
		860.37*	12.46	4.16993E-001	2.53975E-001
Pb-212	0.594	74.81* @	10.70	3.32058E+000	2.75966E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.55040E-001	2.12132E-001
Bi-214	0.998	609.31*	46.30	5.78647E-001	1.62603E-001
		1120.29*	15.10	5.68359E-001	2.85454E-001
		1764.49*	15.80	5.46334E-001	2.16404E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	4.64873E-001	1.95725E-001
		969.11*	16.60	5.44928E-001	2.84799E-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	0.998	1.378493E+001	1.582510E+000
TL-208	0.621	2.647111E-001	7.878330E-002
Pb-212 @	0.594	3.550399E-001	2.121316E-001
Bi-214	0.998	5.672225E-001	1.183057E-001
Ac-228	0.633	4.905540E-001	1.613052E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	352.00	2.0576E-001	34.67

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: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	1.0837E-001	8.00E-002	1.2409E-001
	1332.49	100.00	7.9970E-002		5.8512E-002
Nb-94	702.63	100.00	9.0694E-002	9.07E-002	-6.6660E-002
	871.10	100.00	9.1370E-002		2.0962E-002
Ag-108m	79.20	7.10	8.4029E+000	1.23E-001	1.2691E-001
	433.93	89.90	1.2339E-001		2.8121E-002
	614.37	90.40	1.5636E-001		-4.6890E-002
	722.95	90.50	1.2554E-001		1.6587E-002
Sb-125	176.33	6.89	2.4350E+000	3.91E-001	7.6779E-001
	427.89	29.33	3.9105E-001		2.5495E-001
	463.38	10.35	1.1416E+000		4.6570E-001
	600.56	17.80	6.1391E-001		2.4728E-001
	606.64	5.02	2.9606E+000		3.0062E+000
	635.90	11.32	9.2877E-001		-6.1473E-001
Cs-134	563.23	8.38	1.3313E+000	1.20E-001	2.4065E-001
	569.32	15.43	6.9060E-001		2.9598E-001
	604.70	97.60	1.4813E-001		2.3256E-002
	795.84	85.40	1.1953E-001		3.5262E-002
	801.93	8.73	1.1496E+000		-7.4470E-001
Cs-137	661.65	85.12	1.2472E-001	1.25E-001	1.2565E-001
Eu-152	121.78	28.40	8.3254E-001	3.72E-001	-4.1582E-001
	244.69	7.49	1.9063E+000		4.2105E-001
	344.27	26.50	4.4963E-001		-4.4552E-001
	778.89	12.74	7.4037E-001		-3.0030E-001
	867.32	4.16	2.0858E+000		-5.3759E-001
	964.01	14.40	8.0719E-001		-5.0175E-001
	1085.78	10.00	8.9480E-001		-7.5979E-002
	1112.02	13.30	7.2769E-001		-3.2557E-001
1407.95	20.70	3.7222E-001	1.4480E-001		
Eu-154	123.07	40.50	5.8284E-001	2.45E-001	5.8095E-001
	247.94	6.60	2.0526E+000		-1.8430E+000
	591.81	4.83	2.2278E+000		-2.5075E-001
	723.30	19.70	5.7679E-001		2.8198E-001
	756.87	4.33	2.4257E+000		-1.5531E-002
	873.19	11.50	7.4035E-001		-2.3263E-001
	996.32	10.30	9.0140E-001		3.2946E-001
	1004.76	17.90	5.2949E-001		-2.1021E-001
1274.45	35.50	2.4537E-001	-1.3735E-001		
Eu-155	86.54	30.90	1.4225E+000	1.39E+000	3.3457E-001
	105.31	20.70	1.3906E+000		-1.2397E+000
Am-241	59.54	35.90	3.2472E+000	3.25E+000	-1.1857E+000
Cm-243	228.19	10.56	1.4213E+000	9.89E-001	2.4848E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.8910E-001	9.89E-001	6.9794E-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 6/23/2006 2:55:24 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-170-F-

Sample Title: OOL-10-03-170-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 2:45:23 PM

Live Time: 600.0 seconds

Real Time: 600.6 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-170-F-
Title: OOL-10-03-170-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 11 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.968	1460.81*	10.67	1.39756E+001	1.62286E+000
TL-208	0.464	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.78856E-001	7.63928E-002
		860.37	12.46		
Pb-212	0.592	74.81* @	10.70	8.61948E+000	4.04724E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.90215E-001	1.83066E-001
Bi-214	0.972	609.31*	46.30	3.96578E-001	1.36212E-001
		1120.29*	15.10	3.60598E-001	2.74626E-001
		1764.49*	15.80	2.75742E-001	2.12452E-001
PB-214	0.625	74.82* @	6.21	1.48516E+001	7.05636E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.36384E-001	3.19281E-001
		351.92*	37.20	3.66362E-001	1.66030E-001
Ac-228	0.602	338.32	11.40		
		911.07*	27.70	7.66696E-001	2.18164E-001
		969.11*	16.60	5.76169E-001	2.62131E-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	0.968	1.397559E+001	1.622861E+000
TL-208	0.464	1.788557E-001	7.639282E-002
Pb-212 @	0.592	4.902153E-001	1.830664E-001
Bi-214	0.972	3.612612E-001	1.058142E-001
PB-214 @	0.625	4.025518E-001	1.473041E-001
Ac-228	0.602	6.887287E-001	1.676859E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.0564E-001	8.40E-002	8.3437E-002
	1332.49	100.00	8.3950E-002		4.1049E-002
Nb-94	702.63	100.00	1.0504E-001	9.57E-002	4.4122E-002
	871.10	100.00	9.5659E-002		1.0425E-002
Ag-108m	79.20	7.10	8.1829E+000	1.24E-001	-4.9939E+000
	433.93	89.90	1.2944E-001		1.2668E-001
	614.37	90.40	1.2990E-001		-2.8970E-002
	722.95	90.50	1.2421E-001		6.0818E-003
Sb-125	176.33	6.89	2.3728E+000	3.69E-001	-1.1603E+000
	427.89	29.33	3.6935E-001		2.3503E-002
	463.38	10.35	1.0726E+000		-1.6283E-001
	600.56	17.80	6.1601E-001		-1.8664E-001
	606.64	5.02	2.7452E+000		4.7343E+000
	635.90	11.32	9.5353E-001		2.1621E-001
Cs-134	563.23	8.38	1.2357E+000	1.16E-001	-1.1369E+000
	569.32	15.43	6.7848E-001		-1.7215E-001
	604.70	97.60	1.4074E-001		-2.2151E-002
	795.84	85.40	1.1619E-001		3.6604E-002
	801.93	8.73	1.0639E+000		3.1323E-001
Cs-137	661.65	85.12	1.2569E-001	1.26E-001	5.3193E-002
Eu-152	121.78	28.40	8.2305E-001	3.59E-001	5.8577E-001
	244.69	7.49	1.9829E+000		-1.9430E-001
	344.27	26.50	4.4963E-001		-3.6257E-001
	778.89	12.74	7.9745E-001		-2.4331E-001
	867.32	4.16	2.2464E+000		-1.6846E+000
	964.01	14.40	8.5555E-001		-5.8170E-002
	1085.78	10.00	9.1973E-001		-2.6146E-001
	1112.02	13.30	7.4086E-001		-3.3431E-001
1407.95	20.70	3.5918E-001	-5.3849E-002		
Eu-154	123.07	40.50	5.6043E-001	2.65E-001	-4.5484E-001
	247.94	6.60	2.1447E+000		-2.0833E+000
	591.81	4.83	2.1964E+000		-2.2502E+000
	723.30	19.70	5.7065E-001		1.2855E-001
	756.87	4.33	2.2882E+000		-3.1520E-001
	873.19	11.50	8.4131E-001		-1.5778E-001
	996.32	10.30	9.6646E-001		1.0337E-001
	1004.76	17.90	5.0333E-001		-2.9753E-001
1274.45	35.50	2.6486E-001	-1.0789E-001		
Eu-155	86.54	30.90	1.4157E+000	1.37E+000	1.4823E+000
	105.31	20.70	1.3713E+000		-1.5836E+000
Am-241	59.54	35.90	3.2220E+000	3.22E+000	-1.7419E+000
Cm-243	228.19	10.56	1.4111E+000	9.64E-001	1.3258E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.6385E-001	9.64E-001	6.2632E-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 6/23/2006 1:54:45 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-171-F-

Sample Title: OOL-10-03-171-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 1:44:43 PM

Live Time: 600.0 seconds

Real Time: 600.6 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-171-F-
Title: OOL-10-03-171-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	296-	306	300.48	75.12	0.95	8.97E+001	70.49	5.03E+002
2	947-	959	953.41	238.36	0.91	1.27E+002	48.85	1.88E+002
3	1400-	1413	1406.22	351.58	0.36	9.49E+001	37.31	9.71E+001
4	2323-	2339	2329.46	582.41	0.78	8.77E+001	30.47	4.93E+001
5	2425-	2445	2434.40	608.64	0.85	9.95E+001	39.02	8.15E+001
6	3634-	3650	3642.27	910.63	1.13	8.49E+001	26.31	3.01E+001
7	3865-	3879	3871.75	968.01	0.29	3.47E+001	22.42	3.33E+001
8	5826-	5851	5839.28	1459.92	2.20	6.36E+002	50.53	6.57E+000
9	7048-	7061	7054.07	1763.65	1.18	2.95E+001	11.33	1.51E+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: 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	0.974	1460.81*	10.67	1.44618E+001	1.63989E+000
TL-208	0.460	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.95724E-001	7.26117E-002
		860.37	12.46		
Pb-212	0.592	74.81* @	10.70	3.47958E+000	2.81870E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.13071E-001	1.72077E-001
Bi-214	0.684	609.31*	46.30	4.09673E-001	1.68482E-001
		1120.29	15.10		
		1764.49*	15.80	4.79499E-001	1.90353E-001
Ac-228	0.618	338.32	11.40		
		911.07*	27.70	6.46369E-001	2.13589E-001
		969.11*	16.60	4.47969E-001	2.93190E-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	0.974	1.446181E+001	1.639890E+000
TL-208	0.460	1.957241E-001	7.261174E-002
Pb-212 @	0.592	4.130709E-001	1.720772E-001
Bi-214	0.684	4.403462E-001	1.261619E-001
Ac-228	0.618	5.775817E-001	1.726364E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.58	1.5818E-001	39.31

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: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	1.0397E-001	8.47E-002	7.9225E-002
	1332.49	100.00	8.4722E-002		2.0549E-002
Nb-94	702.63	100.00	1.0331E-001	1.03E-001	1.0015E-002
	871.10	100.00	1.0558E-001		2.1846E-002
Ag-108m	79.20	7.10	7.9993E+000	1.26E-001	-3.6449E+000
	433.93	89.90	1.3221E-001		7.7678E-002
	614.37	90.40	1.4637E-001		4.6395E-002
	722.95	90.50	1.2554E-001		7.9022E-002
Sb-125	176.33	6.89	2.3764E+000	3.86E-001	-1.1216E+000
	427.89	29.33	3.8623E-001		-8.0309E-002
	463.38	10.35	1.1077E+000		1.0288E+000
	600.56	17.80	6.0969E-001		-5.8103E-001
	606.64	5.02	2.9661E+000		5.1741E+000
	635.90	11.32	8.6551E-001		-7.5563E-001
Cs-134	563.23	8.38	1.3059E+000	1.11E-001	-2.5988E-001
	569.32	15.43	7.0719E-001		-2.7182E-002
	604.70	97.60	1.4756E-001		-3.6408E-002
	795.84	85.40	1.1098E-001		1.1427E-002
	801.93	8.73	1.1330E+000		1.7205E-001
Cs-137	661.65	85.12	1.2325E-001	1.23E-001	1.1179E-002
Eu-152	121.78	28.40	8.3442E-001	3.55E-001	1.9757E-001
	244.69	7.49	1.8816E+000		-1.8639E+000
	344.27	26.50	4.5765E-001		-2.2533E-001
	778.89	12.74	7.7137E-001		-9.0644E-001
	867.32	4.16	2.3346E+000		-1.0646E+000
	964.01	14.40	8.4966E-001		1.5712E+000
	1085.78	10.00	9.3796E-001		-6.2452E-001
	1112.02	13.30	7.4086E-001		-1.1883E+000
1407.95	20.70	3.5472E-001	-1.3997E-001		
Eu-154	123.07	40.50	5.8310E-001	2.37E-001	1.8992E-001
	247.94	6.60	2.1240E+000		-1.5847E+000
	591.81	4.83	2.2278E+000		-8.2616E-001
	723.30	19.70	5.7679E-001		4.2560E-001
	756.87	4.33	2.3527E+000		-1.3559E+000
	873.19	11.50	9.2673E-001		5.6837E-001
	996.32	10.30	9.6122E-001		1.1043E+000
	1004.76	17.90	5.0668E-001		2.4179E-001
1274.45	35.50	2.3708E-001	4.0522E-002		
Eu-155	86.54	30.90	1.3919E+000	1.39E+000	1.1437E+000
	105.31	20.70	1.3919E+000		4.2477E-001
Am-241	59.54	35.90	3.3084E+000	3.31E+000	-1.9218E-001
Cm-243	228.19	10.56	1.3845E+000	9.53E-001	-4.6151E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.5301E-001	9.53E-001	6.2318E-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 6/23/2006 10:46:32 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-10-03-172-F-

Sample Title: OOL-10-03-172-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 10:36:30 PM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-172-F-
 Title: OOL-10-03-172-F-G
 Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	309	300.60	75.15	1.14	1.63E+002	89.10	6.85E+002
2	947-	972	954.38	238.61	1.05	1.72E+002	88.40	4.31E+002
3	1174-	1189	1179.81	294.97	0.45	4.52E+001	45.49	1.64E+002
4	1346-	1360	1352.20	338.07	0.85	5.12E+001	39.67	1.24E+002
5	1400-	1413	1405.97	351.51	1.03	1.07E+002	39.75	1.10E+002
6	2321-	2340	2330.67	582.71	1.23	1.32E+002	37.50	6.67E+001
7	2426-	2443	2434.15	608.58	1.33	1.16E+002	33.86	5.62E+001
8	3633-	3650	3641.62	910.47	1.75	9.54E+001	28.54	3.56E+001
9	3864-	3880	3872.72	968.25	1.16	7.18E+001	27.12	3.83E+001
10	4473-	4484	4478.16	1119.62	0.32	1.48E+001	19.00	3.12E+001
11	5827-	5852	5839.49	1459.98	2.28	6.73E+002	52.83	1.27E+001
12	6344-	6357	6350.09	1587.64	1.36	8.94E+000	11.61	9.06E+000
13	7049-	7062	7055.41	1763.98	0.37	3.22E+001	13.26	4.84E+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: 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	1.52994E+001	1.72496E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.95211E-001	9.20832E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	6.31397E+000	3.66716E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.61731E-001	3.01699E-001
Bi-214	0.985	609.31*	46.30	4.77050E-001	1.51342E-001
		1120.29*	15.10	2.17797E-001	2.81266E-001
		1764.49*	15.80	5.22834E-001	2.21923E-001
PB-214	0.624	74.82* @	6.21	1.08791E+001	6.36779E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.60842E-001	3.68053E-001
		351.92*	37.20	4.58695E-001	1.87169E-001
Ac-228	0.986	338.32*	11.40	7.11419E-001	5.62121E-001
		911.07*	27.70	7.25670E-001	2.32745E-001
		969.11*	16.60	9.26181E-001	3.63354E-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	0.977	1.529936E+001	1.724962E+000
TL-208	0.467	2.952109E-001	9.208322E-002
Pb-212 @	0.594	5.617313E-001	3.016987E-001
Bi-214	0.985	4.464060E-001	1.142541E-001
PB-214 @	0.624	4.385886E-001	1.668354E-001
Ac-228	0.986	7.761379E-001	1.850606E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
12	1587.64	1.4907E-002	129.85

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: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	9.06E-002	1.2907E-001
	1332.49	100.00	9.0643E-002		4.1850E-002
Nb-94	702.63	100.00	1.1984E-001	1.00E-001	1.3644E-001
	871.10	100.00	1.0025E-001		-3.0315E-002
Ag-108m	79.20	7.10	8.6201E+000	1.27E-001	-2.5380E+000
	433.93	89.90	1.4356E-001		5.1952E-002
	614.37	90.40	1.4534E-001		-1.0313E-001
	722.95	90.50	1.2730E-001		7.3534E-002
Sb-125	176.33	6.89	2.6786E+000	4.15E-001	-5.6019E-002
	427.89	29.33	4.1518E-001		-1.6822E-001
	463.38	10.35	1.2298E+000		1.4409E+000
	600.56	17.80	6.6046E-001		-1.2937E-002
	606.64	5.02	3.0093E+000		4.1160E+000
	635.90	11.32	1.0337E+000		2.2557E-001
Cs-134	563.23	8.38	1.4123E+000	1.26E-001	2.0346E-001
	569.32	15.43	7.9927E-001		1.1597E+000
	604.70	97.60	1.5378E-001		4.7381E-003
	795.84	85.40	1.2646E-001		9.4747E-002
	801.93	8.73	1.2392E+000		-2.2854E-002
Cs-137	661.65	85.12	1.3674E-001	1.37E-001	5.0931E-002
Eu-152	121.78	28.40	8.7484E-001	4.01E-001	-1.0554E-001
	244.69	7.49	2.1176E+000		2.7163E-002
	344.27	26.50	4.8918E-001		-2.7162E-001
	778.89	12.74	8.4708E-001		-1.9123E-001
	867.32	4.16	2.4549E+000		-2.2268E+000
	964.01	14.40	9.7828E-001		-3.6279E-001
	1085.78	10.00	9.8483E-001		-4.6793E-001
	1112.02	13.30	8.5348E-001		-4.0833E-001
1407.95	20.70	4.0084E-001	-3.2656E-003		
Eu-154	123.07	40.50	6.0817E-001	2.93E-001	2.5169E-002
	247.94	6.60	2.4176E+000		2.4479E+000
	591.81	4.83	2.3566E+000		1.3542E+000
	723.30	19.70	5.8687E-001		4.0776E-001
	756.87	4.33	2.7516E+000		-4.8616E-002
	873.19	11.50	8.6351E-001		-2.5035E-001
	996.32	10.30	9.5594E-001		4.7166E-002
	1004.76	17.90	5.6930E-001		9.1334E-003
1274.45	35.50	2.9320E-001	-9.5173E-002		
Eu-155	86.54	30.90	1.4774E+000	1.48E+000	1.5332E+000
	105.31	20.70	1.5261E+000		2.4437E-001
Am-241	59.54	35.90	3.3947E+000	3.39E+000	-2.8786E+000
Cm-243	228.19	10.56	1.5305E+000	1.04E+000	-2.5593E-001

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	-1.8127E-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 6/26/2006 8:35:39 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-173-F-

Sample Title: OOL-10-03-173-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 8:25:37 AM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-173-F-
 Title: OOL-10-03-173-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	945-	964	955.21	238.84	1.43	2.06E+002	75.98	3.70E+002
2	1172-	1189	1182.42	295.65	0.89	7.16E+001	51.01	1.85E+002
3	2040-	2050	2044.81	511.27	0.31	4.83E+001	29.04	7.17E+001
4	2326-	2342	2333.84	583.53	1.72	1.19E+002	35.47	6.65E+001
5	2428-	2446	2437.01	609.33	0.37	9.36E+001	36.84	7.64E+001
6	3636-	3658	3645.57	911.49	1.43	1.37E+002	30.15	2.57E+001
7	5833-	5860	5846.81	1461.86	1.92	7.17E+002	55.84	2.10E+001
8	7056-	7070	7063.59	1766.08	0.49	4.30E+001	12.85	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: 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	0.962	1460.81*	10.67	1.65668E+001	1.86104E+000
TL-208	0.747	277.35	6.80		
		510.84*	21.60	3.96737E-001	2.46522E-001
		583.14*	84.20	2.65000E-001	8.59054E-002
		860.37	12.46		
Pb-212	0.419	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.35845E-001	2.55066E-001
Bi-214	0.677	609.31*	46.30	3.84204E-001	1.58411E-001
		1120.29	15.10		
		1764.49*	15.80	7.32184E-001	2.30764E-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
X	ANN	0.997		
	K-40	0.962	1.656680E+001	1.861036E+000
	TL-208	0.747	2.792652E-001	8.112118E-002
	Pb-212 @	0.419	6.358454E-001	2.550657E-001
	Bi-214	0.677	4.956614E-001	1.306004E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	295.65	1.1927E-001	71.27
6	911.49	2.2889E-001	21.95

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: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	1.1789E-001	8.41E-002	4.5548E-002
	1332.49	100.00	8.4105E-002		1.3547E-002
Nb-94	702.63	100.00	1.1444E-001	1.13E-001	5.6607E-003
	871.10	100.00	1.1302E-001		6.8626E-002
Ag-108m	79.20	7.10	1.0906E+001	1.28E-001	-1.0067E+001
	433.93	89.90	1.2844E-001		-2.7863E-002
	614.37	90.40	1.4272E-001		-1.9195E-002
	722.95	90.50	1.3024E-001		5.3349E-002
Sb-125	176.33	6.89	2.6597E+000	4.08E-001	4.5041E-001
	427.89	29.33	4.0848E-001		4.7145E-001
	463.38	10.35	1.2568E+000		4.0369E-001
	600.56	17.80	6.3356E-001		-1.4860E-001
	606.64	5.02	2.8764E+000		1.2436E-002
	635.90	11.32	9.6563E-001		-3.1836E-001
Cs-134	563.23	8.38	1.3652E+000	1.31E-001	5.1917E-003
	569.32	15.43	7.2241E-001		-3.1645E-001
	604.70	97.60	1.3675E-001		-4.4603E-002
	795.84	85.40	1.3132E-001		1.5166E-001
	801.93	8.73	1.0622E+000		-2.5837E+000
Cs-137	661.65	85.12	1.3896E-001	1.39E-001	1.3927E-002
Eu-152	121.78	28.40	9.4947E-001	3.76E-001	1.5847E-001
	244.69	7.49	2.1032E+000		-6.0984E-001
	344.27	26.50	4.7333E-001		-9.1341E-001
	778.89	12.74	8.0005E-001		-4.9726E-001
	867.32	4.16	2.7352E+000		-1.0971E+000
	964.01	14.40	9.1877E-001		-3.4605E-001
	1085.78	10.00	1.1431E+000		9.8291E-001
	1112.02	13.30	7.7213E-001		-1.2283E-001
1407.95	20.70	3.7612E-001	2.9265E-004		
Eu-154	123.07	40.50	6.5639E-001	2.57E-001	-3.4398E-002
	247.94	6.60	2.3377E+000		4.8263E-001
	591.81	4.83	2.2614E+000		1.2851E+000
	723.30	19.70	6.0033E-001		1.2186E-001
	756.87	4.33	2.6387E+000		1.2710E+000
	873.19	11.50	9.2040E-001		-1.2374E-001
	996.32	10.30	9.3996E-001		-4.4275E-001
	1004.76	17.90	5.7177E-001		4.5359E-001
	1274.45	35.50	2.5663E-001		-2.9746E-001
Eu-155	86.54	30.90	1.8128E+000	1.76E+000	2.1192E+000
	105.31	20.70	1.7635E+000		-4.5595E-001
Am-241	59.54	35.90	5.8037E+000	5.80E+000	-1.4369E+001
Cm-243	228.19	10.56	1.5395E+000	1.01E+000	5.0292E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0127E+000	1.01E+000	4.3201E-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 6/26/2006 8:14:53 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-174-F-

Sample Title: OOL-10-03-174-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 8:04:50 AM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-174-F-
Title: OOL-10-03-174-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	307	299.09	74.79	1.52	2.02E+002	98.52	9.20E+002
2	948-	965	955.05	238.80	1.30	2.34E+002	77.37	4.05E+002
3	1309-	1318	1313.13	328.33	0.63	2.51E+001	30.01	9.19E+001
4	1349-	1362	1353.71	338.48	0.41	7.99E+001	40.33	1.24E+002
5	1398-	1416	1408.58	352.19	0.43	1.24E+002	51.31	1.66E+002
6	2323-	2341	2333.37	583.41	1.80	1.40E+002	38.42	7.20E+001
7	2431-	2445	2438.44	609.68	0.95	1.22E+002	34.12	6.30E+001
8	3636-	3658	3645.83	911.56	1.21	1.51E+002	33.66	3.71E+001
9	3870-	3885	3878.18	969.65	1.22	6.72E+001	25.45	3.38E+001
10	5834-	5861	5847.65	1462.06	1.93	7.39E+002	54.90	1.03E+001
11	7057-	7070	7063.14	1765.97	0.62	2.96E+001	13.13	5.40E+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: 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	0.945	1460.81*	10.67	1.70686E+001	1.87595E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.10527E-001	9.43182E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	6.37027E+000	3.34350E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.24424E-001	2.64655E-001
Bi-214	0.677	609.31*	46.30	5.00800E-001	1.53045E-001
		1120.29	15.10		
		1764.49*	15.80	5.04000E-001	2.29222E-001
Ac-228	0.992	338.32*	11.40	1.07098E+000	5.66061E-001
		911.07*	27.70	1.14546E+000	2.87407E-001
		969.11*	16.60	8.64116E-001	3.39283E-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	0.945	1.706859E+001	1.875952E+000
TL-208	0.468	3.105274E-001	9.431819E-002
Pb-212 @	0.576	7.244240E-001	2.646546E-001
Bi-214	0.677	5.017870E-001	1.272821E-001
Ac-228	0.992	1.033538E+000	2.044906E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	328.33	4.1759E-002	119.77
5	352.19	2.0613E-001	41.49

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.1296E-001	9.36E-002	-6.2989E-002
	1332.49	100.00	9.3624E-002		4.8479E-002
Nb-94	702.63	100.00	1.2348E-001	1.07E-001	1.1327E-001
	871.10	100.00	1.0672E-001		6.7216E-002
Ag-108m	79.20	7.10	8.3731E+000	1.34E-001	-9.0834E+000
	433.93	89.90	1.3401E-001		-3.6198E-002
	614.37	90.40	1.5483E-001		-1.4125E-001
	722.95	90.50	1.3768E-001		6.4097E-002
Sb-125	176.33	6.89	2.5895E+000	4.13E-001	-2.0570E-001
	427.89	29.33	4.1282E-001		-2.1240E-001
	463.38	10.35	1.2323E+000		-2.8650E-001
	600.56	17.80	6.4751E-001		-1.7718E-001
	606.64	5.02	3.1064E+000		5.7595E+000
	635.90	11.32	1.0757E+000		4.6623E-001
Cs-134	563.23	8.38	1.4505E+000	1.40E-001	-1.6998E+000
	569.32	15.43	7.8289E-001		-5.4446E-002
	604.70	97.60	1.4162E-001		-1.5586E-001
	795.84	85.40	1.4040E-001		8.9316E-002
Cs-137	801.93	8.73	1.3012E+000	1.39E-001	-6.1990E-001
	661.65	85.12	1.3939E-001		-8.1321E-002
Eu-152	121.78	28.40	8.7084E-001	3.89E-001	-1.1643E+000
	244.69	7.49	2.2752E+000		-3.0373E-001
	344.27	26.50	5.0334E-001		-7.4225E-002
	778.89	12.74	8.6629E-001		-8.0338E-001
	867.32	4.16	2.5407E+000		-3.3808E+000
	964.01	14.40	9.1065E-001		2.4113E-001
	1085.78	10.00	1.0582E+000		2.6249E-003
	1112.02	13.30	7.9624E-001		2.9620E-001
	1407.95	20.70	3.8880E-001		1.1433E-001
	Eu-154	123.07	40.50		6.0931E-001
247.94		6.60	2.3713E+000	-7.2992E-001	
591.81		4.83	2.5261E+000	1.8880E-001	
723.30		19.70	6.2512E-001	1.0726E-002	
756.87		4.33	2.6943E+000	7.2455E-001	
873.19		11.50	8.9141E-001	4.5265E-003	
996.32		10.30	1.0919E+000	7.2835E-001	
1004.76		17.90	6.2165E-001	7.8767E-002	
1274.45		35.50	2.8050E-001	-2.3833E-001	
Eu-155		86.54	30.90	1.6600E+000	1.55E+000
	105.31	20.70	1.5538E+000	-2.3109E-001	
Am-241	59.54	35.90	3.0030E+000	3.00E+000	-2.9531E+000
Cm-243	228.19	10.56	1.6014E+000	1.02E+000	-2.1675E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0243E+000	1.02E+000	9.0840E-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 6/23/2006 9:47:27 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-175-F-

Sample Title: OOL-10-03-175-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 9:37:25 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-175-F-
Title: OOL-10-03-175-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	307	300.35	75.09	0.79	1.54E+002	86.14	7.05E+002
2	947-	960	953.93	238.49	0.88	1.92E+002	61.24	2.80E+002
3	1172-	1189	1180.33	295.10	1.15	1.20E+002	54.64	2.02E+002
4	1346-	1357	1351.47	337.89	0.35	6.42E+001	38.69	1.30E+002
5	1401-	1416	1406.33	351.61	1.44	1.45E+002	47.22	1.43E+002
6	2033-	2054	2042.56	510.67	0.99	1.22E+002	47.94	1.27E+002
7	2321-	2342	2330.25	582.60	1.13	1.56E+002	40.44	7.23E+001
8	2426-	2445	2434.84	608.75	1.76	1.80E+002	40.98	7.27E+001
9	3631-	3650	3641.35	910.40	1.27	9.84E+001	34.01	5.76E+001
10	3867-	3881	3872.49	968.19	0.51	7.00E+001	25.40	3.40E+001
11	4468-	4485	4476.72	1119.26	1.31	6.93E+001	25.83	3.17E+001
12	5827-	5853	5839.88	1460.08	1.63	7.98E+002	58.79	2.35E+001
13	7050-	7064	7056.16	1764.17	0.48	5.01E+001	17.78	1.09E+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: 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	0.996	511.00*	100.00	2.19700E-001	9.11095E-002
K-40	0.982	1460.81*	10.67	1.81232E+001	1.98443E+000
TL-208	0.746	277.35	6.80		
		510.84*	21.60	1.01713E+000	4.29905E-001
		583.14*	84.20	3.47476E-001	1.00942E-001
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	5.97230E+000	3.54611E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.986	238.63*	44.60	6.25618E-001	2.22653E-001
		609.31*	46.30	7.42574E-001	1.91994E-001
		1120.29*	15.10	1.02224E+000	3.96153E-001
		1764.49*	15.80	8.14605E-001	3.00337E-001
PB-214	0.626	74.82* @	6.21	1.02904E+001	6.15554E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	9.57166E-001	4.64811E-001
Ac-228	0.983	351.92*	37.20	6.23683E-001	2.28068E-001
		338.32*	11.40	8.91178E-001	5.55128E-001
		911.07*	27.70	7.49163E-001	2.72845E-001
		969.11*	16.60	9.04011E-001	3.41341E-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	0.996	1.446448E-001	9.365018E-002
K-40	0.982	1.812321E+001	1.984425E+000
TL-208	0.746	3.474765E-001	1.003051E-001
Pb-212 @	0.593	6.256184E-001	2.226526E-001
Bi-214	0.986	8.004514E-001	1.497608E-001
PB-214 @	0.626	6.883919E-001	2.047487E-001
Ac-228	0.983	8.200188E-001	1.989658E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.2152E-001	9.48E-002	-1.0015E-001
	1332.49	100.00	9.4824E-002		-2.3405E-002
Nb-94	702.63	100.00	1.2639E-001	1.13E-001	3.9863E-002
	871.10	100.00	1.1286E-001		1.3878E-001
Ag-108m	79.20	7.10	8.9083E+000	1.42E-001	-9.4613E+000
	433.93	89.90	1.4244E-001		-4.4043E-002
	614.37	90.40	1.6783E-001		2.5801E-002
	722.95	90.50	1.4782E-001		1.0368E-001
Sb-125	176.33	6.89	2.6913E+000	4.27E-001	-6.2655E-001
	427.89	29.33	4.2671E-001		-1.4504E-001
	463.38	10.35	1.2452E+000		4.4538E-001
	600.56	17.80	6.4267E-001		7.5442E-002
	606.64	5.02	3.3822E+000		7.0135E+000
	635.90	11.32	1.1109E+000		4.6474E-001
Cs-134	563.23	8.38	1.4549E+000	1.33E-001	1.2011E-001
	569.32	15.43	8.5495E-001		6.0533E-001
	604.70	97.60	1.7328E-001		1.8667E-002
	795.84	85.40	1.3349E-001		-5.4837E-002
Cs-137	801.93	8.73	1.3176E+000	1.50E-001	-4.6851E-001
	661.65	85.12	1.4975E-001		1.9989E-002
Eu-152	121.78	28.40	9.0620E-001	4.31E-001	-4.8101E-001
	244.69	7.49	2.3274E+000		-1.1082E+000
	344.27	26.50	5.4740E-001		-5.6342E-001
	778.89	12.74	9.1624E-001		-6.4729E-001
	867.32	4.16	2.5914E+000		-4.9632E+000
	964.01	14.40	1.0589E+000		-4.5346E-001
	1085.78	10.00	1.1080E+000		-6.9130E-001
	1112.02	13.30	8.4217E-001		-1.5964E-001
1407.95	20.70	4.3105E-001	-9.8514E-002		
Eu-154	123.07	40.50	6.3464E-001	2.90E-001	2.8728E-001
	247.94	6.60	2.5288E+000		-4.9639E-001
	591.81	4.83	2.4643E+000		1.3108E+000
	723.30	19.70	6.8086E-001		4.1144E-001
	756.87	4.33	2.6226E+000		-2.9027E+000
	873.19	11.50	1.0008E+000		7.2351E-002
	996.32	10.30	1.0703E+000		2.3360E-001
	1004.76	17.90	5.7224E-001		-1.5427E-001
1274.45	35.50	2.8981E-001	-1.8546E-001		
Eu-155	86.54	30.90	1.5629E+000	1.54E+000	1.8637E+000
	105.31	20.70	1.5354E+000		-8.7628E-001
Am-241	59.54	35.90	3.5316E+000	3.53E+000	-2.4896E+000
Cm-243	228.19	10.56	1.6622E+000	1.11E+000	9.7079E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1100E+000	1.11E+000	-1.8539E-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 6/23/2006 1:05:30 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-176-F-

Sample Title: OOL-10-03-176-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 12:55:35 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-176-F-
 Title: OOL-10-03-176-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	283-	306	291.33	72.83	1.11	1.51E+002	40.51	5.97E+002
m	2	283-	306	300.34	75.09	1.11	3.35E+002	51.50	7.37E+002
	3	333-	345	339.21	84.80	1.11	9.45E+001	80.11	5.94E+002
	4	943-	959	954.22	238.57	1.44	2.74E+002	68.83	3.07E+002
	5	1398-	1412	1406.63	351.68	1.10	1.04E+002	44.40	1.42E+002
	6	2029-	2045	2039.68	509.95	1.49	7.94E+001	40.11	1.08E+002
	7	2321-	2336	2330.40	582.64	0.94	1.54E+002	39.65	8.34E+001
	8	2427-	2443	2434.59	608.69	0.58	8.56E+001	37.94	9.24E+001
	9	3432-	3447	3440.27	860.13	0.33	4.90E+001	21.58	2.40E+001
	10	3630-	3651	3641.10	910.34	1.38	1.58E+002	33.50	3.57E+001
	11	3864-	3879	3872.16	968.11	1.28	6.50E+001	29.95	5.60E+001
	12	4471-	4484	4477.80	1119.53	0.27	3.49E+001	21.53	3.11E+001
	13	5826-	5851	5839.33	1459.94	2.01	8.27E+002	57.78	9.80E+000
	14	7048-	7061	7054.02	1763.63	0.47	3.49E+001	15.50	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: 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	0.975	1460.81*	10.67	1.87966E+001	2.00991E+000
TL-208	0.893	277.35	6.80		
		510.84*	21.60	6.59531E-001	3.49304E-001
		583.14*	84.20	3.42652E-001	9.90850E-002
		860.37*	12.46	8.18090E-001	3.73946E-001
Pb-212	0.594	74.81* @	10.70	1.30112E+001	3.24172E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.984	238.63*	44.60	8.94373E-001	2.64826E-001
		609.31*	46.30	3.52585E-001	1.62207E-001
		1120.29*	15.10	5.15108E-001	3.22302E-001
Ac-228	0.614	1764.49*	15.80	5.67787E-001	2.58343E-001
		338.32	11.40		
		911.07*	27.70	1.20471E+000	2.90238E-001
		969.11*	16.60	8.39016E-001	3.96497E-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	0.964		
	K-40	0.975	1.879660E+001	2.009914E+000
	TL-208	0.893	3.938201E-001	9.237014E-002
	Pb-212 @	0.594	8.943734E-001	2.648262E-001
	Bi-214	0.984	4.290660E-001	1.263733E-001
	Ac-228	0.614	1.077124E+000	2.341977E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.5154E-001	26.84
3	84.80	1.5756E-001	84.74
5	351.68	1.7297E-001	42.78

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: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	1.2056E-001	8.77E-002	8.8890E-002
	1332.49	100.00	8.7736E-002		6.4195E-003
Nb-94	702.63	100.00	1.1909E-001	1.16E-001	8.4755E-003
	871.10	100.00	1.1589E-001		1.1513E-001
Ag-108m	79.20	7.10	9.0041E+000	1.44E-001	-6.2410E+000
	433.93	89.90	1.4356E-001		-1.0213E-001
	614.37	90.40	1.5604E-001		-8.4206E-002
	722.95	90.50	1.4819E-001		1.2218E-001
Sb-125	176.33	6.89	2.8120E+000	4.55E-001	-4.0619E-001
	427.89	29.33	4.5544E-001		4.4429E-002
	463.38	10.35	1.2876E+000		1.4148E+000
	600.56	17.80	7.2181E-001		-1.3004E-002
	606.64	5.02	3.1913E+000		5.9002E+000
	635.90	11.32	9.6394E-001		-4.2816E-001
Cs-134	563.23	8.38	1.5684E+000	1.47E-001	-6.5506E-001
	569.32	15.43	8.0747E-001		-7.8922E-002
	604.70	97.60	1.6292E-001		-4.6305E-003
	795.84	85.40	1.4739E-001		9.2604E-002
	801.93	8.73	1.2238E+000		-1.5748E+000
Cs-137	661.65	85.12	1.4527E-001	1.45E-001	1.0202E-001
Eu-152	121.78	28.40	9.1241E-001	4.12E-001	-5.7270E-001
	244.69	7.49	2.2440E+000		-1.8611E+000
	344.27	26.50	5.3176E-001		-5.7072E-001
	778.89	12.74	8.4363E-001		-3.8919E-001
	867.32	4.16	2.6353E+000		-1.8641E-001
	964.01	14.40	1.1138E+000		1.8721E+000
	1085.78	10.00	1.0825E+000		-3.5669E-001
	1112.02	13.30	9.3539E-001		-3.4450E-001
1407.95	20.70	4.1245E-001	-7.0429E-002		
Eu-154	123.07	40.50	6.3608E-001	2.95E-001	1.6366E-001
	247.94	6.60	2.4312E+000		-3.1486E+000
	591.81	4.83	2.5674E+000		-5.6023E+000
	723.30	19.70	6.7743E-001		3.6228E-001
	756.87	4.33	2.8832E+000		-2.7808E-001
	873.19	11.50	1.0267E+000		-1.2102E-001
	996.32	10.30	9.4530E-001		-5.1876E-001
	1004.76	17.90	5.9238E-001		1.9221E-001
1274.45	35.50	2.9487E-001	8.8708E-002		
Eu-155	86.54	30.90	1.5302E+000	1.53E+000	1.5504E+000
	105.31	20.70	1.5492E+000		5.2216E-001
Am-241	59.54	35.90	3.5940E+000	3.59E+000	-2.2116E+000
Cm-243	228.19	10.56	1.6597E+000	1.18E+000	1.7929E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1767E+000	1.18E+000	-2.4075E-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 6/23/2006 11:46:35 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-10-03-177-F-

Sample Title: OOL-10-03-177-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 11:36:34 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-177-F-
Title: OOL-10-03-177-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	306	300.40	75.10	1.12	1.96E+002	88.62	7.00E+002
2	333-	346	339.17	84.79	0.36	9.87E+001	87.05	6.71E+002
3	949-	960	953.80	238.46	1.08	2.09E+002	56.56	2.47E+002
4	1343-	1359	1352.34	338.11	0.93	7.60E+001	48.31	1.70E+002
5	1397-	1415	1406.05	351.53	0.92	8.01E+001	50.05	1.69E+002
6	2032-	2047	2042.16	510.57	0.87	7.20E+001	37.84	1.00E+002
7	2324-	2340	2330.60	582.69	1.21	1.43E+002	36.36	6.42E+001
8	2425-	2443	2435.05	608.80	1.39	1.35E+002	35.82	5.90E+001
9	3434-	3446	3439.09	859.83	0.54	2.78E+001	19.14	2.53E+001
10	3633-	3652	3641.49	910.44	1.09	1.24E+002	34.07	5.12E+001
11	3865-	3880	3871.73	968.00	0.78	6.02E+001	25.86	3.78E+001
12	4472-	4484	4477.87	1119.55	0.43	2.53E+001	19.45	2.77E+001
13	5827-	5852	5839.23	1459.91	1.69	8.21E+002	59.55	2.47E+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: 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	0.974	1460.81*	10.67	1.86614E+001	2.02831E+000
TL-208	0.898	277.35	6.80		
		510.84*	21.60	5.98626E-001	3.28569E-001
		583.14*	84.20	3.18565E-001	9.11305E-002
		860.37*	12.46	4.63271E-001	3.24572E-001
Pb-212	0.593	74.81* @	10.70	7.61468E+000	3.75140E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.697	238.63*	44.60	6.82529E-001	2.13377E-001
		609.31*	46.30	5.56176E-001	1.62677E-001
		1120.29*	15.10	3.72630E-001	2.89668E-001
Ac-228	0.981	1764.49	15.80		
		338.32*	11.40	1.05542E+000	6.91015E-001
		911.07*	27.70	9.42515E-001	2.81113E-001
		969.11*	16.60	7.77055E-001	3.43554E-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	0.994		
	K-40	0.974	1.866144E+001	2.028311E+000
	TL-208	0.898	3.470758E-001	8.476764E-002
	Pb-212 @	0.593	6.825293E-001	2.133772E-001
	Bi-214	0.697	5.121672E-001	1.418398E-001
	Ac-228	0.981	8.923275E-001	2.075195E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.6442E-001	88.24
5	351.53	1.3343E-001	62.51

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.1514E-001	9.14E-002	3.7015E-002
	1332.49	100.00	9.1354E-002		2.4884E-002
Nb-94	702.63	100.00	1.1795E-001	1.07E-001	3.7371E-002
	871.10	100.00	1.0698E-001		2.0622E-002
Ag-108m	79.20	7.10	8.8702E+000	1.42E-001	-2.5118E+000
	433.93	89.90	1.4216E-001		1.4700E-002
	614.37	90.40	1.5179E-001		-4.9668E-003
	722.95	90.50	1.4249E-001		1.3824E-001
Sb-125	176.33	6.89	2.8211E+000	4.41E-001	4.1968E-001
	427.89	29.33	4.4132E-001		4.7562E-001
	463.38	10.35	1.2012E+000		-6.4228E-002
	600.56	17.80	6.6435E-001		-3.4048E-001
	606.64	5.02	3.0307E+000		3.2695E+000
	635.90	11.32	9.2517E-001		-6.7272E-001
Cs-134	563.23	8.38	1.4701E+000	1.32E-001	2.8266E-002
	569.32	15.43	8.2959E-001		5.0487E-002
	604.70	97.60	1.5734E-001		-1.2295E-001
	795.84	85.40	1.3152E-001		-2.6099E-002
	801.93	8.73	1.2392E+000		-7.1965E-001
Cs-137	661.65	85.12	1.4773E-001	1.48E-001	1.1419E-001
Eu-152	121.78	28.40	9.0862E-001	3.55E-001	-6.2351E-001
	244.69	7.49	2.2440E+000		-1.3490E+000
	344.27	26.50	5.5032E-001		-1.3921E-001
	778.89	12.74	9.0670E-001		-9.5835E-002
	867.32	4.16	2.5468E+000		2.3129E+000
	964.01	14.40	9.8843E-001		-4.0771E-001
	1085.78	10.00	1.0130E+000		-1.0647E-001
	1112.02	13.30	8.0725E-001		-1.3412E-001
Eu-154	1407.95	20.70	3.5472E-001	3.10E-001	8.0362E-002
	123.07	40.50	6.3727E-001		3.2849E-001
	247.94	6.60	2.4493E+000		-1.7784E+000
	591.81	4.83	2.3712E+000		-1.9242E+000
	723.30	19.70	6.5289E-001		4.8111E-001
	756.87	4.33	2.6508E+000		1.6557E+000
	873.19	11.50	9.3078E-001		8.9960E-002
	996.32	10.30	9.8714E-001		-5.9617E-001
Eu-155	1004.76	17.90	5.8955E-001	1.54E+000	-3.9352E-002
	1274.45	35.50	3.0951E-001		2.0541E-002
	86.54	30.90	1.5380E+000		1.7197E+000
Am-241	105.31	20.70	1.5708E+000	3.54E+000	9.6909E-001
	59.54	35.90	3.5400E+000		3.4658E-001
Cm-243	228.19	10.56	1.6422E+000	1.09E+000	6.3622E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0900E+000	1.09E+000	2.3725E-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 6/23/2006 3:12:05 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-178-F-

Sample Title: OOL-10-03-178-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 3:02:02 PM

Live Time: 600.0 seconds

Real Time: 601.4 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-10-03-178-F-
 Title: OOL-10-03-178-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	284-	308	291.12	72.68	1.42	2.72E+002	59.58	1.16E+003
m	2	284-	308	299.89	74.87	1.42	5.77E+002	69.66	1.67E+003
	3	330-	344	339.90	84.88	1.25	2.00E+002	111.79	1.05E+003
	4	946-	965	954.87	238.66	1.16	3.16E+002	89.09	4.98E+002
	5	1349-	1359	1354.51	338.60	0.67	5.63E+001	36.14	1.19E+002
	6	1401-	1418	1406.93	351.71	0.81	1.08E+002	54.05	1.99E+002
	7	1849-	1859	1853.18	463.30	0.37	3.62E+001	27.65	6.78E+001
	8	2034-	2054	2042.63	510.67	1.62	1.45E+002	47.91	1.25E+002
	9	2319-	2343	2331.49	582.91	1.36	2.14E+002	49.03	9.98E+001
	10	2428-	2445	2436.23	609.10	1.59	1.74E+002	41.22	8.16E+001
	11	2903-	2914	2908.08	727.09	0.82	3.14E+001	23.49	4.46E+001
	12	3633-	3655	3644.51	911.25	1.52	1.50E+002	40.75	7.21E+001
	13	3866-	3884	3875.07	968.91	0.42	7.46E+001	33.43	6.34E+001
	14	4948-	4962	4954.80	1238.91	0.70	3.48E+001	21.24	2.72E+001
	15	5831-	5859	5845.29	1461.59	2.34	1.10E+003	67.39	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	0.997	511.00*	100.00	2.04185E-001	7.28619E-002
K-40	0.981	1460.81*	10.67	1.90154E+001	1.93126E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	9.45302E-001	3.46045E-001
		583.14*	84.20	3.73833E-001	9.84532E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	4.15727E-001	3.14856E-001
Pb-212	0.521	74.81* @	10.70	8.58354E+000	1.97551E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.93923E-001	2.55924E-001
Bi-214	0.397	609.31*	46.30	5.61617E-001	1.49672E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.999	338.32*	11.40	6.10231E-001	4.03472E-001
		911.07*	27.70	8.86190E-001	2.61623E-001
		969.11*	16.60	7.49089E-001	3.44694E-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	1.234371E-001	7.585627E-002
K-40	0.981	1.901544E+001	1.931262E+000
TL-208	0.751	3.738334E-001	9.769648E-002
Bi-212	1.000	4.157265E-001	3.148557E-001
Pb-212 @	0.521	7.939234E-001	2.559243E-001
Bi-214	0.397	5.616171E-001	1.496719E-001
Ac-228	0.999	7.885153E-001	1.851554E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	4.5297E-001	21.92
3	84.88	3.3282E-001	55.98
6	351.71	1.8012E-001	50.01
7	463.30	6.0321E-002	76.41
14	1238.91	5.7970E-002	61.06

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	1.0668E-001	7.94E-002	-1.8148E-002
	1332.49	100.00	7.9387E-002		9.1790E-003
Nb-94	702.63	100.00	9.6350E-002	9.61E-002	-5.5295E-002
	871.10	100.00	9.6145E-002		-1.1983E-002
Ag-108m	79.20	7.10	4.7687E+000	1.21E-001	-2.7460E+000
	433.93	89.90	1.2230E-001		-8.8099E-002
	614.37	90.40	1.4364E-001		-9.9733E-002
	722.95	90.50	1.2092E-001		-2.0330E-002
Sb-125	176.33	6.89	2.2687E+000	3.73E-001	-9.5818E-001
	427.89	29.33	3.7314E-001		-2.4980E-002
	463.38	10.35	1.0856E+000		-2.5994E-001
	600.56	17.80	5.8739E-001		2.1529E-001
	606.64	5.02	2.8232E+000		5.6546E+000
	635.90	11.32	8.9074E-001		4.1168E-001
Cs-134	563.23	8.38	1.3427E+000	1.24E-001	8.6472E-002
	569.32	15.43	7.0955E-001		-1.5500E-001
	604.70	97.60	1.4015E-001		-9.4109E-003
	795.84	85.40	1.2360E-001		6.0562E-003
	801.93	8.73	1.1273E+000		-1.1256E+000
Cs-137	661.65	85.12	1.2214E-001	1.22E-001	1.1005E-001
Eu-152	121.78	28.40	7.1725E-001	3.53E-001	-7.1914E-002
	244.69	7.49	1.9121E+000		-1.7403E+000
	344.27	26.50	4.4064E-001		-6.5121E-001
	778.89	12.74	7.5404E-001		4.6836E-002
	867.32	4.16	2.3533E+000		-5.4507E-001
	964.01	14.40	8.6954E-001		4.4337E-001
	1085.78	10.00	9.5268E-001		-1.9627E-001
	1112.02	13.30	7.2383E-001		-9.5495E-001
1407.95	20.70	3.5348E-001	1.7685E-001		
Eu-154	123.07	40.50	4.9921E-001	2.34E-001	-3.4412E-001
	247.94	6.60	1.9956E+000		-1.2581E+000
	591.81	4.83	2.1197E+000		-1.0053E+000
	723.30	19.70	5.5682E-001		4.7279E-001
	756.87	4.33	2.1782E+000		7.9119E-001
	873.19	11.50	8.3104E-001		5.3969E-001
	996.32	10.30	9.1929E-001		-1.4921E-001
	1004.76	17.90	5.7911E-001		6.8345E-001
1274.45	35.50	2.3422E-001	-1.5271E-001		
Eu-155	86.54	30.90	9.8193E-001	9.82E-001	-1.5958E-001
	105.31	20.70	1.1267E+000		-2.5027E-001
Am-241	59.54	35.90	1.1725E+000	1.17E+000	3.9855E-001
Cm-243	228.19	10.56	1.3522E+000	9.26E-001	1.3055E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.2588E-001	9.26E-001	2.0128E-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 6/23/2006 1:36:14 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-10-03-179-F-

Sample Title: OOL-10-03-179-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 1:26:10 PM

Live Time: 600.0 seconds

Real Time: 601.8 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-10-03-179-F-
 Title: OOL-10-03-179-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	268-	296	278.09	69.42	1.34	3.85E+002	62.88	1.53E+003
m	2	268-	296	287.87	71.87	1.35	4.91E+002	69.08	1.78E+003
M	3	333-	510	340.43	85.01	3.26	8.26E+002	57.37	2.80E+003
m	4	333-	510	362.37	90.50	3.26	4.90E+002	53.53	4.94E+003
m	5	333-	510	383.73	95.84	3.27	9.65E+002	57.80	6.91E+003
m	6	333-	510	401.91	100.39	3.27	1.83E+003	65.10	7.31E+003
m	7	333-	510	418.93	104.64	3.25	2.45E+003	70.09	6.71E+003
m	8	333-	510	436.46	109.03	3.26	3.76E+003	76.57	6.23E+003
m	9	333-	510	458.62	114.57	3.27	2.83E+002	41.04	5.50E+003
m	10	333-	510	501.22	125.22	3.22	4.83E+002	40.93	3.99E+003
	11	541-	550	544.25	135.98	0.31	8.65E+001	68.86	5.06E+002
	12	907-	923	914.44	228.55	1.27	1.94E+002	75.99	4.16E+002
	13	1123-	1141	1131.11	282.74	0.43	8.58E+001	62.65	2.77E+002
	14	1341-	1359	1348.52	337.10	1.22	1.65E+002	53.63	1.73E+002
	15	1736-	1746	1741.49	435.37	0.46	2.68E+001	28.02	7.42E+001
	16	1950-	1962	1956.28	489.08	0.71	7.14E+001	37.73	1.12E+002
	17	2226-	2244	2234.98	558.78	1.09	1.66E+002	42.30	8.88E+001
	18	2327-	2343	2334.50	583.66	1.22	1.26E+002	39.13	8.70E+001
	19	3486-	3504	3493.05	873.38	1.54	1.59E+002	35.53	5.09E+001
	20	3704-	3723	3714.37	928.72	1.20	7.49E+001	34.89	6.91E+001
	21	5588-	5617	5601.83	1400.71	2.12	8.35E+002	63.20	4.37E+001
	22	5836-	5859	5845.93	1461.75	0.91	2.32E+002	33.96	1.83E+001
	23	6760-	6775	6767.41	1692.18	0.81	4.30E+001	17.44	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
K-40	0.972	1460.81*	10.67	4.00878E+000	6.71370E-001
TL-208	0.465	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.19968E-001	7.40793E-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
K-40	0.972	4.008778E+000	6.713696E-001
TL-208	0.465	2.199677E-001	7.407935E-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	69.42	6.4220E-001	16.32
m 2	71.87	8.1782E-001	14.08
M 3	85.01	1.3765E+000	6.95
m 4	90.50	8.1641E-001	10.93
m 5	95.84	1.6086E+000	5.99
m 6	100.39	3.0537E+000	3.55
m 7	104.64	4.0761E+000	2.87
m 8	109.03	6.2671E+000	2.04
m 9	114.57	4.7211E-001	14.49
m 10	125.22	8.0512E-001	8.47
11	135.98	1.4414E-001	79.62
12	228.55	3.2303E-001	39.20
13	282.74	1.4302E-001	73.01
14	337.10	2.7507E-001	32.50
15	435.37	4.4666E-002	104.55
16	489.08	1.1901E-001	52.85
17	558.78	2.7696E-001	25.46
19	873.38	2.6524E-001	22.33
20	928.72	1.2481E-001	46.59
21	1400.71	1.3921E+000	7.57
23	1692.18	7.1727E-002	40.53

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	1.0734E-001	7.24E-002	2.2276E-002
	1332.49	100.00	7.2372E-002		7.7777E-002
Nb-94	702.63	100.00	1.0499E-001	1.05E-001	-1.0329E-001
	871.10	100.00	1.3524E-001		2.9711E-001
Ag-108m	79.20	7.10	5.1231E+000	1.14E-001	-1.6626E+001
	433.93	89.90	1.2645E-001		6.4354E-002
	614.37	90.40	1.1811E-001		7.6364E-002
	722.95	90.50	1.1407E-001		4.7350E-002
Sb-125	176.33	6.89	2.3126E+000	3.77E-001	5.1806E-001
	427.89	29.33	3.7741E-001		8.7920E-002
	463.38	10.35	1.0658E+000		4.9867E-001
	600.56	17.80	5.5868E-001		-3.7608E-001
	606.64	5.02	2.1133E+000		-1.8412E-001
	635.90	11.32	9.6443E-001		3.0414E-001
Cs-134	563.23	8.38	1.6091E+000	1.07E-001	1.9681E-001
	569.32	15.43	6.5663E-001		-7.0628E-001
	604.70	97.60	1.0737E-001		-5.2342E-002
	795.84	85.40	1.1437E-001		2.0902E-002
Cs-137	801.93	8.73	1.2265E+000	1.26E-001	9.2922E-001
	661.65	85.12	1.2625E-001		7.5899E-002
Eu-152	121.78	28.40	8.1917E-001	4.22E-001	-2.1022E+000
	244.69	7.49	1.8710E+000		-1.4339E+000
	344.27	26.50	4.2247E-001		-4.8729E-001
	778.89	12.74	7.6557E-001		-5.1591E-002
	867.32	4.16	2.8882E+000		-3.3653E+000
	964.01	14.40	7.1571E-001		3.5639E-001
	1085.78	10.00	1.0143E+000		5.8186E-001
	1112.02	13.30	7.3179E-001		8.1437E-002
1407.95	20.70	9.3667E-001	1.8022E-002		
Eu-154	123.07	40.50	5.8787E-001	2.28E-001	1.1657E+000
	247.94	6.60	2.0881E+000		-4.7654E-001
	591.81	4.83	2.1640E+000		1.5335E+000
	723.30	19.70	5.2003E-001		-1.3064E-001
	756.87	4.33	2.2527E+000		-2.7080E-001
	873.19	11.50	1.1766E+000		1.6363E+000
	996.32	10.30	8.5791E-001		-4.7766E-001
	1004.76	17.90	5.0293E-001		-7.9963E-002
1274.45	35.50	2.2786E-001	-2.2866E-001		
Eu-155	86.54	30.90	1.2979E+000	1.30E+000	-2.7263E-001
	105.31	20.70	2.1935E+000		1.1424E+000
Am-241	59.54	35.90	1.2229E+000	1.22E+000	1.0735E+000
Cm-243	228.19	10.56	1.5942E+000	9.60E-001	3.5923E+000

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	4.6742E-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 6/23/2006 1:51:19 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-179-F-

Sample Title: OOL-10-03-179-F-G-R

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 1:41:19 PM

Live Time: 600.0 seconds

Real Time: 601.4 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-10-03-179-F-
 Title: OOL-10-03-179-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	202-	218	210.91	52.62	1.60	4.13E+002	108.27	8.38E+002
M	2	278-	308	287.35	71.74	1.77	1.02E+003	79.36	1.64E+003
m	3	278-	308	300.70	75.08	1.77	5.46E+002	68.69	2.16E+003
M	4	339-	373	343.78	85.85	0.86	9.36E+001	52.32	9.74E+002
m	5	339-	373	357.78	89.35	0.86	1.77E+002	56.22	1.08E+003
m	6	339-	373	365.71	91.33	0.87	2.25E+002	60.48	1.09E+003
M	7	430-	452	436.20	108.96	1.32	5.34E+002	85.63	2.42E+003
m	8	430-	452	444.13	110.94	1.32	4.26E+002	74.13	2.56E+003
	9	472-	487	478.54	119.55	1.05	2.37E+002	107.88	9.29E+002
M	10	501-	565	531.09	132.69	1.38	3.75E+002	59.30	1.30E+003
m	11	501-	565	550.95	137.66	1.38	2.35E+002	50.35	1.05E+003
	12	594-	609	600.02	149.93	0.84	1.82E+002	85.72	5.75E+002
	13	908-	924	914.30	228.52	1.29	3.52E+002	77.22	3.80E+002
	14	1291-	1304	1296.09	323.99	1.30	8.86E+001	45.14	1.59E+002
	15	1343-	1356	1347.89	336.95	1.47	1.56E+002	46.86	1.50E+002
	16	2174-	2184	2179.54	544.91	0.47	2.31E+001	21.30	3.99E+001
	17	2223-	2247	2235.09	558.80	1.12	2.52E+002	51.97	1.09E+002
	18	2324-	2346	2334.16	583.58	1.21	1.76E+002	46.46	9.97E+001
	19	3293-	3305	3299.49	824.97	1.10	3.69E+001	23.80	4.21E+001
	20	3481-	3503	3492.26	873.18	0.95	1.77E+002	42.82	7.73E+001
M	21	3692-	3726	3698.07	924.64	1.75	1.76E+001	15.14	5.03E+001
m	22	3692-	3726	3715.02	928.88	1.75	9.40E+001	22.62	6.84E+001
	23	5586-	5617	5601.75	1400.69	2.37	1.14E+003	68.98	2.01E+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
Eu-155	0.324	86.54*	30.90	3.98290E-001	2.35966E-001
		105.31	20.70		
TL-208	0.467	277.35	6.80	3.07886E-001	9.04770E-002
		510.84	21.60		
		583.14*	84.20		
		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
Eu-155	0.324	3.982901E-001	2.359660E-001
TL-208	0.467	3.078857E-001	9.047701E-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
1	52.62	6.8795E-001	26.23
M 2	71.74	1.7015E+000	7.77
m 3	75.08	9.1078E-001	12.57
m 5	89.35	2.9421E-001	31.84
m 6	91.33	3.7539E-001	26.85
M 7	108.96	8.9027E-001	16.03
m 8	110.94	7.1047E-001	17.39
9	119.55	3.9465E-001	45.56
M 10	132.69	6.2493E-001	15.82
m 11	137.66	3.9213E-001	21.40
12	149.93	3.0397E-001	47.00
13	228.52	5.8721E-001	21.92
14	323.99	1.4772E-001	50.93
15	336.95	2.5985E-001	30.06
16	544.91	3.8466E-002	92.27
17	558.80	4.1973E-001	20.64
19	824.97	6.1487E-002	64.52
20	873.18	2.9444E-001	24.24
M 21	924.64	2.9366E-002	85.93
m 22	928.88	1.5665E-001	24.06
23	1400.69	1.8966E+000	6.06

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	1.1087E-001	6.63E-002	-1.0261E-001
	1332.49	100.00	6.6301E-002		-7.4982E-003
Nb-94	702.63	100.00	9.7194E-002	9.72E-002	-2.4283E-001
	871.10	100.00	1.4036E-001		3.1838E-001
Ag-108m	79.20	7.10	5.3693E+000	1.07E-001	-3.4460E+000
	433.93	89.90	1.2190E-001		3.0970E-002
	614.37	90.40	1.0744E-001		-3.2286E-002
	722.95	90.50	1.1259E-001		-7.2847E-002
Sb-125	176.33	6.89	2.3020E+000	3.64E-001	8.4683E-001
	427.89	29.33	3.6444E-001		-2.5680E-002
	463.38	10.35	1.0456E+000		4.1314E-001
	600.56	17.80	5.6980E-001		7.7782E-002
	606.64	5.02	1.8850E+000		1.3101E-001
	635.90	11.32	8.7936E-001		3.5405E-001
Cs-134	563.23	8.38	1.7256E+000	9.98E-002	-2.7631E-001
	569.32	15.43	6.8801E-001		3.8935E-001
	604.70	97.60	9.9786E-002		-1.9676E-002
	795.84	85.40	1.1402E-001		-1.9165E-003
	801.93	8.73	1.0758E+000		-5.0923E-001
Cs-137	661.65	85.12	1.2567E-001	1.26E-001	3.8320E-003
Eu-152	121.78	28.40	8.3457E-001	4.33E-001	3.4362E-001
	244.69	7.49	1.7775E+000		-1.5629E+000
	344.27	26.50	4.3279E-001		1.4369E-002
	778.89	12.74	7.3996E-001		-2.1695E-001
	867.32	4.16	2.9867E+000		5.5397E-002
	964.01	14.40	6.6069E-001		-2.4085E-001
	1085.78	10.00	1.0176E+000		1.2772E-001
	1112.02	13.30	8.0927E-001		1.2586E+000
	1407.95	20.70	1.0504E+000		-3.5326E-001
Eu-154	123.07	40.50	5.9935E-001	2.40E-001	9.3647E-002
	247.94	6.60	1.9660E+000		-1.3439E+000
	591.81	4.83	2.1395E+000		1.2741E+000
	723.30	19.70	5.1867E-001		-2.3460E-001
	756.87	4.33	2.4375E+000		2.9532E+000
	873.19	11.50	1.2102E+000		2.1670E+000
	996.32	10.30	8.8231E-001		2.0046E-001
	1004.76	17.90	5.1678E-001		-1.9121E-001
	1274.45	35.50	2.4040E-001		5.3056E-002
+ Eu-155	86.54*	30.90	6.2947E-001	6.29E-001	3.9829E-001
	105.31	20.70	2.1745E+000		1.2805E+000
Am-241	59.54	35.90	1.3003E+000	1.30E+000	1.2499E+000
Cm-243	228.19	10.56	1.6733E+000	9.36E-001	4.4231E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.3584E-001	9.36E-001	-1.8940E+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 6/23/2006 2:21:03 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-10-03-179-F-

Sample Title: OOL-10-03-179-F-G-S

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 2:10:58 PM

Live Time: 600.0 seconds

Real Time: 601.5 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-10-03-179-F-
 Title: OOL-10-03-179-F-G-S
 Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	202-	219	211.32	52.73	1.32	3.39E+002	114.58	9.37E+002
M	2	279-	305	287.30	71.73	1.59	6.94E+002	74.00	1.64E+003
m	3	279-	305	298.67	74.57	1.60	4.51E+002	66.33	1.92E+003
	4	317-	335	326.14	81.44	1.08	4.57E+002	141.90	1.42E+003
	5	347-	362	356.31	88.98	1.05	2.93E+002	142.37	1.64E+003
M	6	371-	451	381.71	95.34	2.92	9.85E+002	14.27	3.74E+003
m	7	371-	451	401.02	100.16	2.06	2.22E+003	17.01	4.76E+003
m	8	371-	451	434.00	108.41	2.07	3.02E+003	18.93	4.25E+003
M	9	462-	491	469.24	117.22	1.03	1.46E+002	45.84	7.46E+002
m	10	462-	491	485.58	121.31	1.04	1.89E+002	48.09	7.09E+002
	11	507-	514	510.93	127.65	0.38	8.25E+001	61.87	4.53E+002
	12	538-	555	548.43	137.03	1.03	2.79E+002	111.91	9.09E+002
	13	669-	681	675.41	168.78	1.09	7.36E+001	69.08	4.44E+002
	14	907-	921	914.51	228.57	0.94	2.53E+002	73.67	4.02E+002
	15	1123-	1155	1129.15	282.24	0.55	1.31E+002	99.00	4.66E+002
	16	1341-	1359	1347.96	336.96	1.59	2.30E+002	51.93	1.40E+002
	17	2224-	2246	2235.56	558.92	1.43	2.27E+002	51.52	1.20E+002
	18	2325-	2344	2335.39	583.88	1.22	1.55E+002	41.55	8.39E+001
	19	3482-	3503	3492.64	873.27	1.12	2.06E+002	39.83	5.51E+001
	20	3706-	3723	3714.29	928.70	1.42	8.37E+001	32.27	5.73E+001
	21	4288-	4302	4295.24	1073.98	0.86	6.18E+001	24.46	3.22E+001
	22	5590-	5617	5602.35	1400.84	2.11	1.05E+003	70.67	5.51E+001
	23	6763-	6777	6769.51	1692.71	1.30	3.32E+001	17.74	1.48E+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	0.459	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.70875E-001	8.06662E-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	0.459	2.708752E-001	8.066615E-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
1	52.73	5.6441E-001	33.83
M 2	71.73	1.1563E+000	10.67
m 3	74.57	7.5099E-001	14.72
4	81.44	7.6124E-001	31.07
5	88.98	4.8884E-001	48.54
M 6	95.34	1.6409E+000	1.45
m 7	100.16	3.7014E+000	0.77
m 8	108.41	5.0330E+000	0.63
M 9	117.22	2.4272E-001	31.48
m 10	121.31	3.1512E-001	25.44
11	127.65	1.3751E-001	74.98
12	137.03	4.6433E-001	40.17
13	168.78	1.2259E-001	93.91
14	228.57	4.2150E-001	29.13
15	282.24	2.1840E-001	75.55
16	336.96	3.8352E-001	22.57
17	558.92	3.7865E-001	22.67
19	873.27	3.4318E-001	19.34
20	928.70	1.3944E-001	38.57
21	1073.98	1.0297E-001	39.59
22	1400.84	1.7531E+000	6.72
23	1692.71	5.5260E-002	53.50

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	1.0368E-001	6.97E-002	-6.0238E-002
	1332.49	100.00	6.9683E-002		6.6343E-002
Nb-94	702.63	100.00	1.1126E-001	1.11E-001	-2.9687E-002
	871.10	100.00	1.4223E-001		2.5670E-001
Ag-108m	79.20	7.10	5.1195E+000	1.18E-001	-1.1085E+000
	433.93	89.90	1.2390E-001		7.6946E-002
	614.37	90.40	1.1784E-001		-5.9234E-002
	722.95	90.50	1.1783E-001		6.9695E-002
Sb-125	176.33	6.89	2.3147E+000	3.85E-001	-6.1619E-002
	427.89	29.33	3.8521E-001		9.6093E-002
	463.38	10.35	1.0381E+000		1.9742E-002
	600.56	17.80	5.6288E-001		-2.0231E-001
	606.64	5.02	2.0466E+000		-1.6449E-001
	635.90	11.32	9.3697E-001		3.4625E-002
Cs-134	563.23	8.38	1.7563E+000	1.04E-001	9.9601E-003
	569.32	15.43	6.9238E-001		-2.1387E-001
	604.70	97.60	1.0415E-001		-5.7233E-002
	795.84	85.40	1.0872E-001		-8.8243E-002
	801.93	8.73	1.1731E+000		-3.5315E-002
Cs-137	661.65	85.12	1.2769E-001	1.28E-001	2.0895E-002
Eu-152	121.78	28.40	7.6702E-001	4.48E-001	1.8403E-002
	244.69	7.49	1.8139E+000		-1.4394E+000
	344.27	26.50	4.4781E-001		-1.6250E-001
	778.89	12.74	7.5636E-001		-4.0418E-002
	867.32	4.16	2.9924E+000		-8.7934E-001
	964.01	14.40	6.6069E-001		3.9095E-001
	1085.78	10.00	9.7020E-001		9.2090E-001
	1112.02	13.30	7.6780E-001		-6.8541E-002
1407.95	20.70	1.0901E+000	3.3198E-003		
Eu-154	123.07	40.50	5.3543E-001	2.21E-001	-1.7560E-001
	247.94	6.60	2.0646E+000		2.6464E-001
	591.81	4.83	2.0386E+000		-5.8615E-001
	723.30	19.70	5.4267E-001		3.7515E-001
	756.87	4.33	2.3818E+000		3.5692E-001
	873.19	11.50	1.2338E+000		3.2459E+000
	996.32	10.30	9.5159E-001		3.5927E-001
	1004.76	17.90	5.5252E-001		-5.7774E-002
1274.45	35.50	2.2131E-001	2.7160E-002		
Eu-155	86.54	30.90	1.0972E+000	1.10E+000	-4.3260E-001
	105.31	20.70	2.3462E+000		-9.0446E+000
Am-241	59.54	35.90	1.2381E+000	1.24E+000	3.5756E-002
Cm-243	228.19	10.56	1.6624E+000	9.77E-001	3.7533E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.7703E-001	9.77E-001	1.2850E-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 6/26/2006 1:42:12 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-180-F-

Sample Title: OOL-10-03-180-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 1:32:09 PM

Live Time: 600.0 seconds

Real Time: 600.6 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

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

Filename: YEL7810
Log Number: OOL-10-03-180-F-
Title: OOL-10-03-180-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	309	300.78	75.22	0.99	1.43E+002	96.53	8.18E+002
2	947-	963	953.46	238.40	1.61	1.53E+002	67.91	3.30E+002
3	2321-	2341	2331.27	582.89	0.48	1.33E+002	35.74	5.50E+001
4	2423-	2445	2434.99	608.82	1.63	1.44E+002	40.26	7.15E+001
5	3633-	3652	3643.04	910.86	0.71	1.10E+002	29.26	3.24E+001
6	5826-	5854	5841.00	1460.40	1.91	6.22E+002	52.70	2.18E+001
7	7049-	7062	7055.40	1764.03	0.64	2.24E+001	14.14	1.06E+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: 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	1.43709E+001	1.68373E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.95020E-001	8.80682E-002
		860.37	12.46		
Pb-212	0.574	74.81* @	10.70	4.43382E+000	3.11112E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.689	238.63*	44.60	4.73080E-001	2.22446E-001
		609.31*	46.30	5.92716E-001	1.80580E-001
		1120.29	15.10		
		1764.49*	15.80	3.81883E-001	2.43615E-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	0.994	1.437093E+001	1.683727E+000
TL-208	0.468	2.950200E-001	8.806823E-002
Pb-212 @	0.574	4.730798E-001	2.224464E-001
Bi-214	0.689	5.179517E-001	1.450711E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.86	1.8272E-001	26.69

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: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	9.08E-002	7.7306E-002
	1332.49	100.00	9.0809E-002		3.2259E-002
Nb-94	702.63	100.00	1.0756E-001	1.02E-001	3.9764E-003
	871.10	100.00	1.0246E-001		2.4838E-002
Ag-108m	79.20	7.10	7.3635E+000	1.28E-001	-5.9048E-001
	433.93	89.90	1.2754E-001		1.3408E-002
	614.37	90.40	1.2865E-001		-2.9359E-002
	722.95	90.50	1.3024E-001		1.7351E-001
Sb-125	176.33	6.89	2.3520E+000	4.16E-001	-7.5401E-001
	427.89	29.33	4.1627E-001		1.7217E-001
	463.38	10.35	1.1791E+000		1.5003E+000
	600.56	17.80	6.3154E-001		-1.6503E-001
	606.64	5.02	3.0283E+000		5.6130E+000
	635.90	11.32	8.9796E-001		-1.2428E-001
Cs-134	563.23	8.38	1.3652E+000	1.14E-001	-2.5450E-001
	569.32	15.43	6.9480E-001		-5.7329E-001
	604.70	97.60	1.5115E-001		-5.3135E-002
	795.84	85.40	1.1431E-001		-5.6286E-002
	801.93	8.73	1.1200E+000		-1.7929E-001
Cs-137	661.65	85.12	1.4532E-001	1.45E-001	1.6653E-001
Eu-152	121.78	28.40	8.1710E-001	3.76E-001	-6.2177E-001
	244.69	7.49	2.0832E+000		-1.0195E+000
	344.27	26.50	4.3433E-001		-6.2724E-001
	778.89	12.74	8.1088E-001		4.1295E-002
	867.32	4.16	2.4953E+000		-1.4350E+000
	964.01	14.40	8.2781E-001		8.4128E-002
	1085.78	10.00	9.5393E-001		-8.8845E-001
	1112.02	13.30	7.8829E-001		-6.2281E-001
1407.95	20.70	3.7612E-001	-4.3894E-003		
Eu-154	123.07	40.50	5.7066E-001	2.34E-001	1.0630E-001
	247.94	6.60	2.1363E+000		-1.6774E+000
	591.81	4.83	2.1363E+000		-5.8335E-002
	723.30	19.70	5.9642E-001		7.0700E-001
	756.87	4.33	2.4232E+000		1.8293E+000
	873.19	11.50	8.8295E-001		7.6118E-002
	996.32	10.30	8.9630E-001		2.8661E-001
	1004.76	17.90	5.2953E-001		6.6100E-002
1274.45	35.50	2.3440E-001	-1.6292E-001		
Eu-155	86.54	30.90	1.3428E+000	1.34E+000	1.6053E+000
	105.31	20.70	1.3820E+000		-7.6366E-001
Am-241	59.54	35.90	2.6931E+000	2.69E+000	-1.8767E+000
Cm-243	228.19	10.56	1.4774E+000	9.70E-001	7.1253E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.6990E-001	9.70E-001	2.0584E-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 6/26/2006 8:56:24 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-181-F-

Sample Title: OOL-10-03-181-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 8:46:22 AM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-181-F-
Title: OOL-10-03-181-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	948-	963	955.48	238.91	0.80	2.12E+002	69.81	3.51E+002
2	1400-	1419	1408.58	352.19	0.86	8.85E+001	51.76	1.74E+002
3	2326-	2344	2333.83	583.53	0.96	1.20E+002	39.79	8.59E+001
4	2430-	2446	2438.69	609.75	0.44	1.15E+002	33.98	5.95E+001
5	3636-	3657	3644.88	911.32	1.76	1.16E+002	33.71	4.77E+001
6	3872-	3886	3878.08	969.63	0.72	5.02E+001	24.75	3.78E+001
7	5834-	5860	5847.27	1461.97	2.35	7.76E+002	55.54	6.48E+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: 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	0.953	1460.81*	10.67	1.79197E+001	1.93700E+000
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.66445E-001	9.48375E-002
		860.37	12.46		
Pb-212	0.418	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.403	238.63*	44.60	6.55816E-001	2.38962E-001
		609.31*	46.30	4.70033E-001	1.51005E-001
		1120.29	15.10		
Ac-228	0.624	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	8.82420E-001	2.75168E-001
		969.11*	16.60	6.45284E-001	3.25190E-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	0.953	1.791970E+001	1.936997E+000
TL-208	0.466	2.664451E-001	9.483746E-002
Pb-212 @	0.418	6.558159E-001	2.389616E-001
Bi-214	0.403	4.700326E-001	1.510048E-001
Ac-228	0.624	7.834740E-001	2.100574E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	352.19	1.4745E-001	58.51

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	8.17E-002	-3.7805E-002
	1332.49	100.00	8.1737E-002		5.8550E-003
Nb-94	702.63	100.00	1.1126E-001	1.01E-001	-1.8615E-002
	871.10	100.00	1.0149E-001		2.1618E-002
Ag-108m	79.20	7.10	1.3104E+001	1.31E-001	-8.6866E+000
	433.93	89.90	1.3140E-001		2.0666E-003
	614.37	90.40	1.5223E-001		-5.0001E-002
	722.95	90.50	1.3687E-001		-8.3349E-002
Sb-125	176.33	6.89	2.6416E+000	3.94E-001	3.8502E-001
	427.89	29.33	3.9424E-001		-2.4855E-001
	463.38	10.35	1.1817E+000		-5.8831E-001
	600.56	17.80	6.2339E-001		1.6122E-002
	606.64	5.02	2.9425E+000		-7.0066E-001
	635.90	11.32	9.8263E-001		-6.4762E-001
Cs-134	563.23	8.38	1.4201E+000	1.23E-001	1.3752E+000
	569.32	15.43	6.8055E-001		-4.9635E-001
	604.70	97.60	1.3424E-001		-2.3719E-003
	795.84	85.40	1.2259E-001		-8.9668E-002
Cs-137	801.93	8.73	1.1532E+000	1.42E-001	-1.6861E+000
	661.65	85.12	1.4196E-001		-2.1065E-002
Eu-152	121.78	28.40	9.9263E-001	3.85E-001	-5.8458E-001
	244.69	7.49	2.1104E+000		-8.4425E-001
	344.27	26.50	4.8043E-001		-8.2653E-001
	778.89	12.74	8.5957E-001		-8.4648E-001
	867.32	4.16	2.5181E+000		-1.6303E-001
	964.01	14.40	8.7736E-001		-5.7076E-001
	1085.78	10.00	1.0319E+000		-9.5656E-002
	1112.02	13.30	7.8428E-001		-1.6569E-001
	1407.95	20.70	3.8462E-001		1.7711E-001
	Eu-154	123.07	40.50		6.9128E-001
247.94		6.60	2.3143E+000	-1.3970E+000	
591.81		4.83	2.3287E+000	1.6904E+000	
723.30		19.70	6.3988E-001	-1.8461E-001	
756.87		4.33	2.4026E+000	6.3844E-001	
873.19		11.50	9.0810E-001	4.0007E-001	
996.32		10.30	1.0165E+000	-1.2463E+000	
1004.76		17.90	5.7466E-001	3.1522E-001	
Eu-155	1274.45	35.50	2.7158E-001	1.81E+000	3.5737E-002
	86.54	30.90	1.9121E+000		-6.7326E-001
Am-241	105.31	20.70	1.8076E+000	4.31E+000	3.1976E-001
	59.54	35.90	4.3104E+000		-1.0047E+001
Cm-243	228.19	10.56	1.6185E+000	9.94E-001	-2.2363E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.9394E-001	9.94E-001	-2.5271E-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 6/23/2006 4:32:01 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-10-03-182-F-

Sample Title: OOL-10-03-182-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 4:21:57 PM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-182-F-
 Title: OOL-10-03-182-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	296-	305	300.14	75.03	1.20	1.38E+002	73.20	5.54E+002
2	948-	961	954.62	238.67	0.90	1.97E+002	59.93	2.67E+002
3	1348-	1363	1352.93	338.25	1.30	7.65E+001	41.65	1.24E+002
4	1400-	1414	1406.91	351.75	1.48	1.03E+002	41.89	1.23E+002
5	1845-	1857	1851.97	463.02	0.36	2.90E+001	27.71	6.50E+001
6	2034-	2052	2042.33	510.62	0.76	9.76E+001	40.50	9.74E+001
7	2322-	2341	2333.22	583.34	1.44	1.27E+002	38.45	7.19E+001
8	2428-	2444	2436.63	609.20	0.66	8.07E+001	34.39	7.23E+001
9	3635-	3653	3643.97	911.06	0.86	1.12E+002	29.88	3.55E+001
10	3869-	3882	3875.94	969.05	0.54	3.97E+001	25.62	4.73E+001
11	4474-	4487	4480.93	1120.31	0.35	3.28E+001	21.84	3.32E+001
12	5831-	5857	5844.03	1461.11	2.03	8.01E+002	57.35	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: 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	1.75288E-001	7.65118E-002
K-40	0.997	1460.81*	10.67	1.82070E+001	1.96775E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	8.11517E-001	3.60368E-001
		583.14*	84.20	2.83697E-001	9.34479E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	5.39201E+000	3.04099E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.705	238.63*	44.60	6.44419E-001	2.20178E-001
		609.31*	46.30	3.32580E-001	1.47504E-001
		1120.29*	15.10	4.83353E-001	3.26285E-001
Ac-228	1.000	1764.49	15.80		
		338.32*	11.40	1.06248E+000	6.01926E-001
		911.07*	27.70	8.56089E-001	2.47812E-001
		969.11*	16.60	5.12668E-001	3.35114E-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	1.140090E-001	7.910431E-002
K-40	0.997	1.820696E+001	1.967747E+000
TL-208	0.751	2.836969E-001	9.298939E-002
Pb-212 @	0.594	6.444186E-001	2.201775E-001
Bi-214	0.705	3.581643E-001	1.344077E-001
Ac-228	1.000	7.670535E-001	1.891567E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.75	1.7188E-001	40.62
5	463.02	4.8333E-002	95.54

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: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	1.1050E-001	8.24E-002	-7.9850E-002
	1332.49	100.00	8.2383E-002		-1.9157E-002
Nb-94	702.63	100.00	1.1526E-001	1.08E-001	1.7561E-003
	871.10	100.00	1.0791E-001		-4.8639E-002
Ag-108m	79.20	7.10	8.6863E+000	1.36E-001	-1.4085E+001
	433.93	89.90	1.3640E-001		4.8064E-003
	614.37	90.40	1.5828E-001		-8.5024E-002
	722.95	90.50	1.4211E-001		3.6633E-002
Sb-125	176.33	6.89	2.7102E+000	4.21E-001	1.8235E+000
	427.89	29.33	4.2143E-001		-3.2220E-001
	463.38	10.35	1.2703E+000		5.1615E-001
	600.56	17.80	6.2434E-001		3.9962E-001
	606.64	5.02	2.8776E+000		4.5213E+000
	635.90	11.32	9.8103E-001		7.7083E-002
Cs-134	563.23	8.38	1.4005E+000	1.31E-001	-1.1199E-001
	569.32	15.43	7.9099E-001		-6.1693E-001
	604.70	97.60	1.4135E-001		-5.5053E-002
	795.84	85.40	1.3053E-001		6.9799E-002
Cs-137	801.93	8.73	1.2642E+000	1.47E-001	2.1658E-001
	661.65	85.12	1.4692E-001		2.0385E-001
Eu-152	121.78	28.40	8.9575E-001	3.97E-001	3.9695E-001
	244.69	7.49	2.1788E+000		-1.5702E+000
	344.27	26.50	4.9001E-001		-1.0788E-001
	778.89	12.74	8.6743E-001		-4.4187E-001
	867.32	4.16	2.5580E+000		-3.3058E+000
	964.01	14.40	9.3657E-001		-1.7093E-001
	1085.78	10.00	1.0927E+000		-1.3632E-001
	1112.02	13.30	8.9720E-001		-4.0525E-001
	1407.95	20.70	3.9689E-001		1.3686E-001
	Eu-154	123.07	40.50		6.1811E-001
247.94		6.60	2.3507E+000	-1.5176E+000	
591.81		4.83	2.2588E+000	-1.1558E+000	
723.30		19.70	6.5289E-001	2.3030E-001	
756.87		4.33	2.7154E+000	1.9567E-002	
873.19		11.50	9.6256E-001	1.3962E-001	
996.32		10.30	9.4530E-001	1.0699E+000	
1004.76		17.90	5.4824E-001	6.8722E-003	
1274.45	35.50	2.8981E-001	2.9711E-002		
Eu-155	86.54	30.90	1.5567E+000	1.54E+000	1.2082E+000
	105.31	20.70	1.5388E+000		-4.7647E-001
Am-241	59.54	35.90	3.7572E+000	3.76E+000	1.1013E+000
Cm-243	228.19	10.56	1.5305E+000	1.11E+000	-1.5796E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1123E+000	1.11E+000	-4.0159E-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 6/23/2006 3:37:12 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-183-F-

Sample Title: OOL-10-03-183-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 3:27:11 PM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-183-F-
 Title: OOL-10-03-183-F-G
 Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	309	291.98	73.00	1.04	1.56E+002	40.36	4.76E+002
m	2	287-	309	300.39	75.10	1.04	2.47E+002	46.40	6.38E+002
	3	950-	961	954.42	238.62	0.94	1.81E+002	49.48	1.81E+002
	4	1346-	1360	1353.27	338.34	0.38	4.48E+001	36.82	1.05E+002
	5	1402-	1414	1407.37	351.86	0.84	7.21E+001	35.98	9.99E+001
	6	2322-	2340	2332.26	583.11	1.21	9.37E+001	33.60	5.93E+001
	7	2429-	2447	2436.10	609.07	1.17	1.30E+002	31.62	3.88E+001
	8	3633-	3653	3644.80	911.27	0.63	8.63E+001	27.85	3.17E+001
	9	5831-	5856	5843.91	1461.08	1.73	6.30E+002	52.31	1.95E+001
	10	7054-	7067	7060.01	1765.13	0.60	3.17E+001	13.82	6.32E+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: 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	0.998	1460.81*	10.67	1.43077E+001	1.66000E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.09159E-001	7.97815E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	9.60014E+000	2.60551E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.92045E-001	1.86277E-001
Bi-214	0.693	609.31*	46.30	5.36573E-001	1.46065E-001
		1120.29	15.10		
		1764.49*	15.80	5.15275E-001	2.30605E-001
Ac-228	0.540	338.32*	11.40	6.22431E-001	5.20608E-001
		911.07*	27.70	6.57274E-001	2.25034E-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: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	0.998	1.430771E+001	1.659998E+000
TL-208	0.472	2.091589E-001	7.978154E-002
Pb-212 @	0.594	5.920446E-001	1.862769E-001
Bi-214	0.693	5.304748E-001	1.233948E-001
Ac-228	0.540	6.517890E-001	2.065622E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.6074E-001	25.80
5	351.86	1.2018E-001	49.90

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: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	1.1514E-001	8.99E-002	4.0925E-002
	1332.49	100.00	8.9926E-002		7.0733E-003
Nb-94	702.63	100.00	1.0504E-001	9.77E-002	1.6656E-002
	871.10	100.00	9.7728E-002		-4.1410E-002
Ag-108m	79.20	7.10	8.5412E+000	1.24E-001	-4.0941E+000
	433.93	89.90	1.2372E-001		-3.8958E-003
	614.37	90.40	1.5212E-001		-2.7079E-002
	722.95	90.50	1.2730E-001		4.4275E-002
Sb-125	176.33	6.89	2.4904E+000	3.61E-001	8.1607E-002
	427.89	29.33	3.6112E-001		-2.4360E-001
	463.38	10.35	1.1304E+000		2.3347E-001
	600.56	17.80	6.4467E-001		1.5018E-001
	606.64	5.02	2.9000E+000		6.2859E+000
	635.90	11.32	9.7081E-001		8.8359E-003
Cs-134	563.23	8.38	1.3187E+000	1.30E-001	-5.6421E-001
	569.32	15.43	7.2795E-001		-7.3568E-001
	604.70	97.60	1.4581E-001		-7.7208E-002
	795.84	85.40	1.2952E-001		6.6911E-002
	801.93	8.73	1.1979E+000		-7.8855E-001
Cs-137	661.65	85.12	1.3585E-001	1.36E-001	-3.9671E-002
Eu-152	121.78	28.40	8.4341E-001	3.55E-001	-6.8470E-001
	244.69	7.49	2.0504E+000		-7.3313E-001
	344.27	26.50	4.7581E-001		-3.8268E-001
	778.89	12.74	8.1196E-001		-2.4280E-001
	867.32	4.16	2.3835E+000		-5.3895E+000
	964.01	14.40	8.7582E-001		2.7497E-001
	1085.78	10.00	1.0349E+000		1.6568E-002
	1112.02	13.30	7.8305E-001		-3.0130E-001
1407.95	20.70	3.5472E-001	-7.2720E-002		
Eu-154	123.07	40.50	5.9960E-001	2.76E-001	1.3966E-001
	247.94	6.60	2.3319E+000		-1.9215E-001
	591.81	4.83	2.3566E+000		-4.2540E-001
	723.30	19.70	5.9085E-001		3.8049E-001
	756.87	4.33	2.4965E+000		-2.2171E-001
	873.19	11.50	8.5026E-001		7.7138E-002
	996.32	10.30	9.8201E-001		-5.5376E-001
	1004.76	17.90	5.4824E-001		-8.6497E-002
1274.45	35.50	2.7585E-001	1.1198E-001		
Eu-155	86.54	30.90	1.4607E+000	1.44E+000	1.7652E+000
	105.31	20.70	1.4378E+000		-1.3765E-001
Am-241	59.54	35.90	3.4078E+000	3.41E+000	1.3722E+000
Cm-243	228.19	10.56	1.4473E+000	9.98E-001	-4.0361E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.9823E-001	9.98E-001	5.4850E-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 6/23/2006 3:17:15 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-184-F-

Sample Title: OOL-10-03-184-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 3:07:14 PM

Live Time: 600.0 seconds

Real Time: 600.6 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-184-F-
Title: OOL-10-03-184-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	306	300.46	75.12	0.91	1.09E+002	80.13	6.20E+002
2	335-	345	340.91	85.23	0.75	6.61E+001	68.66	4.85E+002
3	947-	959	954.68	238.68	0.97	1.66E+002	49.24	1.77E+002
4	1346-	1359	1353.34	338.36	1.08	5.88E+001	35.15	9.52E+001
5	1399-	1416	1407.46	351.89	1.19	1.13E+002	43.48	1.16E+002
6	2323-	2341	2332.03	583.05	1.17	1.10E+002	34.53	5.94E+001
7	2427-	2445	2436.58	609.19	0.68	1.06E+002	35.45	6.47E+001
8	2903-	2915	2908.64	727.21	0.59	3.35E+001	20.72	2.95E+001
9	3066-	3078	3072.64	768.21	0.74	2.59E+001	17.73	2.11E+001
10	3635-	3653	3644.24	911.12	0.91	1.22E+002	28.47	2.63E+001
11	3871-	3882	3876.03	969.08	0.61	3.40E+001	19.84	2.70E+001
12	5831-	5856	5843.87	1461.07	1.63	5.72E+002	49.13	1.31E+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: 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	0.998	1460.81*	10.67	1.29976E+001	1.53432E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.44575E-001	8.33840E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	5.69358E-001	3.58155E-001
Pb-212	0.594	74.81* @	10.70	4.22069E+000	3.21785E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.402	238.63*	44.60	5.41963E-001	1.81804E-001
		609.31*	46.30	4.38131E-001	1.55714E-001
		1120.29	15.10		
Ac-228	1.000	1764.49	15.80		
		338.32*	11.40	8.16126E-001	5.04749E-001
		911.07*	27.70	9.26629E-001	2.41487E-001
		969.11*	16.60	4.39198E-001	2.60264E-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	0.998	1.299764E+001	1.534325E+000
TL-208	0.471	2.445749E-001	8.338402E-002
Bi-212	1.000	5.693576E-001	3.581546E-001
Pb-212 @	0.594	5.419633E-001	1.818042E-001
Bi-214	0.402	4.381311E-001	1.557142E-001
Ac-228	1.000	7.137255E-001	1.670476E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	85.23	1.1016E-001	103.88
5	351.89	1.8882E-001	38.38
9	768.21	4.3165E-002	68.46

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: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	1.0783E-001	8.24E-002	3.0035E-002
	1332.49	100.00	8.2383E-002		-3.3266E-002
Nb-94	702.63	100.00	1.0375E-001	9.41E-002	9.2840E-004
	871.10	100.00	9.4075E-002		-5.8312E-003
Ag-108m	79.20	7.10	8.2905E+000	1.28E-001	-6.2579E+000
	433.93	89.90	1.2851E-001		-6.5188E-002
	614.37	90.40	1.5112E-001		-7.2478E-003
	722.95	90.50	1.2774E-001		5.6619E-002
Sb-125	176.33	6.89	2.4990E+000	3.89E-001	-1.1590E+000
	427.89	29.33	3.8913E-001		-5.9956E-002
	463.38	10.35	1.1609E+000		8.3243E-001
	600.56	17.80	6.0329E-001		-6.7566E-001
	606.64	5.02	2.9055E+000		5.4474E+000
	635.90	11.32	9.2517E-001		-2.2408E-001
Cs-134	563.23	8.38	1.1896E+000	1.18E-001	-1.6299E-002
	569.32	15.43	7.0485E-001		-1.1073E-001
	604.70	97.60	1.4610E-001		-7.4281E-002
	795.84	85.40	1.1788E-001		1.0044E-001
	801.93	8.73	1.1274E+000		-1.1564E-001
Cs-137	661.65	85.12	1.2760E-001	1.28E-001	3.4744E-002
Eu-152	121.78	28.40	8.5414E-001	3.64E-001	6.4714E-001
	244.69	7.49	1.9613E+000		-3.7053E-001
	344.27	26.50	4.8670E-001		-1.8604E-001
	778.89	12.74	7.0793E-001		-4.2547E-001
	867.32	4.16	2.2335E+000		-2.9832E+000
	964.01	14.40	8.8436E-001		-5.2159E-001
	1085.78	10.00	8.3578E-001		-7.1243E-001
	1112.02	13.30	7.3650E-001		-4.9554E-001
	1407.95	20.70	3.6358E-001		2.0698E-001
Eu-154	123.07	40.50	5.8753E-001	2.43E-001	-3.6692E-002
	247.94	6.60	2.0846E+000		-1.4883E+000
	591.81	4.83	2.1564E+000		-1.1078E-001
	723.30	19.70	5.8886E-001		2.5949E-001
	756.87	4.33	2.4462E+000		-1.6405E-001
	873.19	11.50	8.2310E-001		4.1292E-001
	996.32	10.30	9.2363E-001		-1.0591E+000
	1004.76	17.90	5.3582E-001		-4.4542E-002
	1274.45	35.50	2.4332E-001		-1.4035E-001
Eu-155	86.54	30.90	1.4500E+000	1.45E+000	1.3216E+000
	105.31	20.70	1.4465E+000		6.6122E-001
Am-241	59.54	35.90	3.4488E+000	3.45E+000	-1.7148E-001
Cm-243	228.19	10.56	1.4978E+000	1.02E+000	9.7048E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0175E+000	1.02E+000	-1.4126E-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 6/23/2006 2:12:53 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-185-F-

Sample Title: OOL-10-03-185-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 2:02:52 PM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-185-F-
Title: OOL-10-03-185-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	306	300.35	75.09	0.81	1.31E+002	76.36	5.79E+002
2	946-	960	954.05	238.53	1.22	1.68E+002	58.72	2.53E+002
3	1176-	1205	1180.05	295.03	0.72	6.80E+001	74.32	2.79E+002
4	1348-	1357	1352.49	338.14	0.56	5.29E+001	30.00	8.01E+001
5	1385-	1412	1405.92	351.50	1.27	1.13E+002	62.29	1.95E+002
6	2033-	2049	2038.31	509.61	1.24	7.88E+001	36.93	8.62E+001
7	2322-	2339	2330.36	582.63	1.29	8.85E+001	35.17	7.15E+001
8	2425-	2443	2433.96	608.53	1.79	1.07E+002	33.40	5.43E+001
9	3632-	3651	3641.11	910.34	0.71	1.04E+002	28.81	3.21E+001
10	3866-	3881	3872.40	968.17	0.40	2.96E+001	24.91	4.24E+001
11	5827-	5852	5839.36	1459.95	1.82	6.69E+002	53.49	1.85E+001
12	7048-	7062	7054.19	1763.68	0.40	3.43E+001	13.16	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: 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	0.938	511.00*	100.00	1.41408E-001	6.90045E-002
K-40	0.976	1460.81*	10.67	1.51905E+001	1.72908E+000
TL-208	0.738	277.35	6.80		
		510.84*	21.60	6.54665E-001	3.23908E-001
		583.14*	84.20	1.97501E-001	8.25841E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	5.07528E+000	3.12945E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.681	238.63*	44.60	5.46911E-001	2.09955E-001
		609.31*	46.30	4.39341E-001	1.47851E-001
		1120.29	15.10		
PB-214	0.624	1764.49*	15.80	5.56862E-001	2.21044E-001
		74.82* @	6.21	8.74485E+000	5.42937E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
Ac-228	0.982	295.21*	19.20	5.42981E-001	6.00032E-001
		351.92*	37.20	4.84707E-001	2.79584E-001
		338.32*	11.40	7.34940E-001	4.32309E-001
		911.07*	27.70	7.90648E-001	2.37377E-001
		969.11*	16.60	3.81822E-001	3.23983E-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	0.938	9.874731E-002	7.125932E-002
K-40	0.976	1.519051E+001	1.729082E+000
TL-208	0.738	1.975015E-001	8.233286E-002
Pb-212 @	0.594	5.469113E-001	2.099549E-001
Bi-214	0.681	4.756671E-001	1.228942E-001
PB-214 @	0.624	4.951023E-001	2.534240E-001
Ac-228	0.982	6.621269E-001	1.750760E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.1310E-001	7.83E-002	9.9933E-002
	1332.49	100.00	7.8316E-002		-1.0336E-002
Nb-94	702.63	100.00	1.0842E-001	1.06E-001	-2.3080E-002
	871.10	100.00	1.0558E-001		-3.1450E-002
Ag-108m	79.20	7.10	8.5656E+000	1.35E-001	-9.0096E+000
	433.93	89.90	1.3698E-001		-1.1715E-001
	614.37	90.40	1.3821E-001		1.8039E-002
	722.95	90.50	1.3492E-001		1.0272E-001
Sb-125	176.33	6.89	2.6304E+000	4.31E-001	1.4110E+000
	427.89	29.33	4.3106E-001		7.4390E-002
	463.38	10.35	1.2298E+000		8.5183E-001
	600.56	17.80	6.5459E-001		-1.8302E-001
	606.64	5.02	2.8607E+000		4.7580E+000
	635.90	11.32	9.8103E-001		7.2717E-001
Cs-134	563.23	8.38	1.4318E+000	1.14E-001	1.1680E+000
	569.32	15.43	7.7838E-001		6.4162E-001
	604.70	97.60	1.4785E-001		1.8482E-002
	795.84	85.40	1.1391E-001		-7.3069E-002
	801.93	8.73	1.2187E+000		-1.0944E+000
Cs-137	661.65	85.12	1.3849E-001	1.38E-001	1.0238E-003
Eu-152	121.78	28.40	8.6618E-001	3.76E-001	5.9882E-002
	244.69	7.49	2.1236E+000		4.2762E-001
	344.27	26.50	4.9165E-001		-1.8567E-001
	778.89	12.74	8.2971E-001		-4.6320E-001
	867.32	4.16	2.5804E+000		-4.0194E-001
	964.01	14.40	9.3390E-001		3.3587E-001
	1085.78	10.00	9.9618E-001		-3.2664E-001
	1112.02	13.30	7.6647E-001		-1.2335E+000
1407.95	20.70	3.7645E-001	1.5857E-001		
Eu-154	123.07	40.50	6.0036E-001	2.93E-001	-5.7654E-002
	247.94	6.60	2.3366E+000		-1.9547E-001
	591.81	4.83	2.4218E+000		-9.1971E-001
	723.30	19.70	6.1607E-001		2.8509E-001
	756.87	4.33	2.2440E+000		-2.0747E+000
	873.19	11.50	9.2673E-001		-1.9259E-001
	996.32	10.30	9.7686E-001		-2.9059E-001
	1004.76	17.90	5.8384E-001		2.6307E-001
1274.45	35.50	2.9320E-001	1.3409E-001		
Eu-155	86.54	30.90	1.4929E+000	1.49E+000	1.8930E+000
	105.31	20.70	1.4853E+000		5.1340E-001
Am-241	59.54	35.90	3.4745E+000	3.47E+000	1.2535E+000
Cm-243	228.19	10.56	1.4853E+000	1.08E+000	-1.7389E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0781E+000	1.08E+000	4.9004E-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 6/23/2006 2:34:20 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-186-F-

Sample Title: OOL-10-03-186-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 2:24:19 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-186-F-
Title: OOL-10-03-186-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 14 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.963	1460.81*	10.67	1.80923E+001	1.94521E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.92302E-001	9.31007E-002
		860.37	12.46		
Pb-212	0.592	74.81* @	10.70	1.73193E+001	4.03113E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.24680E-001	2.06609E-001
Bi-214	0.979	609.31*	46.30	5.56368E-001	1.53247E-001
		1120.29*	15.10	4.71895E-001	3.26889E-001
		1764.49*	15.80	3.69528E-001	2.44279E-001
PB-214	0.624	74.82* @	6.21	2.98416E+001	7.27573E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.32799E-001	3.36211E-001
		351.92*	37.20	4.39623E-001	2.07918E-001
Ac-228	0.976	338.32*	11.40	6.34564E-001	6.16601E-001
		911.07*	27.70	8.38057E-001	2.39168E-001
		969.11*	16.60	7.36207E-001	3.49863E-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	0.963	1.809231E+001	1.945205E+000
TL-208	0.467	2.923022E-001	9.310067E-002
Pb-212 @	0.592	5.246798E-001	2.066093E-001
Bi-214	0.979	4.992825E-001	1.206506E-001
PB-214 @	0.624	4.653991E-001	1.768355E-001
Ac-228	0.976	7.897114E-001	1.880377E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	73.05	2.5962E-001	31.60
3	85.03	1.6333E-001	68.45

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: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	1.2104E-001	9.41E-002	7.8645E-003
	1332.49	100.00	9.4141E-002		3.8093E-002
Nb-94	702.63	100.00	1.1329E-001	1.11E-001	1.5183E-002
	871.10	100.00	1.1108E-001		6.6722E-002
Ag-108m	79.20	7.10	8.8408E+000	1.40E-001	-8.2561E+000
	433.93	89.90	1.3988E-001		-2.9617E-002
	614.37	90.40	1.5442E-001		-7.7742E-002
	722.95	90.50	1.5150E-001		1.2866E-001
Sb-125	176.33	6.89	2.7539E+000	4.26E-001	-1.4145E+000
	427.89	29.33	4.2583E-001		-1.2205E-002
	463.38	10.35	1.2375E+000		-4.6159E-002
	600.56	17.80	7.0745E-001		3.7584E-001
	606.64	5.02	3.1198E+000		3.4653E+000
	635.90	11.32	1.1256E+000		6.3946E-001
Cs-134	563.23	8.38	1.4625E+000	1.41E-001	-9.4070E-002
	569.32	15.43	8.2561E-001		2.6254E-001
	604.70	97.60	1.6396E-001		1.0790E-003
	795.84	85.40	1.4062E-001		1.2894E-001
	801.93	8.73	1.2135E+000		-5.5101E-001
Cs-137	661.65	85.12	1.3451E-001	1.35E-001	-7.7785E-002
Eu-152	121.78	28.40	9.2775E-001	3.64E-001	4.9217E-001
	244.69	7.49	2.1534E+000		-2.5538E+000
	344.27	26.50	5.4224E-001		7.5181E-002
	778.89	12.74	8.6070E-001		4.4175E-001
	867.32	4.16	2.6025E+000		6.7098E-002
	964.01	14.40	9.9094E-001		1.5562E+000
	1085.78	10.00	1.0456E+000		-5.8181E-001
	1112.02	13.30	8.4217E-001		-1.6298E-001
1407.95	20.70	3.6358E-001	-3.7647E-002		
Eu-154	123.07	40.50	6.4108E-001	3.05E-001	2.0071E-001
	247.94	6.60	2.4560E+000		1.0904E+000
	591.81	4.83	2.3566E+000		-1.4407E+000
	723.30	19.70	6.9272E-001		7.0012E-001
	756.87	4.33	2.7336E+000		1.5129E+000
	873.19	11.50	9.5078E-001		1.3708E-001
	996.32	10.30	1.0418E+000		-2.2509E-001
	1004.76	17.90	5.7516E-001		1.0793E-001
1274.45	35.50	3.0471E-001	1.3241E-001		
Eu-155	86.54	30.90	1.5317E+000	1.53E+000	1.9404E+000
	105.31	20.70	1.5446E+000		3.8346E-001
Am-241	59.54	35.90	3.4531E+000	3.45E+000	1.5622E-001
Cm-243	228.19	10.56	1.6572E+000	1.11E+000	-4.6625E-002

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	2.9131E-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 6/23/2006 9:05:53 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-187-F-

Sample Title: OOL-10-03-187-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 8:55:52 PM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-187-F-
Title: OOL-10-03-187-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	295-	308	299.70	74.93	0.64	1.75E+002	90.39	7.06E+002
2	333-	347	339.71	84.93	0.55	8.08E+001	84.54	6.14E+002
3	945-	959	954.43	238.62	1.45	2.14E+002	58.55	2.36E+002
4	1345-	1357	1351.73	337.95	0.89	4.46E+001	38.31	1.26E+002
5	1396-	1412	1406.25	351.58	0.83	9.59E+001	44.49	1.34E+002
6	2032-	2051	2041.06	510.30	1.00	9.26E+001	40.82	9.74E+001
7	2321-	2338	2330.74	582.73	1.18	1.30E+002	36.26	6.53E+001
8	2424-	2444	2434.52	608.67	1.34	1.62E+002	39.35	6.56E+001
9	3634-	3651	3641.14	910.35	0.68	9.95E+001	26.41	2.55E+001
10	3865-	3881	3872.14	968.10	1.06	6.44E+001	23.28	2.46E+001
11	5826-	5854	5839.75	1460.04	1.87	6.99E+002	52.50	3.80E+000
12	7049-	7063	7055.60	1764.03	0.80	4.39E+001	15.68	7.06E+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	0.984	511.00*	100.00	1.66332E-001	7.66936E-002
K-40	0.981	1460.81*	10.67	1.58884E+001	1.75441E+000
TL-208	0.747	277.35	6.80		
		510.84*	21.60	7.70053E-001	3.60589E-001
		583.14*	84.20	2.89402E-001	8.92615E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	6.86151E+000	3.78566E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.688	238.63*	44.60	6.99356E-001	2.20345E-001
		609.31*	46.30	6.68808E-001	1.81823E-001
		1120.29	15.10		
Ac-228	0.981	1764.49*	15.80	7.14392E-001	2.64769E-001
		338.32*	11.40	6.19249E-001	5.40702E-001
		911.07*	27.70	7.57280E-001	2.19127E-001
		969.11*	16.60	8.31474E-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: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	0.984	1.038206E-001	7.905377E-002
K-40	0.981	1.588843E+001	1.754405E+000
TL-208	0.747	2.894024E-001	8.876183E-002
Pb-212 @	0.594	6.993562E-001	2.203452E-001
Bi-214	0.688	6.834161E-001	1.498840E-001
Ac-228	0.981	7.655756E-001	1.703421E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.3473E-001	104.58
5	351.58	1.5978E-001	46.40

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: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	9.6968E-002	7.31E-002	-4.8672E-002
	1332.49	100.00	7.3109E-002		-5.7239E-002
Nb-94	702.63	100.00	1.0884E-001	1.04E-001	5.6900E-002
	871.10	100.00	1.0415E-001		-1.5038E-003
Ag-108m	79.20	7.10	8.4923E+000	1.33E-001	-5.6330E+000
	433.93	89.90	1.4159E-001		6.3589E-002
	614.37	90.40	1.5145E-001		-3.7496E-002
	722.95	90.50	1.3285E-001		7.4742E-002
Sb-125	176.33	6.89	2.6092E+000	4.10E-001	1.6022E-001
	427.89	29.33	4.0974E-001		-8.2816E-002
	463.38	10.35	1.1852E+000		4.0078E-001
	600.56	17.80	6.2227E-001		5.2713E-002
	606.64	5.02	3.1710E+000		4.8785E+000
	635.90	11.32	9.7764E-001		-4.4290E-001
Cs-134	563.23	8.38	1.3479E+000	1.28E-001	3.2807E-001
	569.32	15.43	6.9060E-001		-4.4487E-001
	604.70	97.60	1.6187E-001		-4.0600E-002
	795.84	85.40	1.2800E-001		1.6141E-002
	801.93	8.73	1.1605E+000		-3.2688E-001
Cs-137	661.65	85.12	1.3629E-001	1.36E-001	2.7666E-002
Eu-152	121.78	28.40	8.6073E-001	3.68E-001	-9.2305E-002
	244.69	7.49	2.0190E+000		-4.7375E+000
	344.27	26.50	4.9001E-001		-2.3674E-002
	778.89	12.74	9.0028E-001		-1.7657E-001
	867.32	4.16	2.6135E+000		3.8561E-001
	964.01	14.40	9.8083E-001		2.8845E-001
	1085.78	10.00	1.0074E+000		2.0720E-001
	1112.02	13.30	7.5804E-001		-7.6528E-001
1407.95	20.70	3.6793E-001	2.3182E-001		
Eu-154	123.07	40.50	6.0213E-001	2.47E-001	5.7556E-001
	247.94	6.60	2.2526E+000		7.0246E-001
	591.81	4.83	2.3045E+000		-7.1634E-001
	723.30	19.70	6.0650E-001		1.6054E-001
	756.87	4.33	2.4257E+000		-1.0877E+000
	873.19	11.50	9.0200E-001		1.9378E-001
	996.32	10.30	9.5594E-001		5.0927E-002
	1004.76	17.90	5.6337E-001		9.0331E-002
1274.45	35.50	2.4739E-001	-1.2381E-001		
Eu-155	86.54	30.90	1.4345E+000	1.43E+000	9.5990E-001
	105.31	20.70	1.5155E+000		6.9960E-001
Am-241	59.54	35.90	3.3396E+000	3.34E+000	-2.5317E-001
Cm-243	228.19	10.56	1.5128E+000	1.09E+000	6.2315E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0912E+000	1.09E+000	7.3076E-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 6/23/2006 9:19:14 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-188-F-

Sample Title: OOL-10-03-188-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 9:09:12 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-188-F-
 Title: OOL-10-03-188-F-G
 Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	307	300.69	75.17	1.18	1.45E+002	93.58	8.09E+002
2	948-	959	953.61	238.42	1.38	2.29E+002	58.19	2.60E+002
3	1400-	1415	1406.44	351.63	1.55	1.45E+002	44.39	1.19E+002
4	2320-	2338	2330.12	582.57	1.66	1.43E+002	41.70	9.18E+001
5	2425-	2445	2434.71	608.72	1.71	1.78E+002	40.97	7.11E+001
6	3632-	3650	3641.75	910.50	1.70	1.10E+002	32.70	4.98E+001
M 7	3851-	3878	3856.44	964.18	1.31	2.59E+001	14.04	3.02E+001
m 8	3851-	3878	3871.84	968.03	1.31	4.93E+001	18.05	4.01E+001
9	4470-	4486	4477.18	1119.37	1.94	5.87E+001	25.33	3.43E+001
10	5827-	5852	5840.08	1460.13	2.06	8.23E+002	57.15	6.50E+000
11	7047-	7063	7055.24	1763.94	2.18	5.06E+001	16.46	6.36E+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: 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	1.86906E+001	1.99407E+000
TL-208	0.464	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.19520E-001	1.01936E-001
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	5.61817E+000	3.78591E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.47854E-001	2.23191E-001
Bi-214	0.986	609.31*	46.30	7.32949E-001	1.91400E-001
		1120.29*	15.10	8.66014E-001	3.84759E-001
		1764.49*	15.80	8.23457E-001	2.80057E-001
Ac-228	0.616	338.32	11.40		
		911.07*	27.70	8.38724E-001	2.66972E-001
		969.11*	16.60	6.36532E-001	2.42335E-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	0.985	1.869060E+001	1.994065E+000
TL-208	0.464	3.195204E-001	1.019362E-001
Pb-212 @	0.593	7.478544E-001	2.231908E-001
Bi-214	0.986	7.768109E-001	1.461731E-001
Ac-228	0.616	7.278701E-001	1.794357E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.63	2.4223E-001	30.54
M 7	964.18	4.3148E-002	54.24

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: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	9.28E-002	-1.9937E-002
	1332.49	100.00	9.2759E-002		3.1411E-002
Nb-94	702.63	100.00	1.2709E-001	1.02E-001	-3.4172E-003
	871.10	100.00	1.0222E-001		-4.2882E-002
Ag-108m	79.20	7.10	9.2380E+000	1.37E-001	-3.7168E+000
	433.93	89.90	1.4440E-001		2.7466E-002
	614.37	90.40	1.6991E-001		-3.7578E-002
	722.95	90.50	1.3736E-001		-5.2552E-002
Sb-125	176.33	6.89	2.8941E+000	4.35E-001	3.1144E+000
	427.89	29.33	4.3451E-001		-3.0211E-001
	463.38	10.35	1.3120E+000		9.7294E-001
	600.56	17.80	6.5655E-001		3.4196E-002
	606.64	5.02	3.3488E+000		4.7843E+000
	635.90	11.32	1.1079E+000		1.0443E+000
Cs-134	563.23	8.38	1.5998E+000	1.36E-001	2.6983E+000
	569.32	15.43	8.3157E-001		-2.8943E-001
	604.70	97.60	1.7032E-001		5.8631E-002
	795.84	85.40	1.3639E-001		3.2278E-002
Cs-137	801.93	8.73	1.2790E+000	1.42E-001	9.7202E-001
	661.65	85.12	1.4192E-001		-1.7647E-001
Eu-152	121.78	28.40	9.5505E-001	4.52E-001	1.7683E-001
	244.69	7.49	2.3600E+000		1.5730E-002
	344.27	26.50	5.2491E-001		-3.4209E-001
	778.89	12.74	9.3502E-001		-6.0604E-001
	867.32	4.16	2.5127E+000		-3.2083E+000
	964.01	14.40	1.0448E+000		1.7153E+000
	1085.78	10.00	9.5583E-001		-2.9270E-001
	1112.02	13.30	7.9927E-001		-1.8978E-001
1407.95	20.70	4.5229E-001	1.4859E-002		
Eu-154	123.07	40.50	6.7032E-001	3.10E-001	2.6969E-001
	247.94	6.60	2.4938E+000		-1.5807E+000
	591.81	4.83	2.4922E+000		1.2171E+000
	723.30	19.70	6.2736E-001		-3.8163E-001
	756.87	4.33	2.6971E+000		2.1901E+000
	873.19	11.50	9.3078E-001		1.1991E+000
	996.32	10.30	1.1515E+000		7.3519E-001
	1004.76	17.90	5.7807E-001		-6.3071E-001
1274.45	35.50	3.0951E-001	8.1736E-004		
Eu-155	86.54	30.90	1.5770E+000	1.58E+000	2.5075E+000
	105.31	20.70	1.5877E+000		1.2024E+000
Am-241	59.54	35.90	3.7513E+000	3.75E+000	-6.3404E-001
Cm-243	228.19	10.56	1.6584E+000	1.15E+000	-8.7448E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1523E+000	1.15E+000	5.9898E-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 6/23/2006 9:32:58 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-189-F-

Sample Title: OOL-10-03-189-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 9:22:55 PM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-189-F-
 Title: OOL-10-03-189-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	288-	305	292.34	73.09	1.07	1.06E+002	40.66	5.17E+002
m	2	288-	305	300.59	75.15	1.08	2.25E+002	46.97	6.69E+002
M	3	330-	358	339.89	84.98	1.77	2.24E+002	45.71	8.20E+002
m	4	330-	358	352.27	88.07	1.77	1.01E+002	42.72	1.07E+003
	5	949-	960	953.99	238.51	1.21	1.99E+002	55.07	2.31E+002
	6	1397-	1417	1406.71	351.70	1.69	1.48E+002	54.84	1.75E+002
	7	2035-	2049	2040.45	510.15	1.32	6.66E+001	37.70	1.03E+002
	8	2321-	2341	2330.93	582.77	1.28	1.39E+002	40.41	7.91E+001
	9	2426-	2446	2434.72	608.72	1.43	2.02E+002	42.07	7.05E+001
	10	3631-	3652	3640.73	910.25	1.30	1.51E+002	32.45	3.14E+001
	11	3866-	3881	3872.31	968.15	1.27	6.50E+001	26.75	4.00E+001
	12	4469-	4482	4476.54	1119.22	0.32	3.55E+001	21.25	2.95E+001
	13	5827-	5853	5839.67	1460.02	1.65	7.03E+002	54.01	1.31E+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: 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	0.980	1460.81*	10.67	1.59717E+001	1.78278E+000
TL-208	0.747	277.35	6.80		
		510.84*	21.60	5.53266E-001	3.25343E-001
		583.14*	84.20	3.09914E-001	9.87983E-002
		860.37	12.46		
Pb-212	0.736	74.81* @	10.70	8.70724E+000	2.49518E+000
		77.11 @	18.00		
		87.30* @	8.00	3.03613E+000	1.40986E+000
		238.63*	44.60	6.48113E-001	2.06480E-001
Bi-214	0.691	609.31*	46.30	8.34127E-001	2.01497E-001
		1120.29*	15.10	5.23277E-001	3.18333E-001
		1764.49	15.80		
PB-214	0.304	74.82* @	6.21	1.50028E+001	4.43507E+000
		77.11 @	10.50		
		87.30* @	4.67	5.20108E+000	2.44693E+000
		241.98	7.49		
		295.21	19.20		
Ac-228	0.613	351.92*	37.20	6.36374E-001	2.58501E-001
		338.32	11.40		
		911.07*	27.70	1.14629E+000	2.80021E-001
		969.11*	16.60	8.39025E-001	3.56322E-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	0.976		
	K-40	0.980	1.597170E+001	1.782777E+000
	TL-208	0.747	3.304608E-001	9.453547E-002
	Pb-212 @	0.736	6.481127E-001	2.064799E-001
	Bi-214	0.691	7.452088E-001	1.702559E-001
	PB-214 @	0.304	6.363736E-001	2.559721E-001
	Ac-228	0.613	1.028975E+000	2.201696E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.7740E-001	38.20
M 3	84.98	3.7343E-001	20.40

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: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	1.1207E-001	8.47E-002	-7.0238E-002
	1332.49	100.00	8.4722E-002		4.1157E-002
Nb-94	702.63	100.00	1.1007E-001	1.06E-001	3.2038E-002
	871.10	100.00	1.0605E-001		-7.5799E-002
Ag-108m	79.20	7.10	8.6713E+000	1.34E-001	-1.4257E+001
	433.93	89.90	1.3432E-001		3.8206E-002
	614.37	90.40	1.6390E-001		1.6646E-002
	722.95	90.50	1.3695E-001		1.5231E-001
Sb-125	176.33	6.89	2.7678E+000	4.17E-001	5.6836E-001
	427.89	29.33	4.1697E-001		-3.0879E-004
	463.38	10.35	1.2401E+000		1.3581E+000
	600.56	17.80	6.7205E-001		1.5317E-001
	606.64	5.02	3.4388E+000		8.0792E+000
	635.90	11.32	9.8441E-001		-2.2340E-001
Cs-134	563.23	8.38	1.3765E+000	1.29E-001	3.7370E-001
	569.32	15.43	7.3474E-001		4.8439E-002
	604.70	97.60	1.7716E-001		-4.5669E-002
	795.84	85.40	1.2902E-001		5.0313E-002
	801.93	8.73	1.2083E+000		6.6959E-001
Cs-137	661.65	85.12	1.3718E-001	1.37E-001	8.3488E-002
Eu-152	121.78	28.40	8.6799E-001	3.93E-001	-7.2488E-001
	244.69	7.49	2.1494E+000		-1.7729E+000
	344.27	26.50	5.1719E-001		-5.4704E-001
	778.89	12.74	8.8073E-001		7.9438E-001
	867.32	4.16	2.6135E+000		-2.0645E+000
	964.01	14.40	1.0182E+000		-1.9375E-002
	1085.78	10.00	1.1620E+000		-1.0757E-002
	1112.02	13.30	7.6227E-001		-4.1789E-001
1407.95	20.70	3.9289E-001	1.1024E-001		
Eu-154	123.07	40.50	6.1067E-001	3.01E-001	4.2544E-002
	247.94	6.60	2.3647E+000		-1.4512E+000
	591.81	4.83	2.3712E+000		1.9183E+000
	723.30	19.70	6.2922E-001		6.9338E-001
	756.87	4.33	2.6036E+000		2.0475E-002
	873.19	11.50	9.1445E-001		-5.5799E-001
	996.32	10.30	9.5064E-001		3.0134E-001
	1004.76	17.90	5.0668E-001		-7.5788E-001
1274.45	35.50	3.0147E-001	1.1560E-001		
Eu-155	86.54	30.90	1.5263E+000	1.51E+000	-1.2070E-001
	105.31	20.70	1.5061E+000		-5.0795E-001
Am-241	59.54	35.90	3.4681E+000	3.47E+000	1.7213E-001
Cm-243	228.19	10.56	1.5821E+000	1.07E+000	3.3064E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0709E+000	1.07E+000	3.1976E-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 6/23/2006 10:00:44 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-190-F-

Sample Title: OOL-10-03-190-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 9:50:42 PM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-190-F-
 Title: OOL-10-03-190-F-G
 Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	309	300.46	75.12	0.66	2.15E+002	88.25	6.50E+002
2	946-	963	954.26	238.58	1.47	1.84E+002	66.92	3.02E+002
3	1173-	1188	1180.09	295.04	0.53	5.34E+001	45.74	1.64E+002
4	1347-	1360	1351.45	337.88	0.68	3.71E+001	37.14	1.16E+002
5	1397-	1414	1406.30	351.60	1.22	1.02E+002	48.28	1.54E+002
6	2321-	2340	2330.55	582.68	1.59	1.26E+002	38.30	7.27E+001
7	2428-	2444	2434.65	608.70	1.22	1.45E+002	36.04	6.13E+001
8	3634-	3649	3642.10	910.59	1.60	7.59E+001	26.63	3.61E+001
9	3865-	3877	3871.28	967.89	0.55	3.48E+001	20.70	2.93E+001
10	4472-	4488	4477.79	1119.53	1.82	5.26E+001	20.27	1.74E+001
11	5621-	5634	5627.30	1406.93	0.26	9.17E+000	11.66	8.83E+000
12	5825-	5852	5839.87	1460.07	2.17	6.79E+002	51.71	3.62E+000
13	7048-	7061	7054.58	1763.77	0.33	3.08E+001	13.15	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: 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	0.982	1460.81*	10.67	1.54381E+001	1.71557E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.81921E-001	9.30206E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	8.34780E+000	3.79530E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.01696E-001	2.37942E-001
Bi-214	0.986	609.31*	46.30	5.95905E-001	1.65635E-001
		1120.29*	15.10	7.75128E-001	3.10044E-001
		1764.49*	15.80	5.01206E-001	2.19667E-001
PB-214	0.625	74.82* @	6.21	1.43835E+001	6.62223E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.25727E-001	3.71971E-001
		351.92*	37.20	4.39618E-001	2.20047E-001
Ac-228	0.980	338.32*	11.40	5.14763E-001	5.21915E-001
		911.07*	27.70	5.77682E-001	2.13295E-001
		969.11*	16.60	4.48524E-001	2.71297E-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	0.982	1.543806E+001	1.715575E+000
TL-208	0.467	2.819206E-001	9.302065E-002
Pb-212 @	0.594	6.016957E-001	2.379419E-001
Bi-214	0.986	5.944536E-001	1.216471E-001
PB-214 @	0.625	4.360167E-001	1.893898E-001
Ac-228	0.980	5.270735E-001	1.596412E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
11	1406.93	1.5278E-002	127.24

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: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	1.0453E-001	8.92E-002	-5.4736E-002
	1332.49	100.00	8.9202E-002		2.1023E-002
Nb-94	702.63	100.00	1.0717E-001	1.06E-001	2.6274E-002
	871.10	100.00	1.0605E-001		-2.1583E-002
Ag-108m	79.20	7.10	8.3375E+000	1.30E-001	-3.9405E+000
	433.93	89.90	1.3432E-001		-7.5488E-002
	614.37	90.40	1.6018E-001		-1.3157E-002
	722.95	90.50	1.2989E-001		-1.1052E-001
Sb-125	176.33	6.89	2.6109E+000	4.12E-001	2.5539E-001
	427.89	29.33	4.1156E-001		2.5439E-001
	463.38	10.35	1.2012E+000		5.5604E-001
	600.56	17.80	6.5262E-001		1.6641E-001
	606.64	5.02	3.2114E+000		6.7599E+000
	635.90	11.32	9.2877E-001		-7.6229E-001
Cs-134	563.23	8.38	1.3724E+000	1.28E-001	2.2593E-001
	569.32	15.43	8.0543E-001		6.4271E-001
	604.70	97.60	1.6214E-001		-4.2441E-002
	795.84	85.40	1.2800E-001		1.1612E-001
	801.93	8.73	1.2031E+000		-2.0340E-001
Cs-137	661.65	85.12	1.3585E-001	1.36E-001	-8.7641E-004
Eu-152	121.78	28.40	8.6109E-001	3.72E-001	5.7061E-001
	244.69	7.49	2.0400E+000		-2.9565E-001
	344.27	26.50	4.8171E-001		-1.0690E-001
	778.89	12.74	8.4363E-001		-2.5460E-001
	867.32	4.16	2.4782E+000		-4.9504E-001
	964.01	14.40	9.1223E-001		1.1156E+000
	1085.78	10.00	8.3578E-001		-1.7056E+000
	1112.02	13.30	7.6227E-001		-7.7442E-001
1407.95	20.70	3.7222E-001	-2.1176E-001		
Eu-154	123.07	40.50	5.9909E-001	2.65E-001	-1.8097E-001
	247.94	6.60	2.2106E+000		-1.8267E+000
	591.81	4.83	2.4853E+000		1.9012E+000
	723.30	19.70	5.9085E-001		-4.0434E-001
	756.87	4.33	2.4765E+000		-5.7203E-001
	873.19	11.50	9.2266E-001		-6.5476E-002
	996.32	10.30	9.6122E-001		-1.8897E-001
	1004.76	17.90	5.3267E-001		-1.9553E-001
1274.45	35.50	2.6486E-001	-7.4083E-002		
Eu-155	86.54	30.90	1.4428E+000	1.44E+000	1.4493E+000
	105.31	20.70	1.4642E+000		-4.3854E-001
Am-241	59.54	35.90	3.3815E+000	3.38E+000	5.8073E-001
Cm-243	228.19	10.56	1.4515E+000	1.01E+000	-3.7333E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0137E+000	1.01E+000	-6.0342E-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 6/26/2006 9:01:21 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-10-03-191-F-

Sample Title: OOL-10-03-191-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 8:51:18 AM

Live Time: 600.0 seconds

Real Time: 600.6 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-191-F-
Title: OOL-10-03-191-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	308	300.01	75.00	1.07	2.28E+002	99.53	8.11E+002
2	947-	962	954.60	238.66	0.55	2.09E+002	67.94	3.29E+002
3	1344-	1361	1352.84	338.23	0.80	7.81E+001	45.57	1.42E+002
4	1400-	1414	1407.46	351.89	0.53	1.06E+002	44.85	1.45E+002
5	2040-	2055	2044.16	511.07	0.76	6.96E+001	40.35	1.10E+002
6	2323-	2341	2333.02	583.29	1.03	1.48E+002	39.79	7.84E+001
7	2427-	2446	2437.13	609.32	1.52	1.55E+002	34.12	4.24E+001
8	3634-	3653	3644.88	911.28	1.42	1.25E+002	31.92	4.00E+001
9	3866-	3882	3876.51	969.20	1.01	6.63E+001	28.56	4.68E+001
10	4473-	4487	4480.48	1120.20	0.43	4.91E+001	22.91	2.99E+001
11	5833-	5858	5844.76	1461.30	1.80	8.10E+002	58.95	2.24E+001
12	7053-	7068	7061.00	1765.38	0.73	4.00E+001	14.93	5.98E+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	0.992	1460.81*	10.67	1.84021E+001	2.00374E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	5.79005E-001	3.47880E-001
		583.14*	84.20	3.29524E-001	9.86446E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	8.88397E+000	4.25512E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.995	238.63*	44.60	6.81830E-001	2.46189E-001
		609.31*	46.30	6.37057E-001	1.60985E-001
		1120.29*	15.10	7.24651E-001	3.46550E-001
Ac-228	0.999	1764.49*	15.80	6.50895E-001	2.51362E-001
		338.32*	11.40	1.08493E+000	6.55408E-001
		911.07*	27.70	9.51501E-001	2.66450E-001
		969.11*	16.60	8.55407E-001	3.79507E-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	1.000		
	K-40	0.992	1.840214E+001	2.003735E+000
	TL-208	0.752	3.480910E-001	9.490296E-002
	Pb-212 @	0.594	6.818302E-001	2.461892E-001
	Bi-214	0.995	6.521732E-001	1.262495E-001
	Ac-228	0.999	9.362345E-001	2.069168E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.7731E-001	42.15

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: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	1.1514E-001	9.06E-002	-6.6336E-002
	1332.49	100.00	9.0643E-002		8.5249E-002
Nb-94	702.63	100.00	1.1909E-001	1.15E-001	-2.0711E-003
	871.10	100.00	1.1503E-001		1.3716E-001
Ag-108m	79.20	7.10	8.9897E+000	1.46E-001	-5.0434E-001
	433.93	89.90	1.4578E-001		-3.9554E-002
	614.37	90.40	1.6267E-001		-6.5333E-002
	722.95	90.50	1.5187E-001		2.0158E-001
Sb-125	176.33	6.89	2.7785E+000	4.50E-001	3.1143E-001
	427.89	29.33	4.4968E-001		2.9116E-001
	463.38	10.35	1.2452E+000		-8.3766E-002
	600.56	17.80	6.9832E-001		6.2205E-002
	606.64	5.02	3.0624E+000		3.0761E+000
	635.90	11.32	1.0044E+000		-2.3789E-001
Cs-134	563.23	8.38	1.4888E+000	1.36E-001	1.1174E-001
	569.32	15.43	8.0133E-001		-1.8725E-001
	604.70	97.60	1.6055E-001		-7.0496E-002
	795.84	85.40	1.3591E-001		5.9151E-002
Cs-137	801.93	8.73	1.2543E+000	1.44E-001	-7.5785E-001
	661.65	85.12	1.4361E-001		9.5691E-002
Eu-152	121.78	28.40	9.2266E-001	4.20E-001	1.9080E-001
	244.69	7.49	2.2647E+000		8.5518E-001
	344.27	26.50	5.2029E-001		9.3926E-002
	778.89	12.74	9.6246E-001		-4.6594E-001
	867.32	4.16	2.8035E+000		-2.6160E+000
	964.01	14.40	1.0352E+000		4.1617E-002
	1085.78	10.00	1.0403E+000		4.6245E-002
	1112.02	13.30	7.9927E-001		-3.6712E-001
1407.95	20.70	4.2000E-001	3.8761E-002		
Eu-154	123.07	40.50	6.3703E-001	3.13E-001	-5.3695E-002
	247.94	6.60	2.4244E+000		-3.2123E+000
	591.81	4.83	2.4783E+000		-1.5144E+000
	723.30	19.70	7.0107E-001		9.3100E-001
	756.87	4.33	2.6694E+000		8.6261E-001
	873.19	11.50	9.7805E-001		-6.3383E-001
	996.32	10.30	1.0321E+000		8.3379E-002
	1004.76	17.90	5.8096E-001		2.2012E-001
1274.45	35.50	3.1267E-001	-1.5245E-001		
Eu-155	86.54	30.90	1.5509E+000	1.55E+000	1.5509E+000
	105.31	20.70	1.6154E+000		8.5864E-001
Am-241	59.54	35.90	3.4056E+000	3.41E+000	-3.3114E+000
Cm-243	228.19	10.56	1.6535E+000	1.15E+000	4.0289E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1500E+000	1.15E+000	3.0898E-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 6/23/2006 10:15:07 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-192-F-

Sample Title: OOL-10-03-192-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 10:04:58 PM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-192-F-
Title: OOL-10-03-192-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 13 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.986	511.00*	100.00	1.51351E-001	8.41991E-002
K-40	0.979	1460.81*	10.67	1.73227E+001	1.89728E+000
TL-208	0.745	277.35	6.80		
		510.84*	21.60	7.00699E-001	3.93989E-001
		583.14*	84.20	3.13232E-001	9.53381E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	4.73693E+000	3.07461E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.395	238.63*	44.60	7.41381E-001	2.27934E-001
		609.31*	46.30	7.79553E-001	1.87623E-001
		1120.29	15.10		
PB-214	0.625	1764.49	15.80		
		74.82* @	6.21	8.16187E+000	5.33067E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
Ac-228	0.978	295.21*	19.20	6.67258E-001	3.83840E-001
		351.92*	37.20	5.95217E-001	2.38357E-001
		338.32*	11.40	6.94858E-001	5.82031E-001
		911.07*	27.70	7.56159E-001	2.61401E-001
		969.11*	16.60	7.73228E-001	3.27422E-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	0.986	8.369281E-002	8.665277E-002
K-40	0.979	1.732268E+001	1.897276E+000
TL-208	0.745	3.132318E-001	9.479007E-002
Pb-212 @	0.594	7.413807E-001	2.279341E-001
Bi-214	0.395	7.795529E-001	1.876230E-001
PB-214 @	0.625	6.152661E-001	2.024915E-001
Ac-228	0.978	7.553515E-001	1.927553E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.99	1.4944E-001	106.75
12	1237.05	5.0294E-002	60.10

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	1.1813E-001	8.92E-002	6.2064E-002
	1332.49	100.00	8.9202E-002		-2.3743E-002
Nb-94	702.63	100.00	1.1329E-001	1.10E-001	1.3753E-002
	871.10	100.00	1.0973E-001		-3.0794E-003
Ag-108m	79.20	7.10	8.6983E+000	1.40E-001	-1.1826E+001
	433.93	89.90	1.4046E-001		9.0906E-002
	614.37	90.40	1.5764E-001		-4.9462E-002
	722.95	90.50	1.4249E-001		1.0502E-002
Sb-125	176.33	6.89	2.7999E+000	4.34E-001	2.0713E+000
	427.89	29.33	4.3365E-001		-1.0148E-001
	463.38	10.35	1.2778E+000		5.6650E-001
	600.56	17.80	6.4866E-001		4.7840E-002
	606.64	5.02	3.3440E+000		6.6399E+000
	635.90	11.32	1.0011E+000		-3.2871E-001
Cs-134	563.23	8.38	1.5073E+000	1.29E-001	-2.4111E-001
	569.32	15.43	7.9721E-001		1.8787E-001
	604.70	97.60	1.7230E-001		-2.8496E-003
	795.84	85.40	1.2851E-001		9.8562E-003
	801.93	8.73	1.1873E+000		-1.0593E+000
Cs-137	661.65	85.12	1.2948E-001	1.29E-001	6.2785E-002
Eu-152	121.78	28.40	9.1000E-001	3.81E-001	3.9777E-001
	244.69	7.49	2.2155E+000		-1.7719E+000
	344.27	26.50	5.2568E-001		-7.1740E-002
	778.89	12.74	9.0350E-001		-9.9769E-002
	867.32	4.16	2.4549E+000		-3.0373E+000
	964.01	14.40	9.6286E-001		1.4347E+000
	1085.78	10.00	1.1427E+000		-3.7505E-001
	1112.02	13.30	8.4596E-001		-1.5900E+000
1407.95	20.70	3.8063E-001	-2.9249E-001		
Eu-154	123.07	40.50	6.2837E-001	2.85E-001	-1.5611E-001
	247.94	6.60	2.4199E+000		-1.0607E+000
	591.81	4.83	2.3712E+000		1.4309E+000
	723.30	19.70	6.5468E-001		-2.0697E-002
	756.87	4.33	2.6508E+000		7.8995E-001
	873.19	11.50	9.7034E-001		5.4321E-001
	996.32	10.30	1.0562E+000		-1.4334E+000
	1004.76	17.90	6.1727E-001		2.2668E-001
1274.45	35.50	2.8466E-001	5.3946E-002		
Eu-155	86.54	30.90	1.5442E+000	1.53E+000	-4.1097E-002
	105.31	20.70	1.5278E+000		3.2813E-001
Am-241	59.54	35.90	3.4681E+000	3.47E+000	2.1415E+000
Cm-243	228.19	10.56	1.5612E+000	1.06E+000	-5.4339E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0563E+000	1.06E+000	-3.3114E-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 6/26/2006 8:17:46 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-10-03-193-F-

Sample Title: OOL-10-03-193-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 8:07:45 AM

Live Time: 600.0 seconds

Real Time: 600.6 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-193-F-
 Title: OOL-10-03-193-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	291.67	72.92	0.97	1.02E+002	37.35	5.24E+002
m	2	285-	306	300.07	75.02	0.97	2.16E+002	45.70	6.27E+002
	3	332-	345	340.28	85.07	1.00	7.22E+001	81.46	6.00E+002
	4	949-	962	955.20	238.81	1.34	2.24E+002	57.89	2.35E+002
	5	1175-	1187	1181.62	295.42	1.15	7.04E+001	41.27	1.42E+002
	6	1345-	1359	1352.50	338.15	0.96	4.73E+001	39.10	1.22E+002
	7	1401-	1416	1407.96	352.01	1.05	9.04E+001	42.74	1.28E+002
	8	2031-	2053	2041.93	510.52	1.59	1.15E+002	45.50	1.09E+002
	9	2325-	2341	2332.86	583.25	1.49	1.14E+002	36.41	7.29E+001
	10	2427-	2444	2437.03	609.30	1.70	1.35E+002	37.96	7.39E+001
	11	2904-	2916	2909.96	727.54	0.59	2.40E+001	23.19	4.40E+001
	12	3637-	3653	3644.67	911.23	1.97	8.78E+001	29.45	4.42E+001
M	13	3853-	3881	3858.52	964.70	1.15	2.37E+001	12.90	2.47E+001
m	14	3853-	3881	3874.98	968.81	1.15	3.95E+001	16.05	3.21E+001
	15	5830-	5857	5844.69	1461.28	2.15	7.17E+002	55.37	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: 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	0.992	511.00*	100.00	2.06647E-001	8.63725E-002
K-40	0.993	1460.81*	10.67	1.63034E+001	1.82376E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	9.56697E-001	4.07434E-001
		583.14*	84.20	2.54603E-001	8.77631E-002
		860.37	12.46		
Bi-212	0.995	727.17*	11.80	4.07899E-001	3.96867E-001
Pb-212	0.593	74.81* @	10.70	8.42779E+000	2.42960E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.30750E-001	2.21011E-001
Bi-214	0.403	609.31*	46.30	5.56830E-001	1.70802E-001
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.627	74.82* @	6.21	1.45213E+001	4.31694E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.61751E-001	3.42690E-001
		351.92*	37.20	3.88671E-001	1.94818E-001
Ac-228	0.998	338.32*	11.40	6.57397E-001	5.52658E-001
		911.07*	27.70	6.68377E-001	2.37011E-001
		969.11*	16.60	5.10065E-001	2.14045E-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	0.992	1.516523E-001	8.841018E-002
K-40	0.993	1.630335E+001	1.823762E+000
TL-208	0.752	2.546031E-001	8.737000E-002
Bi-212	0.995	4.078991E-001	3.968668E-001
Pb-212 @	0.593	7.307498E-001	2.210113E-001
Bi-214	0.403	5.568300E-001	1.708020E-001
PB-214 @	0.627	4.309456E-001	1.693628E-001
Ac-228	0.998	5.869973E-001	1.526715E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	72.92	1.7018E-001	36.58
3	85.07	1.2039E-001	112.77
M 13	964.70	3.9554E-002	54.35

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: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	1.0944E-001	8.08E-002	-5.3645E-002
	1332.49	100.00	8.0783E-002		-3.7109E-002
Nb-94	702.63	100.00	1.1448E-001	9.57E-002	5.5722E-002
	871.10	100.00	9.5659E-002		-1.1601E-002
Ag-108m	79.20	7.10	8.5107E+000	1.36E-001	-5.3053E+000
	433.93	89.90	1.3551E-001		-5.7787E-002
	614.37	90.40	1.6663E-001		-3.5752E-002
	722.95	90.50	1.3655E-001		5.4979E-002
Sb-125	176.33	6.89	2.5961E+000	3.94E-001	1.2507E-002
	427.89	29.33	3.9391E-001		-2.5597E-002
	463.38	10.35	1.2876E+000		1.4253E+000
	600.56	17.80	6.3662E-001		4.2875E-002
	606.64	5.02	3.2064E+000		7.4973E+000
	635.90	11.32	9.5701E-001		-3.6188E-001
Cs-134	563.23	8.38	1.3684E+000	1.30E-001	-1.7176E-001
	569.32	15.43	7.5031E-001		-1.3728E-001
	604.70	97.60	1.5761E-001		-6.6228E-002
	795.84	85.40	1.3002E-001		-3.2264E-003
Cs-137	801.93	8.73	1.2492E+000	1.44E-001	-1.7404E+000
	661.65	85.12	1.4444E-001		8.7340E-002
Eu-152	121.78	28.40	8.7734E-001	3.55E-001	-5.4486E-001
	244.69	7.49	2.1827E+000		-4.4642E-001
	344.27	26.50	4.9816E-001		-3.7475E-001
	778.89	12.74	8.6407E-001		-5.1466E-001
	867.32	4.16	2.4898E+000		-3.3833E+000
	964.01	14.40	9.6286E-001		-1.6172E-001
	1085.78	10.00	1.0825E+000		-7.5209E-001
	1112.02	13.30	7.5378E-001		1.4097E-003
1407.95	20.70	3.5472E-001	4.1991E-002		
Eu-154	123.07	40.50	6.2130E-001	2.97E-001	4.3717E-001
	247.94	6.60	2.4199E+000		-8.5906E-001
	591.81	4.83	2.2278E+000		-2.1068E+000
	723.30	19.70	6.3107E-001		2.4925E-001
	756.87	4.33	2.2772E+000		1.3437E-001
	873.19	11.50	8.5026E-001		-2.6726E-001
	996.32	10.30	9.0701E-001		8.0210E-001
	1004.76	17.90	5.3267E-001		2.4244E-001
1274.45	35.50	2.9653E-001	1.2764E-001		
Eu-155	86.54	30.90	1.4718E+000	1.47E+000	4.8222E-001
	105.31	20.70	1.5202E+000		8.0025E-001
Am-241	59.54	35.90	3.4121E+000	3.41E+000	6.3645E-001
Cm-243	228.19	10.56	1.5545E+000	1.03E+000	-1.4358E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0264E+000	1.03E+000	-1.1362E-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 6/23/2006 1:19:52 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-10-03-194-F-

Sample Title: OOL-10-03-194-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 1:09:50 PM

Live Time: 600.0 seconds

Real Time: 601.2 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-10-03-194-F-
Title: OOL-10-03-194-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 11 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.980	1460.81*	10.67	1.56021E+001	1.65948E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.12729E-001	8.12163E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	5.02866E+000	2.01668E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.19137E-001	2.28304E-001
Bi-214	0.992	609.31*	46.30	5.77847E-001	1.49909E-001
		1120.29*	15.10	3.65023E-001	2.29631E-001
		1764.49*	15.80	3.80560E-001	2.34880E-001
Ac-228	0.998	338.32*	11.40	6.48975E-001	4.37994E-001
		911.07*	27.70	7.97477E-001	2.04072E-001
		969.11*	16.60	8.73485E-001	3.10585E-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	0.980	1.560211E+001	1.659482E+000
TL-208	0.470	3.127293E-001	8.121629E-002
Pb-212 @	0.521	7.191372E-001	2.283039E-001
Bi-214	0.992	4.845487E-001	1.107091E-001
Ac-228	0.998	7.978268E-001	1.589270E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.56	1.3288E-001	55.94

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: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	9.5183E-002	6.15E-002	4.5335E-002
	1332.49	100.00	6.1478E-002		2.9907E-002
Nb-94	702.63	100.00	9.6632E-002	8.53E-002	2.5765E-002
	871.10	100.00	8.5271E-002		-8.2125E-002
Ag-108m	79.20	7.10	4.5445E+000	1.04E-001	-4.8319E+000
	433.93	89.90	1.0446E-001		-1.1898E-001
	614.37	90.40	1.3302E-001		4.7209E-002
	722.95	90.50	1.1669E-001		4.5068E-002
Sb-125	176.33	6.89	2.1716E+000	3.40E-001	1.5802E+000
	427.89	29.33	3.3967E-001		1.7239E-001
	463.38	10.35	9.6634E-001		1.3304E-001
	600.56	17.80	4.8645E-001		-2.1612E-001
	606.64	5.02	2.5644E+000		5.2557E+000
	635.90	11.32	8.2490E-001		5.9140E-001
Cs-134	563.23	8.38	1.1049E+000	1.11E-001	-9.8999E-001
	569.32	15.43	5.7297E-001		-1.7161E-001
	604.70	97.60	1.2917E-001		-2.1036E-002
	795.84	85.40	1.1123E-001		1.7367E-002
Cs-137	801.93	8.73	1.0029E+000	1.16E-001	-1.1629E+000
	661.65	85.12	1.1568E-001		5.0928E-002
Eu-152	121.78	28.40	6.5965E-001	3.12E-001	-4.7953E-002
	244.69	7.49	1.7874E+000		-1.9085E+000
	344.27	26.50	4.2131E-001		-5.3090E-001
	778.89	12.74	7.1339E-001		-6.4409E-001
	867.32	4.16	2.2179E+000		3.7953E-001
	964.01	14.40	7.9745E-001		2.1959E-001
	1085.78	10.00	8.7888E-001		-1.9676E-001
	1112.02	13.30	6.6821E-001		-3.0851E-001
1407.95	20.70	3.1229E-001	-1.2466E-002		
Eu-154	123.07	40.50	4.6010E-001	2.43E-001	1.4793E-002
	247.94	6.60	1.8933E+000		-1.7533E+000
	591.81	4.83	1.8425E+000		1.7467E-001
	723.30	19.70	5.3744E-001		2.1396E-001
	756.87	4.33	2.0133E+000		-1.7719E+000
	873.19	11.50	7.5097E-001		4.7942E-001
	996.32	10.30	8.1801E-001		4.3056E-001
	1004.76	17.90	4.4756E-001		-1.4650E-001
1274.45	35.50	2.4282E-001	-1.0784E-001		
Eu-155	86.54	30.90	9.3435E-001	9.34E-001	1.8821E+000
	105.31	20.70	1.0330E+000		4.1467E-001
Am-241	59.54	35.90	1.0885E+000	1.09E+000	7.3916E-002
Cm-243	228.19	10.56	1.2172E+000	9.11E-001	-8.6120E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.1073E-001	9.11E-001	3.1337E-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 6/23/2006 1:02:43 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-195-F-

Sample Title: OOL-10-03-195-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 12:52:37 PM

Live Time: 600.0 seconds

Real Time: 601.4 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-10-03-195-F-
 Title: OOL-10-03-195-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	300.11	74.93	1.02	4.36E+002	122.36	1.30E+003
2	331-	345	339.50	84.78	1.17	1.77E+002	115.47	1.14E+003
3	944-	960	954.76	238.64	1.29	3.23E+002	76.39	3.83E+002
4	1174-	1187	1179.85	294.92	0.71	6.43E+001	48.21	1.96E+002
5	1395-	1415	1407.20	351.78	1.86	1.95E+002	56.77	1.78E+002
6	2031-	2049	2043.10	510.79	0.45	9.60E+001	49.34	1.57E+002
7	2324-	2344	2331.91	583.01	1.58	1.88E+002	47.82	1.10E+002
8	2427-	2446	2436.51	609.17	0.56	1.21E+002	42.62	1.00E+002
9	3635-	3654	3643.75	911.06	2.32	1.56E+002	37.22	5.86E+001
10	3868-	3885	3876.00	969.14	0.83	7.77E+001	31.26	5.43E+001
11	4476-	4490	4482.39	1120.78	1.12	3.43E+001	25.03	4.47E+001
12	5831-	5860	5845.71	1461.70	2.18	1.07E+003	66.57	1.86E+001
13	7055-	7070	7062.05	1765.86	0.84	4.72E+001	17.80	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: 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	1.35018E-001	7.17764E-002
K-40	0.975	1460.81*	10.67	1.84343E+001	1.88528E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	6.25084E-001	3.36196E-001
		583.14*	84.20	3.27695E-001	9.37360E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	6.47557E+000	2.21631E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.986	238.63*	44.60	8.11886E-001	2.30136E-001
		609.31*	46.30	3.88897E-001	1.45386E-001
		1120.29*	15.10	3.94681E-001	2.90884E-001
PB-214	0.582	1764.49*	15.80	5.72675E-001	2.23400E-001
		74.82* @	6.21	1.11576E+001	3.90371E+000
		77.11 @	10.50		
		87.30 @	4.67		
Ac-228	0.633	241.98	7.49		
		295.21*	19.20	3.98380E-001	3.05971E-001
		351.92*	37.20	6.56367E-001	2.20059E-001
		338.32	11.40		
		911.07*	27.70	9.24710E-001	2.44472E-001
		969.11*	16.60	7.80301E-001	3.24313E-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	6.423600E-002	7.454169E-002
K-40	0.975	1.843433E+001	1.885284E+000
TL-208	0.752	3.276951E-001	9.312571E-002
Pb-212 @	0.521	8.118860E-001	2.301361E-001
Bi-214	0.986	4.362754E-001	1.123909E-001
PB-214 @	0.582	5.684138E-001	1.786518E-001
Ac-228	0.633	8.723845E-001	1.952197E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.9508E-001	65.22

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	1.0058E-001	7.18E-002	3.7033E-002
	1332.49	100.00	7.1843E-002		-7.4797E-002
Nb-94	702.63	100.00	1.0023E-001	9.27E-002	7.6229E-003
	871.10	100.00	9.2669E-002		-3.0735E-003
Ag-108m	79.20	7.10	4.9401E+000	1.18E-001	-3.4257E+000
	433.93	89.90	1.2190E-001		-5.3662E-002
	614.37	90.40	1.3598E-001		5.9954E-002
	722.95	90.50	1.1840E-001		9.7275E-003
Sb-125	176.33	6.89	2.2881E+000	3.88E-001	-1.8827E+000
	427.89	29.33	3.8817E-001		1.4897E-002
	463.38	10.35	1.0694E+000		-9.0664E-002
	600.56	17.80	5.7798E-001		2.5338E-001
	606.64	5.02	2.6474E+000		6.7333E+000
	635.90	11.32	9.1306E-001		-3.7687E-001
Cs-134	563.23	8.38	1.2132E+000	1.25E-001	-6.0582E-001
	569.32	15.43	6.7772E-001		-5.6699E-001
	604.70	97.60	1.3235E-001		-6.0444E-002
	795.84	85.40	1.2487E-001		1.1617E-001
	801.93	8.73	1.1602E+000		-4.7565E-001
Cs-137	661.65	85.12	1.2654E-001	1.27E-001	4.1796E-002
Eu-152	121.78	28.40	7.1101E-001	3.40E-001	-1.9198E-001
	244.69	7.49	1.9561E+000		-4.0067E+000
	344.27	26.50	4.5486E-001		-5.4367E-001
	778.89	12.74	7.8587E-001		-1.0697E+000
	867.32	4.16	2.3679E+000		-2.2615E+000
	964.01	14.40	9.0831E-001		5.0522E-001
	1085.78	10.00	9.8741E-001		-1.4369E-001
	1112.02	13.30	7.5002E-001		-1.8186E-002
1407.95	20.70	3.4035E-001	-4.7528E-002		
Eu-154	123.07	40.50	4.9717E-001	2.40E-001	3.3516E-002
	247.94	6.60	2.0974E+000		1.1050E-002
	591.81	4.83	2.0073E+000		-4.9664E-001
	723.30	19.70	5.5044E-001		2.8563E-001
	756.87	4.33	2.3629E+000		5.1420E-001
	873.19	11.50	7.8921E-001		7.9344E-002
	996.32	10.30	8.1054E-001		-9.3493E-001
	1004.76	17.90	4.8868E-001		-1.5354E-001
1274.45	35.50	2.4040E-001	-7.3757E-003		
Eu-155	86.54	30.90	1.0005E+000	1.00E+000	3.7996E-002
	105.31	20.70	1.1544E+000		5.3882E-001
Am-241	59.54	35.90	1.1379E+000	1.14E+000	2.8839E-001
Cm-243	228.19	10.56	1.3691E+000	9.51E-001	9.2800E-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	9.0385E-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 6/23/2006 11:42:00 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-10-03-196-F-

Sample Title: OOL-10-03-196-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 11:31:58 AM

Live Time: 600.0 seconds

Real Time: 601.4 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-10-03-196-F-
Title: OOL-10-03-196-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 13 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	2.10684E-001	8.08128E-002
K-40	0.970	1460.81*	10.67	1.89275E+001	1.91497E+000
TL-208	0.902	277.35	6.80		
		510.84*	21.60	9.75388E-001	3.82519E-001
		583.14*	84.20	2.77548E-001	8.52396E-002
		860.37*	12.46	3.69700E-001	2.87369E-001
Pb-212	0.521	74.81* @	10.70	1.10246E+001	3.20002E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.682	238.63*	44.60	7.46877E-001	2.60600E-001
		609.31*	46.30	5.82334E-001	1.48256E-001
		1120.29	15.10		
Ac-228	0.998	1764.49*	15.80	7.22807E-001	2.46140E-001
		338.32*	11.40	7.47048E-001	4.70885E-001
		911.07*	27.70	9.26160E-001	2.30895E-001
		969.11*	16.60	7.84674E-001	3.50002E-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	1.491378E-001	8.269837E-002
K-40	0.970	1.892754E+001	1.914967E+000
TL-208	0.902	2.849351E-001	8.129007E-002
Pb-212 @	0.521	7.468766E-001	2.605995E-001
Bi-214	0.682	6.197296E-001	1.269980E-001
Ac-228	0.998	8.637122E-001	1.783715E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.81	1.9500E-001	99.83
5	351.62	2.5068E-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	1.0023E-001	6.74E-002	-7.5218E-002
	1332.49	100.00	6.7449E-002		5.5201E-004
Nb-94	702.63	100.00	1.0678E-001	9.30E-002	7.6064E-002
	871.10	100.00	9.2991E-002		-2.1532E-002
Ag-108m	79.20	7.10	4.8527E+000	1.19E-001	-2.6851E+000
	433.93	89.90	1.2007E-001		-7.9977E-002
	614.37	90.40	1.3553E-001		-9.6969E-003
	722.95	90.50	1.1868E-001		2.6789E-002
Sb-125	176.33	6.89	2.3041E+000	3.88E-001	-5.6359E-001
	427.89	29.33	3.8817E-001		1.3439E-001
	463.38	10.35	1.1293E+000		1.5150E+000
	600.56	17.80	5.9137E-001		4.2810E-001
	606.64	5.02	2.7278E+000		4.7179E+000
	635.90	11.32	8.4187E-001		1.4028E-001
Cs-134	563.23	8.38	1.3224E+000	1.18E-001	6.1218E-001
	569.32	15.43	6.8215E-001		-4.6496E-001
	604.70	97.60	1.3922E-001		-2.8195E-002
	795.84	85.40	1.1809E-001		4.4141E-002
	801.93	8.73	1.1070E+000		-4.8647E-001
Cs-137	661.65	85.12	1.2450E-001	1.25E-001	8.3525E-003
Eu-152	121.78	28.40	7.1993E-001	3.29E-001	-6.4813E-001
	244.69	7.49	1.9186E+000		-8.6329E-001
	344.27	26.50	4.5593E-001		-6.5628E-002
	778.89	12.74	7.6098E-001		-3.2666E-003
	867.32	4.16	2.3091E+000		5.5184E-001
	964.01	14.40	8.6781E-001		-3.2404E-001
	1085.78	10.00	9.8741E-001		-3.3803E-001
	1112.02	13.30	7.5770E-001		7.3408E-002
1407.95	20.70	3.2943E-001	-1.8631E-001		
Eu-154	123.07	40.50	5.0600E-001	2.49E-001	-1.1261E-001
	247.94	6.60	2.0614E+000		-6.2326E-001
	591.81	4.83	2.0490E+000		-1.8452E+000
	723.30	19.70	5.4398E-001		-4.3785E-002
	756.87	4.33	2.3502E+000		-6.4615E-001
	873.19	11.50	7.6591E-001		-5.0273E-001
	996.32	10.30	9.6106E-001		4.2833E-001
	1004.76	17.90	4.7610E-001		-3.5455E-001
1274.45	35.50	2.4878E-001	-1.7003E-002		
Eu-155	86.54	30.90	1.0148E+000	1.01E+000	-2.7391E-001
	105.31	20.70	1.1196E+000		-7.7152E-003
Am-241	59.54	35.90	1.1669E+000	1.17E+000	1.0104E+000
Cm-243	228.19	10.56	1.2926E+000	9.54E-001	-3.8843E-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	3.9971E-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 6/23/2006 11:26:20 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-197-F-

Sample Title: OOL-10-03-197-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 11:16:16 AM

Live Time: 600.0 seconds

Real Time: 601.4 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-10-03-197-F-
 Title: OOL-10-03-197-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-	318	291.74	72.84	1.51	3.21E+002	65.03	1.05E+003
m	2	286-	318	300.21	74.96	1.51	6.99E+002	72.64	1.67E+003
m	3	286-	318	309.07	77.17	1.51	2.06E+002	57.72	1.65E+003
	4	944-	960	954.63	238.60	1.64	3.35E+002	75.43	3.67E+002
	5	1171-	1188	1180.63	295.12	0.41	9.48E+001	56.04	2.22E+002
	6	1400-	1415	1407.04	351.74	1.84	1.59E+002	49.43	1.57E+002
	7	1846-	1858	1851.37	462.85	1.06	4.17E+001	31.92	8.43E+001
	8	2031-	2054	2043.65	510.93	1.13	1.77E+002	52.90	1.38E+002
	9	2322-	2342	2333.33	583.37	1.41	2.17E+002	42.24	6.83E+001
	10	2424-	2445	2436.91	609.27	0.54	1.43E+002	45.55	1.06E+002
	11	2900-	2915	2909.39	727.42	0.75	6.63E+001	28.25	4.57E+001
	12	3635-	3655	3646.23	911.68	1.91	1.71E+002	35.93	4.47E+001
	13	3866-	3887	3876.51	969.27	1.84	1.02E+002	34.60	5.55E+001
	14	5099-	5112	5105.79	1276.67	0.51	2.22E+001	15.22	1.38E+001
	15	5832-	5861	5846.48	1461.89	1.71	1.05E+003	66.67	2.22E+001
	16	7054-	7071	7063.14	1766.14	1.27	5.97E+001	16.11	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: 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	2.49193E-001	8.17340E-002
K-40	0.964	1460.81*	10.67	1.82182E+001	1.87255E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.15367E+000	3.89951E-001
		583.14*	84.20	3.78303E-001	8.86737E-002
		860.37	12.46		
Bi-212	0.998	727.17*	11.80	8.77440E-001	3.87961E-001
Pb-212	0.844	74.81* @	10.70	1.03737E+001	2.30138E+000
		77.11* @	18.00	1.74780E+000	5.97087E-001
		87.30 @	8.00		
		238.63*	44.60	8.41536E-001	2.30759E-001
Bi-214	0.681	609.31*	46.30	4.60601E-001	1.57296E-001
		1120.29	15.10		
		1764.49*	15.80	7.23867E-001	2.08458E-001
PB-214	0.762	74.82* @	6.21	1.78742E+001	4.17224E+000
		77.11* @	10.50	2.99622E+000	1.04774E+000
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.86809E-001	3.60819E-001
Ac-228	0.627	351.92*	37.20	5.33255E-001	1.88484E-001
		338.32	11.40		
		911.07*	27.70	1.01333E+000	2.42340E-001
		969.11*	16.60	1.01957E+000	3.63432E-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	1.674792E-001	8.390601E-002
K-40	0.964	1.821820E+001	1.872551E+000
TL-208	0.751	3.783029E-001	8.781244E-002
Bi-212	0.998	8.774399E-001	3.879610E-001
Pb-212 @	0.844	8.415362E-001	2.307593E-001
Bi-214	0.681	5.561143E-001	1.255608E-001
PB-214 @	0.762	5.447357E-001	1.670634E-001
Ac-228	0.627	1.015255E+000	2.016257E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	5.3441E-001	20.28
7	462.85	6.9514E-002	76.53
14	1276.67	3.6944E-002	68.68

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: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	8.54E-002	7.5536E-004
	1332.49	100.00	8.5354E-002		7.4683E-002
Nb-94	702.63	100.00	9.8860E-002	9.23E-002	8.4790E-002
	871.10	100.00	9.2346E-002		1.4602E-002
Ag-108m	79.20	7.10	4.8644E+000	1.20E-001	-1.6523E+000
	433.93	89.90	1.2027E-001		-7.9955E-002
	614.37	90.40	1.4085E-001		1.7939E-002
	722.95	90.50	1.2202E-001		-4.7562E-002
Sb-125	176.33	6.89	2.2870E+000	3.71E-001	-1.0491E-001
	427.89	29.33	3.7129E-001		-1.4492E-001
	463.38	10.35	1.1173E+000		1.3468E+000
	600.56	17.80	5.8872E-001		3.0697E-001
	606.64	5.02	2.6988E+000		4.5352E+000
	635.90	11.32	8.4426E-001		-1.3388E-001
Cs-134	563.23	8.38	1.2888E+000	1.20E-001	1.6271E+000
	569.32	15.43	6.4737E-001		-3.0009E-001
	604.70	97.60	1.3678E-001		7.8993E-003
	795.84	85.40	1.2039E-001		5.1389E-002
	801.93	8.73	1.0327E+000		-1.4953E+000
Cs-137	661.65	85.12	1.2625E-001	1.26E-001	4.0432E-002
Eu-152	121.78	28.40	6.9496E-001	3.38E-001	-3.6633E-001
	244.69	7.49	1.9484E+000		-2.8648E+000
	344.27	26.50	4.5324E-001		-4.2209E-001
	778.89	12.74	7.8140E-001		-6.7275E-001
	867.32	4.16	2.2411E+000		-4.4911E+000
	964.01	14.40	8.9335E-001		-8.0490E-002
	1085.78	10.00	1.0009E+000		-2.5286E-001
	1112.02	13.30	7.1307E-001		-7.8753E-001
	1407.95	20.70	3.3765E-001		-4.7928E-002
Eu-154	123.07	40.50	4.8995E-001	2.42E-001	1.6004E-001
	247.94	6.60	2.0488E+000		4.7311E-001
	591.81	4.83	2.0694E+000		1.4696E+000
	723.30	19.70	5.6187E-001		-1.5287E-001
	756.87	4.33	2.1782E+000		1.1892E+000
	873.19	11.50	8.0059E-001		-4.3454E-001
	996.32	10.30	9.7663E-001		1.2151E+000
	1004.76	17.90	5.3402E-001		1.2172E-001
	1274.45	35.50	2.4161E-001		-1.2686E-002
Eu-155	86.54	30.90	1.0077E+000	1.01E+000	1.9476E+000
	105.31	20.70	1.1110E+000		-5.7416E-001
Am-241	59.54	35.90	1.1536E+000	1.15E+000	2.2587E-001
Cm-243	228.19	10.56	1.3637E+000	9.42E-001	-8.1012E-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	-1.8838E-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 6/26/2006 11:58:24 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-198-F-

Sample Title: OOL-10-03-198-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 11:48:21 AM

Live Time: 600.0 seconds

Real Time: 600.6 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-198-F-
Title: OOL-10-03-198-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 10 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.75749E+001	1.93346E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.86610E-001	9.29371E-002
		860.37	12.46		
Bi-212	0.992	727.17*	11.80	4.75165E-001	3.80155E-001
Pb-212	0.576	74.81* @	10.70	4.86988E+000	3.45297E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.690	238.63*	44.60	5.50353E-001	2.10794E-001
		609.31*	46.30	5.74406E-001	1.69811E-001
		1120.29	15.10		
Ac-228	0.995	1764.49*	15.80	5.41605E-001	2.41690E-001
		338.32*	11.40	5.40872E-001	5.14320E-001
		911.07*	27.70	6.99901E-001	2.42486E-001
		969.11*	16.60	8.43771E-001	3.33851E-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	0.996	1.757489E+001	1.933461E+000
TL-208	0.469	2.866099E-001	9.293705E-002
Bi-212	0.992	4.751651E-001	3.801550E-001
Pb-212 @	0.576	5.503531E-001	2.107935E-001
Bi-214	0.690	5.635653E-001	1.389447E-001
Ac-228	0.995	7.230747E-001	1.833105E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.0937E-001	6.66E-002	1.3510E-002
	1332.49	100.00	6.6588E-002		9.9995E-003
Nb-94	702.63	100.00	1.2239E-001	1.06E-001	9.6888E-002
	871.10	100.00	1.0626E-001		-4.4137E-002
Ag-108m	79.20	7.10	7.5436E+000	1.24E-001	-5.4397E+000
	433.93	89.90	1.3796E-001		5.2931E-002
	614.37	90.40	1.3587E-001		-1.8135E-002
	722.95	90.50	1.2413E-001		-2.0420E-002
Sb-125	176.33	6.89	2.5608E+000	4.21E-001	7.9998E-001
	427.89	29.33	4.2137E-001		-1.4964E-001
	463.38	10.35	1.1946E+000		7.8331E-001
	600.56	17.80	6.2339E-001		7.6219E-002
	606.64	5.02	2.9964E+000		4.0430E+000
	635.90	11.32	1.0092E+000		-1.1078E+000
Cs-134	563.23	8.38	1.4505E+000	1.36E-001	2.2444E-001
	569.32	15.43	7.9929E-001		3.3511E-001
	604.70	97.60	1.5143E-001		4.2916E-002
	795.84	85.40	1.3618E-001		4.2011E-003
	801.93	8.73	1.2622E+000		-3.2792E-001
Cs-137	661.65	85.12	1.4154E-001	1.42E-001	-2.4693E-003
Eu-152	121.78	28.40	8.4105E-001	3.76E-001	2.0490E-001
	244.69	7.49	2.1176E+000		-2.6240E+000
	344.27	26.50	4.8819E-001		-6.3477E-001
	778.89	12.74	8.0368E-001		-2.9936E-001
	867.32	4.16	2.4723E+000		-1.9068E+000
	964.01	14.40	9.8376E-001		3.4046E-001
	1085.78	10.00	1.0530E+000		3.7718E-001
	1112.02	13.30	8.1961E-001		-7.8138E-001
1407.95	20.70	3.7612E-001	-8.1643E-002		
Eu-154	123.07	40.50	5.8562E-001	2.84E-001	2.7738E-002
	247.94	6.60	2.3014E+000		1.4911E+000
	591.81	4.83	2.3507E+000		4.0834E-001
	723.30	19.70	5.7441E-001		2.0308E-001
	756.87	4.33	2.5137E+000		3.3174E+000
	873.19	11.50	9.1632E-001		-6.4515E-001
	996.32	10.30	1.0262E+000		-6.1042E-001
	1004.76	17.90	5.8040E-001		-1.0262E-001
1274.45	35.50	2.8398E-001	-4.2993E-002		
Eu-155	86.54	30.90	1.3396E+000	1.34E+000	1.2391E+000
	105.31	20.70	1.4690E+000		3.4553E-001
Am-241	59.54	35.90	2.8510E+000	2.85E+000	-4.9409E-001
Cm-243	228.19	10.56	1.5419E+000	1.03E+000	-1.3830E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0301E+000	1.03E+000	-2.8801E-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 6/26/2006 11:53:59 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-199-F-

Sample Title: OOL-10-03-199-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 11:43:56 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-199-F-
Title: OOL-10-03-199-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	300.61	75.15	1.15	1.56E+002	88.62	7.49E+002
2	332-	344	340.19	85.05	0.93	9.40E+001	82.69	6.41E+002
3	945-	965	955.02	238.77	1.10	2.88E+002	82.67	4.07E+002
4	1348-	1358	1353.22	338.33	1.48	5.83E+001	37.15	1.26E+002
5	1399-	1415	1407.31	351.85	1.82	1.27E+002	47.35	1.46E+002
6	2323-	2341	2333.25	583.35	1.22	1.71E+002	40.57	7.61E+001
7	2427-	2448	2437.84	609.50	1.04	1.56E+002	40.04	6.92E+001
8	3636-	3653	3644.98	911.31	1.52	1.32E+002	30.71	3.48E+001
9	3869-	3884	3876.67	969.23	0.56	7.26E+001	26.54	3.64E+001
10	4474-	4489	4481.96	1120.57	0.37	5.22E+001	25.25	3.78E+001
11	5833-	5858	5844.94	1461.34	1.98	9.13E+002	60.37	8.93E+000
12	7053-	7067	7060.98	1765.37	0.39	3.13E+001	12.71	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: 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	2.07540E+001	2.16941E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.81531E-001	1.03280E-001
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	6.05719E+000	3.63266E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.40014E-001	3.07515E-001
Bi-214	0.994	609.31*	46.30	6.42161E-001	1.82964E-001
		1120.29*	15.10	7.69612E-001	3.81324E-001
		1764.49*	15.80	5.08235E-001	2.12873E-001
Ac-228	0.999	338.32*	11.40	8.10260E-001	5.31437E-001
		911.07*	27.70	1.00621E+000	2.60822E-001
		969.11*	16.60	9.37655E-001	3.56496E-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	2.075400E+001	2.169406E+000
TL-208	0.471	3.815308E-001	1.032804E-001
Pb-212 @	0.593	9.400140E-001	3.075154E-001
Bi-214	0.994	6.068147E-001	1.303909E-001
Ac-228	0.999	9.589739E-001	1.957059E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	85.05	1.5663E-001	87.99
5	351.85	2.1140E-001	37.33

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: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	1.2527E-001	8.62E-002	8.8135E-002
	1332.49	100.00	8.6244E-002		-3.7135E-002
Nb-94	702.63	100.00	1.1210E-001	1.12E-001	-9.3138E-002
	871.10	100.00	1.1842E-001		8.9492E-002
Ag-108m	79.20	7.10	9.2830E+000	1.39E-001	-4.0575E+000
	433.93	89.90	1.5483E-001		6.2908E-002
	614.37	90.40	1.6932E-001		7.6139E-003
	722.95	90.50	1.3936E-001		-4.0637E-002
Sb-125	176.33	6.89	2.8808E+000	4.68E-001	-5.0907E-001
	427.89	29.33	4.6754E-001		3.0876E-001
	463.38	10.35	1.3405E+000		6.7869E-001
	600.56	17.80	6.7397E-001		-3.5686E-001
	606.64	5.02	3.2114E+000		-1.2426E+000
	635.90	11.32	1.0776E+000		1.7295E-001
Cs-134	563.23	8.38	1.4925E+000	1.45E-001	-5.7378E-001
	569.32	15.43	8.0951E-001		1.9870E-001
	604.70	97.60	1.6108E-001		-3.4603E-002
	795.84	85.40	1.4517E-001		1.3962E-001
	801.93	8.73	1.3271E+000		-8.7462E-001
Cs-137	661.65	85.12	1.5055E-001	1.51E-001	8.8811E-003
Eu-152	121.78	28.40	9.3683E-001	4.49E-001	-1.5594E-001
	244.69	7.49	2.2684E+000		-1.0624E+000
	344.27	26.50	5.3628E-001		-6.8354E-001
	778.89	12.74	8.5732E-001		-5.4107E-002
	867.32	4.16	2.7417E+000		-3.8369E+000
	964.01	14.40	1.0084E+000		-2.8398E-001
	1085.78	10.00	1.1279E+000		-7.0077E-001
	1112.02	13.30	7.7065E-001		-1.2400E+000
1407.95	20.70	4.4882E-001	2.8148E-001		
Eu-154	123.07	40.50	6.4980E-001	2.92E-001	-8.3554E-002
	247.94	6.60	2.5418E+000		-1.7366E+000
	591.81	4.83	2.5741E+000		8.3504E-001
	723.30	19.70	6.4570E-001		-2.7494E-001
	756.87	4.33	2.7426E+000		9.8047E-001
	873.19	11.50	1.0120E+000		-8.6831E-001
	996.32	10.30	1.1117E+000		5.8171E-001
	1004.76	17.90	6.1183E-001		-6.4895E-001
1274.45	35.50	2.9151E-001	-6.8416E-003		
Eu-155	86.54	30.90	1.5789E+000	1.58E+000	1.6361E+000
	105.31	20.70	1.6465E+000		1.0530E+000
Am-241	59.54	35.90	3.7552E+000	3.76E+000	1.1367E+000
Cm-243	228.19	10.56	1.7025E+000	1.12E+000	6.4733E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1193E+000	1.12E+000	-6.1414E-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 6/23/2006 1:52:20 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-200-F-

Sample Title: OOL-10-03-200-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 1:42:19 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-200-F-
Title: OOL-10-03-200-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	300.89	75.24	0.77	3.76E+002	124.25	1.12E+003
2	944-	961	954.59	238.69	1.46	2.11E+002	69.90	3.26E+002
3	1397-	1418	1407.67	351.97	1.40	1.44E+002	56.37	1.82E+002
4	2325-	2341	2332.85	583.28	1.60	1.12E+002	37.85	8.19E+001
5	2428-	2444	2437.07	609.34	1.77	1.51E+002	37.37	6.80E+001
6	3636-	3654	3644.48	911.22	1.54	1.04E+002	29.65	3.72E+001
7	4475-	4491	4482.11	1120.65	0.48	5.13E+001	23.61	2.98E+001
8	5832-	5858	5845.70	1461.58	1.54	7.05E+002	54.15	1.34E+001
9	7056-	7069	7062.84	1765.89	0.31	3.32E+001	14.94	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: 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	0.979	1460.81*	10.67	1.62781E+001	1.81710E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.48645E-001	8.99853E-002
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	1.16211E+001	4.46560E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.53190E-001	2.38999E-001
Bi-214	0.985	609.31*	46.30	6.19706E-001	1.71299E-001
		1120.29*	15.10	7.49319E-001	3.54251E-001
		1764.49*	15.80	5.65833E-001	2.60652E-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	0.979	1.627810E+001	1.817099E+000
TL-208	0.469	2.486446E-001	8.998529E-002
Pb-212 @	0.575	6.531897E-001	2.389994E-001
Bi-214	0.985	6.239317E-001	1.327250E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.97	2.4049E-001	39.06
6	911.22	1.7303E-001	28.56

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: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	1.1396E-001	9.36E-002	5.6253E-002
	1332.49	100.00	9.3624E-002		2.0612E-002
Nb-94	702.63	100.00	1.2276E-001	1.10E-001	3.9854E-002
	871.10	100.00	1.0992E-001		-2.9548E-002
Ag-108m	79.20	7.10	7.7443E+000	1.28E-001	-3.6286E+000
	433.93	89.90	1.2784E-001		-4.5542E-002
	614.37	90.40	1.4924E-001		-1.9882E-001
	722.95	90.50	1.3151E-001		4.4261E-002
Sb-125	176.33	6.89	2.6763E+000	4.14E-001	-6.6257E-001
	427.89	29.33	4.1369E-001		-2.9158E-001
	463.38	10.35	1.2022E+000		2.2230E-001
	600.56	17.80	6.2133E-001		-2.1932E-001
	606.64	5.02	3.1776E+000		7.4024E+000
	635.90	11.32	1.0477E+000		-2.6052E-001
Cs-134	563.23	8.38	1.4316E+000	1.31E-001	1.1155E-001
	569.32	15.43	7.7035E-001		-5.1774E-002
	604.70	97.60	1.4690E-001		-1.1521E-001
	795.84	85.40	1.3132E-001		1.1295E-001
	801.93	8.73	1.2116E+000		-8.2899E-001
Cs-137	661.65	85.12	1.4899E-001	1.49E-001	-3.3836E-002
Eu-152	121.78	28.40	8.6401E-001	4.05E-001	6.4216E-001
	244.69	7.49	2.2074E+000		1.8400E-001
	344.27	26.50	5.3929E-001		5.1241E-002
	778.89	12.74	8.9263E-001		-2.2253E-002
	867.32	4.16	2.7248E+000		-2.2360E+000
	964.01	14.40	9.0519E-001		5.0050E-001
	1085.78	10.00	1.0478E+000		-4.5468E-001
	1112.02	13.30	8.1576E-001		5.7594E-001
1407.95	20.70	4.0504E-001	-2.6399E-002		
Eu-154	123.07	40.50	5.9978E-001	2.84E-001	5.1496E-002
	247.94	6.60	2.3713E+000		-5.6582E-001
	591.81	4.83	2.3869E+000		-1.1476E+000
	723.30	19.70	6.0807E-001		2.8269E-001
	756.87	4.33	2.6387E+000		-8.4071E-001
	873.19	11.50	9.4450E-001		-2.8769E-001
	996.32	10.30	9.7646E-001		-4.2209E-001
	1004.76	17.90	5.4805E-001		5.8465E-002
1274.45	35.50	2.8398E-001	4.5450E-002		
Eu-155	86.54	30.90	1.4036E+000	1.40E+000	1.7811E+000
	105.31	20.70	1.4859E+000		4.6052E-001
Am-241	59.54	35.90	2.8809E+000	2.88E+000	-1.0644E+000
Cm-243	228.19	10.56	1.6083E+000	1.01E+000	8.2625E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0127E+000	1.01E+000	5.2842E-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 6/23/2006 2:11:53 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-201-F-

Sample Title: OOL-10-03-201-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 2:01:52 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-201-F-
Title: OOL-10-03-201-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It contains 12 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.987	1460.81*	10.67	1.85394E+001	2.00723E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.61970E-001	8.83904E-002
		860.37	12.46		
Pb-212	0.574	74.81* @	10.70	6.65250E+000	3.36129E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.46518E-001	2.35083E-001
Bi-214	0.989	609.31*	46.30	6.81313E-001	2.04540E-001
		1120.29*	15.10	6.43337E-001	3.17712E-001
		1764.49*	15.80	7.89036E-001	3.10858E-001
PB-214	0.614	74.82* @	6.21	1.14624E+001	5.85106E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.25711E-001	3.53124E-001
		351.92*	37.20	5.38116E-001	2.16491E-001
Ac-228	0.998	338.32*	11.40	6.65694E-001	6.42665E-001
		911.07*	27.70	9.49636E-001	2.59220E-001
		969.11*	16.60	8.31274E-001	3.51272E-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	0.987	1.853941E+001	2.007232E+000
TL-208	0.469	2.619701E-001	8.839043E-002
Pb-212 @	0.574	5.465182E-001	2.350830E-001
Bi-214	0.989	6.980379E-001	1.504861E-001
PB-214 @	0.614	4.800906E-001	1.845664E-001
Ac-228	0.998	8.848236E-001	1.983896E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.1194E-001	8.79E-002	-2.3993E-002
	1332.49	100.00	8.7898E-002		6.6622E-002
Nb-94	702.63	100.00	1.2203E-001	1.08E-001	6.3388E-002
	871.10	100.00	1.0811E-001		2.3617E-002
Ag-108m	79.20	7.10	8.0162E+000	1.31E-001	-4.2439E+000
	433.93	89.90	1.4527E-001		-6.7749E-002
	614.37	90.40	1.6482E-001		-4.5137E-002
	722.95	90.50	1.3109E-001		-8.3766E-002
Sb-125	176.33	6.89	2.7429E+000	4.39E-001	2.6789E-002
	427.89	29.33	4.3877E-001		2.6100E-001
	463.38	10.35	1.2022E+000		-2.2602E-002
	600.56	17.80	6.3356E-001		-2.5353E-001
	606.64	5.02	3.3248E+000		-2.8528E-001
	635.90	11.32	1.0818E+000		5.6615E-001
Cs-134	563.23	8.38	1.4124E+000	1.33E-001	2.1040E-003
	569.32	15.43	7.7664E-001		-1.4199E-001
	604.70	97.60	1.5254E-001		-2.1807E-002
	795.84	85.40	1.3280E-001		1.0285E-001
Cs-137	801.93	8.73	1.1854E+000	1.40E-001	-1.5623E-001
	661.65	85.12	1.3983E-001		4.4021E-002
Eu-152	121.78	28.40	8.8870E-001	4.43E-001	6.3663E-001
	244.69	7.49	2.2786E+000		1.3635E+000
	344.27	26.50	5.4551E-001		-5.9409E-002
	778.89	12.74	9.3687E-001		5.6325E-002
	867.32	4.16	2.5963E+000		-2.8594E+000
	964.01	14.40	9.7620E-001		2.3378E-002
	1085.78	10.00	1.0582E+000		-2.7236E-001
	1112.02	13.30	8.6796E-001		3.0519E-001
1407.95	20.70	4.4285E-001	2.8611E-001		
Eu-154	123.07	40.50	6.1463E-001	2.77E-001	-2.2802E-001
	247.94	6.60	2.4003E+000		-5.5303E-002
	591.81	4.83	2.4012E+000		-9.0093E-001
	723.30	19.70	6.0227E-001		-2.7782E-001
	756.87	4.33	2.7307E+000		4.1983E-001
	873.19	11.50	9.5631E-001		1.8418E-001
	996.32	10.30	1.0116E+000		-6.6556E-001
	1004.76	17.90	6.1094E-001		1.0600E-001
1274.45	35.50	2.7697E-001	-1.1313E-001		
Eu-155	86.54	30.90	1.4248E+000	1.42E+000	1.5104E+000
	105.31	20.70	1.5058E+000		-4.8015E-001
Am-241	59.54	35.90	2.9133E+000	2.91E+000	-5.2786E-001
Cm-243	228.19	10.56	1.6388E+000	1.07E+000	7.8701E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0726E+000	1.07E+000	-1.5197E-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 6/23/2006 2:29:09 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-202-F-

Sample Title: OOL-10-03-202-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 2:19:07 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-202-F-
Title: OOL-10-03-202-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	300.73	75.21	0.51	1.15E+002	92.45	8.35E+002
2	946-	962	954.93	238.77	1.44	1.60E+002	71.29	3.71E+002
3	1401-	1414	1408.38	352.14	0.82	1.22E+002	42.12	1.23E+002
4	2322-	2342	2332.68	583.24	0.65	1.12E+002	42.24	9.70E+001
5	2429-	2449	2437.49	609.44	1.13	1.39E+002	42.29	9.01E+001
6	3635-	3653	3644.76	911.29	2.44	1.02E+002	30.25	4.03E+001
7	3871-	3883	3877.56	969.50	0.80	4.06E+001	21.90	3.14E+001
8	4475-	4489	4482.93	1120.85	1.24	3.90E+001	22.51	3.20E+001
9	5831-	5860	5845.84	1461.61	2.17	7.06E+002	56.40	2.59E+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	0.977	1460.81*	10.67	1.63138E+001	1.85542E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.48349E-001	9.91033E-002
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	3.57452E+000	2.94686E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.95562E-001	2.33552E-001
Bi-214	0.709	609.31*	46.30	5.69927E-001	1.87201E-001
		1120.29*	15.10	5.69981E-001	3.34610E-001
		1764.49	15.80		
Ac-228	0.626	338.32	11.40		
		911.07*	27.70	7.71388E-001	2.46065E-001
		969.11*	16.60	5.21130E-001	2.86671E-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	0.977	1.631378E+001	1.855419E+000
TL-208	0.470	2.483486E-001	9.910335E-002
Pb-212 @	0.575	4.955623E-001	2.335516E-001
Bi-214	0.709	5.699397E-001	1.633716E-001
Ac-228	0.626	6.652238E-001	1.867146E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	352.14	2.0339E-001	34.52

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: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	1.0937E-001	8.64E-002	-4.0468E-003
	1332.49	100.00	8.6402E-002		2.0813E-002
Nb-94	702.63	100.00	1.1716E-001	1.01E-001	-2.3589E-002
	871.10	100.00	1.0149E-001		2.1039E-002
Ag-108m	79.20	7.10	7.5205E+000	1.35E-001	-4.6320E+000
	433.93	89.90	1.3458E-001		-7.7774E-002
	614.37	90.40	1.5928E-001		-1.5775E-002
	722.95	90.50	1.3606E-001		7.8108E-002
Sb-125	176.33	6.89	2.6430E+000	4.11E-001	1.6975E+000
	427.89	29.33	4.1109E-001		1.0596E-001
	463.38	10.35	1.2022E+000		-1.2672E-001
	600.56	17.80	6.1305E-001		-2.0570E-001
	606.64	5.02	3.1524E+000		-5.4287E-001
	635.90	11.32	1.0446E+000		-6.7692E-001
Cs-134	563.23	8.38	1.3969E+000	1.23E-001	-2.8479E-001
	569.32	15.43	7.4460E-001		-1.9601E-001
	604.70	97.60	1.4632E-001		-6.3374E-002
	795.84	85.40	1.2312E-001		4.5855E-002
	801.93	8.73	1.1256E+000		-1.8014E+000
Cs-137	661.65	85.12	1.4154E-001	1.42E-001	-1.8663E-002
Eu-152	121.78	28.40	8.6550E-001	4.28E-001	2.8987E-001
	244.69	7.49	2.1814E+000		-2.6018E-001
	344.27	26.50	5.2378E-001		-7.7283E-001
	778.89	12.74	8.8938E-001		9.9697E-002
	867.32	4.16	2.4953E+000		-1.7358E+000
	964.01	14.40	9.1336E-001		-3.4938E-001
	1085.78	10.00	1.0940E+000		-4.0256E-001
	1112.02	13.30	8.5706E-001		7.3617E-001
Eu-154	1407.95	20.70	4.2816E-001	2.64E-001	2.3598E-001
	123.07	40.50	5.9706E-001		2.1451E-001
	247.94	6.60	2.3121E+000		-2.2973E-001
	591.81	4.83	2.3507E+000		-2.1643E+000
	723.30	19.70	6.2137E-001		2.0922E-001
	756.87	4.33	2.6667E+000		5.5569E-001
	873.19	11.50	9.0810E-001		1.3437E+000
	996.32	10.30	1.0214E+000		-1.1164E-001
Eu-155	1004.76	17.90	5.6886E-001	1.37E+000	-5.1338E-002
	1274.45	35.50	2.6422E-001		-2.3891E-001
	86.54	30.90	1.3708E+000		1.8805E+000
Am-241	105.31	20.70	1.4812E+000	2.85E+000	4.5660E-001
	59.54	35.90	2.8469E+000		1.6131E-001
Cm-243	228.19	10.56	1.5455E+000	1.03E+000	-2.0624E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0278E+000	1.03E+000	2.5473E-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 6/23/2006 2:47:02 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-203-F-

Sample Title: OOL-10-03-203-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 2:37:01 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-203-F-
Title: OOL-10-03-203-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 10 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.68759E+001	1.87388E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.15679E-001	9.21708E-002
		860.37	12.46		
Bi-212	0.996	727.17*	11.80	8.14761E-001	4.55298E-001
Pb-212	0.419	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.691	238.63*	44.60	7.16402E-001	2.46564E-001
		609.31*	46.30	5.14593E-001	1.76796E-001
		1120.29	15.10		
PB-214	0.530	1764.49*	15.80	4.29628E-001	2.69797E-001
		74.82 @	6.21		
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	2.86197E-001	2.69654E-001
Ac-228	0.628	351.92*	37.20	5.39223E-001	2.03841E-001
		338.32	11.40		
		911.07*	27.70	6.05674E-001	2.63560E-001
		969.11*	16.60	9.91531E-001	3.46789E-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	0.990	1.687595E+001	1.873884E+000
TL-208	0.467	3.156789E-001	9.217075E-002
Bi-212	0.996	8.147606E-001	4.552979E-001
Pb-212 @	0.419	7.164016E-001	2.465639E-001
Bi-214	0.691	4.890684E-001	1.478747E-001
PB-214 @	0.530	4.472126E-001	1.626085E-001
Ac-228	0.628	7.469466E-001	2.098366E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.0565E-001	8.94E-002	-1.4611E-002
	1332.49	100.00	8.9366E-002		-1.5540E-002
Nb-94	702.63	100.00	1.1830E-001	1.09E-001	-1.5689E-002
	871.10	100.00	1.0856E-001		4.0540E-002
Ag-108m	79.20	7.10	7.6401E+000	1.38E-001	-1.9054E+001
	433.93	89.90	1.3824E-001		1.1922E-001
	614.37	90.40	1.4991E-001		-1.3505E-001
	722.95	90.50	1.4959E-001		-1.1566E-002
Sb-125	176.33	6.89	2.6150E+000	4.15E-001	1.1362E+000
	427.89	29.33	4.1455E-001		-5.0815E-001
	463.38	10.35	1.2397E+000		1.5582E+000
	600.56	17.80	6.4947E-001		-1.1694E-001
	606.64	5.02	3.2026E+000		6.7960E+000
	635.90	11.32	1.0726E+000		-1.2612E-001
Cs-134	563.23	8.38	1.4655E+000	1.24E-001	9.7199E-002
	569.32	15.43	7.7664E-001		1.4164E-001
	604.70	97.60	1.5115E-001		-6.1026E-002
	795.84	85.40	1.2365E-001		5.0902E-002
Cs-137	801.93	8.73	1.1854E+000	1.47E-001	-8.1766E-001
	661.65	85.12	1.4737E-001		9.9400E-002
Eu-152	121.78	28.40	8.6521E-001	3.85E-001	2.6881E-001
	244.69	7.49	2.2618E+000		-1.2644E+000
	344.27	26.50	4.9959E-001		-7.4686E-001
	778.89	12.74	8.1088E-001		-8.8873E-001
	867.32	4.16	2.6182E+000		-1.8394E+000
	964.01	14.40	9.5573E-001		-4.9187E-002
	1085.78	10.00	1.0634E+000		4.3808E-001
	1112.02	13.30	8.0411E-001		-3.9326E-001
1407.95	20.70	3.8462E-001	8.5768E-002		
Eu-154	123.07	40.50	5.9643E-001	2.49E-001	-1.7077E-001
	247.94	6.60	2.4064E+000		-3.5016E+000
	591.81	4.83	2.2309E+000		2.2052E-001
	723.30	19.70	6.8895E-001		-1.4169E-001
	756.87	4.33	2.7398E+000		-3.0225E-001
	873.19	11.50	9.1632E-001		1.5475E-001
	996.32	10.30	9.7133E-001		1.2335E+000
	1004.76	17.90	5.8608E-001		1.1896E-002
1274.45	35.50	2.4879E-001	-2.4386E-001		
Eu-155	86.54	30.90	1.3704E+000	1.37E+000	1.2463E+000
	105.31	20.70	1.4457E+000		-2.2771E+000
Am-241	59.54	35.90	2.8386E+000	2.84E+000	1.9617E-001
Cm-243	228.19	10.56	1.5431E+000	1.05E+000	-3.3089E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0471E+000	1.05E+000	-1.1220E-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 6/23/2006 3:01:14 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-204-F-

Sample Title: OOL-10-03-204-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 2:51:13 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-204-F-
 Title: OOL-10-03-204-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-	964	954.41	238.64	1.18	2.95E+002	81.00	4.15E+002
2	1346-	1359	1353.48	338.42	0.60	7.09E+001	41.01	1.33E+002
3	1397-	1418	1407.73	351.98	1.50	1.60E+002	57.64	1.88E+002
4	2035-	2050	2044.73	511.25	0.52	7.71E+001	40.99	1.20E+002
5	2324-	2341	2332.74	583.25	0.73	1.76E+002	40.96	7.95E+001
6	2425-	2445	2437.08	609.34	1.32	1.41E+002	42.97	9.36E+001
7	3635-	3654	3644.46	911.22	1.27	1.15E+002	30.15	3.48E+001
8	3868-	3884	3876.34	969.19	1.04	7.71E+001	26.96	3.59E+001
9	4473-	4488	4481.78	1120.56	0.88	5.49E+001	21.42	2.01E+001
10	5831-	5859	5844.67	1461.32	2.13	8.27E+002	57.39	6.84E+000
11	7052-	7070	7059.88	1765.15	0.41	5.19E+001	15.01	2.12E+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: 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	0.991	1460.81*	10.67	1.91089E+001	2.03752E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	6.32945E-001	3.51037E-001
		583.14*	84.20	3.89367E-001	1.04029E-001
		860.37	12.46		
Pb-212	0.420	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.996	238.63*	44.60	9.10604E-001	2.88093E-001
		609.31*	46.30	5.80448E-001	1.90270E-001
		1120.29*	15.10	8.02184E-001	3.24557E-001
Ac-228	0.999	1764.49*	15.80	8.83168E-001	2.70321E-001
		338.32*	11.40	9.49727E-001	5.69527E-001
		911.07*	27.70	8.74494E-001	2.49940E-001
		969.11*	16.60	9.90951E-001	3.61671E-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
X	ANN	0.998		
	K-40	0.991	1.910890E+001	2.037524E+000
	TL-208	0.750	4.090319E-001	9.974185E-002
	Pb-212 @	0.420	9.106041E-001	2.880927E-001
	Bi-214	0.996	7.034324E-001	1.403026E-001
	Ac-228	0.999	9.164695E-001	1.933994E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.98	2.6681E-001	36.01

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: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	1.1296E-001	8.25E-002	-3.3510E-002
	1332.49	100.00	8.2534E-002		8.5257E-003
Nb-94	702.63	100.00	1.1286E-001	1.13E-001	-3.5626E-002
	871.10	100.00	1.1979E-001		1.0614E-001
Ag-108m	79.20	7.10	7.8737E+000	1.42E-001	-2.4214E+001
	433.93	89.90	1.4234E-001		6.6549E-002
	614.37	90.40	1.6022E-001		-7.1579E-002
	722.95	90.50	1.4586E-001		4.8010E-002
Sb-125	176.33	6.89	2.6304E+000	4.25E-001	-5.1891E-001
	427.89	29.33	4.2474E-001		-1.0511E-001
	463.38	10.35	1.2996E+000		9.7179E-001
	600.56	17.80	6.6691E-001		1.3940E-001
	606.64	5.02	3.2423E+000		4.9310E+000
	635.90	11.32	1.0319E+000		-1.5245E-001
Cs-134	563.23	8.38	1.5202E+000	1.42E-001	2.0753E-001
	569.32	15.43	8.4844E-001		2.3078E-001
	604.70	97.60	1.5420E-001		1.2971E-002
	795.84	85.40	1.4178E-001		3.1634E-002
	801.93	8.73	1.2818E+000		-2.1987E+000
Cs-137	661.65	85.12	1.4655E-001	1.47E-001	-3.3237E-002
Eu-152	121.78	28.40	8.8754E-001	4.36E-001	-2.6222E-001
	244.69	7.49	2.2836E+000		-9.0801E-001
	344.27	26.50	5.2019E-001		-2.3791E-001
	778.89	12.74	8.5619E-001		-1.6067E+000
	867.32	4.16	2.8171E+000		-4.9289E+000
	964.01	14.40	9.9126E-001		-2.3114E-003
	1085.78	10.00	1.0634E+000		1.0485E+000
	1112.02	13.30	8.2724E-001		-6.5633E-001
1407.95	20.70	4.3557E-001	-1.4546E-001		
Eu-154	123.07	40.50	6.1910E-001	2.47E-001	-1.0425E-001
	247.94	6.60	2.3879E+000		-7.0200E-001
	591.81	4.83	2.4852E+000		-8.3107E-001
	723.30	19.70	6.8046E-001		6.7507E-001
	756.87	4.33	2.8021E+000		5.9078E-001
	873.19	11.50	1.0205E+000		3.0831E-001
	996.32	10.30	1.0214E+000		-2.6218E-001
	1004.76	17.90	6.0002E-001		4.2629E-001
1274.45	35.50	2.4679E-001	-2.5254E-001		
Eu-155	86.54	30.90	1.4486E+000	1.45E+000	2.0685E+000
	105.31	20.70	1.5363E+000		3.7809E-001
Am-241	59.54	35.90	2.8958E+000	2.90E+000	-9.5267E-001
Cm-243	228.19	10.56	1.6807E+000	1.11E+000	-6.9871E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1050E+000	1.11E+000	2.3199E-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 6/23/2006 3:19:34 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-205-F-

Sample Title: OOL-10-03-205-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 3:09:23 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-205-F-
Title: OOL-10-03-205-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 10 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.989	1460.81*	10.67	1.94944E+001	2.10765E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.08979E-001	9.43491E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	1.38221E+001	4.74465E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.96010E-001	2.57497E-001
Bi-214	0.997	609.31*	46.30	5.48125E-001	1.73394E-001
		1120.29*	15.10	5.62108E-001	2.85715E-001
		1764.49*	15.80	5.89951E-001	2.73429E-001
Ac-228	0.628	338.32	11.40		
		911.07*	27.70	1.17185E+000	2.96730E-001
		969.11*	16.60	7.39392E-001	3.64033E-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	0.989	1.949439E+001	2.107648E+000
TL-208	0.470	3.089787E-001	9.434907E-002
Pb-212 @	0.576	6.960102E-001	2.574967E-001
Bi-214	0.997	5.605343E-001	1.303147E-001
Ac-228	0.628	9.992174E-001	2.300015E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.94	2.0988E-001	36.66

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	1.1932E-001	8.56E-002	1.3134E-002
	1332.49	100.00	8.5644E-002		3.4069E-003
Nb-94	702.63	100.00	1.2312E-001	1.11E-001	7.3269E-003
	871.10	100.00	1.1081E-001		4.7689E-002
Ag-108m	79.20	7.10	7.7172E+000	1.33E-001	-6.6589E+000
	433.93	89.90	1.3314E-001		-8.2823E-002
	614.37	90.40	1.5580E-001		-1.2433E-001
	722.95	90.50	1.3525E-001		8.9344E-002
Sb-125	176.33	6.89	2.6680E+000	4.35E-001	-1.3563E+000
	427.89	29.33	4.3469E-001		4.3177E-002
	463.38	10.35	1.2519E+000		-6.8796E-001
	600.56	17.80	6.2951E-001		-5.7859E-001
	606.64	5.02	3.2026E+000		5.9418E+000
	635.90	11.32	9.8263E-001		-8.9196E-001
Cs-134	563.23	8.38	1.4803E+000	1.27E-001	3.2957E-001
	569.32	15.43	7.9318E-001		-4.2057E-002
	604.70	97.60	1.5115E-001		-1.5846E-001
	795.84	85.40	1.2729E-001		2.2346E-002
	801.93	8.73	1.1854E+000		-1.8944E+000
Cs-137	661.65	85.12	1.3365E-001	1.34E-001	-8.1974E-002
Eu-152	121.78	28.40	8.7615E-001	3.80E-001	8.0553E-001
	244.69	7.49	2.2416E+000		-9.0099E-001
	344.27	26.50	5.2664E-001		-8.3535E-001
	778.89	12.74	8.3907E-001		-2.6930E-001
	867.32	4.16	2.7352E+000		-1.4677E+000
	964.01	14.40	9.2414E-001		-3.5582E-001
	1085.78	10.00	1.0319E+000		-1.4959E+000
	1112.02	13.30	8.1961E-001		-7.4397E-001
1407.95	20.70	3.8040E-001	3.0833E-002		
Eu-154	123.07	40.50	6.0705E-001	2.68E-001	-9.3241E-002
	247.94	6.60	2.4391E+000		9.6259E-001
	591.81	4.83	2.2916E+000		-2.4858E+000
	723.30	19.70	6.2137E-001		4.1789E-001
	756.87	4.33	2.7217E+000		1.9246E+000
	873.19	11.50	9.6021E-001		-9.5671E-001
	996.32	10.30	1.0066E+000		-2.9247E-001
	1004.76	17.90	6.1899E-001		7.4873E-001
1274.45	35.50	2.6793E-001	-2.7251E-001		
Eu-155	86.54	30.90	1.4127E+000	1.41E+000	1.3343E+000
	105.31	20.70	1.5332E+000		6.4214E-001
Am-241	59.54	35.90	2.8809E+000	2.88E+000	-6.0506E-001
Cm-243	228.19	10.56	1.6242E+000	1.08E+000	-5.5742E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0825E+000	1.08E+000	1.1190E+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 6/23/2006 3:32:29 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-206-F-

Sample Title: OOL-10-03-206-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 3:22:24 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-206-F-
Title: OOL-10-03-206-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	300.82	75.23	0.63	2.77E+002	127.93	1.22E+003
2	945-	962	954.34	238.62	1.84	2.00E+002	73.76	3.73E+002
3	1401-	1415	1408.66	352.21	1.63	1.47E+002	45.48	1.36E+002
4	2324-	2339	2331.55	582.96	1.92	1.16E+002	35.89	7.24E+001
5	2427-	2447	2436.74	609.26	1.61	1.72E+002	42.09	7.91E+001
6	3635-	3653	3645.30	911.43	0.94	1.21E+002	33.41	4.99E+001
7	3867-	3883	3875.27	968.92	0.67	3.78E+001	29.34	5.92E+001
8	5831-	5858	5844.69	1461.32	1.81	8.26E+002	58.39	1.38E+001
9	7054-	7067	7060.06	1765.20	0.36	4.01E+001	15.10	6.94E+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	0.991	1460.81*	10.67	1.90873E+001	2.05129E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.56347E-001	8.63072E-002
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	8.56705E+000	4.29874E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.17076E-001	2.47522E-001
Bi-214	0.692	609.31*	46.30	7.05255E-001	1.93327E-001
		1120.29	15.10		
		1764.49*	15.80	6.82031E-001	2.65873E-001
Ac-228	0.626	338.32	11.40		
		911.07*	27.70	9.18955E-001	2.74636E-001
		969.11*	16.60	4.86269E-001	3.80340E-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	0.991	1.908731E+001	2.051286E+000
TL-208	0.469	2.563467E-001	8.630723E-002
Pb-212 @	0.575	6.170756E-001	2.475221E-001
Bi-214	0.692	6.972224E-001	1.563604E-001
Ac-228	0.626	7.706685E-001	2.226567E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	352.21	2.4488E-001	30.95

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: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	1.1396E-001	9.90E-002	2.4112E-002
	1332.49	100.00	9.8997E-002		-2.7530E-002
Nb-94	702.63	100.00	1.2312E-001	1.02E-001	-2.8074E-003
	871.10	100.00	1.0198E-001		-9.8543E-002
Ag-108m	79.20	7.10	7.9442E+000	1.36E-001	-3.0636E+000
	433.93	89.90	1.4762E-001		9.3483E-002
	614.37	90.40	1.5897E-001		-6.7589E-003
	722.95	90.50	1.3606E-001		2.7076E-002
Sb-125	176.33	6.89	2.7254E+000	4.45E-001	-5.6842E-001
	427.89	29.33	4.4521E-001		9.2214E-003
	463.38	10.35	1.2831E+000		9.3046E-001
	600.56	17.80	6.2748E-001		5.7998E-002
	606.64	5.02	3.2619E+000		-1.7974E-001
	635.90	11.32	1.1177E+000		1.0961E+000
Cs-134	563.23	8.38	1.5309E+000	1.36E-001	7.6663E-001
	569.32	15.43	7.8702E-001		1.5534E-001
	604.70	97.60	1.5199E-001		-2.5082E-002
	795.84	85.40	1.3618E-001		1.5177E-001
Cs-137	801.93	8.73	1.1960E+000	1.39E-001	-1.6706E+000
	661.65	85.12	1.3896E-001		-1.0090E-001
Eu-152	121.78	28.40	8.7498E-001	4.09E-001	-2.0664E-001
	244.69	7.49	2.1779E+000		-1.6493E+000
	344.27	26.50	5.2593E-001		-6.0741E-001
	778.89	12.74	8.6293E-001		-4.7403E-001
	867.32	4.16	2.6182E+000		-1.4902E+000
	964.01	14.40	9.9870E-001		7.1237E-001
	1085.78	10.00	1.0890E+000		3.8668E-003
	1112.02	13.30	8.2724E-001		-5.1859E-001
1407.95	20.70	4.0899E-001	-1.2162E-001		
Eu-154	123.07	40.50	6.1178E-001	2.91E-001	3.5478E-001
	247.94	6.60	2.3143E+000		-1.5069E+000
	591.81	4.83	2.4714E+000		-4.7430E-001
	723.30	19.70	6.2325E-001		1.6396E-001
	756.87	4.33	2.7488E+000		7.5540E-001
	873.19	11.50	9.0810E-001		6.2204E-001
	996.32	10.30	1.0165E+000		6.4170E-001
	1004.76	17.90	6.2693E-001		8.5084E-002
1274.45	35.50	2.9081E-001	2.8589E-002		
Eu-155	86.54	30.90	1.4307E+000	1.43E+000	1.2526E+000
	105.31	20.70	1.5109E+000		4.1776E-001
Am-241	59.54	35.90	2.9439E+000	2.94E+000	-1.5762E+000
Cm-243	228.19	10.56	1.6521E+000	1.10E+000	1.0767E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1029E+000	1.10E+000	7.0728E-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 6/23/2006 3:47:14 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-207-F-

Sample Title: OOL-10-03-207-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 3:37:09 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-207-F-
Title: OOL-10-03-207-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 10 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.000	511.00*	100.00	1.67149E-001	8.23826E-002
K-40	0.990	1460.81*	10.67	1.87854E+001	2.01303E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	7.73839E-001	3.86601E-001
		583.14*	84.20	2.76348E-001	9.22398E-002
		860.37	12.46		
Pb-212	0.420	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.685	238.63*	44.60	6.91716E-001	2.53158E-001
		609.31*	46.30	6.69004E-001	1.75025E-001
		1120.29	15.10		
		1764.49*	15.80	5.85936E-001	2.70649E-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	1.000	1.074581E-001	8.473529E-002
K-40	0.990	1.878538E+001	2.013033E+000
TL-208	0.751	2.763478E-001	9.179909E-002
Pb-212 @	0.420	6.917163E-001	2.531584E-001
Bi-214	0.685	6.445087E-001	1.469707E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.97	2.3615E-001	39.98
3	408.83	5.8210E-002	77.83
6	590.85	2.3547E-002	123.80
8	911.42	2.3867E-001	23.64

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: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	1.0726E-001	8.56E-002	-2.0029E-003
	1332.49	100.00	8.5644E-002		-1.5876E-002
Nb-94	702.63	100.00	1.1716E-001	1.05E-001	8.8543E-002
	871.10	100.00	1.0532E-001		7.3555E-002
Ag-108m	79.20	7.10	7.5828E+000	1.38E-001	-1.9615E+001
	433.93	89.90	1.4044E-001		-2.3437E-002
	614.37	90.40	1.5707E-001		2.3363E-002
	722.95	90.50	1.3808E-001		3.3492E-002
Sb-125	176.33	6.89	2.5652E+000	4.43E-001	5.9492E-001
	427.89	29.33	4.4281E-001		3.5498E-001
	463.38	10.35	1.2347E+000		1.7715E-001
	600.56	17.80	6.1927E-001		-1.8129E-002
	606.64	5.02	3.0806E+000		-1.9675E+000
	635.90	11.32	1.0695E+000		6.4312E-001
Cs-134	563.23	8.38	1.5521E+000	1.30E-001	4.4287E-001
	569.32	15.43	8.0132E-001		6.8603E-001
	604.70	97.60	1.4805E-001		-7.3975E-002
	795.84	85.40	1.3033E-001		2.7385E-002
Cs-137	801.93	8.73	1.2572E+000	1.35E-001	-2.0832E-001
	661.65	85.12	1.3545E-001		-6.5279E-002
Eu-152	121.78	28.40	8.6133E-001	3.63E-001	-2.2301E-002
	244.69	7.49	2.2296E+000		1.0574E+000
	344.27	26.50	5.2091E-001		-5.1503E-001
	778.89	12.74	8.6629E-001		-3.3958E-001
	867.32	4.16	2.6290E+000		-4.4678E+000
	964.01	14.40	8.9693E-001		-2.9383E-001
	1085.78	10.00	1.0634E+000		-3.4343E-001
	1112.02	13.30	7.6803E-001		-8.1754E-001
1407.95	20.70	3.6295E-001	-1.8728E-001		
Eu-154	123.07	40.50	5.9769E-001	2.79E-001	-4.9378E-002
	247.94	6.60	2.3962E+000		-3.2815E-001
	591.81	4.83	2.3507E+000		-1.9613E+000
	723.30	19.70	6.3439E-001		-3.8080E-002
	756.87	4.33	2.7217E+000		1.1546E+000
	873.19	11.50	8.9562E-001		3.0247E-001
	996.32	10.30	1.0214E+000		4.1083E-001
	1004.76	17.90	5.7754E-001		6.6732E-002
1274.45	35.50	2.7874E-001	-9.9478E-002		
Eu-155	86.54	30.90	1.4066E+000	1.41E+000	1.9541E+000
	105.31	20.70	1.5003E+000		-5.0344E-001
Am-241	59.54	35.90	2.8633E+000	2.86E+000	2.9372E-001
Cm-243	228.19	10.56	1.5980E+000	1.08E+000	7.4181E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0792E+000	1.08E+000	5.6305E-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 6/23/2006 4:04:00 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-208-F-

Sample Title: OOL-10-03-208-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 3:53:56 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-208-F-
Title: OOL-10-03-208-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	944-	961	954.35	238.63	1.51	2.38E+002	71.53	3.36E+002
2	1044-	1054	1049.46	262.41	0.54	3.26E+001	37.08	1.36E+002
3	1350-	1363	1354.40	338.65	0.70	5.68E+001	41.84	1.43E+002
4	1402-	1417	1408.07	352.07	1.88	1.17E+002	44.44	1.32E+002
5	2326-	2341	2332.46	583.19	1.26	1.26E+002	36.13	7.08E+001
6	2428-	2447	2436.10	609.10	1.42	1.47E+002	41.63	8.56E+001
7	3635-	3654	3644.68	911.27	1.70	1.18E+002	31.02	3.76E+001
8	5831-	5857	5844.81	1461.35	1.95	7.64E+002	55.21	6.68E+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: 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	0.989	1460.81*	10.67	1.76573E+001	1.91582E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.79845E-001	8.80351E-002
		860.37	12.46		
Pb-212	0.420	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.406	238.63*	44.60	7.34971E-001	2.49211E-001
		609.31*	46.30	6.05000E-001	1.86366E-001
		1120.29	15.10		
Ac-228	0.540	1764.49	15.80		
		338.32*	11.40	7.61068E-001	5.73569E-001
		911.07*	27.70	8.98609E-001	2.57105E-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: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	0.989	1.765729E+001	1.915818E+000
TL-208	0.470	2.798452E-001	8.803512E-002
Pb-212 @	0.420	7.349713E-001	2.492110E-001
Bi-214	0.406	6.050002E-001	1.863657E-001
Ac-228	0.540	8.755966E-001	2.346127E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	262.41	5.4403E-002	113.61
4	352.07	1.9531E-001	37.92

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: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	1.1980E-001	8.49E-002	4.1811E-002
	1332.49	100.00	8.4878E-002		-1.7611E-002
Nb-94	702.63	100.00	1.2457E-001	1.02E-001	7.1923E-002
	871.10	100.00	1.0198E-001		-1.2345E-001
Ag-108m	79.20	7.10	7.6401E+000	1.44E-001	-1.7251E+001
	433.93	89.90	1.4500E-001		-6.7206E-003
	614.37	90.40	1.5802E-001		-1.5301E-002
	722.95	90.50	1.4357E-001		-9.7143E-002
Sb-125	176.33	6.89	2.6220E+000	4.40E-001	1.0017E+000
	427.89	29.33	4.4039E-001		2.3776E-001
	463.38	10.35	1.2323E+000		-2.2080E-001
	600.56	17.80	6.7827E-001		-7.9421E-002
	606.64	5.02	3.3152E+000		-3.7748E-001
	635.90	11.32	9.9932E-001		-2.4154E-001
Cs-134	563.23	8.38	1.4047E+000	1.41E-001	-2.1381E-001
	569.32	15.43	7.2241E-001		-7.8295E-005
	604.70	97.60	1.5984E-001		-1.8193E-002
	795.84	85.40	1.4132E-001		1.6052E-001
Cs-137	801.93	8.73	1.2012E+000	1.46E-001	-1.7356E+000
	661.65	85.12	1.4573E-001		7.7361E-002
Eu-152	121.78	28.40	8.4746E-001	3.97E-001	-2.5849E-001
	244.69	7.49	2.2685E+000		1.0312E-001
	344.27	26.50	4.9809E-001		-9.2730E-002
	778.89	12.74	8.3560E-001		-1.6056E-001
	867.32	4.16	2.5631E+000		-1.7116E+000
	964.01	14.40	9.3744E-001		3.1648E-001
	1085.78	10.00	1.1479E+000		-3.1254E-001
	1112.02	13.30	8.3103E-001		-1.4657E-001
1407.95	20.70	3.9701E-001	-4.9552E-001		
Eu-154	123.07	40.50	5.8455E-001	2.84E-001	-3.5111E-001
	247.94	6.60	2.3817E+000		-2.8895E+000
	591.81	4.83	2.4921E+000		1.8283E+000
	723.30	19.70	6.7703E-001		3.1988E-001
	756.87	4.33	2.5818E+000		-5.2917E-001
	873.19	11.50	9.4845E-001		7.7561E-001
	996.32	10.30	1.0311E+000		4.3318E-001
	1004.76	17.90	5.7177E-001		1.3449E-001
1274.45	35.50	2.8398E-001	-1.6174E-001		
Eu-155	86.54	30.90	1.3905E+000	1.39E+000	1.4910E+000
	105.31	20.70	1.4756E+000		-4.6866E-001
Am-241	59.54	35.90	2.8728E+000	2.87E+000	9.1676E-001
Cm-243	228.19	10.56	1.5725E+000	1.06E+000	-1.3298E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0616E+000	1.06E+000	-3.7374E-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 6/23/2006 7:02:22 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-209-F-

Sample Title: OOL-10-03-209-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 6:52:19 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-209-F-
 Title: OOL-10-03-209-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	291.90	72.98	0.95	1.48E+002	41.50	5.99E+002
m	2	284-	305	300.38	75.10	0.95	2.26E+002	48.36	6.68E+002
	3	810-	820	815.03	203.77	0.73	5.25E+001	48.52	2.36E+002
	4	947-	959	954.73	238.70	1.45	2.19E+002	59.47	2.67E+002
	5	1345-	1357	1352.26	338.09	1.28	5.25E+001	39.51	1.34E+002
	6	1399-	1415	1407.20	351.82	0.75	1.14E+002	47.52	1.51E+002
	7	2322-	2341	2331.65	582.95	1.36	1.67E+002	42.22	8.48E+001
	8	2426-	2444	2435.96	609.03	1.24	1.35E+002	39.59	8.08E+001
	9	3137-	3149	3142.56	785.69	0.52	2.57E+001	18.59	2.33E+001
	10	3635-	3653	3642.35	910.65	0.92	9.83E+001	32.40	5.17E+001
	11	3867-	3882	3873.65	968.48	0.55	7.88E+001	28.73	4.52E+001
	12	4474-	4489	4479.91	1120.06	0.26	2.54E+001	24.00	4.06E+001
	13	5828-	5855	5841.85	1460.57	2.05	8.76E+002	61.09	2.11E+001
	14	7052-	7065	7058.85	1764.84	1.53	2.57E+001	13.95	8.31E+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
K-40	0.998	1460.81*	10.67	1.99049E+001	2.12717E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.73102E-001	1.06014E-001
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	8.77525E+000	2.54688E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.14489E-001	2.24124E-001
Bi-214	0.997	609.31*	46.30	5.57230E-001	1.76970E-001
		1120.29*	15.10	3.75149E-001	3.56311E-001
		1764.49*	15.80	4.17790E-001	2.30609E-001
Ac-228	0.993	338.32*	11.40	7.29620E-001	5.60498E-001
		911.07*	27.70	7.47768E-001	2.61197E-001
		969.11*	16.60	1.01676E+000	3.85893E-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	0.998	1.990487E+001	2.127168E+000
TL-208	0.471	3.731023E-001	1.060142E-001
Pb-212 @	0.594	7.144890E-001	2.241239E-001
Bi-214	0.997	4.880242E-001	1.306204E-001
Ac-228	0.993	8.189766E-001	2.017998E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.4628E-001	28.08
3	203.77	8.7431E-002	92.50
6	351.82	1.8996E-001	41.69
9	785.69	4.2789E-002	72.43

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: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	1.2104E-001	9.68E-002	-1.7762E-001
	1332.49	100.00	9.6842E-002		-8.2929E-002
Nb-94	702.63	100.00	1.1757E-001	1.18E-001	1.0614E-002
	871.10	100.00	1.1967E-001		2.9025E-003
Ag-108m	79.20	7.10	9.1731E+000	1.44E-001	-1.2332E+001
	433.93	89.90	1.4356E-001		-2.5249E-002
	614.37	90.40	1.6482E-001		3.7915E-002
	722.95	90.50	1.4819E-001		1.3915E-001
Sb-125	176.33	6.89	2.8793E+000	4.50E-001	-2.1018E+000
	427.89	29.33	4.4968E-001		3.9998E-001
	463.38	10.35	1.3936E+000		3.1760E-001
	600.56	17.80	7.3589E-001		-1.3329E-001
	606.64	5.02	3.3150E+000		6.8819E+000
	635.90	11.32	1.1019E+000		1.2080E+000
Cs-134	563.23	8.38	1.5036E+000	1.49E-001	6.2824E-001
	569.32	15.43	7.9099E-001		-4.0523E-002
	604.70	97.60	1.7131E-001		1.6805E-003
	795.84	85.40	1.4870E-001		1.1025E-001
	801.93	8.73	1.3176E+000		-3.0806E-001
Cs-137	661.65	85.12	1.4895E-001	1.49E-001	-1.7343E-002
Eu-152	121.78	28.40	9.6355E-001	3.85E-001	-5.7956E-002
	244.69	7.49	2.3365E+000		-3.3359E+000
	344.27	26.50	5.7458E-001		-2.7076E-003
	778.89	12.74	9.5341E-001		-4.0336E-001
	867.32	4.16	2.9328E+000		1.9956E+000
	964.01	14.40	1.0775E+000		-8.0096E-001
	1085.78	10.00	1.1080E+000		9.2102E-001
	1112.02	13.30	8.6093E-001		-3.9984E-001
1407.95	20.70	3.8477E-001	2.8555E-002		
Eu-154	123.07	40.50	6.7484E-001	3.23E-001	6.6058E-001
	247.94	6.60	2.6289E+000		-9.5654E-001
	591.81	4.83	2.5941E+000		-8.2305E-001
	723.30	19.70	6.8257E-001		8.2222E-001
	756.87	4.33	2.8226E+000		6.8377E-002
	873.19	11.50	1.0045E+000		-4.4581E-001
	996.32	10.30	1.0272E+000		1.0210E+000
	1004.76	17.90	5.7516E-001		-4.0977E-001
1274.45	35.50	3.2345E-001	-1.0496E-001		
Eu-155	86.54	30.90	1.6375E+000	1.63E+000	3.0182E+000
	105.31	20.70	1.6291E+000		-3.6732E-002
Am-241	59.54	35.90	3.6492E+000	3.65E+000	-1.0843E+000
Cm-243	228.19	10.56	1.6855E+000	1.16E+000	-9.9048E-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	1.9372E-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 6/27/2006 10:23:53 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-03-210-F-G

Sample ID: OOL-10-03-210-F

Sample Title: OOL-10-03-210-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 6:38:13 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-210-F-G

Log Number: OOL-10-03-210-F

Title: OOL-10-03-210-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-	309	300.62	75.16	1.13	2.55E+002	91.97	7.32E+002
2	948-	962	954.62	238.67	1.15	2.23E+002	66.19	3.18E+002
3	1176-	1188	1181.12	295.30	0.91	3.81E+001	46.45	1.98E+002
4	1400-	1415	1406.80	351.72	0.72	1.10E+002	48.61	1.67E+002
5	2324-	2340	2331.02	582.80	1.33	1.86E+002	39.10	6.74E+001
6	2426-	2445	2435.82	609.00	0.87	1.51E+002	41.03	8.22E+001
7	3632-	3652	3642.86	910.78	1.18	1.19E+002	33.50	4.75E+001
M 8	3849-	3882	3855.37	963.91	1.20	2.51E+001	13.30	2.69E+001
m 9	3849-	3882	3874.55	968.71	1.20	4.52E+001	17.22	3.70E+001
10	4474-	4487	4481.36	1120.42	0.65	3.44E+001	23.38	3.76E+001
11	5828-	5855	5842.05	1460.62	1.81	8.58E+002	59.48	1.40E+001
12	7051-	7067	7058.56	1764.77	1.73	3.78E+001	14.78	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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-03-210-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	0.999	1460.81*	10.67	1.94993E+001	2.07840E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.14239E-001	1.02594E-001
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	9.88564E+000	4.05553E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.28919E-001	2.44414E-001
Bi-214	0.997	609.31*	46.30	6.21426E-001	1.85574E-001
		1120.29*	15.10	5.07473E-001	3.49111E-001
		1764.49*	15.80	6.15454E-001	2.48155E-001
PB-214	0.626	74.82* @	6.21	1.70332E+001	7.09634E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.03995E-001	3.74226E-001
		351.92*	37.20	4.74279E-001	2.23380E-001
Ac-228	0.630	338.32	11.40		
		911.07*	27.70	9.01914E-001	2.75302E-001
		969.11*	16.60	5.82948E-001	2.30522E-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-10-03-210-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	0.999	1.949932E+001	2.078402E+000
TL-208	0.469	4.142394E-001	1.025937E-001
Pb-212 @	0.594	7.289195E-001	2.444136E-001
Bi-214	0.997	6.021309E-001	1.367406E-001
PB-214 @	0.626	4.295447E-001	1.918078E-001
Ac-228	0.630	7.144125E-001	1.767432E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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 8	963.91	4.1900E-002	52.89

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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-03-210-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	1.1413E-001	9.68E-002	-1.0322E-001
	1332.49	100.00	9.6842E-002		1.1158E-001
Nb-94	702.63	100.00	1.2059E-001	1.17E-001	1.7206E-002
	871.10	100.00	1.1674E-001		4.3833E-002
Ag-108m	79.20	7.10	9.3889E+000	1.47E-001	-7.3445E+000
	433.93	89.90	1.4741E-001		-7.6246E-002
	614.37	90.40	1.6783E-001		2.9673E-002
	722.95	90.50	1.5331E-001		1.0562E-001
Sb-125	176.33	6.89	2.9451E+000	4.55E-001	-8.3790E-001
	427.89	29.33	4.5544E-001		8.0271E-002
	463.38	10.35	1.3287E+000		8.3938E-001
	600.56	17.80	7.2181E-001		-1.7598E-002
	606.64	5.02	3.3679E+000		7.3595E+000
	635.90	11.32	1.0838E+000		2.1755E-001
Cs-134	563.23	8.38	1.6474E+000	1.44E-001	9.5509E-001
	569.32	15.43	8.6070E-001		-3.1802E-001
	604.70	97.60	1.7328E-001		3.5988E-002
	795.84	85.40	1.4382E-001		8.2601E-002
Cs-137	801.93	8.73	1.2888E+000	1.38E-001	-1.0429E+000
	661.65	85.12	1.3805E-001		-2.6585E-002
Eu-152	121.78	28.40	9.5833E-001	3.97E-001	2.2334E-003
	244.69	7.49	2.3671E+000		1.1923E+000
	344.27	26.50	5.5685E-001		-3.2824E-001
	778.89	12.74	9.6546E-001		1.1922E-001
	867.32	4.16	2.7831E+000		2.8254E-002
	964.01	14.40	9.8590E-001		-8.1748E-003
	1085.78	10.00	1.0978E+000		-4.5362E-001
	1112.02	13.30	8.9007E-001		-3.3017E-001
1407.95	20.70	3.9689E-001	-2.6529E-001		
Eu-154	123.07	40.50	6.6782E-001	2.97E-001	7.1465E-001
	247.94	6.60	2.5804E+000		-3.4310E+000
	591.81	4.83	2.7615E+000		1.9521E+000
	723.30	19.70	6.9941E-001		2.6876E-001
	756.87	4.33	2.9841E+000		5.9046E-002
	873.19	11.50	1.0339E+000		4.5135E-001
	996.32	10.30	1.1296E+000		7.8787E-001
Eu-155	1004.76	17.90	6.7651E-001	1.62E+000	1.4004E-002
	1274.45	35.50	2.9653E-001		-1.2636E-001
	86.54	30.90	1.6211E+000		1.6047E+000
Am-241	105.31	20.70	1.6291E+000	3.73E+000	-5.2891E-001
	59.54	35.90	3.7335E+000		-6.3530E-001
Cm-243	228.19	10.56	1.7666E+000	1.14E+000	1.8433E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1410E+000	1.14E+000	1.3661E-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 6/27/2006 10:22:55 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-03-211-F-G

Sample ID: OOL-10-03-211-F

Sample Title: OOL-10-03-211-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 6:24:32 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-211-F-G
Log Number: OOL-10-03-211-F
Title: OOL-10-03-211-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 13 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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-10-03-211-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	0.999	1460.81*	10.67	1.80226E+001	1.96857E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.97229E-001	9.29324E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	9.75779E+000	2.70821E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.994	238.63*	44.60	8.69348E-001	2.69581E-001
		609.31*	46.30	3.49445E-001	1.61678E-001
		1120.29*	15.10	7.18602E-001	3.52144E-001
Ac-228	0.996	1764.49*	15.80	3.81727E-001	2.57904E-001
		338.32*	11.40	8.28501E-001	5.61880E-001
		911.07*	27.70	1.11837E+000	2.88753E-001
		969.11*	16.60	8.60437E-001	3.32353E-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-10-03-211-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	0.999	1.802261E+001	1.968567E+000
TL-208	0.471	2.972287E-001	9.293238E-002
Pb-212 @	0.594	8.693485E-001	2.695808E-001
Bi-214	0.994	4.058759E-001	1.276664E-001
Ac-228	0.996	9.840156E-001	2.032193E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	72.92	2.7319E-001	26.09
5	351.69	1.7401E-001	37.47
8	768.06	5.0958E-002	64.62

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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-03-211-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	1.1413E-001	9.41E-002	1.1933E-001
	1332.49	100.00	9.4141E-002		9.2210E-002
Nb-94	702.63	100.00	1.2021E-001	1.10E-001	-4.4881E-002
	871.10	100.00	1.0973E-001		-4.1374E-002
Ag-108m	79.20	7.10	9.2183E+000	1.48E-001	-1.2748E+001
	433.93	89.90	1.4796E-001		2.9395E-002
	614.37	90.40	1.5700E-001		1.1070E-002
	722.95	90.50	1.4894E-001		1.3232E-002
Sb-125	176.33	6.89	2.8823E+000	4.36E-001	1.5926E+000
	427.89	29.33	4.3622E-001		1.2508E-001
	463.38	10.35	1.2803E+000		-1.5862E-002
	600.56	17.80	7.1825E-001		-2.5938E-001
	606.64	5.02	3.0939E+000		4.0734E+000
	635.90	11.32	1.1488E+000		9.8006E-001
Cs-134	563.23	8.38	1.5507E+000	1.52E-001	5.4950E-001
	569.32	15.43	8.1559E-001		-4.4913E-001
	604.70	97.60	1.5626E-001		-1.7074E-002
	795.84	85.40	1.5172E-001		6.9432E-002
	801.93	8.73	1.3597E+000		-3.6539E-001
Cs-137	661.65	85.12	1.4569E-001	1.46E-001	-1.7871E-003
Eu-152	121.78	28.40	9.5111E-001	3.89E-001	7.8956E-002
	244.69	7.49	2.2610E+000		-1.0939E+000
	344.27	26.50	5.2261E-001		-4.2260E-001
	778.89	12.74	8.6407E-001		-6.7929E-001
	867.32	4.16	2.6135E+000		-1.5549E+000
	964.01	14.40	1.0495E+000		-3.5414E-001
	1085.78	10.00	1.1230E+000		5.3271E-001
	1112.02	13.30	8.3070E-001		-1.1721E+000
1407.95	20.70	3.8885E-001	2.2114E-001		
Eu-154	123.07	40.50	6.5818E-001	3.08E-001	1.7133E-001
	247.94	6.60	2.4649E+000		-3.1778E+000
	591.81	4.83	2.6856E+000		-5.1254E-001
	723.30	19.70	6.8597E-001		1.5982E-001
	756.87	4.33	2.8050E+000		1.3266E+000
	873.19	11.50	9.6256E-001		-9.0092E-002
	996.32	10.30	1.0797E+000		-2.3716E-001
	1004.76	17.90	6.2266E-001		1.4749E-001
1274.45	35.50	3.0792E-001	5.0461E-002		
Eu-155	86.54	30.90	1.6461E+000	1.61E+000	2.4939E+000
	105.31	20.70	1.6099E+000		-2.0507E-001
Am-241	59.54	35.90	3.6916E+000	3.69E+000	-7.2171E-001
Cm-243	228.19	10.56	1.7025E+000	1.19E+000	7.4878E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1919E+000	1.19E+000	6.5146E-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 6/27/2006 10:29:43 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-03-212-F-G

Sample ID: OOL-10-03-212-F-

Sample Title: OOL-10-03-212-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 6:30:05 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-03-212-F-G
Log Number: OOL-10-03-212-F-
Title: OOL-10-03-212-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 13 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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-10-03-212-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	0.997	1460.81*	10.67	2.10268E+001	2.11893E+000
Cs-137	0.986	661.65*	85.12	8.44836E-002	5.09328E-002
TL-208	0.620	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.45221E-001	9.69172E-002
Bi-212	0.999	860.37*	12.46	4.20014E-001	2.81610E-001
		727.17*	11.80	8.40492E-001	3.95781E-001
Pb-212	0.521	74.81* @	10.70	1.08523E+001	3.29234E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.691	238.63*	44.60	5.82938E-001	2.40655E-001
		609.31*	46.30	5.50462E-001	1.66659E-001
		1120.29	15.10		
Ac-228	0.999	1764.49*	15.80	7.53940E-001	2.24635E-001
		338.32*	11.40	1.01359E+000	6.25415E-001
		911.07*	27.70	1.12000E+000	2.64718E-001
		969.11*	16.60	1.05130E+000	3.52659E-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-10-03-212-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	0.997	2.102685E+001	2.118925E+000
Cs-137	0.986	8.448361E-002	5.093284E-002
TL-208	0.620	3.531415E-001	9.164188E-002
Bi-212	0.999	8.404920E-001	3.957807E-001
Pb-212 @	0.521	5.829375E-001	2.406552E-001
Bi-214	0.691	6.227000E-001	1.338451E-001
Ac-228	0.999	1.086849E+000	2.005319E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.81	2.3640E-001	42.16

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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-10-03-212-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	1.0766E-001	7.70E-002	1.3284E-001
	1332.49	100.00	7.6960E-002		-1.0248E-002
Nb-94	702.63	100.00	1.0627E-001	9.86E-002	-4.5386E-002
	871.10	100.00	9.8592E-002		6.8189E-002
Ag-108m	79.20	7.10	5.3201E+000	1.27E-001	-4.4159E+000
	433.93	89.90	1.2703E-001		1.7974E-003
	614.37	90.40	1.3888E-001		-1.0555E-001
	722.95	90.50	1.2712E-001		-4.1919E-002
Sb-125	176.33	6.89	2.4761E+000	4.09E-001	1.5613E+000
	427.89	29.33	4.0881E-001		2.3224E-002
	463.38	10.35	1.1514E+000		1.7635E-001
	600.56	17.80	6.0574E-001		-3.2719E-001
	606.64	5.02	2.7776E+000		3.6839E+000
	635.90	11.32	9.5186E-001		5.7443E-001
Cs-134	563.23	8.38	1.3275E+000	1.30E-001	-8.0526E-001
	569.32	15.43	7.0672E-001		1.3726E-001
	604.70	97.60	1.4071E-001		1.7939E-002
	795.84	85.40	1.3008E-001		8.0063E-002
	801.93	8.73	1.1306E+000		-8.6612E-001
+ Cs-137	661.65*	85.12	7.8249E-002	7.82E-002	8.4484E-002
Eu-152	121.78	28.40	7.7126E-001	3.64E-001	-1.6461E-002
	244.69	7.49	2.0693E+000		-5.3310E-001
	344.27	26.50	4.6863E-001		-3.3748E-001
	778.89	12.74	8.0129E-001		-7.1226E-001
	867.32	4.16	2.3967E+000		-5.1587E-001
	964.01	14.40	9.7502E-001		5.0196E-001
	1085.78	10.00	9.6673E-001		-1.3123E+000
	1112.02	13.30	7.8516E-001		-7.6008E-001
1407.95	20.70	3.6362E-001	-1.5330E-002		
Eu-154	123.07	40.50	5.3800E-001	2.65E-001	1.9065E-001
	247.94	6.60	2.1989E+000		7.9842E-002
	591.81	4.83	2.2914E+000		7.8373E-001
	723.30	19.70	5.8283E-001		-6.1460E-002
	756.87	4.33	2.4253E+000		1.0858E+000
	873.19	11.50	8.4717E-001		5.0131E-001
	996.32	10.30	9.2257E-001		-4.1404E-001
	1004.76	17.90	5.3213E-001		-2.1651E-001
1274.45	35.50	2.6470E-001	-1.0820E-001		
Eu-155	86.54	30.90	1.0645E+000	1.06E+000	1.4427E+000
	105.31	20.70	1.1907E+000		-2.5220E-001
Am-241	59.54	35.90	1.2718E+000	1.27E+000	6.9664E-001
Cm-243	228.19	10.56	1.4811E+000	1.05E+000	4.4836E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0501E+000	1.05E+000	7.1914E-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 6/23/2006 4:26:11 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-10-03-213-F-

Sample Title: OOL-10-03-213-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 4:16:08 PM

Live Time: 600.0 seconds

Real Time: 601.5 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-10-03-213-F-
Title: OOL-10-03-213-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Rows 1-14 with peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	2.11223E-001	7.08100E-002
K-40	0.975	1460.81*	10.67	1.96681E+001	1.98537E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	9.77885E-001	3.37411E-001
		583.14*	84.20	3.85366E-001	1.01769E-001
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.07161E+001	2.38359E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.980	238.63*	44.60	6.53907E-001	2.06088E-001
		609.31*	46.30	4.07133E-001	1.54541E-001
		1120.29*	15.10	3.49043E-001	3.01131E-001
Ac-228	0.999	1764.49*	15.80	3.64151E-001	2.10249E-001
		338.32*	11.40	1.29431E+000	5.13319E-001
		911.07*	27.70	9.18390E-001	2.60815E-001
		969.11*	16.60	7.22124E-001	3.40678E-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	1.279842E-001	7.409393E-002
K-40	0.975	1.966810E+001	1.985372E+000
TL-208	0.752	3.853660E-001	1.009913E-001
Pb-212 @	0.521	6.539067E-001	2.060875E-001
Bi-214	0.980	3.857755E-001	1.150713E-001
Ac-228	0.999	9.086388E-001	1.920526E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	72.92	4.9539E-001	22.30
3	84.76	3.9097E-001	53.35
6	351.96	2.9466E-001	30.82

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	9.6654E-002	8.22E-002	-2.0234E-002
	1332.49	100.00	8.2198E-002		3.4244E-002
Nb-94	702.63	100.00	1.0551E-001	9.14E-002	3.9948E-002
	871.10	100.00	9.1371E-002		2.0900E-002
Ag-108m	79.20	7.10	5.0585E+000	1.24E-001	-4.0871E+000
	433.93	89.90	1.2370E-001		-5.9837E-002
	614.37	90.40	1.4554E-001		5.7892E-002
	722.95	90.50	1.2764E-001		1.0130E-001
Sb-125	176.33	6.89	2.3462E+000	3.82E-001	-1.2464E+000
	427.89	29.33	3.8223E-001		1.0424E-002
	463.38	10.35	1.0802E+000		1.8808E-001
	600.56	17.80	5.6704E-001		-2.2673E-001
	606.64	5.02	2.7564E+000		5.8714E+000
	635.90	11.32	8.8621E-001		1.3433E-001
Cs-134	563.23	8.38	1.2993E+000	1.21E-001	-4.5646E-001
	569.32	15.43	6.9238E-001		-2.8031E-001
	604.70	97.60	1.3602E-001		-2.0490E-002
	795.84	85.40	1.2104E-001		2.5260E-002
	801.93	8.73	1.1138E+000		-7.8832E-001
Cs-137	661.65	85.12	1.2538E-001	1.25E-001	2.8430E-002
Eu-152	121.78	28.40	7.3563E-001	3.69E-001	5.4726E-002
	244.69	7.49	1.9752E+000		-6.1208E-001
	344.27	26.50	4.4835E-001		-3.9917E-002
	778.89	12.74	7.9911E-001		-6.5237E-001
	867.32	4.16	2.3240E+000		-9.9073E-001
	964.01	14.40	8.6608E-001		-1.7914E-001
	1085.78	10.00	9.4913E-001		-7.7669E-001
	1112.02	13.30	7.1578E-001		-6.6184E-002
1407.95	20.70	3.6858E-001	1.2913E-001		
Eu-154	123.07	40.50	5.1327E-001	2.58E-001	2.2643E-001
	247.94	6.60	2.1374E+000		-2.1421E+000
	591.81	4.83	2.0643E+000		-6.9391E-002
	723.30	19.70	5.8765E-001		5.3533E-001
	756.87	4.33	2.3052E+000		-2.5851E+000
	873.19	11.50	8.0621E-001		-7.1213E-001
	996.32	10.30	9.0936E-001		3.9143E-002
	1004.76	17.90	5.1872E-001		1.1493E-001
1274.45	35.50	2.5800E-001	-1.6794E-001		
Eu-155	86.54	30.90	1.0324E+000	1.03E+000	1.3545E-001
	105.31	20.70	1.1860E+000		1.9298E-001
Am-241	59.54	35.90	1.2010E+000	1.20E+000	1.4571E-001
Cm-243	228.19	10.56	1.3945E+000	9.65E-001	3.9443E-001

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	-7.2620E-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 6/23/2006 4:07:08 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03214-F-

Sample Title: OOL-10-03-214-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 3:57:05 PM

Live Time: 600.0 seconds

Real Time: 601.5 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-10-03214-F-
 Title: OOL-10-03-214-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	291.35	72.74	1.46	3.51E+002	66.12	1.53E+003
m	2	282-	309	300.35	74.99	1.46	7.84E+002	77.54	1.97E+003
	3	334-	347	338.63	84.56	1.12	2.07E+002	114.64	1.16E+003
	4	946-	961	954.47	238.56	1.42	3.19E+002	74.28	3.71E+002
	5	1279-	1289	1283.72	320.90	0.76	4.93E+001	34.44	1.09E+002
	6	1397-	1416	1408.16	352.02	0.86	1.41E+002	55.56	1.89E+002
	7	2031-	2054	2042.47	510.63	0.92	1.75E+002	54.29	1.48E+002
	8	2322-	2341	2331.58	582.93	2.38	1.98E+002	45.04	9.33E+001
	9	2427-	2448	2437.28	609.36	0.65	1.67E+002	44.16	9.11E+001
	10	3636-	3655	3644.35	911.21	1.46	1.71E+002	37.84	5.48E+001
	11	3871-	3887	3876.28	969.21	1.10	9.42E+001	32.20	5.58E+001
	12	5830-	5860	5845.82	1461.72	2.28	1.11E+003	69.61	3.11E+001
	13	7055-	7068	7061.19	1765.65	1.75	3.04E+001	15.31	9.59E+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: 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	0.996	511.00*	100.00	2.46156E-001	8.33382E-002
K-40	0.974	1460.81*	10.67	1.91871E+001	1.96567E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.13961E+000	3.96891E-001
		583.14*	84.20	3.44972E-001	9.05444E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.16225E+001	2.55193E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.690	238.63*	44.60	7.99957E-001	2.24681E-001
		609.31*	46.30	5.37531E-001	1.56883E-001
		1120.29	15.10		
Ac-228	0.633	1764.49*	15.80	3.68922E-001	1.89374E-001
		338.32	11.40		
		911.07*	27.70	1.01243E+000	2.52265E-001
		969.11*	16.60	9.45673E-001	3.38131E-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	0.996	1.716415E-001	8.556785E-002
K-40	0.974	1.918709E+001	1.965670E+000
TL-208	0.751	3.449724E-001	8.984371E-002
Pb-212 @	0.521	7.999572E-001	2.246814E-001
Bi-214	0.690	4.689099E-001	1.208115E-001
Ac-228	0.633	9.885593E-001	2.021938E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	5.8494E-001	18.84
3	84.56	3.4487E-001	55.40
5	320.90	8.2083E-002	69.93
6	352.02	2.3454E-001	39.48

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.0058E-001	7.84E-002	-3.6496E-002
	1332.49	100.00	7.8425E-002		1.5645E-002
Nb-94	702.63	100.00	1.0627E-001	9.52E-002	4.3689E-002
	871.10	100.00	9.5210E-002		-3.2785E-003
Ag-108m	79.20	7.10	5.1121E+000	1.25E-001	-7.8187E+000
	433.93	89.90	1.2489E-001		6.5914E-003
	614.37	90.40	1.4020E-001		-3.4856E-002
	722.95	90.50	1.2527E-001		3.1955E-002
Sb-125	176.33	6.89	2.3347E+000	3.92E-001	-9.4919E-001
	427.89	29.33	3.9227E-001		-1.6333E-002
	463.38	10.35	1.0730E+000		-1.9605E-001
	600.56	17.80	5.9533E-001		-4.7061E-001
	606.64	5.02	2.7349E+000		2.5014E-001
	635.90	11.32	9.5186E-001		3.0912E-001
Cs-134	563.23	8.38	1.2516E+000	1.20E-001	3.5543E-001
	569.32	15.43	6.5816E-001		-2.7136E-001
	604.70	97.60	1.3583E-001		-1.1801E-001
	795.84	85.40	1.1974E-001		7.7404E-002
	801.93	8.73	1.1273E+000		-7.4177E-001
Cs-137	661.65	85.12	1.1440E-001	1.14E-001	-3.0604E-002
Eu-152	121.78	28.40	7.4046E-001	3.40E-001	7.7341E-002
	244.69	7.49	1.9752E+000		-2.7975E+000
	344.27	26.50	4.5700E-001		-8.7080E-001
	778.89	12.74	8.3124E-001		6.1055E-001
	867.32	4.16	2.4252E+000		-1.0349E+000
	964.01	14.40	9.0501E-001		-3.9440E-001
	1085.78	10.00	9.5621E-001		8.5161E-001
	1112.02	13.30	7.0489E-001		-1.5684E-001
1407.95	20.70	3.4035E-001	-3.7662E-002		
Eu-154	123.07	40.50	5.1157E-001	2.44E-001	-9.3732E-002
	247.94	6.60	2.1114E+000		-2.6788E-001
	591.81	4.83	2.1395E+000		3.1858E-002
	723.30	19.70	5.7429E-001		4.3304E-003
	756.87	4.33	2.4680E+000		6.9913E-001
	873.19	11.50	8.1734E-001		5.6120E-001
	996.32	10.30	8.2542E-001		-1.3286E-001
	1004.76	17.90	4.9484E-001		-1.0814E-001
1274.45	35.50	2.4403E-001	-2.4119E-001		
Eu-155	86.54	30.90	1.0279E+000	1.03E+000	1.3371E+000
	105.31	20.70	1.1676E+000		-1.9335E-001
Am-241	59.54	35.90	1.1986E+000	1.20E+000	-1.4819E-002
Cm-243	228.19	10.56	1.3548E+000	9.76E-001	-1.2983E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.7624E-001	9.76E-001	-2.4805E-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 6/26/2006 8:38:58 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-215-F-

Sample Title: OOL-10-03-215-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 8:28:57 AM

Live Time: 600.0 seconds

Real Time: 600.6 seconds

Energy Calibration Date: 5/10/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-215-F-
Title: OOL-10-03-215-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 14 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.72736E+001	1.87806E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.92225E-001	1.11569E-001
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	5.94515E+000	3.56107E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.74216E-001	2.30779E-001
Bi-214	0.993	609.31*	46.30	4.96941E-001	1.64320E-001
		1120.29*	15.10	3.60168E-001	2.96922E-001
		1764.49*	15.80	6.94345E-001	2.74537E-001
Ac-228	0.999	338.32*	11.40	8.99309E-001	5.26127E-001
		911.07*	27.70	8.01945E-001	2.46103E-001
		969.11*	16.60	8.89505E-001	3.54623E-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	1.727359E+001	1.878061E+000
TL-208	0.471	3.922248E-001	1.115686E-001
Pb-212 @	0.594	6.742155E-001	2.307794E-001
Bi-214	0.993	5.142618E-001	1.273644E-001
Ac-228	0.999	8.392732E-001	1.887293E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	85.02	1.9684E-001	69.80
4	317.62	5.1239E-002	96.78
6	351.97	2.8814E-001	27.93
9	763.56	2.5000E-002	113.70

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: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	1.1102E-001	8.70E-002	3.7874E-002
	1332.49	100.00	8.6993E-002		-8.5425E-002
Nb-94	702.63	100.00	1.1526E-001	1.07E-001	9.0480E-002
	871.10	100.00	1.0745E-001		-1.4072E-002
Ag-108m	79.20	7.10	9.0531E+000	1.43E-001	9.3354E-001
	433.93	89.90	1.4328E-001		-2.7417E-002
	614.37	90.40	1.6298E-001		-3.5216E-003
	722.95	90.50	1.4442E-001		1.3443E-001
Sb-125	176.33	6.89	2.6944E+000	4.40E-001	-7.0572E-001
	427.89	29.33	4.3963E-001		1.3687E-001
	463.38	10.35	1.2628E+000		-9.9941E-001
	600.56	17.80	6.6821E-001		3.0695E-002
	606.64	5.02	3.0729E+000		4.9407E+000
	635.90	11.32	1.0077E+000		-3.0005E-001
Cs-134	563.23	8.38	1.4776E+000	1.38E-001	4.7104E-001
	569.32	15.43	7.5031E-001		-2.2416E-001
	604.70	97.60	1.5544E-001		3.8919E-002
	795.84	85.40	1.3829E-001		9.7124E-002
Cs-137	801.93	8.73	1.2135E+000	1.40E-001	-3.0795E-001
	661.65	85.12	1.3979E-001		9.6651E-002
Eu-152	121.78	28.40	9.2096E-001	3.64E-001	-1.0499E-001
	244.69	7.49	2.2078E+000		-1.4843E+000
	344.27	26.50	5.3926E-001		1.1394E-001
	778.89	12.74	9.0028E-001		-1.1139E+000
	867.32	4.16	2.5804E+000		-4.7310E+000
	964.01	14.40	1.0352E+000		4.2360E-001
	1085.78	10.00	9.8483E-001		-1.4368E+000
	1112.02	13.30	7.5378E-001		-1.0835E+000
1407.95	20.70	3.6358E-001	8.0476E-002		
Eu-154	123.07	40.50	6.4274E-001	2.85E-001	9.5628E-002
	247.94	6.60	2.4605E+000		-1.8197E+000
	591.81	4.83	2.3930E+000		-3.8811E-001
	723.30	19.70	6.6177E-001		5.0536E-001
	756.87	4.33	2.4865E+000		-5.6539E-001
	873.19	11.50	9.5472E-001		3.0891E-001
	996.32	10.30	9.5594E-001		4.3837E-002
	1004.76	17.90	5.8670E-001		2.5363E-002
1274.45	35.50	2.8466E-001	-7.6726E-002		
Eu-155	86.54	30.90	1.5704E+000	1.56E+000	1.6909E+000
	105.31	20.70	1.5561E+000		7.3663E-001
Am-241	59.54	35.90	3.6228E+000	3.62E+000	-2.0515E+000
Cm-243	228.19	10.56	1.6535E+000	1.12E+000	-7.8190E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1170E+000	1.12E+000	-2.7548E-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 6/26/2006 10:30:25 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: RED6264

Spectrum File: RED6264

Sample ID: OOL-10-03-216-F-

Sample Title: OOL-10-03-216-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 10:20:23 AM

Live Time: 600.0 seconds

Real Time: 602.0 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-10-03-216-F-
Title: OOL-10-03-216-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	1.15	3.79E+002	129.19	1.42E+003
2	944-	961	954.07	238.46	1.46	1.72E+002	78.72	4.43E+002
3	1345-	1383	1351.94	337.96	0.95	9.74E+001	91.18	3.48E+002
4	1396-	1417	1406.01	351.48	1.16	1.93E+002	55.44	1.62E+002
5	2031-	2052	2041.89	510.49	0.94	1.18E+002	48.44	1.31E+002
6	2319-	2340	2330.77	582.73	1.67	1.75E+002	41.23	7.14E+001
7	2425-	2448	2435.41	608.90	1.11	1.47E+002	46.67	1.05E+002
8	3635-	3652	3643.27	910.94	0.59	1.17E+002	31.39	4.28E+001
9	3867-	3882	3873.95	968.63	0.44	5.92E+001	27.16	4.38E+001
10	5828-	5858	5842.82	1460.97	2.36	1.24E+003	71.40	1.88E+001
11	7053-	7067	7059.70	1765.27	0.70	4.34E+001	15.51	6.64E+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	0.992	511.00*	100.00	1.65323E-001	7.17172E-002
K-40	0.999	1460.81*	10.67	2.14051E+001	2.12825E+000
TL-208	0.748	277.35	6.80		
		510.84*	21.60	7.65383E-001	3.37857E-001
		583.14*	84.20	3.04704E-001	8.21739E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	5.62850E+000	2.21258E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.691	238.63*	44.60	4.30811E-001	2.08768E-001
		609.31*	46.30	4.73760E-001	1.61197E-001
Ac-228	0.997	1120.29	15.10		
		1764.49*	15.80	5.26069E-001	1.95340E-001
		338.32*	11.40	1.05598E+000	1.00208E+000
		911.07*	27.70	6.92985E-001	2.02013E-001
		969.11*	16.60	5.94397E-001	2.79661E-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	9.950666E-002	7.384990E-002
K-40	0.999	2.140510E+001	2.128249E+000
TL-208	0.748	3.047037E-001	8.157174E-002
Pb-212 @	0.521	4.308115E-001	2.087680E-001
Bi-214	0.691	4.949504E-001	1.243303E-001
Ac-228	0.997	6.695025E-001	1.616140E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.48	3.2190E-001	28.70

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: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	1.0928E-001	8.27E-002	4.6273E-002
	1332.49	100.00	8.2657E-002		5.9868E-002
Nb-94	702.63	100.00	1.0023E-001	1.00E-001	-6.1481E-002
	871.10	100.00	1.0039E-001		-1.4349E-002
Ag-108m	79.20	7.10	5.0231E+000	1.14E-001	-8.3521E+000
	433.93	89.90	1.1418E-001		-7.1352E-002
	614.37	90.40	1.3866E-001		-1.0575E-002
	722.95	90.50	1.1726E-001		-2.4966E-003
Sb-125	176.33	6.89	2.3073E+000	3.79E-001	9.8210E-001
	427.89	29.33	3.7922E-001		-1.7104E-001
	463.38	10.35	1.0548E+000		6.1378E-001
	600.56	17.80	5.7934E-001		-3.1504E-001
	606.64	5.02	2.5797E+000		-7.8321E-001
	635.90	11.32	9.3267E-001		-1.4774E-003
Cs-134	563.23	8.38	1.2862E+000	1.13E-001	2.9710E-001
	569.32	15.43	6.6575E-001		-1.1233E-001
	604.70	97.60	1.3077E-001		2.6289E-002
	795.84	85.40	1.1264E-001		-9.0767E-002
	801.93	8.73	1.0967E+000		-1.0610E+000
Cs-137	661.65	85.12	1.2797E-001	1.28E-001	-3.8755E-002
Eu-152	121.78	28.40	7.2179E-001	3.18E-001	1.5831E-001
	244.69	7.49	1.8764E+000		-1.9525E+000
	344.27	26.50	4.3841E-001		3.4728E-002
	778.89	12.74	7.2317E-001		-5.2578E-001
	867.32	4.16	2.5559E+000		3.0434E-001
	964.01	14.40	8.5738E-001		1.9397E-001
	1085.78	10.00	9.4557E-001		-1.0152E+000
	1112.02	13.30	6.6237E-001		-8.5021E-001
1407.95	20.70	3.1811E-001	8.6533E-002		
Eu-154	123.07	40.50	4.9936E-001	2.43E-001	4.6747E-002
	247.94	6.60	2.0693E+000		9.5088E-001
	591.81	4.83	2.1247E+000		1.4704E+000
	723.30	19.70	5.4527E-001		3.0135E-001
	756.87	4.33	2.2527E+000		2.9135E-001
	873.19	11.50	8.5247E-001		-5.3958E-001
	996.32	10.30	8.9932E-001		-4.2405E-001
	1004.76	17.90	5.4704E-001		7.7362E-002
	1274.45	35.50	2.4282E-001		-2.1269E-001
	86.54	30.90	1.0348E+000		1.03E+000
105.31	20.70	1.1461E+000		-4.3006E-001	
Am-241	59.54	35.90	1.3069E+000	1.31E+000	7.3308E-001
Cm-243	228.19	10.56	1.3186E+000	9.08E-001	3.8827E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.0818E-001	9.08E-001	2.1602E-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 6/26/2006 10:57:46 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-10-03-217-F-

Sample Title: OOL-10-03-217-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 10:47:42 AM

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-10-03-217-F-
Title: OOL-10-03-217-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	300.40	75.00	1.11	4.89E+002	147.76	1.79E+003
2	944-	963	953.63	238.35	0.96	2.26E+002	98.97	6.61E+002
3	1397-	1416	1406.51	351.60	0.38	1.39E+002	57.95	2.10E+002
4	2324-	2340	2330.82	582.74	1.18	1.44E+002	39.82	8.60E+001
5	2426-	2443	2434.93	608.78	1.41	1.49E+002	39.45	7.87E+001
6	3633-	3652	3643.01	910.88	0.45	1.29E+002	38.78	7.50E+001
7	3867-	3883	3874.18	968.68	1.22	9.18E+001	30.45	4.72E+001
8	5828-	5857	5842.69	1460.94	2.43	1.13E+003	69.88	2.92E+001
9	7049-	7066	7058.40	1764.95	0.43	5.14E+001	16.04	4.60E+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	0.999	1460.81*	10.67	1.96334E+001	1.99716E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.51360E-001	7.68193E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	7.25399E+000	2.61198E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.692	238.63*	44.60	5.65886E-001	2.63706E-001
		609.31*	46.30	4.80763E-001	1.40153E-001
		1120.29	15.10		
Ac-228	0.631	1764.49*	15.80	6.23613E-001	2.04320E-001
		338.32	11.40		
		911.07*	27.70	7.62721E-001	2.45534E-001
		969.11*	16.60	9.21836E-001	3.20619E-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	0.999	1.963344E+001	1.997157E+000
TL-208	0.468	2.513604E-001	7.681933E-002
Pb-212 @	0.520	5.658855E-001	2.637065E-001
Bi-214	0.692	5.264713E-001	1.155756E-001
Ac-228	0.631	8.215409E-001	1.949377E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.60	2.3172E-001	41.68

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: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	1.0635E-001	7.44E-002	5.0597E-002
	1332.49	100.00	7.4448E-002		-3.9177E-002
Nb-94	702.63	100.00	1.0499E-001	9.49E-002	-6.2053E-002
	871.10	100.00	9.4896E-002		-5.1621E-002
Ag-108m	79.20	7.10	5.5987E+000	1.14E-001	-7.9733E+000
	433.93	89.90	1.2781E-001		7.2244E-002
	614.37	90.40	1.3688E-001		-7.4667E-002
	722.95	90.50	1.1437E-001		1.3020E-001
Sb-125	176.33	6.89	2.6662E+000	3.96E-001	6.3779E-001
	427.89	29.33	3.9633E-001		-2.1140E-001
	463.38	10.35	1.0856E+000		-2.4090E-001
	600.56	17.80	6.0574E-001		1.7398E-001
	606.64	5.02	2.6548E+000		4.1265E+000
	635.90	11.32	8.9750E-001		3.2392E-001
Cs-134	563.23	8.38	1.2730E+000	1.18E-001	-5.7058E-001
	569.32	15.43	6.9959E-001		3.5815E-001
	604.70	97.60	1.3468E-001		-6.1991E-002
	795.84	85.40	1.1775E-001		7.4502E-002
	801.93	8.73	1.0437E+000		-1.1800E+000
Cs-137	661.65	85.12	1.3107E-001	1.31E-001	7.1254E-002
Eu-152	121.78	28.40	8.3670E-001	3.21E-001	-3.3645E-001
	244.69	7.49	2.2631E+000		5.3042E-001
	344.27	26.50	4.6391E-001		-4.0080E-001
	778.89	12.74	7.6098E-001		-1.0626E+000
	867.32	4.16	2.3387E+000		-3.2860E+000
	964.01	14.40	8.6954E-001		-4.1869E-001
	1085.78	10.00	9.7367E-001		-5.4706E-001
	1112.02	13.30	7.5770E-001		-1.0196E+000
1407.95	20.70	3.2098E-001	-2.3933E-001		
Eu-154	123.07	40.50	5.8192E-001	2.44E-001	-2.3247E-001
	247.94	6.60	2.3654E+000		-2.2347E+000
	591.81	4.83	2.2263E+000		-6.0398E-001
	723.30	19.70	5.2003E-001		2.4174E-001
	756.87	4.33	2.2659E+000		1.6844E+000
	873.19	11.50	8.3914E-001		4.9158E-001
	996.32	10.30	8.7542E-001		-1.3741E-001
	1004.76	17.90	4.7610E-001		-6.0882E-002
	1274.45	35.50	2.4403E-001		6.9084E-002
Eu-155	86.54	30.90	1.1286E+000	1.13E+000	9.5732E-001
	105.31	20.70	1.3060E+000		-7.8920E-003
Am-241	59.54	35.90	1.4714E+000	1.47E+000	-4.0211E-001
Cm-243	228.19	10.56	1.6265E+000	1.07E+000	7.7527E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0683E+000	1.07E+000	4.9666E-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 6/27/2006 12:54:52 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-218-F-

Sample Title: OOL-10-03-218-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/27/2006 12:44:48 AM

Live Time: 600.0 seconds

Real Time: 601.9 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-218-F-
Title: OOL-10-03-218-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Rows 1-10 with peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.000	1460.81*	10.67	1.80043E+001	2.01609E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.31335E-001	7.99820E-002
Pb-212	0.417	860.37	12.46		
		74.81 @	10.70		
		77.11 @	18.00		
Bi-214	0.694	87.30 @	8.00		
		238.63*	44.60	5.17682E-001	2.67594E-001
		609.31*	46.30	4.95843E-001	1.46060E-001
PB-214	0.528	1120.29	15.10		
		1764.49*	15.80	7.16118E-001	2.58613E-001
		74.82 @	6.21		
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	6.38082E-001	3.79126E-001
		351.92*	37.20	5.01598E-001	2.11105E-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	1.000	1.800428E+001	2.016090E+000
TL-208	0.468	2.313352E-001	7.998202E-002
Pb-212 @	0.417	5.176819E-001	2.675944E-001
Bi-214	0.694	5.491137E-001	1.271781E-001
PB-214 @	0.528	5.339000E-001	1.844402E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	98.39	1.0102E+000	25.96
m 2	101.52	1.4243E+000	19.38
8	911.16	1.5198E-001	31.44

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: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	1.1396E-001	8.25E-002	-6.5888E-002
	1332.49	100.00	8.2534E-002		9.6083E-003
Nb-94	702.63	100.00	1.2203E-001	1.07E-001	-7.5983E-002
	871.10	100.00	1.0719E-001		1.0666E-001
Ag-108m	79.20	7.10	1.2264E+001	1.38E-001	-1.1381E+001
	433.93	89.90	1.3796E-001		-8.4997E-003
	614.37	90.40	1.5321E-001		1.2150E-003
	722.95	90.50	1.4357E-001		2.0886E-002
Sb-125	176.33	6.89	3.6234E+000	4.29E-001	-5.8594E-001
	427.89	29.33	4.2892E-001		2.9580E-002
	463.38	10.35	1.2273E+000		1.2771E+000
	600.56	17.80	6.6115E-001		8.3650E-002
	606.64	5.02	2.9261E+000		2.7000E+000
	635.90	11.32	1.0848E+000		2.3046E-001
Cs-134	563.23	8.38	1.5022E+000	1.42E-001	1.2073E+000
	569.32	15.43	7.2241E-001		-1.7214E+000
	604.70	97.60	1.4545E-001		-6.8810E-002
	795.84	85.40	1.4178E-001		1.1513E-001
Cs-137	801.93	8.73	1.2372E+000	1.38E-001	-4.8563E-002
	661.65	85.12	1.3765E-001		7.2747E-002
Eu-152	121.78	28.40	1.5656E+000	3.89E-001	-1.2407E+000
	244.69	7.49	2.7451E+000		-2.7714E-001
	344.27	26.50	5.1367E-001		-1.0195E+000
	778.89	12.74	8.7295E-001		-8.0178E-001
	867.32	4.16	2.5742E+000		6.0783E-001
	964.01	14.40	9.5831E-001		2.0278E-001
	1085.78	10.00	1.0103E+000		-6.0385E-001
	1112.02	13.30	7.6803E-001		-1.8603E-001
1407.95	20.70	3.8880E-001	-2.9535E-002		
Eu-154	123.07	40.50	1.0657E+000	2.66E-001	-7.5358E-001
	247.94	6.60	2.8854E+000		-6.9599E+000
	591.81	4.83	2.3361E+000		-3.2570E+000
	723.30	19.70	6.6137E-001		2.8222E-001
	756.87	4.33	2.5235E+000		-1.9107E+000
	873.19	11.50	8.9141E-001		-3.8203E-001
	996.32	10.30	9.1293E-001		-2.5233E-001
	1004.76	17.90	5.9726E-001		1.1900E-001
1274.45	35.50	2.6608E-001	7.1000E-002		
Eu-155	86.54	30.90	2.4604E+000	2.46E+000	6.2934E-001
	105.31	20.70	3.5196E+000		-1.3147E+000
Am-241	59.54	35.90	3.6398E+000	3.64E+000	-2.3715E-001
Cm-243	228.19	10.56	1.9119E+000	1.23E+000	-8.7706E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2260E+000	1.23E+000	-8.4117E-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 6/27/2006 12:40:07 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-10-03-219-F-

Sample Title: OOL-10-03-219-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/27/2006 12:30:03 AM

Live Time: 600.0 seconds

Real Time: 601.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-219-F-
Title: OOL-10-03-219-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-	306	301.57	75.42	1.12	3.57E+002	157.67	2.11E+003
2	949-	964	955.32	238.87	1.62	1.44E+002	78.07	4.79E+002
3	1348-	1360	1353.93	338.53	0.40	4.81E+001	40.99	1.47E+002
4	1402-	1417	1408.62	352.20	1.59	1.30E+002	48.48	1.60E+002
5	2324-	2342	2332.63	583.23	1.09	1.46E+002	39.12	7.49E+001
6	2429-	2442	2436.71	609.25	0.85	1.06E+002	30.40	4.89E+001
7	3636-	3653	3643.71	911.03	1.27	1.18E+002	30.63	3.85E+001
8	3868-	3883	3875.86	969.07	0.65	5.62E+001	26.84	4.38E+001
9	5831-	5854	5842.12	1460.68	2.05	6.81E+002	57.53	4.69E+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	1.57325E+001	1.84072E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.24104E-001	9.64913E-002
		860.37	12.46		
Pb-212	0.573	74.81* @	10.70	1.09615E+001	5.29561E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.44877E-001	2.51107E-001
Bi-214	0.407	609.31*	46.30	4.35318E-001	1.35795E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	1.000	338.32*	11.40	6.44982E-001	5.58746E-001
		911.07*	27.70	8.91548E-001	2.54075E-001
		969.11*	16.60	7.22660E-001	3.53092E-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	0.999	1.573251E+001	1.840723E+000
TL-208	0.470	3.241041E-001	9.649128E-002
Pb-212 @	0.573	4.448769E-001	2.511073E-001
Bi-214	0.407	4.353175E-001	1.357955E-001
Ac-228	1.000	8.112780E-001	1.934742E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	352.20	2.1736E-001	37.18

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: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	1.2214E-001	9.36E-002	8.0697E-002
	1332.49	100.00	9.3624E-002		1.0345E-001
Nb-94	702.63	100.00	1.1286E-001	1.04E-001	9.2046E-003
	871.10	100.00	1.0390E-001		-5.7230E-003
Ag-108m	79.20	7.10	1.2943E+001	1.42E-001	-9.8013E+000
	433.93	89.90	1.4180E-001		-3.6968E-002
	614.37	90.40	1.4721E-001		-8.3852E-002
	722.95	90.50	1.4699E-001		6.4186E-002
Sb-125	176.33	6.89	3.4598E+000	4.52E-001	4.4592E-001
	427.89	29.33	4.5234E-001		-5.2929E-002
	463.38	10.35	1.2347E+000		1.3580E+000
	600.56	17.80	6.7262E-001		-4.0552E-002
	606.64	5.02	3.0283E+000		3.2277E+000
	635.90	11.32	1.0382E+000		-2.6903E-001
Cs-134	563.23	8.38	1.3969E+000	1.34E-001	4.5601E-002
	569.32	15.43	7.7873E-001		3.6282E-001
	604.70	97.60	1.5171E-001		2.8899E-002
	795.84	85.40	1.3377E-001		-5.8765E-002
Cs-137	801.93	8.73	1.2116E+000	1.58E-001	-3.9387E-001
	661.65	85.12	1.5836E-001		1.0360E-002
Eu-152	121.78	28.40	1.4110E+000	4.01E-001	5.7769E-001
	244.69	7.49	2.5594E+000		-7.4298E-001
	344.27	26.50	5.5570E-001		-2.4361E-001
	778.89	12.74	8.4596E-001		-5.6904E-001
	867.32	4.16	2.7038E+000		-1.7422E+000
	964.01	14.40	9.8876E-001		3.2862E-001
	1085.78	10.00	1.0990E+000		-4.7443E-001
	1112.02	13.30	8.0801E-001		1.0783E-001
1407.95	20.70	4.0105E-001	1.5866E-001		
Eu-154	123.07	40.50	9.6096E-001	2.82E-001	-1.3911E+000
	247.94	6.60	2.7953E+000		-2.5668E+000
	591.81	4.83	2.4365E+000		8.1739E-001
	723.30	19.70	6.8046E-001		2.6176E-001
	756.87	4.33	2.8197E+000		-4.6239E-001
	873.19	11.50	9.3253E-001		6.0831E-001
	996.32	10.30	9.7646E-001		-4.5637E-001
	1004.76	17.90	6.2956E-001		4.9016E-001
1274.45	35.50	2.8224E-001	4.2486E-003		
Eu-155	86.54	30.90	2.5276E+000	2.53E+000	2.1672E+000
	105.31	20.70	3.0226E+000		-3.4500E+000
Am-241	59.54	35.90	4.8920E+000	4.89E+000	5.8364E+000
Cm-243	228.19	10.56	1.8318E+000	1.16E+000	-1.0682E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1580E+000	1.16E+000	-2.5786E-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 6/27/2006 12:24:33 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-220-F-

Sample Title: OOL-10-03-220-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/27/2006 12:14:30 AM

Live Time: 600.0 seconds

Real Time: 601.4 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-220-F-
Title: OOL-10-03-220-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 11 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.70731E+001	1.93692E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.63316E-001	8.92644E-002
		860.37	12.46		
Bi-212	0.995	727.17*	11.80	5.42245E-001	4.46390E-001
Pb-212	0.419	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.405	238.63*	44.60	6.76738E-001	2.31981E-001
		609.31*	46.30	4.98071E-001	1.40542E-001
		1120.29	15.10		
Ac-228	0.997	1764.49	15.80		
		338.32*	11.40	6.19165E-001	6.68967E-001
		911.07*	27.70	7.77507E-001	2.46004E-001
		969.11*	16.60	7.89404E-001	3.25451E-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	0.999	1.707310E+001	1.936921E+000
TL-208	0.470	2.633156E-001	8.926441E-002
Bi-212	0.995	5.422445E-001	4.463898E-001
Pb-212 @	0.419	6.767378E-001	2.319805E-001
Bi-214	0.405	4.980710E-001	1.405418E-001
Ac-228	0.997	7.689432E-001	1.883117E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.98	8.6410E-002	78.90
7	874.65	2.8452E-002	92.58
9	951.66	3.7365E-002	67.18

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: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	1.1837E-001	7.76E-002	-4.3294E-002
	1332.49	100.00	7.7617E-002		3.8974E-002
Nb-94	702.63	100.00	1.1366E-001	1.02E-001	3.7438E-002
	871.10	100.00	1.0246E-001		7.4165E-002
Ag-108m	79.20	7.10	9.8290E+000	1.32E-001	-1.2082E+001
	433.93	89.90	1.3198E-001		-1.5609E-001
	614.37	90.40	1.3661E-001		-1.7701E-001
	722.95	90.50	1.4434E-001		2.7335E-002
Sb-125	176.33	6.89	3.4085E+000	4.01E-001	-3.0634E+000
	427.89	29.33	4.0053E-001		-2.8988E-001
	463.38	10.35	1.2248E+000		1.9036E-001
	600.56	17.80	6.3356E-001		3.7789E-001
	606.64	5.02	2.9857E+000		6.8032E+000
	635.90	11.32	1.0059E+000		1.2478E+000
Cs-134	563.23	8.38	1.4430E+000	1.36E-001	7.7357E-001
	569.32	15.43	7.4678E-001		-5.1208E-001
	604.70	97.60	1.4776E-001		-6.8683E-002
	795.84	85.40	1.3618E-001		1.3290E-001
	801.93	8.73	1.2321E+000		-1.3489E+000
Cs-137	661.65	85.12	1.3677E-001	1.37E-001	3.2566E-002
Eu-152	121.78	28.40	1.4386E+000	3.40E-001	8.9115E-001
	244.69	7.49	2.3829E+000		-5.9594E-001
	344.27	26.50	5.0779E-001		-2.1140E-001
	778.89	12.74	8.5619E-001		-7.4865E-001
	867.32	4.16	2.2918E+000		-2.5294E+000
	964.01	14.40	9.4270E-001		-1.0820E-001
	1085.78	10.00	1.1139E+000		5.6481E-001
	1112.02	13.30	8.4971E-001		-1.8481E-001
1407.95	20.70	3.3975E-001	-2.2313E-002		
Eu-154	123.07	40.50	9.7536E-001	2.72E-001	-5.7937E-001
	247.94	6.60	2.6186E+000		1.2141E-001
	591.81	4.83	2.2841E+000		1.5097E+000
	723.30	19.70	6.6838E-001		2.6346E-001
	756.87	4.33	2.6199E+000		-6.7905E-001
	873.19	11.50	8.9141E-001		-9.7409E-002
	996.32	10.30	1.0311E+000		4.7895E-001
	1004.76	17.90	5.5408E-001		-4.4287E-001
1274.45	35.50	2.7158E-001	-1.1956E-001		
Eu-155	86.54	30.90	1.8379E+000	1.84E+000	9.2382E-001
	105.31	20.70	2.8915E+000		-5.0743E-001
Am-241	59.54	35.90	3.3305E+000	3.33E+000	1.8639E+000
Cm-243	228.19	10.56	1.7626E+000	1.26E+000	-9.2573E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2646E+000	1.26E+000	2.8532E-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 6/27/2006 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-221-F-

Sample Title: OOL-10-03-221-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 11:59:04 PM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-221-F-
Title: OOL-10-03-221-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 13 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.998	511.00*	100.00	3.07630E-001	9.90866E-002
K-40	0.996	1460.81*	10.67	1.75314E+001	1.96905E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	1.42421E+000	4.73250E-001
		583.14*	84.20	3.46471E-001	9.51636E-002
		860.37	12.46		
Pb-212	0.573	74.81* @	10.70	6.35053E+000	3.43154E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.693	238.63*	44.60	5.86233E-001	2.47528E-001
		609.31*	46.30	4.76977E-001	1.84297E-001
		1120.29	15.10		
Ac-228	0.996	1764.49*	15.80	6.64559E-001	2.75750E-001
		338.32*	11.40	9.45092E-001	6.19745E-001
		911.07*	27.70	8.19401E-001	2.55819E-001
		969.11*	16.60	1.27756E+000	3.81891E-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	0.998	2.327926E-001	1.011669E-001
K-40	0.996	1.753142E+001	1.969054E+000
TL-208	0.750	3.464713E-001	9.449139E-002
Pb-212 @	0.573	5.862333E-001	2.475283E-001
Bi-214	0.693	5.348961E-001	1.532257E-001
Ac-228	0.996	9.596038E-001	2.010448E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.98	2.4770E-001	86.36
5	351.78	2.1667E-001	34.32
12	1588.09	2.3333E-002	81.53

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: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	1.1643E-001	8.41E-002	-8.0492E-002
	1332.49	100.00	8.4105E-002		-2.3621E-003
Nb-94	702.63	100.00	1.1792E-001	1.04E-001	4.8577E-002
	871.10	100.00	1.0390E-001		3.1201E-002
Ag-108m	79.20	7.10	9.2890E+000	1.38E-001	-7.8915E+000
	433.93	89.90	1.4044E-001		-2.9180E-002
	614.37	90.40	1.5515E-001		-9.4895E-003
	722.95	90.50	1.3768E-001		1.3554E-001
Sb-125	176.33	6.89	3.4278E+000	4.26E-001	-2.5308E+000
	427.89	29.33	4.2642E-001		2.6084E-001
	463.38	10.35	1.3020E+000		-3.3613E-002
	600.56	17.80	6.6691E-001		-7.9288E-003
	606.64	5.02	3.0493E+000		-5.6927E-001
	635.90	11.32	9.9601E-001		-6.9866E-002
Cs-134	563.23	8.38	1.4803E+000	1.41E-001	-2.1286E-001
	569.32	15.43	7.9114E-001		1.7333E-001
	604.70	97.60	1.4890E-001		-2.5127E-002
	795.84	85.40	1.4132E-001		1.3626E-001
Cs-137	801.93	8.73	1.2321E+000	1.50E-001	-8.3096E-001
	661.65	85.12	1.5020E-001		1.2794E-001
Eu-152	121.78	28.40	1.4250E+000	4.01E-001	8.1650E-001
	244.69	7.49	2.4612E+000		-1.2610E+000
	344.27	26.50	5.2521E-001		3.8732E-002
	778.89	12.74	8.0368E-001		-1.1322E-001
	867.32	4.16	2.3779E+000		-6.2853E+000
	964.01	14.40	1.0702E+000		5.4834E-001
	1085.78	10.00	1.1808E+000		2.7970E-001
	1112.02	13.30	8.3103E-001		-4.1423E-003
1407.95	20.70	4.0105E-001	3.0306E-001		
Eu-154	123.07	40.50	9.8350E-001	2.68E-001	1.3655E-001
	247.94	6.60	2.6653E+000		-2.5014E+000
	591.81	4.83	2.6769E+000		1.8795E+000
	723.30	19.70	6.3255E-001		5.9932E-001
	756.87	4.33	2.7035E+000		8.0468E-001
	873.19	11.50	9.1632E-001		1.8789E-003
	996.32	10.30	9.6100E-001		-1.0266E-001
	1004.76	17.90	5.7754E-001		-1.9128E-001
1274.45	35.50	2.6793E-001	-1.1876E-001		
Eu-155	86.54	30.90	1.7614E+000	1.76E+000	1.8242E+000
	105.31	20.70	2.4344E+000		8.7562E-001
Am-241	59.54	35.90	3.1152E+000	3.12E+000	-3.1836E+000
Cm-243	228.19	10.56	1.7428E+000	1.22E+000	6.6293E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2231E+000	1.22E+000	2.7141E-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 6/26/2006 2:36:21 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-222-F-

Sample Title: OOL-10-03-222-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 2:26:17 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-222-F-
 Title: OOL-10-03-222-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	300.16	75.06	1.27	2.48E+002	98.70	8.70E+002
2	944-	962	954.49	238.66	1.59	2.77E+002	77.29	3.75E+002
3	1395-	1414	1406.04	351.56	1.00	1.00E+002	57.21	2.15E+002
4	1992-	2001	1996.77	499.26	0.51	2.46E+001	22.46	4.74E+001
5	2033-	2053	2041.89	510.54	1.03	8.02E+001	48.11	1.44E+002
6	2324-	2339	2330.79	582.77	1.28	1.32E+002	37.82	7.87E+001
7	2429-	2443	2435.30	608.90	1.36	8.44E+001	34.31	7.56E+001
8	3633-	3653	3642.09	910.62	1.42	1.53E+002	33.18	3.68E+001
9	3790-	3801	3795.92	949.08	0.89	1.65E+001	16.58	2.15E+001
10	3865-	3883	3874.23	968.66	1.06	7.45E+001	30.45	4.95E+001
11	5828-	5854	5841.09	1460.43	2.04	8.83E+002	59.61	9.77E+000
12	7050-	7063	7056.20	1764.23	0.45	3.18E+001	15.63	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: 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	1.42158E-001	8.73914E-002
K-40	0.995	1460.81*	10.67	2.03985E+001	2.15005E+000
TL-208	0.748	277.35	6.80		
		510.84*	21.60	6.58138E-001	4.08144E-001
		583.14*	84.20	2.93320E-001	9.21468E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	7.72222E+000	3.42601E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.691	238.63*	44.60	8.56983E-001	2.73980E-001
		609.31*	46.30	3.46330E-001	1.47088E-001
		1120.29	15.10		
Ac-228	0.623	1764.49*	15.80	5.41154E-001	2.71468E-001
		338.32	11.40		
		911.07*	27.70	1.16268E+000	2.85122E-001
		969.11*	16.60	9.57502E-001	4.03914E-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	0.992	7.880062E-002	8.960555E-002
K-40	0.995	2.039849E+001	2.150052E+000
TL-208	0.748	2.933203E-001	9.164962E-002
Pb-212 @	0.576	8.569834E-001	2.739800E-001
Bi-214	0.691	3.905450E-001	1.293246E-001
Ac-228	0.623	1.094446E+000	2.329336E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.56	1.6742E-001	56.95
4	499.26	4.1019E-002	91.26
9	949.08	2.7478E-002	100.56

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: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	1.1643E-001	1.02E-001	-1.0323E-001
	1332.49	100.00	1.0157E-001		5.1761E-002
Nb-94	702.63	100.00	1.2166E-001	1.08E-001	-1.0532E-002
	871.10	100.00	1.0811E-001		-3.5899E-002
Ag-108m	79.20	7.10	7.6103E+000	1.47E-001	-8.7519E+000
	433.93	89.90	1.4684E-001		4.5356E-002
	614.37	90.40	1.4755E-001		-6.2462E-002
	722.95	90.50	1.4848E-001		2.1635E-001
Sb-125	176.33	6.89	2.6360E+000	4.15E-001	-8.3900E-001
	427.89	29.33	4.1455E-001		-3.9789E-001
	463.38	10.35	1.3136E+000		8.6755E-001
	600.56	17.80	6.9495E-001		3.8170E-002
	606.64	5.02	3.0702E+000		3.2565E+000
	635.90	11.32	1.0787E+000		-1.1541E+000
Cs-134	563.23	8.38	1.4505E+000	1.33E-001	-3.3322E-001
	569.32	15.43	7.7035E-001		-4.8674E-001
	604.70	97.60	1.5556E-001		-1.4961E-001
	795.84	85.40	1.3329E-001		-2.5997E-002
Cs-137	801.93	8.73	1.2818E+000	1.45E-001	1.5380E-001
	661.65	85.12	1.4490E-001		-5.6880E-002
Eu-152	121.78	28.40	8.5291E-001	4.01E-001	-2.9973E-001
	244.69	7.49	2.2177E+000		-1.0380E+000
	344.27	26.50	5.1947E-001		-4.3056E-001
	778.89	12.74	9.6119E-001		-4.2748E-001
	867.32	4.16	2.6827E+000		1.2495E-001
	964.01	14.40	1.0183E+000		7.1240E-002
	1085.78	10.00	1.1334E+000		3.9625E-001
	1112.02	13.30	8.7872E-001		-1.7940E+000
1407.95	20.70	4.0105E-001	1.5452E-001		
Eu-154	123.07	40.50	5.9895E-001	2.80E-001	1.0091E-001
	247.94	6.60	2.3920E+000		-1.1609E+000
	591.81	4.83	2.4154E+000		-4.9704E-001
	723.30	19.70	6.8046E-001		7.8778E-001
	756.87	4.33	2.5914E+000		1.3880E+000
	873.19	11.50	9.2851E-001		3.7781E-001
	996.32	10.30	1.0214E+000		-1.0005E+000
Eu-155	1004.76	17.90	5.8608E-001	1.38E+000	-3.1541E-001
	1274.45	35.50	2.8050E-001		-3.0746E-002
	86.54	30.90	1.3782E+000		1.3747E+000
Am-241	105.31	20.70	1.4859E+000	2.91E+000	2.3322E-001
	59.54	35.90	2.9133E+000		2.1927E+000
Cm-243	228.19	10.56	1.6298E+000	1.04E+000	1.0723E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0403E+000	1.04E+000	2.3285E-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 6/26/2006 2:56:04 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-223-F-

Sample Title: OOL-10-03-223-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 2:46:02 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-223-F-
Title: OOL-10-03-223-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	300.11	75.05	1.63	1.80E+002	104.75	9.70E+002
2	947-	964	954.46	238.65	1.27	1.77E+002	75.75	4.02E+002
3	1347-	1356	1351.61	337.95	0.76	3.13E+001	33.00	1.11E+002
4	2321-	2342	2330.61	582.72	0.69	1.57E+002	42.66	8.43E+001
5	2428-	2444	2435.24	608.88	1.07	1.04E+002	36.91	7.93E+001
6	3633-	3653	3641.72	910.53	0.44	1.12E+002	35.68	5.89E+001
7	3866-	3882	3872.44	968.22	0.88	7.64E+001	28.61	4.36E+001
8	5826-	5855	5840.94	1460.39	1.95	8.23E+002	59.75	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: 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	1.89956E+001	2.06628E+000
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.47394E-001	1.04847E-001
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	5.61672E+000	3.44418E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.46794E-001	2.49211E-001
Bi-214	0.403	609.31*	46.30	4.25648E-001	1.60265E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.985	338.32*	11.40	4.19714E-001	4.47086E-001
		911.07*	27.70	8.50372E-001	2.87843E-001
		969.11*	16.60	9.81843E-001	3.81645E-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	0.994	1.899564E+001	2.066284E+000
TL-208	0.466	3.473943E-001	1.048467E-001
Pb-212 @	0.576	5.467939E-001	2.492108E-001
Bi-214	0.403	4.256478E-001	1.602647E-001
Ac-228	0.985	7.980748E-001	2.043885E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.0779E-001	8.64E-002	-4.1314E-002
	1332.49	100.00	8.6402E-002		-1.4095E-002
Nb-94	702.63	100.00	1.2457E-001	1.07E-001	1.4195E-001
	871.10	100.00	1.0672E-001		-2.1813E-003
Ag-108m	79.20	7.10	7.6787E+000	1.41E-001	-9.4291E+000
	433.93	89.90	1.4071E-001		-6.3774E-002
	614.37	90.40	1.4272E-001		3.7509E-002
	722.95	90.50	1.4586E-001		5.7691E-002
Sb-125	176.33	6.89	2.6108E+000	4.15E-001	5.5854E-001
	427.89	29.33	4.1455E-001		-1.7928E-001
	463.38	10.35	1.2446E+000		3.0491E-001
	600.56	17.80	6.4355E-001		-7.4567E-001
	606.64	5.02	3.0702E+000		5.0452E+000
	635.90	11.32	1.1236E+000		-2.1438E-001
Cs-134	563.23	8.38	1.4124E+000	1.35E-001	4.6710E-001
	569.32	15.43	7.7873E-001		2.4809E-001
	604.70	97.60	1.5718E-001		3.4152E-002
	795.84	85.40	1.3522E-001		4.3650E-002
Cs-137	801.93	8.73	1.2572E+000	1.50E-001	-4.5573E-001
	661.65	85.12	1.4980E-001		-6.6572E-002
Eu-152	121.78	28.40	8.6521E-001	3.67E-001	6.2783E-002
	244.69	7.49	2.1656E+000		-1.4613E+000
	344.27	26.50	5.3999E-001		1.3965E-001
	778.89	12.74	9.2758E-001		1.9063E-001
	867.32	4.16	2.6933E+000		-2.0060E+000
	964.01	14.40	1.0725E+000		1.3430E-001
	1085.78	10.00	1.0319E+000		-7.1324E-001
	1112.02	13.30	8.9635E-001		-2.0195E-001
1407.95	20.70	3.6740E-001	5.9835E-002		
Eu-154	123.07	40.50	6.0395E-001	2.80E-001	1.1663E-001
	247.94	6.60	2.2689E+000		-4.7925E+000
	591.81	4.83	2.4012E+000		2.5789E+000
	723.30	19.70	6.6838E-001		3.8334E-001
	756.87	4.33	2.8458E+000		-1.5934E+000
	873.19	11.50	9.2040E-001		1.5280E-001
	996.32	10.30	9.8156E-001		-3.8745E-001
	1004.76	17.90	6.0002E-001		-3.9788E-001
1274.45	35.50	2.8050E-001	-9.7847E-003		
Eu-155	86.54	30.90	1.3955E+000	1.40E+000	2.0782E+000
	105.31	20.70	1.5109E+000		1.0834E+000
Am-241	59.54	35.90	2.8359E+000	2.84E+000	1.9496E+000
Cm-243	228.19	10.56	1.6621E+000	1.09E+000	1.3168E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0911E+000	1.09E+000	-4.0046E-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 6/26/2006 3:32:21 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: YEL7810

Spectrum File: YEL7810

Sample ID: OOL-10-03-224-F-

Sample Title: OOL-10-03-224-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 3:22:19 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-224-F-
Title: OOL-10-03-224-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 12 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.993	1460.81*	10.67	1.97172E+001	2.11538E+000
TL-208	0.746	277.35	6.80		
		510.84*	21.60	6.58164E-001	3.98790E-001
		583.14*	84.20	3.27073E-001	9.92446E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	9.48459E+000	3.69079E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.08704E-001	2.76679E-001
Bi-214	0.707	609.31*	46.30	4.50481E-001	1.81672E-001
		1120.29*	15.10	5.24619E-001	3.51171E-001
		1764.49	15.80		
PB-214	0.614	74.82* @	6.21	1.63422E+001	6.46903E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.49841E-001	4.07710E-001
		351.92*	37.20	3.24066E-001	2.04879E-001
Ac-228	0.621	338.32	11.40		
		911.07*	27.70	9.75485E-001	2.62356E-001
		969.11*	16.60	1.06070E+000	3.39645E-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
X	ANN	0.974		
	K-40	0.993	1.971724E+001	2.115385E+000
	TL-208	0.746	3.463825E-001	9.630712E-002
	Pb-212 @	0.576	8.087036E-001	2.766792E-001
	Bi-214	0.707	4.661337E-001	1.613583E-001
	PB-214 @	0.614	3.695840E-001	1.830651E-001
	Ac-228	0.621	1.007327E+000	2.076268E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.5377E-001	50.67

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: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	1.1545E-001	9.01E-002	3.2443E-002
	1332.49	100.00	9.0091E-002		4.6651E-002
Nb-94	702.63	100.00	1.1600E-001	1.12E-001	-2.9037E-002
	871.10	100.00	1.1170E-001		1.5608E-003
Ag-108m	79.20	7.10	7.7981E+000	1.36E-001	-1.3210E+001
	433.93	89.90	1.4207E-001		-2.6233E-002
	614.37	90.40	1.4550E-001		-2.4061E-002
	722.95	90.50	1.3606E-001		1.1544E-001
Sb-125	176.33	6.89	2.5435E+000	4.29E-001	9.9882E-001
	427.89	29.33	4.2892E-001		2.5230E-003
	463.38	10.35	1.2397E+000		-5.2444E-001
	600.56	17.80	6.7262E-001		1.2005E-001
	606.64	5.02	3.1371E+000		5.9723E+000
	635.90	11.32	1.1029E+000		-4.7524E-002
Cs-134	563.23	8.38	1.4618E+000	1.40E-001	-4.5833E-002
	569.32	15.43	7.2914E-001		-2.9138E-001
	604.70	97.60	1.5664E-001		2.5442E-002
	795.84	85.40	1.4040E-001		1.6136E-001
Cs-137	801.93	8.73	1.2372E+000	1.46E-001	-2.8724E-001
	661.65	85.12	1.4573E-001		9.3811E-002
Eu-152	121.78	28.40	8.7556E-001	4.28E-001	9.2475E-001
	244.69	7.49	2.2056E+000		-1.0780E+000
	344.27	26.50	5.2450E-001		-2.8869E-001
	778.89	12.74	8.8938E-001		-2.5504E-001
	867.32	4.16	2.8372E+000		-1.4295E+000
	964.01	14.40	9.9126E-001		-3.2262E-001
	1085.78	10.00	1.0425E+000		-6.2868E-001
	1112.02	13.30	8.8228E-001		-6.9184E-001
1407.95	20.70	4.2816E-001	2.3653E-001		
Eu-154	123.07	40.50	6.1014E-001	2.87E-001	-1.4781E-002
	247.94	6.60	2.4228E+000		3.4280E-001
	591.81	4.83	2.3214E+000		2.5576E-001
	723.30	19.70	6.1571E-001		2.8609E-001
	756.87	4.33	2.5137E+000		6.5240E-001
	873.19	11.50	9.4450E-001		-1.9784E-001
	996.32	10.30	9.8156E-001		5.6720E-001
	1004.76	17.90	6.1363E-001		1.2018E-001
1274.45	35.50	2.8741E-001	3.1063E-001		
Eu-155	86.54	30.90	1.3867E+000	1.39E+000	1.4123E-001
	105.31	20.70	1.4376E+000		-6.9433E-001
Am-241	59.54	35.90	2.9400E+000	2.94E+000	4.7652E-001
Cm-243	228.19	10.56	1.5702E+000	1.04E+000	9.0785E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0358E+000	1.04E+000	-9.2781E-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 6/27/2006 10:28:18 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-10-03-225-F-G

Sample ID: OOL-10-03-225-F-

Sample Title: OOL-10-03-225-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 4:13:49 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 5/9/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7810Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-225-F-G
 Log Number: OOL-10-03-225-F-
 Title: OOL-10-03-225-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	199-	215	207.68	51.94	1.26	2.12E+002	95.34	6.86E+002
2	295-	308	299.88	74.99	1.38	2.06E+002	105.94	9.83E+002
3	947-	959	954.25	238.60	1.58	1.88E+002	63.91	3.32E+002
4	1173-	1188	1180.70	295.22	0.48	5.50E+001	52.70	2.22E+002
5	1400-	1418	1407.69	351.97	0.82	1.44E+002	51.51	1.61E+002
6	2033-	2052	2041.92	510.54	0.99	8.41E+001	47.48	1.43E+002
7	2323-	2341	2330.20	582.62	1.49	1.95E+002	40.73	6.98E+001
8	2428-	2445	2435.47	608.94	1.56	1.27E+002	36.62	6.85E+001
9	3118-	3129	3123.55	780.98	0.72	1.82E+001	18.42	2.78E+001
10	3175-	3187	3181.18	795.39	0.46	2.54E+001	18.74	2.46E+001
11	3632-	3651	3641.90	910.58	1.00	1.43E+002	32.42	3.74E+001
12	3865-	3882	3873.99	968.60	0.51	5.29E+001	29.68	5.41E+001
13	5831-	5853	5840.76	1460.34	1.94	8.27E+002	58.90	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-10-03-225-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	0.992	1460.81*	10.67	1.91033E+001	2.05977E+000
TL-208	0.744	277.35	6.80		
		510.84*	21.60	6.89720E-001	4.04499E-001
		583.14*	84.20	4.32681E-001	1.06436E-001
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	6.44300E+000	3.54118E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.79982E-001	2.17339E-001
Bi-214	0.404	609.31*	46.30	5.19049E-001	1.63298E-001
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.615	74.82* @	6.21	1.11015E+001	6.15454E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.20060E-001	4.08921E-001
Ac-228	0.621	351.92*	37.20	5.98470E-001	2.36283E-001
		338.32	11.40		
		911.07*	27.70	1.08151E+000	2.75679E-001
		969.11*	16.60	6.79449E-001	3.87891E-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-10-03-225-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
X	ANN	0.993		
	K-40	0.992	1.910331E+001	2.059767E+000
	TL-208	0.744	4.493249E-001	1.029320E-001
	Pb-212 @	0.576	5.799823E-001	2.173393E-001
	Bi-214	0.404	5.190489E-001	1.632976E-001
	PB-214 @	0.615	5.538133E-001	2.045853E-001
	Ac-228	0.621	9.465811E-001	2.247085E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	51.94	3.5294E-001	45.02
9	780.98	3.0389E-002	101.05
10	795.39	4.2292E-002	73.86

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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-03-225-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	1.2714E-001	8.17E-002	3.2572E-002
	1332.49	100.00	8.1737E-002		2.0932E-002
Nb-94	702.63	100.00	1.1905E-001	1.15E-001	-6.0538E-002
	871.10	100.00	1.1475E-001		-2.7599E-002
Ag-108m	79.20	7.10	7.9595E+000	1.40E-001	-7.1274E+000
	433.93	89.90	1.4044E-001		4.5189E-002
	614.37	90.40	1.4721E-001		1.1063E-002
	722.95	90.50	1.5142E-001		1.8257E-001
Sb-125	176.33	6.89	2.6996E+000	4.29E-001	4.2694E-001
	427.89	29.33	4.2892E-001		1.0595E-001
	463.38	10.35	1.3113E+000		7.3282E-001
	600.56	17.80	6.5922E-001		1.9130E-001
	606.64	5.02	3.1574E+000		6.9874E+000
	635.90	11.32	1.1148E+000		1.0934E+000
Cs-134	563.23	8.38	1.5058E+000	1.36E-001	6.3979E-001
	569.32	15.43	8.0334E-001		4.8589E-001
	604.70	97.60	1.5392E-001		-6.7618E-002
	795.84	85.40	1.3570E-001		3.4986E-002
Cs-137	801.93	8.73	1.2064E+000	1.45E-001	1.9061E-001
	661.65	85.12	1.4532E-001		-7.9561E-002
Eu-152	121.78	28.40	8.9735E-001	3.89E-001	-2.5615E-001
	244.69	7.49	2.3034E+000		-4.0496E+000
	344.27	26.50	5.3371E-001		-7.2691E-001
	778.89	12.74	9.5215E-001		-2.9143E-001
	867.32	4.16	2.7352E+000		8.9405E-001
	964.01	14.40	9.7872E-001		2.0761E-001
	1085.78	10.00	1.0839E+000		-4.0413E-001
	1112.02	13.30	7.7620E-001		-1.3119E+000
1407.95	20.70	3.8880E-001	1.1610E-001		
Eu-154	123.07	40.50	6.2654E-001	3.09E-001	1.9665E-001
	247.94	6.60	2.4733E+000		-8.3690E-001
	591.81	4.83	2.4436E+000		2.0920E+000
	723.30	19.70	6.9399E-001		6.4991E-001
	756.87	4.33	2.4639E+000		2.0087E-001
	873.19	11.50	1.0132E+000		4.5717E-001
	996.32	10.30	1.0116E+000		7.7574E-002
	1004.76	17.90	6.2430E-001		2.5378E-001
1274.45	35.50	3.0876E-001	2.1984E-001		
Eu-155	86.54	30.90	1.4640E+000	1.46E+000	2.2861E+000
	105.31	20.70	1.5565E+000		1.6473E-001
Am-241	59.54	35.90	3.2726E+000	3.27E+000	2.1560E+000
Cm-243	228.19	10.56	1.6521E+000	1.14E+000	6.6941E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1386E+000	1.14E+000	6.7536E-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 6/26/2006 3:59:38 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-226-F-

Sample Title: OOL-10-03-226-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 3:49:36 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-226-F-
 Title: OOL-10-03-226-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	292.27	73.07	1.04	1.69E+002	43.05	5.61E+002
m	2	287-	306	300.39	75.10	1.04	2.97E+002	49.72	7.20E+002
	3	945-	960	954.95	238.75	0.93	2.45E+002	67.59	3.14E+002
	4	1176-	1186	1181.34	295.35	0.44	5.91E+001	35.78	1.15E+002
	5	1345-	1360	1351.96	338.01	1.28	1.02E+002	44.38	1.36E+002
	6	1402-	1417	1407.28	351.84	1.38	1.50E+002	46.52	1.37E+002
	7	2036-	2051	2043.17	510.83	0.73	9.85E+001	39.38	1.01E+002
	8	2324-	2341	2332.20	583.09	1.36	1.58E+002	37.79	6.54E+001
	9	2427-	2446	2436.94	609.28	0.68	1.04E+002	38.72	8.18E+001
	10	2903-	2918	2908.76	727.24	1.58	5.61E+001	27.10	4.49E+001
	11	3635-	3654	3644.56	911.20	1.15	1.43E+002	35.37	5.23E+001
	12	3868-	3883	3875.14	968.85	0.67	6.76E+001	25.84	3.54E+001
M	13	4454-	4488	4460.05	1115.09	1.32	1.02E+001	9.40	1.33E+001
m	14	4454-	4488	4480.64	1120.24	1.32	3.92E+001	16.17	3.17E+001
	15	5502-	5515	5508.87	1377.32	1.01	1.38E+001	13.51	1.22E+001
	16	5831-	5857	5844.20	1461.16	1.95	9.61E+002	63.85	2.32E+001
	17	6346-	6359	6352.09	1588.14	0.34	1.66E+001	11.10	5.42E+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	1.76929E-001	7.46861E-002
K-40	0.996	1460.81*	10.67	2.18377E+001	2.28741E+000
TL-208	0.753	277.35	6.80		
		510.84*	21.60	8.19114E-001	3.52180E-001
		583.14*	84.20	3.51678E-001	9.59726E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	9.52398E-001	4.73622E-001
Pb-212	0.593	74.81* @	10.70	1.15216E+001	2.97136E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.98946E-001	2.53741E-001
Bi-214	0.705	609.31*	46.30	4.29524E-001	1.68096E-001
		1120.29*	15.10	5.77692E-001	2.46358E-001
		1764.49	15.80		
PB-214	0.627	74.82* @	6.21	1.98521E+001	5.31869E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.71553E-001	2.96400E-001
Ac-228	0.998	351.92*	37.20	6.46041E-001	2.27210E-001
		338.32*	11.40	1.41225E+000	6.54899E-001
		911.07*	27.70	1.08630E+000	2.96806E-001
		969.11*	16.60	8.73031E-001	3.45879E-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	1.009662E-001	7.747011E-002
K-40	0.996	2.183774E+001	2.287409E+000
TL-208	0.753	3.516780E-001	9.528585E-002
Bi-212	1.000	9.523978E-001	4.736216E-001
Pb-212 @	0.593	7.989456E-001	2.537413E-001
Bi-214	0.705	4.765927E-001	1.388529E-001
PB-214 @	0.627	5.814580E-001	1.803242E-001
Ac-228	0.998	1.039900E+000	2.129972E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.8143E-001	25.49
M 13	1115.09	1.7033E-002	91.96
15	1377.32	2.2933E-002	98.21
17	1588.14	2.7633E-002	66.94

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: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	1.2619E-001	9.28E-002	-1.8613E-002
	1332.49	100.00	9.2759E-002		-5.3829E-002
Nb-94	702.63	100.00	1.1604E-001	1.16E-001	1.2659E-001
	871.10	100.00	1.2090E-001		-5.0856E-002
Ag-108m	79.20	7.10	9.0272E+000	1.54E-001	-6.9453E+000
	433.93	89.90	1.5353E-001		6.8201E-002
	614.37	90.40	1.6143E-001		3.9800E-002
	722.95	90.50	1.5474E-001		2.7681E-002
Sb-125	176.33	6.89	2.8970E+000	4.21E-001	-1.0061E+000
	427.89	29.33	4.2143E-001		-2.1266E-001
	463.38	10.35	1.2753E+000		2.0193E-001
	600.56	17.80	6.9648E-001		-4.1045E-001
	606.64	5.02	3.1250E+000		3.9927E+000
	635.90	11.32	1.0746E+000		1.7094E-001
Cs-134	563.23	8.38	1.4738E+000	1.43E-001	-4.5353E-001
	569.32	15.43	8.4334E-001		1.4325E-001
	604.70	97.60	1.5815E-001		5.3754E-002
	795.84	85.40	1.4291E-001		9.2110E-002
Cs-137	801.93	8.73	1.3504E+000	1.50E-001	2.2874E-001
	661.65	85.12	1.5015E-001		7.4927E-004
Eu-152	121.78	28.40	9.8414E-001	3.72E-001	1.4302E+000
	244.69	7.49	2.2553E+000		-5.2879E+000
	344.27	26.50	5.4298E-001		-4.7219E-001
	778.89	12.74	9.3502E-001		-1.3976E-001
	867.32	4.16	2.8339E+000		-3.0893E+000
	964.01	14.40	1.0059E+000		-2.9318E-001
	1085.78	10.00	1.1180E+000		-9.6950E-001
	1112.02	13.30	7.9525E-001		2.4078E-001
1407.95	20.70	3.7222E-001	1.6188E-001		
Eu-154	123.07	40.50	6.7258E-001	2.92E-001	-4.5295E-001
	247.94	6.60	2.5026E+000		-1.0034E+000
	591.81	4.83	2.6140E+000		1.6989E+000
	723.30	19.70	7.1095E-001		9.0807E-002
	756.87	4.33	2.8050E+000		5.8693E-001
	873.19	11.50	1.0625E+000		-6.0500E-002
	996.32	10.30	1.0843E+000		-7.8610E-002
	1004.76	17.90	5.9801E-001		-1.5830E-002
1274.45	35.50	2.9151E-001	1.5554E-001		
Eu-155	86.54	30.90	1.5892E+000	1.59E+000	2.7923E+000
	105.31	20.70	1.5950E+000		-1.5535E-001
Am-241	59.54	35.90	3.6125E+000	3.61E+000	9.0536E-001
Cm-243	228.19	10.56	1.6843E+000	1.15E+000	-2.6975E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1545E+000	1.15E+000	-9.5978E-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 6/26/2006 3:38:41 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-227-F-

Sample Title: OOL-10-03-227-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 3:28:38 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-227-F-
Title: OOL-10-03-227-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Rows 1-14 with peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.51126E-001	7.41245E-002
K-40	0.996	1460.81*	10.67	1.86327E+001	2.02174E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	6.99659E-001	3.47893E-001
		583.14*	84.20	3.54417E-001	1.04089E-001
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.27912E+001	3.18889E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.705	238.63*	44.60	7.52891E-001	2.28571E-001
		609.31*	46.30	6.93755E-001	1.81771E-001
		1120.29*	15.10	8.57886E-001	3.63625E-001
PB-214	0.626	1764.49	15.80		
		74.82* @	6.21	2.20396E+001	5.72274E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
Ac-228	0.633	295.21*	19.20	4.66914E-001	4.03042E-001
		351.92*	37.20	4.84705E-001	2.18643E-001
		338.32	11.40		
		911.07*	27.70	7.19543E-001	2.36987E-001
		969.11*	16.60	6.12458E-001	3.87666E-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	7.457234E-002	7.741912E-002
K-40	0.996	1.863268E+001	2.021739E+000
TL-208	0.752	3.544171E-001	1.034465E-001
Pb-212 @	0.593	7.528905E-001	2.285712E-001
Bi-214	0.705	7.265694E-001	1.625881E-001
PB-214 @	0.626	4.806600E-001	1.921853E-001
Ac-228	0.633	6.904110E-001	2.021982E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.1184E-001	23.19
6	386.17	4.2917E-002	97.66
7	409.28	3.6377E-002	123.36

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: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	1.1259E-001	8.08E-002	-4.9343E-002
	1332.49	100.00	8.0783E-002		-1.1694E-001
Nb-94	702.63	100.00	1.2388E-001	1.23E-001	-1.0417E-002
	871.10	100.00	1.2333E-001		-1.4064E-002
Ag-108m	79.20	7.10	9.6295E+000	1.44E-001	-8.7386E+000
	433.93	89.90	1.4412E-001		1.5898E-002
	614.37	90.40	1.7371E-001		1.3635E-002
	722.95	90.50	1.4632E-001		1.3147E-001
Sb-125	176.33	6.89	2.9624E+000	4.52E-001	5.1686E-001
	427.89	29.33	4.5216E-001		-1.0605E-001
	463.38	10.35	1.3263E+000		1.4427E+000
	600.56	17.80	7.3936E-001		3.0508E-001
	606.64	5.02	3.3150E+000		5.6542E+000
	635.90	11.32	1.0746E+000		1.6311E-001
Cs-134	563.23	8.38	1.5255E+000	1.40E-001	7.1353E-001
	569.32	15.43	8.4334E-001		5.5458E-001
	604.70	97.60	1.7304E-001		-1.2610E-002
	795.84	85.40	1.4016E-001		7.3996E-002
	801.93	8.73	1.4093E+000		-1.7596E-002
Cs-137	661.65	85.12	1.4814E-001	1.48E-001	4.0346E-002
Eu-152	121.78	28.40	9.5374E-001	4.66E-001	4.2672E-001
	244.69	7.49	2.3474E+000		-2.8081E+000
	344.27	26.50	5.4298E-001		-1.2109E+000
	778.89	12.74	9.0670E-001		-9.5835E-002
	867.32	4.16	2.9328E+000		-4.3013E+000
	964.01	14.40	1.0867E+000		1.0780E+000
	1085.78	10.00	1.1329E+000		4.7227E-001
	1112.02	13.30	7.9121E-001		-3.8755E-001
1407.95	20.70	4.6587E-001	-4.0989E-001		
Eu-154	123.07	40.50	6.5610E-001	3.06E-001	1.9453E-002
	247.94	6.60	2.6538E+000		-6.5687E-001
	591.81	4.83	2.6206E+000		-2.4810E+000
	723.30	19.70	6.7398E-001		6.4164E-001
	756.87	4.33	2.7154E+000		1.4273E+000
	873.19	11.50	1.0765E+000		7.1258E-001
	996.32	10.30	1.0981E+000		-1.4472E-001
	1004.76	17.90	6.0358E-001		-4.3795E-001
1274.45	35.50	3.0632E-001	-9.5304E-002		
Eu-155	86.54	30.90	1.6609E+000	1.65E+000	3.0344E+000
	105.31	20.70	1.6470E+000		7.5075E-001
Am-241	59.54	35.90	3.9191E+000	3.92E+000	2.0028E+000
Cm-243	228.19	10.56	1.7134E+000	1.19E+000	-8.1880E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1919E+000	1.19E+000	6.0391E-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 6/26/2006 3:00:20 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-228-F-

Sample Title: OOL-10-03-228-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 2:50:18 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-228-F-
 Title: OOL-10-03-228-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	300.26	75.07	0.65	1.85E+002	77.24	6.03E+002
2	333-	345	339.79	84.95	0.65	1.38E+002	84.61	6.56E+002
3	944-	962	954.67	238.68	1.09	2.30E+002	75.69	3.74E+002
4	1347-	1360	1352.83	338.23	1.00	6.69E+001	39.97	1.26E+002
5	1401-	1413	1407.70	351.95	1.40	1.01E+002	38.05	1.05E+002
6	2035-	2050	2043.38	510.88	1.56	8.60E+001	38.82	1.02E+002
7	2323-	2342	2331.74	582.97	1.38	1.65E+002	43.55	9.31E+001
8	2428-	2447	2436.47	609.16	1.13	1.39E+002	39.42	7.56E+001
9	2901-	2914	2908.06	727.06	0.37	2.35E+001	26.47	5.75E+001
10	3317-	3329	3323.10	830.83	1.02	1.46E+001	16.67	2.14E+001
11	3635-	3655	3644.80	911.26	0.80	1.14E+002	32.97	4.66E+001
M 12	3853-	3886	3858.50	964.69	1.10	2.75E+001	13.91	3.01E+001
m 13	3853-	3886	3876.25	969.13	1.10	7.42E+001	19.22	2.57E+001
14	5832-	5856	5844.54	1461.24	1.71	8.28E+002	59.39	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: 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	1.54394E-001	7.28056E-002
K-40	0.994	1460.81*	10.67	1.88231E+001	2.03592E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	7.14785E-001	3.42080E-001
		583.14*	84.20	3.68115E-001	1.08369E-001
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	3.98522E-001	4.51988E-001
Pb-212	0.594	74.81* @	10.70	7.21448E+000	3.32057E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.52366E-001	2.73789E-001
Bi-214	0.402	609.31*	46.30	5.74446E-001	1.77162E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.999	338.32*	11.40	9.29134E-001	5.73982E-001
		911.07*	27.70	8.70755E-001	2.70213E-001
		969.11*	16.60	9.58014E-001	2.67734E-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	7.488072E-002	7.643207E-002
K-40	0.994	1.882312E+001	2.035916E+000
TL-208	0.752	3.681155E-001	1.077027E-001
Bi-212	1.000	3.985220E-001	4.519877E-001
Pb-212 @	0.594	7.523662E-001	2.737886E-001
Bi-214	0.402	5.744456E-001	1.771620E-001
Ac-228	0.999	9.162059E-001	1.805343E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.95	2.2947E-001	61.45
5	351.95	1.6838E-001	37.66
10	830.83	2.4271E-002	114.47
M 12	964.69	4.5882E-002	50.53

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: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	1.1959E-001	9.62E-002	-7.8652E-002
	1332.49	100.00	9.6174E-002		6.1425E-002
Nb-94	702.63	100.00	1.2059E-001	1.02E-001	6.2943E-002
	871.10	100.00	1.0173E-001		1.1820E-002
Ag-108m	79.20	7.10	9.3277E+000	1.47E-001	-8.0697E+000
	433.93	89.90	1.4714E-001		-1.9791E-002
	614.37	90.40	1.7138E-001		-7.9430E-002
	722.95	90.50	1.5367E-001		1.2008E-001
Sb-125	176.33	6.89	2.8926E+000	4.46E-001	6.0585E-001
	427.89	29.33	4.4636E-001		-1.4482E-001
	463.38	10.35	1.2603E+000		1.2077E+000
	600.56	17.80	6.8344E-001		-5.4430E-001
	606.64	5.02	3.2857E+000		6.9144E+000
	635.90	11.32	1.0143E+000		2.2232E-001
Cs-134	563.23	8.38	1.5436E+000	1.35E-001	8.2378E-001
	569.32	15.43	8.2561E-001		-1.3183E-001
	604.70	97.60	1.6448E-001		1.9693E-002
	795.84	85.40	1.3495E-001		6.8609E-002
Cs-137	801.93	8.73	1.3033E+000	1.49E-001	6.7873E-001
	661.65	85.12	1.4855E-001		4.2166E-002
Eu-152	121.78	28.40	9.3750E-001	3.89E-001	-1.0474E-001
	244.69	7.49	2.3037E+000		-1.3563E+000
	344.27	26.50	5.5541E-001		1.3434E-001
	778.89	12.74	9.0989E-001		-4.5269E-001
	867.32	4.16	2.4076E+000		-4.9249E+000
	964.01	14.40	1.0981E+000		-2.1432E-001
	1085.78	10.00	1.0130E+000		-9.1677E-001
	1112.02	13.30	9.2514E-001		6.5008E-001
	1407.95	20.70	3.8885E-001		-1.1294E-001
	Eu-154	123.07	40.50		6.6026E-001
247.94		6.60	2.5526E+000	-1.9975E+000	
591.81		4.83	2.4432E+000	-1.3469E-001	
723.30		19.70	7.1258E-001	6.6448E-001	
756.87		4.33	2.5749E+000	1.5400E+000	
873.19		11.50	8.7654E-001	-8.0825E-001	
996.32		10.30	1.0843E+000	-4.1628E-001	
1004.76		17.90	6.3853E-001	3.9447E-002	
1274.45	35.50	3.0951E-001	-1.2182E-001		
Eu-155	86.54	30.90	1.6027E+000	1.60E+000	1.0673E+000
	105.31	20.70	1.6105E+000		-6.8149E-003
Am-241	59.54	35.90	3.7176E+000	3.72E+000	1.4051E+000
Cm-243	228.19	10.56	1.7013E+000	1.13E+000	2.2556E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1330E+000	1.13E+000	2.9546E-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 6/26/2006 2:08:49 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-229-F-

Sample Title: OOL-10-03-229-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 1:58:47 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-229-F-
 Title: OOL-10-03-229-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	291.51	72.88	1.23	2.03E+002	43.61	6.97E+002
m	2	282-	306	300.43	75.11	1.23	3.22E+002	51.44	8.24E+002
	3	332-	345	340.12	85.03	0.68	1.24E+002	86.50	6.61E+002
	4	739-	753	744.09	186.03	0.64	5.48E+001	66.51	3.76E+002
	5	947-	970	955.02	238.77	1.08	3.22E+002	88.54	4.17E+002
	6	1403-	1413	1408.07	352.04	0.79	6.88E+001	37.44	1.24E+002
	7	2035-	2051	2043.30	510.86	1.18	1.12E+002	40.15	9.80E+001
	8	2323-	2342	2333.03	583.30	0.67	1.43E+002	40.91	8.36E+001
	9	2427-	2447	2436.83	609.25	1.20	1.48E+002	40.91	7.88E+001
	10	2904-	2916	2909.02	727.30	0.68	3.81E+001	22.01	3.29E+001
	11	3635-	3654	3644.77	911.26	0.43	1.20E+002	33.63	4.98E+001
	12	3869-	3884	3876.45	969.18	1.83	6.74E+001	26.76	3.96E+001
	13	4474-	4488	4481.13	1120.36	1.26	4.33E+001	27.42	5.27E+001
	14	5506-	5519	5512.39	1378.20	0.70	1.64E+001	13.34	1.06E+001
	15	5832-	5857	5845.03	1461.36	1.62	8.38E+002	60.77	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: 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	2.01160E-001	7.71062E-002
K-40	0.990	1460.81*	10.67	1.90457E+001	2.07012E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	9.31295E-001	3.64985E-001
		583.14*	84.20	3.20152E-001	1.00385E-001
		860.37	12.46		
Bi-212	0.999	727.17*	11.80	6.47073E-001	3.81463E-001
Pb-212	0.593	74.81* @	10.70	1.24847E+001	3.15843E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.05112E+000	3.32721E-001
Bi-214	0.705	609.31*	46.30	6.10864E-001	1.84587E-001
		1120.29*	15.10	6.38648E-001	4.10146E-001
		1764.49	15.80		
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	9.14711E-001	2.76796E-001
		969.11*	16.60	8.70698E-001	3.57358E-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	1.320069E-001	8.006528E-002
K-40	0.990	1.904573E+001	2.070121E+000
TL-208	0.752	3.201520E-001	9.984097E-002
Bi-212	0.999	6.470729E-001	3.814631E-001
Pb-212 @	0.593	1.051123E+000	3.327209E-001
Bi-214	0.705	6.155437E-001	1.683258E-001
Ac-228	0.632	8.982070E-001	2.188300E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.3802E-001	21.51
3	85.03	2.0652E-001	69.81
4	186.03	9.1251E-002	121.48
6	352.04	1.1473E-001	54.38
14	1378.20	2.7315E-002	81.40

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: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	1.2573E-001	9.62E-002	3.8921E-002
	1332.49	100.00	9.6174E-002		7.7964E-002
Nb-94	702.63	100.00	1.2352E-001	1.18E-001	-9.0668E-002
	871.10	100.00	1.1842E-001		1.0274E-001
Ag-108m	79.20	7.10	9.2352E+000	1.34E-001	-6.0315E+000
	433.93	89.90	1.5170E-001		1.2158E-001
	614.37	90.40	1.7168E-001		1.0920E-002
	722.95	90.50	1.3368E-001		-8.2711E-002
Sb-125	176.33	6.89	2.8897E+000	4.24E-001	2.4160E+000
	427.89	29.33	4.2408E-001		-2.8971E-001
	463.38	10.35	1.2925E+000		7.6628E-001
	600.56	17.80	6.6241E-001		-6.0083E-001
	606.64	5.02	3.2808E+000		6.3266E+000
	635.90	11.32	1.0684E+000		8.2089E-001
Cs-134	563.23	8.38	1.5292E+000	1.45E-001	-2.8077E-001
	569.32	15.43	8.4139E-001		3.9087E-001
	604.70	97.60	1.6577E-001		-3.4148E-002
	795.84	85.40	1.4472E-001		6.4154E-002
	801.93	8.73	1.2936E+000		-2.9012E-001
Cs-137	661.65	85.12	1.4107E-001	1.41E-001	4.9611E-002
Eu-152	121.78	28.40	9.7132E-001	4.24E-001	-1.2212E-001
	244.69	7.49	2.3238E+000		2.5288E-001
	344.27	26.50	5.4959E-001		-8.9928E-001
	778.89	12.74	9.3502E-001		-7.0279E-001
	867.32	4.16	2.6891E+000		-2.6390E+000
	964.01	14.40	1.0471E+000		-4.2080E-002
	1085.78	10.00	1.0773E+000		2.0231E-001
	1112.02	13.30	8.3454E-001		-8.1703E-001
1407.95	20.70	4.2372E-001	-7.4092E-002		
Eu-154	123.07	40.50	6.7731E-001	3.10E-001	2.5216E-001
	247.94	6.60	2.6079E+000		5.6180E-001
	591.81	4.83	2.6140E+000		2.5909E+000
	723.30	19.70	6.2174E-001		-2.2506E-001
	756.87	4.33	2.6879E+000		5.0661E-001
	873.19	11.50	1.0303E+000		8.9390E-001
	996.32	10.30	1.0609E+000		-7.7848E-001
	1004.76	17.90	6.2266E-001		-1.7832E-001
1274.45	35.50	3.0951E-001	-1.1770E-001		
Eu-155	86.54	30.90	1.5629E+000	1.56E+000	1.3992E+000
	105.31	20.70	1.6033E+000		-5.7895E-002
Am-241	59.54	35.90	3.6956E+000	3.70E+000	3.7444E+000
Cm-243	228.19	10.56	1.7230E+000	1.17E+000	1.3439E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1723E+000	1.17E+000	5.1339E-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 6/26/2006 1:39:54 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-230-F-

Sample Title: OOL-10-03-230-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 1:29:51 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-230-F-
Title: OOL-10-03-230-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	292.30	73.08	1.13	1.58E+002	43.28	8.10E+002
m	2	283-	306	300.48	75.12	1.13	3.16E+002	52.29	8.14E+002
	3	948-	960	954.69	238.68	1.30	2.28E+002	57.60	2.42E+002
	4	1401-	1416	1407.41	351.87	1.32	8.90E+001	43.82	1.36E+002
	5	2035-	2049	2042.91	510.76	0.61	4.39E+001	39.01	1.22E+002
	6	2325-	2342	2332.23	583.10	1.19	1.49E+002	36.91	6.35E+001
	7	2428-	2445	2437.33	609.37	0.57	1.15E+002	36.62	7.20E+001
	8	3176-	3187	3181.37	795.40	0.76	1.77E+001	20.24	3.53E+001
	9	3636-	3653	3644.04	911.08	0.39	8.26E+001	30.22	4.74E+001
	10	3869-	3882	3876.01	969.07	0.56	5.86E+001	23.18	2.94E+001
	11	5832-	5858	5844.77	1461.30	1.55	8.02E+002	58.83	2.30E+001
	12	7054-	7067	7060.76	1765.32	1.86	3.23E+001	11.92	1.70E+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	0.992	1460.81*	10.67	1.82289E+001	1.99160E+000
TL-208	0.753	277.35	6.80		
		510.84*	21.60	3.65159E-001	3.29453E-001
		583.14*	84.20	3.31556E-001	9.30171E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	1.22526E+001	3.14388E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.43825E-001	2.21245E-001
Bi-214	0.693	609.31*	46.30	4.73891E-001	1.61803E-001
		1120.29	15.10		
		1764.49*	15.80	5.25330E-001	2.00866E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	6.28612E-001	2.41092E-001
		969.11*	16.60	7.57039E-001	3.09649E-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	0.998		
	K-40	0.992	1.822893E+001	1.991597E+000
	TL-208	0.753	3.340372E-001	8.951759E-002
	Pb-212 @	0.594	7.438249E-001	2.212454E-001
	Bi-214	0.693	4.941336E-001	1.260066E-001
	Ac-228	0.633	6.770821E-001	1.902310E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.6327E-001	27.40
4	351.87	1.4833E-001	49.24
8	795.40	2.9434E-002	114.61

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: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	8.70E-002	8.0579E-002
	1332.49	100.00	8.6993E-002		8.9508E-004
Nb-94	702.63	100.00	1.1984E-001	1.15E-001	-3.5087E-002
	871.10	100.00	1.1503E-001		-3.0319E-002
Ag-108m	79.20	7.10	9.4935E+000	1.45E-001	-1.0631E+001
	433.93	89.90	1.4823E-001		-1.0173E-001
	614.37	90.40	1.6451E-001		-8.9725E-002
	722.95	90.50	1.4480E-001		1.4265E-001
Sb-125	176.33	6.89	2.8151E+000	4.59E-001	1.1842E+000
	427.89	29.33	4.5870E-001		1.5591E-001
	463.38	10.35	1.2803E+000		1.3348E-001
	600.56	17.80	6.7967E-001		-1.4113E-001
	606.64	5.02	3.1250E+000		5.6513E+000
	635.90	11.32	1.0496E+000		5.8547E-001
Cs-134	563.23	8.38	1.5073E+000	1.41E-001	-3.1553E-001
	569.32	15.43	7.9721E-001		2.7724E-001
	604.70	97.60	1.5434E-001		-1.4610E-002
	795.84	85.40	1.4108E-001		1.2505E-001
	801.93	8.73	1.2839E+000		-3.4243E-001
Cs-137	661.65	85.12	1.5055E-001	1.51E-001	2.8146E-002
Eu-152	121.78	28.40	9.1618E-001	4.01E-001	-7.3353E-001
	244.69	7.49	2.3546E+000		-1.8581E+000
	344.27	26.50	5.5685E-001		-5.5471E-001
	778.89	12.74	8.6070E-001		5.2637E-002
	867.32	4.16	2.8739E+000		-6.1808E-001
	964.01	14.40	9.9094E-001		5.2764E-001
	1085.78	10.00	1.2043E+000		-3.7341E-001
	1112.02	13.30	8.3837E-001		2.4993E-001
1407.95	20.70	4.0084E-001	1.5114E-001		
Eu-154	123.07	40.50	6.5261E-001	3.25E-001	4.4444E-001
	247.94	6.60	2.6497E+000		-4.2609E-002
	591.81	4.83	2.5198E+000		-1.2805E+000
	723.30	19.70	6.6177E-001		5.1566E-001
	756.87	4.33	2.6879E+000		-1.4153E+000
	873.19	11.50	9.6256E-001		-2.6225E-001
	996.32	10.30	1.0514E+000		3.2049E-002
	1004.76	17.90	5.8670E-001		-3.5009E-001
1274.45	35.50	3.2496E-001	2.4819E-001		
Eu-155	86.54	30.90	1.6452E+000	1.58E+000	2.7956E+000
	105.31	20.70	1.5765E+000		-7.7910E-001
Am-241	59.54	35.90	3.9228E+000	3.92E+000	9.7003E-001
Cm-243	228.19	10.56	1.6233E+000	1.11E+000	1.2970E+000

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	-4.0717E-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 6/26/2006 11:07:46 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-10-03-231-F-

Sample Title: OOL-10-03-231-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 10:57:43 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-231-F-
 Title: OOL-10-03-231-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	296-	314	300.80	75.20	0.83	1.87E+002	47.20	5.48E+002
m	2	296-	314	311.04	77.76	0.84	6.81E+001	35.71	4.49E+002
	3	944-	962	955.04	238.77	1.07	2.85E+002	73.17	3.28E+002
	4	1345-	1360	1353.73	338.45	0.83	6.48E+001	47.43	1.73E+002
	5	1400-	1417	1407.50	351.90	1.16	1.28E+002	50.55	1.64E+002
	6	2035-	2052	2043.08	510.80	0.86	9.29E+001	43.41	1.22E+002
	7	2326-	2343	2332.80	583.24	1.52	1.49E+002	36.83	6.23E+001
	8	2426-	2445	2436.98	609.29	1.28	1.47E+002	38.87	6.99E+001
	9	2902-	2918	2908.15	727.09	0.82	4.65E+001	26.09	4.15E+001
	10	3436-	3447	3441.55	860.45	0.32	2.58E+001	19.03	2.72E+001
	11	3637-	3655	3645.14	911.35	2.24	1.16E+002	32.41	4.67E+001
	12	3868-	3884	3876.61	969.22	0.56	8.88E+001	26.34	2.92E+001
	13	4474-	4490	4481.50	1120.46	0.75	5.90E+001	23.47	2.70E+001
	14	5833-	5858	5845.01	1461.36	1.99	8.31E+002	59.25	1.95E+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	0.999	511.00*	100.00	1.66852E-001	8.11915E-002
K-40	0.990	1460.81*	10.67	1.88773E+001	2.03705E+000
TL-208	0.903	277.35	6.80		
		510.84*	21.60	7.72465E-001	3.81144E-001
		583.14*	84.20	3.31897E-001	9.28731E-002
		860.37*	12.46	4.31447E-001	3.22165E-001
Bi-212	1.000	727.17*	11.80	7.88939E-001	4.52625E-001
Pb-212	0.852	74.81* @	10.70	7.24576E+000	2.31230E+000
		77.11* @	18.00	1.39349E+000	7.79940E-001
		87.30 @	8.00		
Bi-214	0.705	238.63*	44.60	9.29492E-001	2.79812E-001
		609.31*	46.30	6.06296E-001	1.76720E-001
		1120.29*	15.10	8.69800E-001	3.58293E-001
PB-214	0.366	1764.49	15.80		
		74.82* @	6.21	1.24846E+001	4.08593E+000
		77.11* @	10.50	2.38884E+000	1.34888E+000
		87.30 @	4.67		
Ac-228	0.998	241.98	7.49		
		295.21	19.20		
		351.92*	37.20	5.48094E-001	2.35744E-001
		338.32*	11.40	9.00084E-001	6.73765E-001
		911.07*	27.70	8.85626E-001	2.66900E-001
		969.11*	16.60	1.14670E+000	3.60716E-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	9.353069E-002	8.342004E-002
K-40	0.990	1.887726E+001	2.037048E+000
TL-208	0.903	3.394528E-001	8.867137E-002
Bi-212	1.000	7.889392E-001	4.526247E-001
Pb-212 @	0.852	9.294920E-001	2.798121E-001
Bi-214	0.705	6.578558E-001	1.584899E-001
PB-214 @	0.366	5.480939E-001	2.336887E-001
Ac-228	0.998	9.708165E-001	2.044386E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.1615E-001	8.16E-002	2.2453E-002
	1332.49	100.00	8.1587E-002		-3.5630E-002
Nb-94	702.63	100.00	1.2133E-001	1.09E-001	-2.1630E-003
	871.10	100.00	1.0928E-001		-3.0057E-002
Ag-108m	79.20	7.10	8.9607E+000	1.44E-001	-4.4904E+000
	433.93	89.90	1.4384E-001		-9.9228E-002
	614.37	90.40	1.6932E-001		-6.0654E-002
	722.95	90.50	1.4819E-001		-4.4230E-004
Sb-125	176.33	6.89	2.8823E+000	4.62E-001	3.6325E-001
	427.89	29.33	4.6194E-001		-6.3850E-002
	463.38	10.35	1.2901E+000		1.3418E-001
	600.56	17.80	6.7777E-001		-2.6214E-001
	606.64	5.02	3.1761E+000		5.4455E+000
	635.90	11.32	1.0868E+000		7.9461E-001
Cs-134	563.23	8.38	1.6306E+000	1.34E-001	1.3648E+000
	569.32	15.43	8.2959E-001		-4.4601E-001
	604.70	97.60	1.6240E-001		-5.3459E-002
	795.84	85.40	1.3398E-001		4.6875E-002
	801.93	8.73	1.2936E+000		-7.7024E-001
Cs-137	661.65	85.12	1.3585E-001	1.36E-001	2.5976E-002
Eu-152	121.78	28.40	9.1789E-001	4.09E-001	-1.2359E-002
	244.69	7.49	2.2251E+000		-2.3896E+000
	344.27	26.50	5.3327E-001		-1.0914E-001
	778.89	12.74	8.9381E-001		-2.8004E-001
	867.32	4.16	2.6135E+000		-1.1412E+000
	964.01	14.40	1.0109E+000		2.2064E-001
	1085.78	10.00	1.1180E+000		-4.7798E-001
	1112.02	13.30	8.4596E-001		-8.2553E-002
1407.95	20.70	4.0862E-001	8.9833E-003		
Eu-154	123.07	40.50	6.4013E-001	2.83E-001	-1.4325E-001
	247.94	6.60	2.5244E+000		-6.4738E-001
	591.81	4.83	2.6468E+000		1.2569E+000
	723.30	19.70	6.7915E-001		-2.4986E-002
	756.87	4.33	2.8138E+000		3.1734E-001
	873.19	11.50	9.6646E-001		-4.6145E-002
	996.32	10.30	1.0609E+000		-9.6754E-002
	1004.76	17.90	6.3329E-001		4.5335E-001
1274.45	35.50	2.8292E-001	-1.9060E-001		
Eu-155	86.54	30.90	1.5648E+000	1.56E+000	2.9708E+000
	105.31	20.70	1.5697E+000		6.0928E-001
Am-241	59.54	35.90	3.6023E+000	3.60E+000	8.2162E-001
Cm-243	228.19	10.56	1.6770E+000	1.14E+000	4.8972E-001

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	4.1094E-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 6/26/2006 10:51:05 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-03-232-F-

Sample Title: OOL-10-03-232-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 10:41:04 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-03-232-F-
Title: OOL-10-03-232-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	0.81	1.66E+002	95.72	8.01E+002
2	334-	344	339.79	84.95	0.65	1.30E+002	72.26	5.13E+002
3	950-	961	954.99	238.76	1.00	2.08E+002	57.61	2.57E+002
4	1348-	1358	1353.99	338.52	0.78	6.88E+001	33.40	9.32E+001
5	1401-	1413	1407.21	351.82	1.28	8.46E+001	39.63	1.22E+002
6	2033-	2055	2043.56	510.92	0.84	1.24E+002	43.47	9.48E+001
7	2324-	2340	2332.25	583.10	1.35	1.23E+002	37.99	8.07E+001
8	2427-	2444	2436.80	609.24	1.30	1.24E+002	37.32	7.34E+001
9	3635-	3653	3644.43	911.17	1.43	1.11E+002	32.85	5.01E+001
10	3867-	3882	3874.57	968.71	0.96	6.29E+001	29.05	5.21E+001
11	5832-	5856	5844.90	1461.33	2.02	7.77E+002	59.08	3.15E+001
12	7055-	7068	7061.44	1765.49	0.38	3.23E+001	13.20	4.68E+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: 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	2.23110E-001	8.37315E-002
K-40	0.991	1460.81*	10.67	1.76725E+001	1.96221E+000
TL-208	0.753	277.35	6.80		
		510.84*	21.60	1.03292E+000	3.96718E-001
		583.14*	84.20	2.75104E-001	9.20481E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	6.42551E+000	3.91662E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.691	238.63*	44.60	6.78765E-001	2.16096E-001
		609.31*	46.30	5.09413E-001	1.66080E-001
		1120.29	15.10		
Ac-228	0.998	1764.49*	15.80	5.25608E-001	2.20985E-001
		338.32*	11.40	9.56350E-001	4.87580E-001
		911.07*	27.70	8.44173E-001	2.68276E-001
		969.11*	16.60	8.11820E-001	3.84614E-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	1.636878E-001	8.603788E-002
K-40	0.991	1.767246E+001	1.962206E+000
TL-208	0.753	2.751039E-001	9.161049E-002
Pb-212 @	0.593	6.787649E-001	2.160963E-001
Bi-214	0.691	5.152586E-001	1.327654E-001
Ac-228	0.998	8.543553E-001	2.005595E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.95	2.1586E-001	55.79
5	351.82	1.4098E-001	46.85

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: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	1.1413E-001	9.55E-002	2.9880E-002
	1332.49	100.00	9.5502E-002		1.1476E-002
Nb-94	702.63	100.00	1.1795E-001	1.15E-001	-7.5454E-002
	871.10	100.00	1.1546E-001		-1.0721E-001
Ag-108m	79.20	7.10	9.2014E+000	1.40E-001	-2.8413E-001
	433.93	89.90	1.3960E-001		-2.9582E-002
	614.37	90.40	1.7138E-001		-8.1811E-002
	722.95	90.50	1.5474E-001		1.6242E-001
Sb-125	176.33	6.89	2.8970E+000	4.44E-001	3.2515E-001
	427.89	29.33	4.4385E-001		-1.1321E-001
	463.38	10.35	1.3120E+000		9.8447E-001
	600.56	17.80	6.6046E-001		1.6311E-001
	606.64	5.02	3.1812E+000		3.8396E+000
	635.90	11.32	1.0273E+000		1.8027E-001
Cs-134	563.23	8.38	1.4851E+000	1.36E-001	-4.4661E-001
	569.32	15.43	8.2362E-001		8.1545E-002
	604.70	97.60	1.5869E-001		-1.8009E-002
	795.84	85.40	1.3639E-001		5.2215E-002
Cs-137	801.93	8.73	1.2492E+000	1.50E-001	-8.0632E-001
	661.65	85.12	1.5015E-001		8.5059E-002
Eu-152	121.78	28.40	9.3649E-001	3.93E-001	7.8097E-001
	244.69	7.49	2.2610E+000		-7.9280E-001
	344.27	26.50	5.3176E-001		-4.3307E-001
	778.89	12.74	8.6407E-001		-8.6147E-001
	867.32	4.16	2.8937E+000		-1.8555E+000
	964.01	14.40	1.0158E+000		3.6229E-001
	1085.78	10.00	1.0403E+000		-3.7385E-002
	1112.02	13.30	7.5804E-001		-7.3369E-001
	1407.95	20.70	3.9289E-001		1.0310E-001
	Eu-154	123.07	40.50		6.4487E-001
247.94		6.60	2.5026E+000	4.0189E-001	
591.81		4.83	2.6074E+000	5.2724E-001	
723.30		19.70	7.1095E-001	7.5251E-001	
756.87		4.33	2.6508E+000	-1.8664E+000	
873.19		11.50	9.7420E-001	-3.7423E-001	
996.32		10.30	1.0703E+000	1.2578E-001	
1004.76		17.90	6.4114E-001	1.3572E-001	
Eu-155	1274.45	35.50	2.9487E-001	1.54E+000	-3.5637E-001
	86.54	30.90	1.5423E+000		1.2614E+000
Am-241	105.31	20.70	1.5652E+000	3.63E+000	3.0028E-001
	59.54	35.90	3.6309E+000		-5.1382E-001
Cm-243	228.19	10.56	1.6410E+000	1.12E+000	9.4407E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1158E+000	1.12E+000	3.1533E-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 6/26/2006 11:34:49 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-10-03-233-F-

Sample Title: OOL-10-03-233-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/26/2006 11:24:46 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: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-03-233-F-
 Title: OOL-10-03-233-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-	307	301.44	75.36	0.81	1.56E+002	82.45	6.75E+002
2	947-	961	955.21	238.81	1.14	2.41E+002	65.11	3.00E+002
3	1403-	1415	1407.99	352.02	1.46	9.23E+001	40.48	1.26E+002
4	2031-	2053	2043.16	510.82	1.24	1.73E+002	46.47	1.00E+002
5	2324-	2340	2332.47	583.16	1.58	1.66E+002	40.48	8.28E+001
6	2428-	2447	2437.57	609.43	1.42	1.38E+002	40.46	8.24E+001
7	2901-	2914	2907.93	727.03	0.31	2.77E+001	25.01	4.83E+001
8	3436-	3448	3441.28	860.38	0.45	3.63E+001	20.51	2.77E+001
9	3635-	3653	3644.90	911.29	1.69	1.54E+002	32.85	3.75E+001
10	3868-	3887	3876.78	969.26	1.34	1.02E+002	25.16	1.77E+001
11	4476-	4487	4481.12	1120.36	1.46	3.60E+001	19.47	2.50E+001
12	5832-	5858	5844.95	1461.34	1.77	7.80E+002	56.70	1.32E+001
13	7057-	7070	7063.10	1765.90	0.98	3.91E+001	13.40	2.93E+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
ANN	0.999	511.00*	100.00	3.09859E-001	9.34434E-002
K-40	0.991	1460.81*	10.67	1.77240E+001	1.92878E+000
TL-208	0.903	277.35	6.80		
		510.84*	21.60	1.43453E+000	4.48191E-001
		583.14*	84.20	3.70940E-001	1.02445E-001
		860.37*	12.46	6.05585E-001	3.50311E-001
Bi-212	0.999	727.17*	11.80	4.69707E-001	4.28350E-001
Pb-212	0.592	74.81* @	10.70	5.99660E+000	3.37507E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.986	238.63*	44.60	7.86716E-001	2.45776E-001
		609.31*	46.30	5.67204E-001	1.80788E-001
		1120.29*	15.10	5.30958E-001	2.92743E-001
Ac-228	0.632	1764.49*	15.80	6.35497E-001	2.27000E-001
		338.32	11.40		
		911.07*	27.70	1.16851E+000	2.83875E-001
		969.11*	16.60	1.32152E+000	3.53085E-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	2.257826E-001	9.579580E-002
K-40	0.991	1.772398E+001	1.928785E+000
TL-208	0.903	3.892438E-001	9.768117E-002
Bi-212	0.999	4.697071E-001	4.283499E-001
Pb-212 @	0.592	7.867160E-001	2.457761E-001
Bi-214	0.986	5.818362E-001	1.273383E-001
Ac-228	0.632	1.228581E+000	2.212382E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	352.02	1.5389E-001	43.84

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: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	9.82E-002	7.2253E-002
	1332.49	100.00	9.8162E-002		9.9902E-002
Nb-94	702.63	100.00	1.2953E-001	1.12E-001	8.8745E-002
	871.10	100.00	1.1197E-001		-1.8888E-002
Ag-108m	79.20	7.10	9.3583E+000	1.39E-001	-6.4115E+000
	433.93	89.90	1.3873E-001		-2.1443E-001
	614.37	90.40	1.8133E-001		3.1277E-002
	722.95	90.50	1.4967E-001		2.7268E-002
Sb-125	176.33	6.89	2.8749E+000	4.37E-001	1.4657E-002
	427.89	29.33	4.3707E-001		6.6156E-003
	463.38	10.35	1.2753E+000		9.2183E-001
	600.56	17.80	7.1467E-001		1.7397E-001
	606.64	5.02	3.3536E+000		6.1969E+000
	635.90	11.32	1.1344E+000		2.6032E-001
Cs-134	563.23	8.38	1.4776E+000	1.32E-001	4.6336E-001
	569.32	15.43	8.5303E-001		6.0542E-001
	604.70	97.60	1.6525E-001		-9.1796E-002
	795.84	85.40	1.3202E-001		-5.1353E-002
	801.93	8.73	1.1926E+000		-3.5174E+000
Cs-137	661.65	85.12	1.4107E-001	1.41E-001	8.1589E-002
Eu-152	121.78	28.40	9.3415E-001	4.01E-001	-8.6738E-002
	244.69	7.49	2.2421E+000		-2.1037E+000
	344.27	26.50	5.4372E-001		-1.0561E+000
	778.89	12.74	9.2880E-001		-5.6410E-001
	867.32	4.16	2.7933E+000		-1.6198E+000
	964.01	14.40	1.0207E+000		3.8423E-001
	1085.78	10.00	1.1427E+000		6.2616E-001
	1112.02	13.30	8.3454E-001		-1.1376E-001
1407.95	20.70	4.0084E-001	2.2588E-001		
Eu-154	123.07	40.50	6.4980E-001	2.97E-001	7.9054E-002
	247.94	6.60	2.4694E+000		-3.7485E+000
	591.81	4.83	2.5741E+000		-3.8345E+000
	723.30	19.70	6.8766E-001		3.5574E-001
	756.87	4.33	2.6787E+000		-3.2731E+000
	873.19	11.50	9.8188E-001		5.9286E-001
	996.32	10.30	1.0843E+000		-9.4001E-002
	1004.76	17.90	5.8955E-001		7.3739E-002
1274.45	35.50	2.9653E-001	5.8208E-002		
Eu-155	86.54	30.90	1.6046E+000	1.60E+000	1.9403E+000
	105.31	20.70	1.5989E+000		5.2944E-001
Am-241	59.54	35.90	3.6043E+000	3.60E+000	-6.2776E-001
Cm-243	228.19	10.56	1.6296E+000	1.13E+000	-1.3473E+000

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	-4.9230E-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 6/27/2006 10:26:49 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: RED6264

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-03-234-F-G

Sample ID: OOL-10-03-234-F-

Sample Title: OOL-10-03-234-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 6/23/2006 2:44:38 PM

Live Time: 600.0 seconds

Real Time: 601.4 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-03-234-F-G
Log Number: OOL-10-03-234-F-
Title: OOL-10-03-234-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 14 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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-10-03-234-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	2.43247E-001	8.22961E-002
K-40	0.978	1460.81*	10.67	1.98206E+001	1.99831E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	1.12614E+000	3.91943E-001
		583.14*	84.20	3.24406E-001	8.90629E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	7.13976E-001	3.92665E-001
Pb-212	0.521	74.81* @	10.70	1.06157E+001	3.14188E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.04296E-001	2.32131E-001
Bi-214	0.988	609.31*	46.30	3.84817E-001	1.51799E-001
		1120.29*	15.10	5.88079E-001	2.83770E-001
		1764.49*	15.80	6.52877E-001	2.29330E-001
Ac-228	0.999	338.32*	11.40	1.20644E+000	6.90487E-001
		911.07*	27.70	1.00792E+000	2.71806E-001
		969.11*	16.60	8.03607E-001	3.43532E-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-10-03-234-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	1.731754E-001	8.448379E-002
K-40	0.978	1.982055E+001	1.998306E+000
TL-208	0.750	3.244058E-001	8.843325E-002
Bi-212	1.000	7.139760E-001	3.926650E-001
Pb-212 @	0.521	8.042960E-001	2.321310E-001
Bi-214	0.988	4.866627E-001	1.156011E-001
Ac-228	0.999	9.533782E-001	2.036719E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.73	3.8278E-001	50.71
5	351.86	1.8630E-001	48.07

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:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-10-03-234-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	1.0023E-001	8.13E-002	3.6852E-002
	1332.49	100.00	8.1272E-002		-7.0292E-003
Nb-94	702.63	100.00	1.0343E-001	9.77E-002	3.9489E-002
	871.10	100.00	9.7682E-002		-6.1860E-002
Ag-108m	79.20	7.10	4.9191E+000	1.26E-001	-5.6585E+000
	433.93	89.90	1.2567E-001		-1.0250E-002
	614.37	90.40	1.4742E-001		2.6881E-002
	722.95	90.50	1.2659E-001		-8.0158E-002
Sb-125	176.33	6.89	2.2881E+000	3.83E-001	-8.0933E-002
	427.89	29.33	3.8342E-001		3.5772E-002
	463.38	10.35	1.1207E+000		1.1067E+000
	600.56	17.80	5.6148E-001		-9.6011E-002
	606.64	5.02	2.6250E+000		2.1452E+000
	635.90	11.32	8.7707E-001		8.5560E-001
Cs-134	563.23	8.38	1.2380E+000	1.30E-001	-1.2137E-001
	569.32	15.43	7.2354E-001		-5.6868E-002
	604.70	97.60	1.3235E-001		-4.1146E-002
	795.84	85.40	1.2978E-001		1.0307E-001
	801.93	8.73	1.1667E+000		-1.4241E+000
Cs-137	661.65	85.12	1.2567E-001	1.26E-001	7.9171E-003
Eu-152	121.78	28.40	7.1018E-001	3.83E-001	3.2406E-001
	244.69	7.49	2.0253E+000		-1.3408E+000
	344.27	26.50	4.4507E-001		-2.1634E-001
	778.89	12.74	7.5636E-001		-3.9365E-001
	867.32	4.16	2.3606E+000		-1.5499E+000
	964.01	14.40	9.3750E-001		6.9858E-003
	1085.78	10.00	9.8741E-001		-4.6843E-001
	1112.02	13.30	6.9661E-001		4.5053E-002
1407.95	20.70	3.8305E-001	-4.6722E-001		
Eu-154	123.07	40.50	4.8862E-001	2.39E-001	-7.3561E-002
	247.94	6.60	2.1541E+000		6.4677E-001
	591.81	4.83	2.0897E+000		-2.3250E+000
	723.30	19.70	5.8524E-001		-2.8553E-001
	756.87	4.33	2.1224E+000		-1.2044E+000
	873.19	11.50	8.4450E-001		2.4639E-001
	996.32	10.30	9.1599E-001		5.9549E-001
	1004.76	17.90	5.2451E-001		1.8355E-001
1274.45	35.50	2.3918E-001	-1.9410E-001		
Eu-155	86.54	30.90	1.0013E+000	1.00E+000	1.8547E-001
	105.31	20.70	1.0950E+000		3.4999E-001
Am-241	59.54	35.90	1.1891E+000	1.19E+000	7.2280E-001
Cm-243	228.19	10.56	1.3637E+000	9.56E-001	1.4367E+000

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	-5.3034E-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 7/26/2006 7:11:41 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-101-F-

Sample Title: OOL-10-04-101-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 7:01:38 PM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-101-F-
Title: OOL-10-04-101-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	946-	961	953.88	238.45	0.64	6.57E+001	58.73	2.76E+002
2	1397-	1415	1407.30	351.82	1.34	1.18E+002	42.40	1.04E+002
3	2034-	2045	2040.56	510.15	0.40	3.06E+001	29.78	7.94E+001
4	2322-	2338	2330.48	582.64	1.04	8.40E+001	31.35	5.50E+001
5	2426-	2443	2434.45	608.64	0.85	1.02E+002	30.83	4.46E+001
6	3633-	3649	3641.36	910.41	0.61	6.05E+001	27.37	4.25E+001
7	5826-	5851	5839.66	1460.05	2.11	4.61E+002	43.82	9.41E+000
8	7048-	7061	7054.40	1763.78	0.46	2.47E+001	14.29	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: 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	1.04663E+001	1.30742E+000
TL-208	0.745	277.35	6.80		
		510.84*	21.60	2.54193E-001	2.50814E-001
		583.14*	84.20	1.87549E-001	7.41059E-002
		860.37	12.46		
Pb-212	0.446	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.14480E-001	1.94595E-001
Bi-214	0.685	609.31*	46.30	4.21702E-001	1.37216E-001
		1120.29	15.10		
		1764.49*	15.80	4.01830E-001	2.35756E-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	0.976		
	K-40	0.981	1.046631E+001	1.307421E+000
	TL-208	0.745	1.928996E-001	7.106878E-002
	Pb-212 @	0.446	2.144800E-001	1.945946E-001
	Bi-214	0.685	4.166735E-001	1.185919E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.82	1.9731E-001	35.82
6	910.41	1.0083E-001	45.24

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: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	1.0619E-001	8.55E-002	7.0557E-002
	1332.49	100.00	8.5487E-002		8.2862E-003
Nb-94	702.63	100.00	9.9749E-002	8.80E-002	1.6369E-002
	871.10	100.00	8.8007E-002		-9.7484E-002
Ag-108m	79.20	7.10	1.0430E+001	1.18E-001	-6.7202E+000
	433.93	89.90	1.1804E-001		3.0232E-002
	614.37	90.40	1.3450E-001		-3.8360E-003
	722.95	90.50	1.2860E-001		1.4664E-001
Sb-125	176.33	6.89	2.7399E+000	3.52E-001	2.6177E+000
	427.89	29.33	3.5162E-001		1.0738E-001
	463.38	10.35	1.0209E+000		3.8079E-001
	600.56	17.80	5.9465E-001		3.1065E-001
	606.64	5.02	2.7511E+000		3.6082E+000
	635.90	11.32	8.4991E-001		8.7605E-002
Cs-134	563.23	8.38	1.2887E+000	1.12E-001	-6.1321E-001
	569.32	15.43	6.8819E-001		-1.2449E-001
	604.70	97.60	1.4135E-001		-4.3543E-002
	795.84	85.40	1.1216E-001		-2.5758E-002
Cs-137	801.93	8.73	1.1274E+000	1.26E-001	6.2171E-001
	661.65	85.12	1.2617E-001		-5.9490E-002
Eu-152	121.78	28.40	9.9428E-001	3.59E-001	-3.5737E-001
	244.69	7.49	2.0771E+000		-3.5626E-001
	344.27	26.50	4.4329E-001		-3.5444E-001
	778.89	12.74	7.9378E-001		-6.1463E-002
	867.32	4.16	2.2592E+000		5.6935E-001
	964.01	14.40	7.9144E-001		5.6071E-001
	1085.78	10.00	9.1356E-001		5.3426E-001
	1112.02	13.30	6.7226E-001		-1.0457E+000
1407.95	20.70	3.5918E-001	8.9617E-002		
Eu-154	123.07	40.50	6.9351E-001	2.65E-001	4.6888E-001
	247.94	6.60	2.3129E+000		-1.3514E+000
	591.81	4.83	2.2969E+000		2.2433E+000
	723.30	19.70	5.9085E-001		6.7113E-001
	756.87	4.33	2.3947E+000		2.2085E-001
	873.19	11.50	8.1383E-001		1.3391E-001
	996.32	10.30	8.5508E-001		4.7534E-001
	1004.76	17.90	4.5738E-001		-3.2212E-001
1274.45	35.50	2.6486E-001	7.3414E-002		
Eu-155	86.54	30.90	1.6958E+000	1.70E+000	1.7321E+000
	105.31	20.70	1.7167E+000		7.9562E-001
Am-241	59.54	35.90	5.8824E+000	5.88E+000	7.1254E+000
Cm-243	228.19	10.56	1.4530E+000	9.84E-001	-5.8188E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.8384E-001	9.84E-001	7.5072E-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 7/26/2006 6:53:58 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-102-F-

Sample Title: OOL-10-04-102-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 6:43:55 PM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-102-F-
Title: OOL-10-04-102-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	297-	308	300.40	75.06	0.69	2.75E+002	96.34	8.43E+002
2	947-	963	953.95	238.46	0.74	1.40E+002	66.39	3.19E+002
3	1175-	1186	1180.87	295.20	0.86	6.86E+001	38.10	1.23E+002
4	1346-	1359	1352.38	338.08	0.55	5.17E+001	38.79	1.23E+002
5	2323-	2341	2330.04	582.53	0.99	1.04E+002	34.88	6.30E+001
6	2426-	2444	2435.13	608.81	0.90	1.24E+002	34.45	5.39E+001
7	3634-	3647	3640.96	910.31	1.09	6.00E+001	22.94	2.80E+001
8	3865-	3883	3874.40	968.67	0.86	6.55E+001	26.87	3.55E+001
9	5827-	5851	5840.16	1460.18	1.91	5.55E+002	50.40	2.54E+001
10	7048-	7061	7054.48	1763.80	0.34	2.09E+001	11.58	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: 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	0.987	1460.81*	10.67	1.26025E+001	1.53381E+000
TL-208	0.463	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.32011E-001	8.34830E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.06845E+001	4.29456E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.58514E-001	2.28288E-001
Bi-214	0.689	609.31*	46.30	5.11232E-001	1.55247E-001
		1120.29	15.10		
		1764.49*	15.80	3.39721E-001	1.91305E-001
Ac-228	0.988	338.32*	11.40	7.17259E-001	5.50224E-001
		911.07*	27.70	4.56590E-001	1.82335E-001
		969.11*	16.60	8.45122E-001	3.58055E-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	0.987	1.260247E+001	1.533809E+000
TL-208	0.463	2.320106E-001	8.348304E-002
Pb-212 @	0.593	4.585137E-001	2.282879E-001
Bi-214	0.689	4.431308E-001	1.205476E-001
Ac-228	0.988	5.510878E-001	1.558282E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	295.20	1.1441E-001	55.51

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.0111E-001	8.70E-002	3.6507E-002
	1332.49	100.00	8.6993E-002		-9.1363E-003
Nb-94	702.63	100.00	1.0633E-001	9.30E-002	2.7827E-003
	871.10	100.00	9.3003E-002		6.7858E-002
Ag-108m	79.20	7.10	1.0754E+001	1.25E-001	2.8332E+000
	433.93	89.90	1.3129E-001		-7.4764E-002
	614.37	90.40	1.4706E-001		-4.7589E-002
	722.95	90.50	1.2465E-001		8.9834E-002
Sb-125	176.33	6.89	2.9767E+000	4.18E-001	3.0266E+000
	427.89	29.33	4.1787E-001		-1.4198E-002
	463.38	10.35	1.1799E+000		1.3926E+000
	600.56	17.80	6.1601E-001		-6.9325E-002
	606.64	5.02	2.9222E+000		3.6999E+000
	635.90	11.32	9.6738E-001		4.6692E-001
Cs-134	563.23	8.38	1.3684E+000	1.22E-001	-4.7601E-001
	569.32	15.43	7.1186E-001		-1.3024E-001
	604.70	97.60	1.4928E-001		-1.5047E-002
	795.84	85.40	1.2225E-001		-1.0028E-001
Cs-137	801.93	8.73	1.2187E+000	1.38E-001	-2.7142E-001
	661.65	85.12	1.3761E-001		-1.7714E-002
Eu-152	121.78	28.40	1.0377E+000	4.24E-001	-1.9379E-001
	244.69	7.49	2.2572E+000		7.5863E-001
	344.27	26.50	5.0698E-001		-3.2648E-001
	778.89	12.74	8.6070E-001		-3.2150E-001
	867.32	4.16	2.2205E+000		-3.4796E+000
	964.01	14.40	9.4454E-001		1.5339E-001
	1085.78	10.00	9.9052E-001		3.5830E-001
	1112.02	13.30	7.1426E-001		-1.8281E+000
1407.95	20.70	4.2372E-001	-1.4698E-002		
Eu-154	123.07	40.50	7.2332E-001	2.86E-001	4.7594E-001
	247.94	6.60	2.4290E+000		1.8652E+000
	591.81	4.83	2.3195E+000		2.2305E+000
	723.30	19.70	5.7475E-001		2.3912E-001
	756.87	4.33	2.2329E+000		4.3840E-001
	873.19	11.50	8.2769E-001		-1.1844E+000
	996.32	10.30	1.0223E+000		-1.5225E-001
	1004.76	17.90	6.0358E-001		6.1679E-001
1274.45	35.50	2.8639E-001	1.2805E-002		
Eu-155	86.54	30.90	1.8283E+000	1.81E+000	4.9627E-002
	105.31	20.70	1.8146E+000		2.5057E-001
Am-241	59.54	35.90	4.9936E+000	4.99E+000	8.1079E-001
Cm-243	228.19	10.56	1.5834E+000	1.02E+000	2.2337E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0213E+000	1.02E+000	2.5812E-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 7/26/2006 6:39:05 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-103-F-

Sample Title: OOL-10-04-103-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 6:29:03 PM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-103-F-
Title: OOL-10-04-103-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	296-	310	301.20	75.25	0.97	1.51E+002	120.33	1.24E+003
2	945-	960	953.94	238.46	1.46	1.71E+002	58.44	2.38E+002
3	1343-	1359	1351.14	337.78	0.98	6.15E+001	36.90	9.35E+001
4	1400-	1412	1406.65	351.65	1.34	7.77E+001	36.50	1.02E+002
5	2324-	2340	2330.31	582.60	1.63	1.10E+002	30.82	4.36E+001
6	2425-	2443	2434.70	608.70	0.48	9.63E+001	31.84	4.97E+001
7	3633-	3651	3642.10	910.59	0.44	7.88E+001	27.12	3.33E+001
8	5827-	5852	5840.65	1460.30	1.31	4.84E+002	46.63	1.94E+001
9	7050-	7063	7056.84	1764.39	0.37	3.60E+001	12.98	2.97E+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: 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	1.09897E+001	1.38375E+000
TL-208	0.465	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.46285E-001	7.58895E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	5.83981E+000	4.77911E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.56711E-001	2.09761E-001
Bi-214	0.690	609.31*	46.30	3.96871E-001	1.39982E-001
		1120.29	15.10		
		1764.49*	15.80	5.85804E-001	2.19116E-001
Ac-228	0.535	338.32*	11.40	8.53365E-001	5.29450E-001
		911.07*	27.70	5.99325E-001	2.17636E-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: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	1.098968E+001	1.383749E+000
TL-208	0.465	2.462849E-001	7.588954E-002
Pb-212 @	0.593	5.567113E-001	2.097613E-001
Bi-214	0.690	4.516309E-001	1.179646E-001
Ac-228	0.535	6.360453E-001	2.012934E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.65	1.2955E-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: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	1.0111E-001	8.92E-002	7.5627E-003
	1332.49	100.00	8.9202E-002		2.9069E-002
Nb-94	702.63	100.00	1.0155E-001	9.93E-002	2.3217E-002
	871.10	100.00	9.9250E-002		1.4670E-002
Ag-108m	79.20	7.10	1.0976E+001	1.23E-001	-2.0442E+000
	433.93	89.90	1.2913E-001		5.6436E-002
	614.37	90.40	1.3183E-001		-3.8558E-002
	722.95	90.50	1.2285E-001		1.4045E-001
Sb-125	176.33	6.89	2.6385E+000	3.88E-001	-2.2212E+000
	427.89	29.33	3.8816E-001		-4.6813E-002
	463.38	10.35	1.1248E+000		5.5686E-001
	600.56	17.80	6.4467E-001		-2.5486E-001
	606.64	5.02	2.7629E+000		4.6284E+000
	635.90	11.32	9.5003E-001		1.8991E-001
Cs-134	563.23	8.38	1.2757E+000	1.17E-001	-4.8012E-001
	569.32	15.43	7.6340E-001		7.5637E-001
	604.70	97.60	1.4522E-001		1.8932E-002
	795.84	85.40	1.1732E-001		-4.1052E-003
	801.93	8.73	1.1926E+000		-7.9767E-001
Cs-137	661.65	85.12	1.3087E-001	1.31E-001	2.5125E-002
Eu-152	121.78	28.40	1.0145E+000	3.31E-001	5.5363E-001
	244.69	7.49	2.0648E+000		-2.1649E+000
	344.27	26.50	4.7581E-001		-2.0400E-001
	778.89	12.74	7.9378E-001		2.3207E-001
	867.32	4.16	2.3714E+000		-3.9317E-001
	964.01	14.40	9.3122E-001		1.0801E+000
	1085.78	10.00	9.6170E-001		3.8544E-001
	1112.02	13.30	7.4519E-001		-4.7964E-001
1407.95	20.70	3.3143E-001	-1.8917E-001		
Eu-154	123.07	40.50	7.0157E-001	2.43E-001	5.6443E-001
	247.94	6.60	2.2526E+000		-6.8111E-001
	591.81	4.83	2.3858E+000		1.2878E+000
	723.30	19.70	5.6027E-001		3.3531E-001
	756.87	4.33	2.2440E+000		-8.3071E-001
	873.19	11.50	8.7222E-001		-6.1887E-001
	996.32	10.30	9.3993E-001		2.5174E-001
	1004.76	17.90	5.4207E-001		6.5312E-002
1274.45	35.50	2.4332E-001	-4.9101E-002		
Eu-155	86.54	30.90	1.8287E+000	1.83E+000	1.2837E+000
	105.31	20.70	1.8528E+000		-8.6650E-002
Am-241	59.54	35.90	4.7826E+000	4.78E+000	-9.8641E+000
Cm-243	228.19	10.56	1.4811E+000	9.89E-001	-6.0626E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.8910E-001	9.89E-001	-1.1148E+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 7/26/2006 4:13:43 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-104-F-

Sample Title: OOL-10-04-104-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 4:03:40 PM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-104-F-
Title: OOL-10-04-104-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	291-	305	300.72	75.14	0.88	1.96E+002	102.82	8.87E+002
2	949-	960	954.48	238.60	0.86	8.78E+001	42.45	1.49E+002
3	1174-	1184	1179.67	294.90	0.92	4.47E+001	29.42	7.53E+001
4	1402-	1415	1407.08	351.76	1.14	1.04E+002	33.63	6.79E+001
5	2032-	2050	2042.53	510.65	1.17	6.84E+001	37.06	8.56E+001
6	2324-	2338	2330.98	582.77	1.02	4.88E+001	26.32	4.42E+001
7	2427-	2444	2435.10	608.80	1.07	1.13E+002	35.23	6.35E+001
8	3635-	3649	3641.89	910.54	0.34	3.52E+001	23.30	3.68E+001
9	5828-	5853	5840.99	1460.38	1.58	4.12E+002	42.31	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: 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	0.996	511.00*	100.00	1.22913E-001	6.86159E-002
K-40	0.994	1460.81*	10.67	9.36889E+000	1.22469E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	5.69041E-001	3.21047E-001
		583.14*	84.20	1.08856E-001	6.04324E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	7.59261E+000	4.25526E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.397	238.63*	44.60	2.86736E-001	1.45669E-001
		609.31*	46.30	4.67466E-001	1.56157E-001
		1120.29	15.10		
PB-214	0.626	1764.49	15.80		
		74.82* @	6.21	1.30823E+001	7.39317E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.56793E-001	2.42266E-001
351.92*	37.20	4.47158E-001	1.62694E-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	0.996	9.939995E-002	6.984227E-002
K-40	0.994	9.368890E+000	1.224686E+000
TL-208	0.749	1.088564E-001	6.032815E-002
Pb-212 @	0.594	2.867363E-001	1.456688E-001
Bi-214	0.397	4.674661E-001	1.561569E-001
PB-214 @	0.626	4.190718E-001	1.350641E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
8	910.54	5.8681E-002	66.18

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: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	8.3915E-002	6.84E-002	5.2266E-002
	1332.49	100.00	6.8436E-002		1.6946E-003
Nb-94	702.63	100.00	9.8837E-002	9.14E-002	-1.9420E-002
	871.10	100.00	9.1370E-002		2.2807E-002
Ag-108m	79.20	7.10	9.2970E+000	1.10E-001	-9.6878E+000
	433.93	89.90	1.1770E-001		-1.8849E-002
	614.37	90.40	1.3930E-001		4.3311E-002
	722.95	90.50	1.0991E-001		-2.1834E-002
Sb-125	176.33	6.89	2.5279E+000	3.55E-001	1.3039E-002
	427.89	29.33	3.5482E-001		-2.0029E-001
	463.38	10.35	9.9552E-001		1.3757E-001
	600.56	17.80	5.8367E-001		-2.2664E-001
	606.64	5.02	2.9552E+000		4.9038E+000
	635.90	11.32	8.3399E-001		-2.5374E-001
Cs-134	563.23	8.38	1.1464E+000	1.21E-001	-1.1517E+000
	569.32	15.43	6.6862E-001		6.5705E-001
	604.70	97.60	1.5323E-001		1.0554E-002
	795.84	85.40	1.2117E-001		7.3645E-002
	801.93	8.73	1.1162E+000		-4.4216E-001
Cs-137	661.65	85.12	1.2374E-001	1.24E-001	1.2104E-001
Eu-152	121.78	28.40	9.6485E-001	3.22E-001	-1.1443E-001
	244.69	7.49	1.9063E+000		-5.1456E-001
	344.27	26.50	4.5499E-001		-4.6589E-001
	778.89	12.74	7.9378E-001		2.1974E-001
	867.32	4.16	2.2074E+000		-2.9096E+000
	964.01	14.40	8.2262E-001		7.2650E-001
	1085.78	10.00	9.6170E-001		-1.1827E-001
	1112.02	13.30	6.5762E-001		-1.0597E+000
1407.95	20.70	3.2159E-001	-2.1280E-001		
Eu-154	123.07	40.50	6.6736E-001	2.31E-001	-1.2057E-001
	247.94	6.60	2.0873E+000		-1.3224E+000
	591.81	4.83	2.1157E+000		1.1644E-001
	723.30	19.70	5.0961E-001		3.2534E-002
	756.87	4.33	2.2990E+000		-8.1721E-003
	873.19	11.50	7.9494E-001		5.2635E-001
	996.32	10.30	9.1258E-001		3.2798E-001
	1004.76	17.90	4.6477E-001		-2.1612E-001
1274.45	35.50	2.3066E-001	7.1594E-002		
Eu-155	86.54	30.90	1.6216E+000	1.62E+000	1.3915E+000
	105.31	20.70	1.6626E+000		-1.0272E-001
Am-241	59.54	35.90	4.9847E+000	4.98E+000	-1.7218E+000
Cm-243	228.19	10.56	1.3171E+000	9.23E-001	2.4361E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.2253E-001	9.23E-001	-6.3384E-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 7/26/2006 4:29:24 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-105-F-

Sample Title: OOL-10-04-105-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 4:19:21 PM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-105-F-
Title: OOL-10-04-105-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	945-	963	953.40	238.33	0.49	1.59E+002	72.32	3.55E+002
2	1397-	1412	1405.66	351.41	0.82	8.88E+001	42.08	1.23E+002
3	2039-	2050	2043.27	510.83	0.55	4.88E+001	32.38	8.52E+001
4	2320-	2340	2330.73	582.71	1.69	1.28E+002	36.52	6.05E+001
5	2426-	2442	2434.32	608.61	1.21	8.37E+001	33.26	6.53E+001
6	3633-	3651	3642.16	910.60	1.10	9.71E+001	29.09	3.59E+001
7	3866-	3882	3873.45	968.43	0.92	5.40E+001	24.95	3.40E+001
8	5827-	5853	5840.57	1460.28	2.10	6.42E+002	52.94	2.01E+001
9	7050-	7064	7056.52	1764.31	0.85	2.81E+001	14.39	8.86E+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: 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	1.45864E+001	1.68586E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	4.06103E-001	2.76815E-001
		583.14*	84.20	2.84628E-001	8.95389E-002
		860.37	12.46		
Pb-212	0.445	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.687	238.63*	44.60	5.19467E-001	2.49654E-001
		609.31*	46.30	3.44726E-001	1.43421E-001
		1120.29	15.10		
Ac-228	0.625	1764.49*	15.80	4.57602E-001	2.38482E-001
		338.32	11.40		
		911.07*	27.70	7.38748E-001	2.37200E-001
		969.11*	16.60	6.97092E-001	3.30251E-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	0.999		
	K-40	0.991	1.458639E+001	1.685864E+000
	TL-208	0.749	2.961340E-001	8.519298E-002
	Pb-212 @	0.445	5.194672E-001	2.496535E-001
	Bi-214	0.687	3.747065E-001	1.229071E-001
	Ac-228	0.625	7.245719E-001	1.926563E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.41	1.4804E-001	47.37

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: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	8.92E-002	-6.6633E-002
	1332.49	100.00	8.9202E-002		1.0031E-002
Nb-94	702.63	100.00	1.0243E-001	1.02E-001	-1.6150E-002
	871.10	100.00	1.0558E-001		-8.6418E-002
Ag-108m	79.20	7.10	1.0847E+001	1.31E-001	-2.6899E+001
	433.93	89.90	1.3432E-001		-3.6329E-002
	614.37	90.40	1.4146E-001		-3.9154E-002
	722.95	90.50	1.3074E-001		-5.6993E-002
Sb-125	176.33	6.89	2.8451E+000	4.24E-001	-2.7512E+000
	427.89	29.33	4.2408E-001		-5.2657E-002
	463.38	10.35	1.1879E+000		8.4965E-001
	600.56	17.80	6.6629E-001		-1.1152E+000
	606.64	5.02	2.9277E+000		4.7236E+000
	635.90	11.32	9.9448E-001		1.0982E+000
Cs-134	563.23	8.38	1.4005E+000	1.32E-001	-6.7077E-002
	569.32	15.43	8.1760E-001		4.2592E-002
	604.70	97.60	1.5014E-001		-8.7605E-003
	795.84	85.40	1.3152E-001		7.9503E-002
	801.93	8.73	1.2083E+000		-6.9657E-001
Cs-137	661.65	85.12	1.3849E-001	1.38E-001	-2.6938E-002
Eu-152	121.78	28.40	1.0719E+000	3.72E-001	2.8188E-001
	244.69	7.49	2.3274E+000		6.7367E-002
	344.27	26.50	5.1563E-001		-3.1562E-001
	778.89	12.74	8.4363E-001		-8.6830E-001
	867.32	4.16	2.4549E+000		-1.7722E+000
	964.01	14.40	9.8843E-001		1.2197E-001
	1085.78	10.00	1.0927E+000		8.2425E-001
	1112.02	13.30	8.0327E-001		-9.6695E-001
1407.95	20.70	3.7222E-001	-1.2452E-002		
Eu-154	123.07	40.50	7.3891E-001	2.93E-001	-2.6253E-001
	247.94	6.60	2.4627E+000		-1.5966E-001
	591.81	4.83	2.4573E+000		1.0156E+000
	723.30	19.70	6.0068E-001		-7.5826E-002
	756.87	4.33	2.6036E+000		2.0466E-001
	873.19	11.50	9.4681E-001		4.8837E-001
	996.32	10.30	1.0418E+000		7.9678E-001
	1004.76	17.90	5.9520E-001		-1.0276E-001
1274.45	35.50	2.9320E-001	3.9772E-002		
Eu-155	86.54	30.90	1.9141E+000	1.89E+000	2.5612E+000
	105.31	20.70	1.8935E+000		7.6311E-001
Am-241	59.54	35.90	5.5678E+000	5.57E+000	-9.2236E-001
Cm-243	228.19	10.56	1.6054E+000	1.09E+000	6.4428E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0900E+000	1.09E+000	-5.3118E-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 7/26/2006 6:25:55 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-10-04-106-F-

Sample Title: OOL-10-04-106-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 6:15:51 PM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-106-F-
Title: OOL-10-04-106-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 11 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.989	1460.81*	10.67	1.66558E+001	1.83725E+000
TL-208	0.464	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.04974E-001	9.75496E-002
Pb-212	0.593	860.37	12.46		
		74.81* @	10.70	1.64301E+001	6.65065E+000
		77.11 @	18.00		
Bi-214	0.395	87.30 @	8.00		
		238.63*	44.60	6.29683E-001	2.25268E-001
		609.31*	46.30	4.91632E-001	1.70922E-001
Ac-228	0.989	1120.29	15.10		
		1764.49	15.80		
		338.32*	11.40	1.34953E+000	7.25570E-001
		911.07*	27.70	8.34212E-001	2.77756E-001
		969.11*	16.60	1.03695E+000	3.65754E-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	0.989	1.665580E+001	1.837254E+000
TL-208	0.464	3.049745E-001	9.754962E-002
Pb-212 @	0.593	6.296834E-001	2.252680E-001
Bi-214	0.395	4.916320E-001	1.709223E-001
Ac-228	0.989	9.458813E-001	2.115878E-001

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	3.8491E-001	45.07
5	351.50	1.5275E-001	57.39
6	481.03	4.2169E-002	85.81

M = First peak in a multiplet region

m = Other peak in a multiplet region

F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.1959E-001	9.68E-002	-7.9655E-002
	1332.49	100.00	9.6842E-002		1.2188E-002
Nb-94	702.63	100.00	1.1369E-001	1.13E-001	-8.4669E-003
	871.10	100.00	1.1329E-001		-2.8367E-003
Ag-108m	79.20	7.10	1.1608E+001	1.50E-001	2.7698E+000
	433.93	89.90	1.5457E-001		1.4817E-001
	614.37	90.40	1.5212E-001		2.0106E-002
	722.95	90.50	1.4967E-001		1.9898E-001
Sb-125	176.33	6.89	3.0333E+000	4.56E-001	-1.8678E+000
	427.89	29.33	4.5626E-001		-2.4936E-001
	463.38	10.35	1.2803E+000		1.5886E-001
	600.56	17.80	6.9832E-001		-3.4531E-002
	606.64	5.02	3.1198E+000		3.2643E+000
	635.90	11.32	9.6738E-001		-1.1103E-002
Cs-134	563.23	8.38	1.5109E+000	1.52E-001	1.2922E-001
	569.32	15.43	8.3354E-001		7.9001E-003
	604.70	97.60	1.6240E-001		3.0257E-002
	795.84	85.40	1.5215E-001		1.6919E-001
	801.93	8.73	1.3597E+000		3.3245E-001
Cs-137	661.65	85.12	1.4107E-001	1.41E-001	-3.8095E-002
Eu-152	121.78	28.40	1.0716E+000	3.64E-001	-4.7250E-001
	244.69	7.49	2.3600E+000		-2.7330E+000
	344.27	26.50	5.6330E-001		2.1055E-001
	778.89	12.74	9.6845E-001		1.7132E-002
	867.32	4.16	2.6461E+000		-1.2412E+000
	964.01	14.40	9.8337E-001		-1.3377E-001
	1085.78	10.00	1.0876E+000		-4.6722E-001
	1112.02	13.30	8.3837E-001		-1.1273E+000
1407.95	20.70	3.6358E-001	2.8090E-001		
Eu-154	123.07	40.50	7.3746E-001	3.05E-001	-3.8312E-001
	247.94	6.60	2.5569E+000		-5.0687E-001
	591.81	4.83	2.5130E+000		6.8439E-001
	723.30	19.70	6.8257E-001		3.4017E-001
	756.87	4.33	2.8487E+000		-2.2762E+000
	873.19	11.50	9.8569E-001		1.7080E-002
	996.32	10.30	9.5064E-001		1.5722E-001
	1004.76	17.90	5.5130E-001		1.0905E-001
1274.45	35.50	3.0471E-001	8.7375E-002		
Eu-155	86.54	30.90	1.9414E+000	1.94E+000	2.4740E+000
	105.31	20.70	1.9420E+000		7.1874E-001
Am-241	59.54	35.90	5.7994E+000	5.80E+000	-3.0375E+000
Cm-243	228.19	10.56	1.7242E+000	1.14E+000	3.5217E-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	5.4535E-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 7/27/2006 7:57:32 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-107-F-

Sample Title: OOL-10-04-107-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 7:47:27 AM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-107-F-
Title: OOL-10-04-107-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 11 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.992	1460.81*	10.67	1.61290E+001	1.79896E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.65466E-001	8.75240E-002
Pb-212	0.593	860.37	12.46		
		74.81* @	10.70	9.48504E+000	4.28790E+000
		77.11 @	18.00		
Bi-214	0.991	87.30 @	8.00		
		238.63*	44.60	7.15287E-001	2.73674E-001
		609.31*	46.30	5.21053E-001	1.58815E-001
PB-214	0.627	1120.29*	15.10	6.22635E-001	3.04109E-001
		1764.49*	15.80	6.55089E-001	2.49314E-001
		74.82* @	6.21	1.63430E+001	7.48282E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.21049E-001	3.18155E-001
		351.92*	37.20	4.52765E-001	1.92880E-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	0.992	1.612900E+001	1.798961E+000
TL-208	0.470	2.654660E-001	8.752404E-002
Pb-212 @	0.593	7.152870E-001	2.736740E-001
Bi-214	0.991	5.699610E-001	1.225828E-001
PB-214 @	0.627	4.173654E-001	1.649368E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.54	1.8662E-001	26.91
9	1222.38	2.4818E-002	101.93

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: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	1.1362E-001	1.02E-001	5.8143E-002
	1332.49	100.00	1.0202E-001		3.2985E-002
Nb-94	702.63	100.00	1.2059E-001	1.07E-001	-1.8332E-002
	871.10	100.00	1.0698E-001		-7.9274E-002
Ag-108m	79.20	7.10	1.1302E+001	1.41E-001	-2.5722E+001
	433.93	89.90	1.4384E-001		-1.2316E-002
	614.37	90.40	1.5311E-001		-1.2699E-002
	722.95	90.50	1.4133E-001		1.1204E-001
Sb-125	176.33	6.89	3.2222E+000	4.44E-001	6.3770E-001
	427.89	29.33	4.4385E-001		-6.0605E-002
	463.38	10.35	1.3499E+000		6.4375E-001
	600.56	17.80	6.7397E-001		3.0164E-001
	606.64	5.02	3.0466E+000		3.4799E+000
	635.90	11.32	1.0401E+000		1.7639E-001
Cs-134	563.23	8.38	1.5578E+000	1.36E-001	1.4553E+000
	569.32	15.43	8.0951E-001		-6.1276E-001
	604.70	97.60	1.5869E-001		-3.7048E-002
	795.84	85.40	1.3591E-001		-8.3598E-002
Cs-137	801.93	8.73	1.2592E+000	1.44E-001	-2.0039E+000
	661.65	85.12	1.4403E-001		-4.6853E-002
Eu-152	121.78	28.40	1.1593E+000	4.20E-001	-5.8223E-002
	244.69	7.49	2.4959E+000		-5.6053E-001
	344.27	26.50	5.5901E-001		-7.6307E-001
	778.89	12.74	8.6070E-001		-6.1656E-001
	867.32	4.16	2.6569E+000		-1.1202E+000
	964.01	14.40	9.9094E-001		1.2892E+000
	1085.78	10.00	1.1180E+000		-3.1834E-001
	1112.02	13.30	8.1515E-001		-1.2119E-001
1407.95	20.70	4.2000E-001	-2.6648E-001		
Eu-154	123.07	40.50	8.0723E-001	2.88E-001	5.7662E-001
	247.94	6.60	2.6887E+000		-5.7936E-001
	591.81	4.83	2.4361E+000		2.7602E-001
	723.30	19.70	6.4389E-001		-1.3284E-002
	756.87	4.33	2.6787E+000		-1.4009E-001
	873.19	11.50	9.1032E-001		-5.4922E-001
	996.32	10.30	9.1812E-001		-1.1693E+000
	1004.76	17.90	6.0909E-001		4.1708E-001
1274.45	35.50	2.8811E-001	-9.5290E-002		
Eu-155	86.54	30.90	2.0344E+000	2.01E+000	3.1353E+000
	105.31	20.70	2.0137E+000		1.0807E+000
Am-241	59.54	35.90	4.4768E+000	4.48E+000	-4.5803E-001
Cm-243	228.19	10.56	1.8250E+000	1.20E+000	-5.6000E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1995E+000	1.20E+000	3.8633E-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 7/26/2006 3:44:02 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-108-F-

Sample Title: OOL-10-04-108-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 3:33:59 PM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-108-F-
Title: OOL-10-04-108-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	217-	230	221.74	55.39	0.80	1.66E+002	100.03	8.63E+002
2	292-	306	300.94	75.19	1.10	2.61E+002	110.55	1.01E+003
3	944-	960	954.58	238.62	1.66	1.85E+002	62.80	2.69E+002
4	1395-	1416	1407.06	351.76	1.26	1.39E+002	50.04	1.37E+002
5	2323-	2341	2330.89	582.75	0.50	1.19E+002	34.60	5.73E+001
6	2425-	2445	2434.72	608.71	0.89	1.32E+002	40.43	8.10E+001
7	3635-	3650	3642.42	910.67	1.36	6.79E+001	26.70	3.91E+001
8	5829-	5853	5840.57	1460.28	2.10	5.64E+002	49.72	2.02E+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
K-40	0.991	1460.81*	10.67	1.28114E+001	1.53380E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.64850E-001	8.45590E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.00883E+001	4.71043E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.02797E-001	2.25738E-001
Bi-214	0.395	609.31*	46.30	5.43682E-001	1.79511E-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	0.991	1.281140E+001	1.533803E+000
TL-208	0.468	2.648498E-001	8.455902E-002
Pb-212 @	0.593	6.027975E-001	2.257380E-001
Bi-214	0.395	5.436821E-001	1.795112E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	55.39	2.7670E-001	60.25
4	351.76	2.3209E-001	35.94
7	910.67	1.1321E-001	39.30

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: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	1.1050E-001	8.16E-002	-6.0118E-002
	1332.49	100.00	8.1587E-002		-2.0655E-002
Nb-94	702.63	100.00	1.0418E-001	9.98E-002	5.6934E-002
	871.10	100.00	9.9752E-002		2.7292E-002
Ag-108m	79.20	7.10	1.0249E+001	1.25E-001	-7.6528E+000
	433.93	89.90	1.2944E-001		2.8395E-002
	614.37	90.40	1.5409E-001		-1.6163E-002
	722.95	90.50	1.2465E-001		9.6639E-002
Sb-125	176.33	6.89	2.7523E+000	3.99E-001	2.9070E-001
	427.89	29.33	3.9863E-001		-1.1779E-001
	463.38	10.35	1.1191E+000		1.5262E-001
	600.56	17.80	6.4467E-001		1.4488E-001
	606.64	5.02	3.1710E+000		4.8058E+000
	635.90	11.32	9.7764E-001		2.2613E-001
Cs-134	563.23	8.38	1.3885E+000	1.22E-001	-6.8490E-002
	569.32	15.43	7.6771E-001		5.8802E-001
	604.70	97.60	1.6055E-001		1.9010E-002
	795.84	85.40	1.2225E-001		-1.4232E-002
	801.93	8.73	1.1767E+000		3.3877E-001
Cs-137	661.65	85.12	1.2854E-001	1.29E-001	1.4977E-002
Eu-152	121.78	28.40	1.0056E+000	3.72E-001	7.2320E-002
	244.69	7.49	2.1035E+000		-2.3991E+000
	344.27	26.50	4.8003E-001		-5.8393E-001
	778.89	12.74	8.0474E-001		-4.8294E-001
	867.32	4.16	2.4314E+000		-9.8366E-001
	964.01	14.40	9.6027E-001		1.3334E+000
	1085.78	10.00	1.1230E+000		8.1344E-001
	1112.02	13.30	6.7707E-001		-1.2440E+000
1407.95	20.70	3.7222E-001	-1.4480E-002		
Eu-154	123.07	40.50	6.9329E-001	2.51E-001	-3.9229E-002
	247.94	6.60	2.3200E+000		-2.1582E-001
	591.81	4.83	2.2818E+000		1.4413E+000
	723.30	19.70	5.7475E-001		5.0025E-001
	756.87	4.33	2.4563E+000		5.7965E-001
	873.19	11.50	8.6351E-001		4.3824E-001
	996.32	10.30	9.7168E-001		-1.3376E-001
	1004.76	17.90	5.7224E-001		1.1399E-001
	1274.45	35.50	2.5139E-001		-5.4805E-002
	Eu-155	86.54	30.90		1.7188E+000
105.31		20.70	1.7423E+000	-6.3187E-001	
Am-241	59.54	35.90	4.7111E+000	4.71E+000	-6.9595E+000
Cm-243	228.19	10.56	1.4601E+000	1.00E+000	-1.4361E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0034E+000	1.00E+000	-2.5585E-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 7/26/2006 3:58:17 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-10-04-109-F-

Sample Title: OOL-10-04-109-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 3:48:14 PM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-109-F-
 Title: OOL-10-04-109-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	294-	309	301.05	75.22	0.94	2.40E+002	122.33	1.21E+003
2	948-	959	954.26	238.54	1.10	1.30E+002	52.14	2.27E+002
3	1176-	1185	1180.35	295.07	0.71	4.84E+001	31.62	9.36E+001
4	1398-	1416	1405.94	351.48	0.88	1.35E+002	45.40	1.17E+002
5	2032-	2054	2042.17	510.56	1.26	1.60E+002	39.37	6.27E+001
6	2322-	2339	2330.79	582.72	1.40	6.23E+001	36.89	8.97E+001
7	2427-	2446	2435.60	608.93	0.35	1.65E+002	36.24	5.00E+001
8	3633-	3652	3642.01	910.57	2.43	7.47E+001	30.40	4.73E+001
9	3865-	3878	3872.08	968.09	0.99	3.54E+001	23.02	3.66E+001
10	4944-	4955	4949.93	1237.59	0.83	2.29E+001	14.48	1.21E+001
11	5828-	5853	5840.54	1460.27	2.11	5.76E+002	49.25	1.30E+001
12	7050-	7063	7056.50	1764.30	0.53	3.51E+001	15.21	8.93E+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
ANN	0.993	511.00*	100.00	2.87933E-001	8.07698E-002
K-40	0.990	1460.81*	10.67	1.30895E+001	1.54127E+000
TL-208	0.748	277.35	6.80		
		510.84*	21.60	1.33302E+000	3.89459E-001
		583.14*	84.20	1.38920E-001	8.42769E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	9.27254E+000	5.06238E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.694	238.63*	44.60	4.24296E-001	1.82705E-001
		609.31*	46.30	6.79759E-001	1.71163E-001
		1120.29	15.10		
PB-214	0.624	1764.49*	15.80	5.70226E-001	2.53785E-001
		74.82* @	6.21	1.59768E+001	8.79938E+000
		77.11 @	10.50		
		87.30 @	4.67		
Ac-228	0.619	241.98	7.49		
		295.21*	19.20	3.86131E-001	2.60577E-001
		351.92*	37.20	5.77930E-001	2.17650E-001
		338.32	11.40		
		911.07*	27.70	5.68489E-001	2.40442E-001
		969.11*	16.60	4.57513E-001	3.01011E-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	0.993	2.579264E-001	8.279000E-002
K-40	0.990	1.308950E+001	1.541266E+000
TL-208	0.748	1.389205E-001	8.415524E-002
Pb-212 @	0.593	4.242959E-001	1.827047E-001
Bi-214	0.694	6.455134E-001	1.419051E-001
PB-214 @	0.624	4.991089E-001	1.670448E-001
Ac-228	0.619	5.252620E-001	1.878655E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
10	1237.59	3.8143E-002	63.28

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	1.0783E-001	8.47E-002	-3.5703E-002
	1332.49	100.00	8.4722E-002		-5.9071E-002
Nb-94	702.63	100.00	1.0065E-001	1.01E-001	-1.4049E-001
	871.10	100.00	1.0319E-001		4.2585E-002
Ag-108m	79.20	7.10	1.0732E+001	1.29E-001	1.1502E+000
	433.93	89.90	1.3068E-001		-4.0615E-002
	614.37	90.40	1.5409E-001		-3.4409E-002
	722.95	90.50	1.2946E-001		1.2006E-001
Sb-125	176.33	6.89	2.8436E+000	4.03E-001	3.0465E-001
	427.89	29.33	4.0330E-001		-2.9858E-001
	463.38	10.35	1.1471E+000		4.2246E-001
	600.56	17.80	6.5064E-001		-3.0575E-001
	606.64	5.02	3.2164E+000		6.9756E+000
	635.90	11.32	9.8778E-001		5.0970E-001
Cs-134	563.23	8.38	1.3229E+000	1.19E-001	6.7448E-002
	569.32	15.43	7.3474E-001		-2.3069E-001
	604.70	97.60	1.6266E-001		-9.0696E-003
	795.84	85.40	1.1898E-001		7.3411E-003
	801.93	8.73	1.0933E+000		-7.9892E-001
Cs-137	661.65	85.12	1.3674E-001	1.37E-001	3.0711E-002
Eu-152	121.78	28.40	1.0158E+000	3.76E-001	-2.0195E-001
	244.69	7.49	2.1435E+000		-2.6671E+000
	344.27	26.50	4.7326E-001		-2.7807E-002
	778.89	12.74	8.7410E-001		2.0668E-001
	867.32	4.16	2.5127E+000		-2.1687E+000
	964.01	14.40	8.9282E-001		1.0743E+000
	1085.78	10.00	9.2585E-001		-4.0518E-001
	1112.02	13.30	6.9593E-001		-2.0647E+000
1407.95	20.70	3.7645E-001	-2.8959E-003		
Eu-154	123.07	40.50	7.0739E-001	2.86E-001	8.3508E-002
	247.94	6.60	2.3295E+000		-2.4936E+000
	591.81	4.83	2.3344E+000		5.4804E-001
	723.30	19.70	5.9873E-001		6.5321E-001
	756.87	4.33	2.4664E+000		-1.4994E+000
	873.19	11.50	8.9360E-001		-6.3072E-001
	996.32	10.30	9.5064E-001		-3.3378E-001
	1004.76	17.90	5.3582E-001		1.9192E-001
1274.45	35.50	2.8639E-001	1.6062E-001		
Eu-155	86.54	30.90	1.8030E+000	1.79E+000	1.5510E+000
	105.31	20.70	1.7881E+000		-1.0302E+000
Am-241	59.54	35.90	5.7343E+000	5.73E+000	-2.6104E+000
Cm-243	228.19	10.56	1.5183E+000	1.06E+000	-6.2123E-003

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0624E+000	1.06E+000	-1.5442E-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 7/26/2006 4:10:42 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-110-F-

Sample Title: OOL-10-04-110-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 4:00:40 PM

Live Time: 600.0 seconds

Real Time: 601.1 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-110-F-
Title: OOL-10-04-110-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	2036-	2049	2042.19	510.51	0.98	6.64E+001	36.29	9.96E+001
2	2322-	2341	2331.76	582.90	1.04	1.48E+002	40.55	8.00E+001
3	3632-	3653	3642.96	910.70	1.54	1.03E+002	33.68	5.02E+001
4	5827-	5855	5841.41	1460.32	2.43	7.10E+002	55.82	2.17E+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	1.55893E+001	1.75898E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	5.40321E-001	3.07444E-001
		583.14*	84.20	3.22637E-001	9.78730E-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: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	0.992	1.558929E+001	1.758984E+000
	TL-208	0.751	3.426675E-001	9.326131E-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
3	910.70	1.7136E-001	32.76

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: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	1.0068E-001	8.95E-002	-8.9276E-003
	1332.49	100.00	8.9472E-002		1.0536E-001
Nb-94	702.63	100.00	1.0708E-001	1.06E-001	-4.6737E-002
	871.10	100.00	1.0551E-001		7.0062E-002
Ag-108m	79.20	7.10	1.0562E+001	1.41E-001	-1.8554E+001
	433.93	89.90	1.4358E-001		1.8391E-001
	614.37	90.40	1.5198E-001		-1.6611E-001
	722.95	90.50	1.4073E-001		1.6092E-001
Sb-125	176.33	6.89	2.9442E+000	4.45E-001	-1.2255E-001
	427.89	29.33	4.4460E-001		1.3493E-001
	463.38	10.35	1.2813E+000		1.0092E+000
	600.56	17.80	7.0126E-001		1.8573E-002
	606.64	5.02	3.1202E+000		3.3819E+000
	635.90	11.32	9.9579E-001		-3.1280E-001
Cs-134	563.23	8.38	1.3956E+000	1.35E-001	-8.1765E-001
	569.32	15.43	8.1063E-001		9.1141E-001
	604.70	97.60	1.5981E-001		1.5350E-001
	795.84	85.40	1.3530E-001		-3.8746E-002
	801.93	8.73	1.2385E+000		-9.2558E-001
Cs-137	661.65	85.12	1.4203E-001	1.42E-001	-7.4475E-004
Eu-152	121.78	28.40	1.0132E+000	3.81E-001	8.4912E-002
	244.69	7.49	2.2695E+000		-4.2808E+000
	344.27	26.50	4.9937E-001		-1.0953E+000
	778.89	12.74	8.5371E-001		-7.7096E-001
	867.32	4.16	2.5025E+000		5.9037E-001
	964.01	14.40	9.7326E-001		7.7578E-001
	1085.78	10.00	9.7240E-001		2.0146E-001
	1112.02	13.30	7.7447E-001		-9.9640E-001
	1407.95	20.70	3.8088E-001		-2.8890E-001
Eu-154	123.07	40.50	6.9671E-001	2.71E-001	-3.1276E-001
	247.94	6.60	2.4853E+000		-9.8264E-001
	591.81	4.83	2.4675E+000		-7.9183E-001
	723.30	19.70	6.4484E-001		8.9000E-001
	756.87	4.33	2.5447E+000		1.1894E+000
	873.19	11.50	8.7888E-001		-1.9132E-001
	996.32	10.30	9.2975E-001		-7.3706E-001
	1004.76	17.90	6.0402E-001		2.6977E-001
	1274.45	35.50	2.7131E-001		-3.5780E-001
Eu-155	86.54	30.90	1.9053E+000	1.89E+000	2.9917E+000
	105.31	20.70	1.8889E+000		1.1602E+000
Am-241	59.54	35.90	5.1258E+000	5.13E+000	-2.0380E+000
Cm-243	228.19	10.56	1.6499E+000	1.14E+000	6.8771E-003

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1402E+000	1.14E+000	3.2735E-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 7/26/2006 3:55:02 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-111-F-

Sample Title: OOL-10-04-111-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 3:45:01 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-111-F-
Title: OOL-10-04-111-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	945-	964	953.85	238.42	2.24	2.07E+002	85.42	4.83E+002
2	2322-	2343	2331.03	582.72	2.03	1.87E+002	44.24	8.55E+001
3	2717-	2729	2722.90	680.69	0.29	1.68E+001	21.21	3.72E+001
4	3633-	3652	3642.46	910.58	1.58	1.21E+002	33.04	4.66E+001
5	3866-	3880	3872.82	968.17	1.47	4.90E+001	27.24	5.00E+001
6	5827-	5857	5841.58	1460.36	2.82	8.78E+002	59.20	7.39E+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	0.993	1460.81*	10.67	1.92627E+001	2.02995E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.06558E-001	1.10012E-001
		860.37	12.46		
Pb-212	0.453	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Ac-228	0.623	238.63*	44.60	6.70805E-001	2.95650E-001
		338.32	11.40		
		911.07*	27.70	8.90483E-001	2.63243E-001
		969.11*	16.60	6.09067E-001	3.44445E-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	0.993	1.926272E+001	2.029954E+000
TL-208	0.468	4.065582E-001	1.100116E-001
Pb-212 @	0.453	6.708051E-001	2.956500E-001
Ac-228	0.623	7.867193E-001	2.091550E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	680.69	2.7924E-002	126.61

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	1.1365E-001	9.39E-002	1.3470E-001
	1332.49	100.00	9.3915E-002		-9.2111E-002
Nb-94	702.63	100.00	1.1981E-001	1.09E-001	4.6100E-002
	871.10	100.00	1.0897E-001		1.4488E-002
Ag-108m	79.20	7.10	1.1979E+001	1.43E-001	-3.0813E+001
	433.93	89.90	1.4963E-001		4.7819E-002
	614.37	90.40	1.6234E-001		-9.4286E-002
	722.95	90.50	1.4330E-001		4.9787E-002
Sb-125	176.33	6.89	3.3275E+000	4.52E-001	-1.4092E+000
	427.89	29.33	4.5180E-001		-6.7526E-003
	463.38	10.35	1.3301E+000		7.9229E-001
	600.56	17.80	6.9425E-001		3.8414E-001
	606.64	5.02	3.0906E+000		3.6293E+000
	635.90	11.32	1.1094E+000		3.1981E-001
Cs-134	563.23	8.38	1.3726E+000	1.47E-001	-1.5656E+000
	569.32	15.43	8.0480E-001		9.2738E-002
	604.70	97.60	1.5674E-001		7.5373E-002
	795.84	85.40	1.4737E-001		-2.3604E-002
	801.93	8.73	1.3211E+000		-1.1652E+000
Cs-137	661.65	85.12	1.5211E-001	1.52E-001	8.4283E-002
Eu-152	121.78	28.40	1.1443E+000	3.81E-001	-7.6076E-002
	244.69	7.49	2.4184E+000		-6.3760E-001
	344.27	26.50	5.6182E-001		-7.0514E-001
	778.89	12.74	9.0333E-001		-4.3971E-001
	867.32	4.16	2.8321E+000		6.9950E-001
	964.01	14.40	1.0013E+000		1.1319E+000
	1085.78	10.00	1.0732E+000		-2.8579E-001
	1112.02	13.30	8.4702E-001		-1.5245E+000
1407.95	20.70	3.8088E-001	-3.2020E-002		
Eu-154	123.07	40.50	7.9219E-001	2.79E-001	-1.5224E-001
	247.94	6.60	2.6266E+000		-6.1123E-001
	591.81	4.83	2.6661E+000		2.1076E+000
	723.30	19.70	6.5163E-001		-9.2608E-003
	756.87	4.33	2.6959E+000		1.1745E+000
	873.19	11.50	9.2931E-001		-5.8111E-002
	996.32	10.30	1.0022E+000		-7.3943E-002
	1004.76	17.90	6.3148E-001		3.9244E-001
1274.45	35.50	2.7944E-001	4.2751E-002		
Eu-155	86.54	30.90	2.1887E+000	2.13E+000	2.4633E+000
	105.31	20.70	2.1310E+000		5.1428E-001
Am-241	59.54	35.90	5.3159E+000	5.32E+000	-2.3643E+000
Cm-243	228.19	10.56	1.8158E+000	1.16E+000	-1.3333E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1611E+000	1.16E+000	-1.6525E-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 7/26/2006 3:39:17 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-112-F-

Sample Title: OOL-10-04-112-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 3:29:14 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-112-F-
Title: OOL-10-04-112-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	2323-	2342	2332.63	583.12	1.73	1.12E+002	46.49	1.29E+002
2	2425-	2447	2436.79	609.16	2.09	1.67E+002	42.10	7.52E+001
3	2902-	2913	2907.10	726.74	0.37	2.48E+001	23.55	4.52E+001
4	3632-	3654	3641.60	910.36	0.92	1.16E+002	35.03	5.21E+001
5	5828-	5857	5841.99	1460.47	2.60	7.80E+002	59.43	2.95E+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	0.996	1460.81*	10.67	1.71313E+001	1.90407E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.45137E-001	1.06262E-001
		860.37	12.46		
Bi-212	0.994	727.17*	11.80	4.09620E-001	3.91543E-001
Bi-214	0.403	609.31*	46.30	6.70697E-001	1.88386E-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	0.996	1.713133E+001	1.904069E+000
TL-208	0.472	2.451371E-001	1.062625E-001
Bi-212	0.994	4.096199E-001	3.915429E-001
Bi-214	0.403	6.706967E-001	1.883865E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.36	1.9319E-001	30.22

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: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	1.1128E-001	1.06E-001	8.6424E-003
	1332.49	100.00	1.0607E-001		1.1180E-002
Nb-94	702.63	100.00	1.2087E-001	1.12E-001	5.8043E-002
	871.10	100.00	1.1189E-001		-2.9669E-004
Ag-108m	79.20	7.10	1.1886E+001	1.51E-001	-2.1037E+001
	433.93	89.90	1.5319E-001		2.2972E-002
	614.37	90.40	1.7178E-001		4.2222E-003
	722.95	90.50	1.5073E-001		4.0282E-002
Sb-125	176.33	6.89	3.2337E+000	4.75E-001	4.1995E-001
	427.89	29.33	4.7499E-001		6.7422E-002
	463.38	10.35	1.3505E+000		-4.5883E-001
	600.56	17.80	7.4188E-001		-4.2540E-001
	606.64	5.02	3.2877E+000		4.6341E+000
	635.90	11.32	1.1066E+000		-4.4300E-001
Cs-134	563.23	8.38	1.5736E+000	1.47E-001	-2.2949E-001
	569.32	15.43	8.7392E-001		-3.4733E-001
	604.70	97.60	1.6627E-001		-1.7127E-002
	795.84	85.40	1.4654E-001		3.6813E-002
Cs-137	801.93	8.73	1.3859E+000	1.45E-001	-7.8844E-001
	661.65	85.12	1.4521E-001		5.1522E-003
Eu-152	121.78	28.40	1.1375E+000	3.57E-001	6.0989E-001
	244.69	7.49	2.4961E+000		-4.9451E+000
	344.27	26.50	5.7279E-001		-5.2827E-001
	778.89	12.74	9.7560E-001		-3.7831E-001
	867.32	4.16	2.7367E+000		-2.0351E+000
	964.01	14.40	1.0375E+000		1.2560E+000
	1085.78	10.00	1.1201E+000		1.6302E-001
	1112.02	13.30	8.6754E-001		-7.6115E-001
	1407.95	20.70	3.5720E-001		4.4049E-002
	Eu-154	123.07	40.50		7.8583E-001
247.94		6.60	2.6834E+000	9.0932E-002	
591.81		4.83	2.7028E+000	5.8421E-001	
723.30		19.70	6.8775E-001	4.0357E-002	
756.87		4.33	2.8955E+000	8.9801E-001	
873.19		11.50	9.6260E-001	-4.2619E-001	
996.32		10.30	1.0994E+000	5.8710E-001	
1004.76		17.90	5.9888E-001	-4.8543E-001	
1274.45		35.50	2.9650E-001	6.5438E-002	
Eu-155		86.54	30.90	2.0979E+000	2.06E+000
	105.31	20.70	2.0569E+000	-1.7539E+000	
Am-241	59.54	35.90	5.6414E+000	5.64E+000	3.6134E-001
Cm-243	228.19	10.56	1.7764E+000	1.21E+000	-4.3628E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2131E+000	1.21E+000	2.0219E-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 7/26/2006 2:54:14 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-113-F-

Sample Title: OOL-10-04-113-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 2:44:11 PM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-113-F-
 Title: OOL-10-04-113-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	296-	316	300.30	75.03	0.92	1.54E+002	52.97	7.80E+002
m	2	296-	316	310.15	77.49	0.92	8.70E+001	43.20	8.09E+002
	3	943-	960	953.69	238.40	1.29	1.56E+002	63.70	2.77E+002
	4	1347-	1358	1352.53	338.12	1.06	2.98E+001	32.04	9.42E+001
	5	1397-	1412	1406.87	351.71	1.36	9.68E+001	42.08	1.21E+002
	6	2033-	2048	2041.30	510.34	1.09	7.45E+001	35.30	8.15E+001
	7	2075-	2085	2080.05	520.03	0.55	1.50E+001	17.20	2.60E+001
	8	2321-	2339	2331.03	582.78	1.02	1.31E+002	34.12	5.02E+001
	9	2425-	2445	2435.06	608.79	0.91	1.25E+002	35.90	5.78E+001
	10	2658-	2669	2663.17	665.83	0.44	3.03E+001	19.04	2.47E+001
	11	3633-	3650	3641.65	910.48	0.46	9.51E+001	28.13	3.39E+001
	12	5827-	5854	5841.03	1460.40	2.07	5.96E+002	50.89	1.74E+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	0.986	511.00*	100.00	1.33780E-001	6.59245E-002
K-40	0.994	1460.81*	10.67	1.35343E+001	1.59310E+000
TL-208	0.748	277.35	6.80		
		510.84*	21.60	6.19354E-001	3.09369E-001
		583.14*	84.20	2.91811E-001	8.50928E-002
		860.37	12.46		
Pb-212	0.854	74.81* @	10.70	5.99716E+000	2.37513E+000
		77.11* @	18.00	1.80173E+000	9.61651E-001
		87.30 @	8.00		
Bi-214	0.397	238.63*	44.60	5.10620E-001	2.22756E-001
		609.31*	46.30	5.15960E-001	1.60973E-001
		1120.29	15.10		
PB-214	0.367	1764.49	15.80		
		74.82* @	6.21	1.03333E+001	4.16059E+000
		77.11* @	10.50	3.08868E+000	1.66460E+000
		87.30 @	4.67		
		241.98	7.49		
Ac-228	0.534	295.21	19.20		
		351.92*	37.20	4.15861E-001	1.93676E-001
		338.32*	11.40	4.14043E-001	4.49710E-001
		911.07*	27.70	7.23708E-001	2.29751E-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: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	0.986	7.074927E-002	6.840799E-002
K-40	0.994	1.353432E+001	1.593101E+000
TL-208	0.748	2.918111E-001	8.455973E-002
Pb-212 @	0.854	5.106197E-001	2.227558E-001
Bi-214	0.397	5.159595E-001	1.609732E-001
PB-214 @	0.367	4.158614E-001	1.922364E-001
Ac-228	0.534	6.596131E-001	2.045969E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	520.03	2.5051E-002	114.44
10	665.83	5.0424E-002	62.94

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: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	1.0729E-001	8.00E-002	1.4858E-002
	1332.49	100.00	7.9970E-002		-2.2752E-002
Nb-94	702.63	100.00	1.1681E-001	1.01E-001	7.8236E-002
	871.10	100.00	1.0075E-001		-6.4530E-002
Ag-108m	79.20	7.10	1.0188E+001	1.26E-001	-2.5245E+000
	433.93	89.90	1.2598E-001		8.9677E-003
	614.37	90.40	1.4637E-001		7.2313E-002
	722.95	90.50	1.2946E-001		7.2881E-002
Sb-125	176.33	6.89	2.8376E+000	3.97E-001	3.6992E-001
	427.89	29.33	3.9675E-001		2.0830E-002
	463.38	10.35	1.1444E+000		1.6590E-001
	600.56	17.80	5.8367E-001		-2.3191E-001
	606.64	5.02	2.8776E+000		5.0058E+000
	635.90	11.32	8.9587E-001		2.5653E-002
Cs-134	563.23	8.38	1.4396E+000	1.23E-001	-1.9593E-002
	569.32	15.43	7.9721E-001		6.0403E-001
	604.70	97.60	1.4813E-001		-3.6744E-003
	795.84	85.40	1.2278E-001		7.6934E-002
	801.93	8.73	1.0933E+000		-6.4583E-001
Cs-137	661.65	85.12	1.3133E-001	1.31E-001	-8.7453E-002
Eu-152	121.78	28.40	9.5505E-001	4.27E-001	-8.0414E-001
	244.69	7.49	2.1612E+000		-5.4972E-001
	344.27	26.50	4.6639E-001		-6.3590E-002
	778.89	12.74	7.2839E-001		-1.4375E-001
	867.32	4.16	2.3470E+000		-1.3239E+000
	964.01	14.40	8.5847E-001		1.1041E+000
	1085.78	10.00	9.3193E-001		-9.6003E-001
	1112.02	13.30	7.7481E-001		-1.1055E+000
1407.95	20.70	4.2740E-001	-1.7086E-001		
Eu-154	123.07	40.50	6.6485E-001	2.59E-001	-2.8083E-003
	247.94	6.60	2.2890E+000		2.5044E-001
	591.81	4.83	2.3639E+000		5.3323E-001
	723.30	19.70	5.9480E-001		3.4545E-001
	756.87	4.33	2.2882E+000		5.5930E-001
	873.19	11.50	9.0200E-001		-3.3524E-001
	996.32	10.30	9.2910E-001		3.4169E-001
	1004.76	17.90	5.2308E-001		-2.1395E-002
1274.45	35.50	2.5918E-001	9.7564E-003		
Eu-155	86.54	30.90	1.7492E+000	1.68E+000	3.8274E-001
	105.31	20.70	1.6759E+000		-9.1288E-001
Am-241	59.54	35.90	5.4799E+000	5.48E+000	5.8296E+000
Cm-243	228.19	10.56	1.4038E+000	9.92E-001	-1.1899E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.9172E-001	9.92E-001	8.0382E-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 7/26/2006 3:09:22 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-114-F-

Sample Title: OOL-10-04-114-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 2:59:19 PM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-114-F-
Title: OOL-10-04-114-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	295-	309	300.52	75.09	1.22	1.61E+002	109.92	1.03E+003
2	948-	963	955.23	238.79	0.84	1.07E+002	56.53	2.41E+002
3	1173-	1188	1179.71	294.91	0.79	6.38E+001	40.99	1.24E+002
4	1401-	1413	1407.07	351.76	1.08	8.23E+001	35.40	9.17E+001
5	2035-	2045	2040.47	510.13	0.31	3.81E+001	27.87	6.69E+001
6	2323-	2340	2331.13	582.80	0.35	8.64E+001	30.23	4.66E+001
7	2428-	2446	2434.83	608.73	1.23	1.13E+002	30.53	3.80E+001
8	3635-	3650	3641.63	910.47	0.41	6.11E+001	26.47	3.89E+001
9	5828-	5853	5841.05	1460.40	1.96	3.87E+002	40.57	9.71E+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: 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	8.80136E+000	1.16525E+000
TL-208	0.747	277.35	6.80		
		510.84*	21.60	3.16936E-001	2.37027E-001
		583.14*	84.20	1.92748E-001	7.19789E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	6.25652E+000	4.44392E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.50482E-001	1.92560E-001
Bi-214	0.396	609.31*	46.30	4.65482E-001	1.38230E-001
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.626	74.82* @	6.21	1.07802E+001	7.69688E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.09086E-001	3.38124E-001
		351.92*	37.20	3.53705E-001	1.63185E-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	0.975		
	K-40	0.994	8.801356E+000	1.165251E+000
	TL-208	0.747	2.032333E-001	6.887321E-002
	Pb-212 @	0.593	3.504820E-001	1.925601E-001
	Bi-214	0.396	4.654816E-001	1.382304E-001
	PB-214 @	0.626	3.830596E-001	1.469649E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
8	910.47	1.0185E-001	43.31

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: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	8.6009E-002	7.58E-002	-7.8363E-002
	1332.49	100.00	7.5761E-002		3.2419E-002
Nb-94	702.63	100.00	8.8147E-002	8.74E-002	1.5911E-003
	871.10	100.00	8.7433E-002		6.0227E-002
Ag-108m	79.20	7.10	9.9872E+000	1.21E-001	-1.2713E+000
	433.93	89.90	1.2566E-001		-1.2433E-002
	614.37	90.40	1.3637E-001		-8.8097E-002
	722.95	90.50	1.2057E-001		5.2533E-002
Sb-125	176.33	6.89	2.7508E+000	3.78E-001	1.3366E-001
	427.89	29.33	3.7838E-001		-8.6458E-003
	463.38	10.35	1.0209E+000		3.0316E-001
	600.56	17.80	5.8588E-001		3.2275E-001
	606.64	5.02	2.7804E+000		6.0954E+000
	635.90	11.32	8.8083E-001		-6.7630E-002
Cs-134	563.23	8.38	1.1753E+000	1.16E-001	-1.6764E-001
	569.32	15.43	6.5354E-001		-9.2586E-002
	604.70	97.60	1.3891E-001		-2.9662E-002
	795.84	85.40	1.1563E-001		8.4047E-003
	801.93	8.73	9.8972E-001		-9.2499E-001
Cs-137	661.65	85.12	1.1404E-001	1.14E-001	-6.6676E-002
Eu-152	121.78	28.40	9.6906E-001	3.31E-001	5.5614E-003
	244.69	7.49	2.0504E+000		7.2074E-001
	344.27	26.50	4.8505E-001		-1.4840E-001
	778.89	12.74	7.7137E-001		-1.0200E+000
	867.32	4.16	2.2464E+000		-1.0967E-001
	964.01	14.40	8.9282E-001		6.7312E-001
	1085.78	10.00	8.7560E-001		-5.1519E-001
	1112.02	13.30	6.1675E-001		-1.1181E+000
1407.95	20.70	3.3143E-001	1.9468E-001		
Eu-154	123.07	40.50	6.6918E-001	2.37E-001	-6.9237E-001
	247.94	6.60	2.2721E+000		-9.8551E-001
	591.81	4.83	2.0991E+000		1.3866E+000
	723.30	19.70	5.5605E-001		1.9559E-001
	756.87	4.33	2.3843E+000		-8.0855E-002
	873.19	11.50	7.2996E-001		2.3107E-002
	996.32	10.30	8.4307E-001		3.0517E-001
	1004.76	17.90	5.1000E-001		3.1777E-002
1274.45	35.50	2.3708E-001	-1.1845E-001		
Eu-155	86.54	30.90	1.6927E+000	1.69E+000	1.7473E+000
	105.31	20.70	1.7203E+000		-4.0904E-001
Am-241	59.54	35.90	5.1789E+000	5.18E+000	-7.2055E+000
Cm-243	228.19	10.56	1.4286E+000	9.77E-001	-8.3518E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.7722E-001	9.77E-001	2.0564E-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 7/26/2006 3:28:19 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-115-F-

Sample Title: OOL-10-04-115-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 3:18:16 PM

Live Time: 600.0 seconds

Real Time: 601.3 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-115-F-
Title: OOL-10-04-115-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	287-	306	292.35	73.04	1.28	1.75E+002	51.54	9.19E+002
m	2	287-	306	300.54	75.09	1.28	3.34E+002	58.15	1.21E+003
	3	945-	964	954.27	238.55	0.99	2.27E+002	72.43	3.25E+002
	4	1397-	1415	1405.34	351.33	1.93	1.48E+002	49.79	1.47E+002
	5	2323-	2343	2331.07	582.79	1.30	1.36E+002	36.77	5.98E+001
	6	2426-	2445	2435.75	608.96	1.52	1.30E+002	34.21	4.99E+001
	7	3634-	3651	3643.35	910.90	0.48	8.54E+001	28.25	3.76E+001
	8	3865-	3880	3872.14	968.11	0.25	4.70E+001	24.86	3.80E+001
	9	4471-	4484	4478.48	1119.71	0.42	4.00E+001	17.37	1.40E+001
	10	5828-	5854	5841.13	1460.42	1.94	5.76E+002	51.64	2.70E+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: 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	0.995	1460.81*	10.67	1.30899E+001	1.58129E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.03923E-001	9.10954E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	1.29860E+001	3.40329E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.40723E-001	2.63387E-001
Bi-214	0.701	609.31*	46.30	5.36014E-001	1.55648E-001
		1120.29*	15.10	5.89998E-001	2.63715E-001
		1764.49	15.80		
Ac-228	0.622	338.32	11.40		
		911.07*	27.70	6.49919E-001	2.27648E-001
		969.11*	16.60	6.07167E-001	3.27204E-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	0.995	1.308990E+001	1.581293E+000
TL-208	0.469	3.039225E-001	9.109541E-002
Pb-212 @	0.594	7.407234E-001	2.633865E-001
Bi-214	0.701	5.499610E-001	1.340425E-001
Ac-228	0.622	6.359749E-001	1.868700E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.9143E-001	29.47
4	351.33	2.4625E-001	33.70

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: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	1.0890E-001	9.41E-002	2.8699E-002
	1332.49	100.00	9.4141E-002		6.9867E-002
Nb-94	702.63	100.00	1.1170E-001	9.41E-002	1.6611E-002
	871.10	100.00	9.4075E-002		-1.2159E-001
Ag-108m	79.20	7.10	1.0866E+001	1.32E-001	-1.4380E+001
	433.93	89.90	1.3221E-001		2.7347E-004
	614.37	90.40	1.4637E-001		-3.9717E-002
	722.95	90.50	1.3326E-001		6.1685E-002
Sb-125	176.33	6.89	2.9117E+000	4.02E-001	9.5061E-001
	427.89	29.33	4.0237E-001		-1.2774E-001
	463.38	10.35	1.1879E+000		2.4468E-001
	600.56	17.80	6.5262E-001		2.0354E-001
	606.64	5.02	2.9332E+000		2.8844E+000
	635.90	11.32	9.5003E-001		-1.0941E-001
Cs-134	563.23	8.38	1.4625E+000	1.31E-001	1.9642E+000
	569.32	15.43	7.7200E-001		4.4646E-001
	604.70	97.60	1.5183E-001		2.3396E-002
	795.84	85.40	1.3053E-001		9.9959E-002
Cs-137	801.93	8.73	1.2187E+000	1.32E-001	6.8749E-001
	661.65	85.12	1.3179E-001		3.3282E-002
Eu-152	121.78	28.40	1.0566E+000	3.72E-001	-2.4711E-001
	244.69	7.49	2.2740E+000		-1.2685E+000
	344.27	26.50	5.3852E-001		2.5218E-002
	778.89	12.74	8.2971E-001		-8.2073E-001
	867.32	4.16	2.4195E+000		-7.1392E-001
	964.01	14.40	9.4981E-001		5.4943E-001
	1085.78	10.00	8.6910E-001		-8.8862E-001
	1112.02	13.30	6.9127E-001		-4.5811E-001
1407.95	20.70	3.7222E-001	-7.4570E-002		
Eu-154	123.07	40.50	7.3891E-001	2.57E-001	5.7136E-001
	247.94	6.60	2.4672E+000		1.8984E+000
	591.81	4.83	2.3120E+000		-6.3325E-001
	723.30	19.70	6.0843E-001		4.5978E-001
	756.87	4.33	2.6131E+000		-1.5559E+000
	873.19	11.50	8.2769E-001		-1.7750E-001
	996.32	10.30	1.0124E+000		-1.7229E-001
	1004.76	17.90	5.4207E-001		-5.9341E-003
1274.45	35.50	2.5725E-001	-1.7655E-001		
Eu-155	86.54	30.90	1.9017E+000	1.83E+000	2.6066E+000
	105.31	20.70	1.8302E+000		-3.5765E-001
Am-241	59.54	35.90	5.2691E+000	5.27E+000	1.4663E-001
Cm-243	228.19	10.56	1.5782E+000	1.10E+000	5.1181E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0971E+000	1.10E+000	-7.3505E-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 7/26/2006 2:52:31 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-10-04-116-F-

Sample Title: OOL-10-04-116-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 2:42:29 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-10-04-116-F-
Title: OOL-10-04-116-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	943-	962	952.69	238.13	1.40	2.32E+002	80.94	4.21E+002
2	3633-	3654	3643.41	910.82	1.05	1.44E+002	35.99	5.15E+001
3	5827-	5857	5842.32	1460.55	2.82	7.89E+002	60.55	3.43E+001
4	7049-	7065	7057.31	1764.30	1.11	5.89E+001	15.84	2.06E+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	0.998	1460.81*	10.67	1.73116E+001	1.93163E+000
Pb-212	0.449	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.50669E-001	2.86987E-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	0.998	1.731165E+001	1.931627E+000
Pb-212 @	0.449	7.506692E-001	2.869866E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.82	2.4082E-001	24.91
4	1764.30	9.8231E-002	26.88

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: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	9.33E-002	4.9788E-003
	1332.49	100.00	9.3294E-002		3.6621E-002
Nb-94	702.63	100.00	1.2052E-001	1.20E-001	-2.0286E-002
	871.10	100.00	1.1985E-001		-7.7698E-003
Ag-108m	79.20	7.10	1.1640E+001	1.48E-001	-1.7832E+001
	433.93	89.90	1.4834E-001		-2.0395E-002
	614.37	90.40	1.6813E-001		-2.0338E-001
	722.95	90.50	1.4795E-001		-4.4633E-002
Sb-125	176.33	6.89	3.2467E+000	4.47E-001	-5.0630E-001
	427.89	29.33	4.4701E-001		-2.7704E-001
	463.38	10.35	1.3301E+000		4.3131E-001
	600.56	17.80	6.9951E-001		1.2826E-001
	606.64	5.02	3.2831E+000		5.6238E+000
	635.90	11.32	1.0661E+000		-3.3857E-001
Cs-134	563.23	8.38	1.5568E+000	1.40E-001	1.5064E+000
	569.32	15.43	7.8101E-001		-1.1897E+000
	604.70	97.60	1.6357E-001		1.2061E-001
	795.84	85.40	1.4017E-001		-7.8847E-002
	801.93	8.73	1.2896E+000		-1.5838E+000
Cs-137	661.65	85.12	1.4363E-001	1.44E-001	2.3177E-002
Eu-152	121.78	28.40	1.1311E+000	4.10E-001	8.1550E-001
	244.69	7.49	2.3977E+000		-1.5453E+000
	344.27	26.50	5.3773E-001		-6.1310E-001
	778.89	12.74	9.0933E-001		-5.7003E-001
	867.32	4.16	2.7944E+000		-1.8431E+000
	964.01	14.40	1.0507E+000		1.2987E+000
	1085.78	10.00	1.1427E+000		1.1129E-001
	1112.02	13.30	7.9697E-001		-1.9507E+000
1407.95	20.70	4.1016E-001	5.0796E-002		
Eu-154	123.07	40.50	7.8195E-001	2.95E-001	-1.0048E-001
	247.94	6.60	2.5790E+000		-2.2101E+000
	591.81	4.83	2.6414E+000		8.8047E-001
	723.30	19.70	6.9410E-001		2.7455E-001
	756.87	4.33	2.7472E+000		1.2063E+000
	873.19	11.50	1.0155E+000		-5.3415E-001
	996.32	10.30	1.0824E+000		1.0587E-001
	1004.76	17.90	6.1164E-001		3.0106E-001
1274.45	35.50	2.9499E-001	-2.6487E-002		
Eu-155	86.54	30.90	2.0427E+000	2.02E+000	2.2400E+000
	105.31	20.70	2.0179E+000		5.1009E-001
Am-241	59.54	35.90	5.1193E+000	5.12E+000	-2.0982E+000
Cm-243	228.19	10.56	1.7430E+000	1.20E+000	6.7318E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2037E+000	1.20E+000	1.8926E-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 7/26/2006 3:07:15 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-10-04-117-F-

Sample Title: OOL-10-04-117-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 2:57:13 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-117-F-
Title: OOL-10-04-117-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	775-	782	778.23	194.51	0.89	4.67E+001	42.12	2.05E+002
2	946-	963	953.47	238.32	1.13	1.62E+002	79.97	4.60E+002
3	2033-	2047	2038.28	509.53	1.18	8.11E+001	39.63	1.09E+002
4	2323-	2342	2332.16	583.00	0.45	1.17E+002	38.29	7.53E+001
5	3866-	3879	3872.81	968.17	0.36	2.91E+001	28.01	6.29E+001
6	5826-	5856	5841.84	1460.43	2.93	8.08E+002	59.49	2.33E+001
7	7052-	7065	7058.59	1764.62	0.92	4.49E+001	16.05	8.13E+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: 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	0.932	511.00*	100.00	1.42380E-001	7.22543E-002
K-40	0.995	1460.81*	10.67	1.77297E+001	1.94042E+000
TL-208	0.742	277.35	6.80		
		510.84*	21.60	6.59165E-001	3.38815E-001
		583.14*	84.20	2.54470E-001	8.98075E-002
		860.37	12.46		
Pb-212	0.452	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.22858E-001	2.71334E-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	0.932	8.741407E-002	7.479155E-002
K-40	0.995	1.772967E+001	1.940423E+000
TL-208	0.742	2.544700E-001	8.942376E-002
Pb-212 @	0.452	5.228578E-001	2.713337E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	194.51	7.7857E-002	90.16
5	968.17	4.8514E-002	96.24
7	1764.62	7.4788E-002	35.77

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: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	1.1551E-001	9.93E-002	9.9201E-002
	1332.49	100.00	9.9317E-002		3.9817E-002
Nb-94	702.63	100.00	1.2466E-001	1.21E-001	4.5332E-002
	871.10	100.00	1.2099E-001		8.7130E-002
Ag-108m	79.20	7.10	1.2520E+001	1.46E-001	-2.9941E+001
	433.93	89.90	1.5444E-001		-7.0410E-003
	614.37	90.40	1.6898E-001		-4.9007E-002
	722.95	90.50	1.4618E-001		8.1169E-002
Sb-125	176.33	6.89	3.3136E+000	4.86E-001	3.8281E+000
	427.89	29.33	4.8616E-001		-1.6428E-002
	463.38	10.35	1.3437E+000		2.1905E-001
	600.56	17.80	6.8180E-001		3.1794E-001
	606.64	5.02	3.2408E+000		5.1916E+000
	635.90	11.32	1.1619E+000		1.0135E+000
Cs-134	563.23	8.38	1.5870E+000	1.42E-001	-1.0482E+000
	569.32	15.43	8.6128E-001		-2.9584E-001
	604.70	97.60	1.6082E-001		6.7166E-002
	795.84	85.40	1.4190E-001		-1.9117E-003
	801.93	8.73	1.3647E+000		-2.4003E-001
Cs-137	661.65	85.12	1.4638E-001	1.46E-001	-1.7954E-001
Eu-152	121.78	28.40	1.1674E+000	3.69E-001	6.4890E-001
	244.69	7.49	2.5160E+000		-7.7965E-001
	344.27	26.50	5.7482E-001		-3.6869E-001
	778.89	12.74	9.9485E-001		-2.1271E-001
	867.32	4.16	2.9244E+000		-2.0320E+000
	964.01	14.40	1.0150E+000		8.8433E-001
	1085.78	10.00	1.1292E+000		6.1256E-001
	1112.02	13.30	8.4006E-001		-6.9886E-001
1407.95	20.70	3.6924E-001	-9.0353E-002		
Eu-154	123.07	40.50	8.0495E-001	2.54E-001	1.4466E-001
	247.94	6.60	2.7153E+000		-1.3052E-001
	591.81	4.83	2.4541E+000		4.9600E-001
	723.30	19.70	6.7322E-001		5.8460E-001
	756.87	4.33	2.6699E+000		-1.0645E+000
	873.19	11.50	1.0224E+000		-5.5143E-001
	996.32	10.30	1.0994E+000		5.3848E-001
	1004.76	17.90	6.0657E-001		-1.1064E-001
1274.45	35.50	2.5421E-001	-2.6652E-001		
Eu-155	86.54	30.90	2.1438E+000	2.09E+000	1.9978E+000
	105.31	20.70	2.0917E+000		-9.8668E-001
Am-241	59.54	35.90	5.5205E+000	5.52E+000	-4.1215E-002
Cm-243	228.19	10.56	1.8598E+000	1.26E+000	3.7259E-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	3.4824E-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 7/26/2006 3:23:47 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-10-04-118-F-

Sample Title: OOL-10-04-118-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 3:13:45 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-118-F-
Title: OOL-10-04-118-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	946-	962	952.68	238.13	1.15	2.08E+002	75.65	4.09E+002
2	2034-	2048	2039.97	509.95	0.74	4.31E+001	39.89	1.28E+002
3	2321-	2340	2330.44	582.57	0.89	1.40E+002	35.71	5.48E+001
4	2425-	2445	2435.59	608.86	1.21	1.21E+002	42.66	9.50E+001
5	5323-	5337	5329.81	1332.42	0.65	2.50E+001	16.12	1.30E+001
6	5829-	5855	5841.64	1460.38	2.50	6.59E+002	55.69	3.38E+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	0.994	1460.81*	10.67	1.44699E+001	1.69302E+000
TL-208	0.741	277.35	6.80		
		510.84*	21.60	3.50235E-001	3.29239E-001
		583.14*	84.20	3.05526E-001	8.74151E-002
		860.37	12.46		
Pb-212	0.449	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.73221E-001	2.66425E-001
Bi-214	0.399	609.31*	46.30	4.86630E-001	1.81713E-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
X	ANN	0.965		
	K-40	0.994	1.446994E+001	1.693017E+000
	TL-208	0.741	3.084702E-001	8.448792E-002
	Pb-212 @	0.449	6.732208E-001	2.664253E-001
	Bi-214	0.399	4.866299E-001	1.817130E-001

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1332.42	4.1667E-002	64.47

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: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	1.0886E-001	9.93E-002	1.1251E-002
	1332.49	100.00	9.9317E-002		1.2051E-001
Nb-94	702.63	100.00	1.1839E-001	1.15E-001	7.7486E-002
	871.10	100.00	1.1515E-001		4.7636E-003
Ag-108m	79.20	7.10	1.3183E+001	1.41E-001	-1.5893E+001
	433.93	89.90	1.4060E-001		7.0412E-003
	614.37	90.40	1.5996E-001		-2.4443E-002
	722.95	90.50	1.4073E-001		8.9132E-002
Sb-125	176.33	6.89	3.6068E+000	4.47E-001	2.9765E-001
	427.89	29.33	4.4701E-001		-6.8327E-002
	463.38	10.35	1.2526E+000		1.2299E+000
	600.56	17.80	6.5988E-001		-6.1746E-001
	606.64	5.02	3.1349E+000		4.4731E+000
	635.90	11.32	1.0177E+000		4.6647E-002
Cs-134	563.23	8.38	1.4838E+000	1.36E-001	3.1382E-001
	569.32	15.43	7.9300E-001		5.5998E-001
	604.70	97.60	1.5570E-001		-7.4427E-002
	795.84	85.40	1.3620E-001		1.1918E-001
	801.93	8.73	1.2942E+000		-1.1359E-001
Cs-137	661.65	85.12	1.4203E-001	1.42E-001	4.9389E-002
Eu-152	121.78	28.40	1.2707E+000	3.77E-001	-4.6467E-001
	244.69	7.49	2.5939E+000		-1.1442E+000
	344.27	26.50	5.5062E-001		-6.2010E-001
	778.89	12.74	8.5371E-001		-1.2232E+000
	867.32	4.16	2.8039E+000		8.7831E-001
	964.01	14.40	9.7089E-001		1.3626E+000
	1085.78	10.00	1.1062E+000		2.3130E-001
	1112.02	13.30	8.2596E-001		-6.4715E-001
1407.95	20.70	3.7704E-001	-1.3340E-001		
Eu-154	123.07	40.50	8.8171E-001	2.73E-001	-5.7728E-001
	247.94	6.60	2.7760E+000		-1.5515E+000
	591.81	4.83	2.5203E+000		1.2754E+000
	723.30	19.70	6.4484E-001		5.6246E-001
	756.87	4.33	2.6348E+000		-1.2876E+000
	873.19	11.50	9.9823E-001		2.4049E-001
	996.32	10.30	1.0520E+000		-4.2863E-001
	1004.76	17.90	6.0402E-001		2.6453E-001
1274.45	35.50	2.7296E-001	-1.9787E-001		
Eu-155	86.54	30.90	2.3148E+000	2.31E+000	2.7647E+000
	105.31	20.70	2.3407E+000		-5.2133E-001
Am-241	59.54	35.90	5.8058E+000	5.81E+000	-5.1021E+000
Cm-243	228.19	10.56	1.9238E+000	1.24E+000	1.7739E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2429E+000	1.24E+000	-1.2081E+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 7/27/2006 2:19:32 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-119-F-

Sample Title: OOL-10-04-119-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 2:09:27 PM

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

Filename: GRN7780
Log Number: OOL-10-04-119-F-
Title: OOL-10-04-119-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	1401-	1415	1406.89	351.68	0.37	9.15E+001	44.75	1.47E+002
2	2426-	2447	2438.71	609.64	1.66	1.85E+002	39.88	6.07E+001
3	3634-	3656	3643.10	910.74	0.51	1.14E+002	37.47	6.49E+001
4	3868-	3884	3875.56	968.85	0.78	7.04E+001	26.86	3.76E+001
5	5831-	5858	5845.24	1461.28	2.55	7.74E+002	57.76	2.10E+001
6	7057-	7070	7063.47	1765.84	0.72	2.66E+001	14.74	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	0.993	1460.81*	10.67	1.69936E+001	1.87117E+000
Bi-214	0.681	609.31*	46.30	7.45522E-001	1.84830E-001
		1120.29	15.10		
		1764.49*	15.80	4.32187E-001	2.43289E-001
Ac-228	0.634	338.32	11.40		
		911.07*	27.70	8.37364E-001	2.91367E-001
		969.11*	16.60	8.75084E-001	3.46237E-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	0.993	1.699363E+001	1.871167E+000
Bi-214	0.681	6.308567E-001	1.471748E-001
Ac-228	0.634	8.530018E-001	2.229336E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.68	1.5256E-001	48.88

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: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	9.87E-002	1.5174E-002
	1332.49	100.00	9.8732E-002		5.4014E-002
Nb-94	702.63	100.00	1.1695E-001	1.02E-001	-2.3054E-003
	871.10	100.00	1.0239E-001		-8.8067E-002
Ag-108m	79.20	7.10	1.2119E+001	1.35E-001	-1.6123E+001
	433.93	89.90	1.4115E-001		-1.5669E-001
	614.37	90.40	1.6322E-001		-8.2951E-002
	722.95	90.50	1.3505E-001		-1.5203E-002
Sb-125	176.33	6.89	3.1304E+000	4.41E-001	2.6171E+000
	427.89	29.33	4.4136E-001		-4.6785E-002
	463.38	10.35	1.2005E+000		5.4710E-001
	600.56	17.80	6.4102E-001		-1.0452E-001
	606.64	5.02	3.2170E+000		7.1796E+000
	635.90	11.32	9.9895E-001		8.1413E-001
Cs-134	563.23	8.38	1.4550E+000	1.36E-001	3.7769E-001
	569.32	15.43	8.2787E-001		8.8535E-002
	604.70	97.60	1.5596E-001		-1.1158E-001
	795.84	85.40	1.3575E-001		-2.7997E-002
	801.93	8.73	1.2620E+000		-1.0979E+000
Cs-137	661.65	85.12	1.4481E-001	1.45E-001	6.6864E-002
Eu-152	121.78	28.40	1.1180E+000	4.21E-001	1.3888E-001
	244.69	7.49	2.2950E+000		-4.1262E+000
	344.27	26.50	5.4920E-001		-3.4766E-001
	778.89	12.74	8.2772E-001		-5.7325E-001
	867.32	4.16	2.6070E+000		-5.3648E-001
	964.01	14.40	9.5409E-001		-2.6132E-001
	1085.78	10.00	1.0636E+000		-4.7307E-001
	1112.02	13.30	7.9327E-001		-2.8858E-001
1407.95	20.70	4.2057E-001	4.0004E-001		
Eu-154	123.07	40.50	7.7334E-001	2.79E-001	1.0560E-001
	247.94	6.60	2.4059E+000		-1.2893E+000
	591.81	4.83	2.4608E+000		-1.8714E+000
	723.30	19.70	6.2223E-001		-2.5126E-001
	756.87	4.33	2.5263E+000		5.6637E-001
	873.19	11.50	9.5164E-001		1.3962E-002
	996.32	10.30	1.0068E+000		3.5228E-001
	1004.76	17.90	5.9109E-001		2.0639E-001
1274.45	35.50	2.7944E-001	-3.1142E-002		
Eu-155	86.54	30.90	2.1191E+000	2.08E+000	3.3037E+000
	105.31	20.70	2.0804E+000		-1.5430E-001
Am-241	59.54	35.90	5.1792E+000	5.18E+000	-3.7335E-001
Cm-243	228.19	10.56	1.7102E+000	1.15E+000	1.2695E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1480E+000	1.15E+000	9.0399E-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 7/26/2006 9:46:44 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-120-F-

Sample Title: OOL-10-04-120-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 9:36:41 PM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-120-F-
Title: OOL-10-04-120-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	295-	309	300.90	75.18	1.24	1.20E+002	114.13	1.13E+003
2	331-	343	338.17	84.50	0.91	1.09E+002	95.00	8.48E+002
3	948-	958	953.20	238.28	0.60	1.61E+002	49.95	2.05E+002
4	2321-	2337	2329.12	582.30	0.69	7.74E+001	32.20	6.16E+001
5	2425-	2443	2434.54	608.66	0.41	1.05E+002	36.74	7.28E+001
6	3631-	3649	3640.38	910.16	1.10	1.04E+002	27.78	2.85E+001
7	3865-	3877	3871.36	967.91	0.54	4.85E+001	19.62	1.95E+001
8	5825-	5850	5838.11	1459.67	2.13	6.11E+002	52.15	2.28E+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: 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	0.957	1460.81*	10.67	1.38885E+001	1.63360E+000
TL-208	0.456	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.72693E-001	7.52770E-002
		860.37	12.46		
Pb-212	0.591	74.81* @	10.70	4.64991E+000	4.50861E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.24899E-001	1.82598E-001
Bi-214	0.394	609.31*	46.30	4.33297E-001	1.60461E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.605	338.32	11.40		
		911.07*	27.70	7.95095E-001	2.30417E-001
		969.11*	16.60	6.26002E-001	2.61616E-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	0.957	1.388854E+001	1.633600E+000
TL-208	0.456	1.726930E-001	7.527702E-002
Pb-212 @	0.591	5.248988E-001	1.825983E-001
Bi-214	0.394	4.332967E-001	1.604611E-001
Ac-228	0.605	7.212272E-001	1.729133E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.50	1.8130E-001	87.33

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: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	1.0890E-001	9.41E-002	5.3029E-002
	1332.49	100.00	9.4141E-002		8.8416E-003
Nb-94	702.63	100.00	1.0884E-001	1.01E-001	1.7621E-002
	871.10	100.00	1.0075E-001		7.2494E-002
Ag-108m	79.20	7.10	1.0467E+001	1.36E-001	-1.3814E+000
	433.93	89.90	1.3902E-001		1.2323E-002
	614.37	90.40	1.4218E-001		9.9019E-003
	722.95	90.50	1.3614E-001		1.0630E-001
Sb-125	176.33	6.89	2.9350E+000	4.18E-001	-1.6685E+000
	427.89	29.33	4.1787E-001		4.0795E-002
	463.38	10.35	1.1332E+000		3.6992E-001
	600.56	17.80	6.7014E-001		-7.2215E-002
	606.64	5.02	3.0466E+000		3.2920E+000
	635.90	11.32	9.1064E-001		5.5436E-002
Cs-134	563.23	8.38	1.3805E+000	1.30E-001	4.1615E-001
	569.32	15.43	7.3022E-001		3.6544E-001
	604.70	97.60	1.5815E-001		3.0158E-002
	795.84	85.40	1.2952E-001		-2.6420E-002
	801.93	8.73	1.2442E+000		5.2892E-001
Cs-137	661.65	85.12	1.3629E-001	1.36E-001	6.6282E-002
Eu-152	121.78	28.40	1.0176E+000	3.89E-001	-1.1702E+000
	244.69	7.49	2.2251E+000		-2.0774E+000
	344.27	26.50	5.0698E-001		-4.7958E-001
	778.89	12.74	7.7892E-001		-5.9392E-001
	867.32	4.16	2.4314E+000		-7.8313E-001
	964.01	14.40	9.3122E-001		1.7330E+000
	1085.78	10.00	9.7334E-001		-2.5174E-001
	1112.02	13.30	8.1907E-001		-9.2184E-001
1407.95	20.70	3.8885E-001	-1.3163E-001		
Eu-154	123.07	40.50	7.1104E-001	2.61E-001	1.7142E-001
	247.94	6.60	2.4108E+000		-1.3936E+000
	591.81	4.83	2.3270E+000		-2.6491E+000
	723.30	19.70	6.1986E-001		3.3246E-001
	756.87	4.33	2.3633E+000		5.2908E-001
	873.19	11.50	8.8511E-001		7.8796E-001
	996.32	10.30	9.1258E-001		-1.0709E+000
	1004.76	17.90	5.5737E-001		-5.1922E-001
1274.45	35.50	2.6109E-001	-2.5594E-002		
Eu-155	86.54	30.90	1.7918E+000	1.79E+000	-9.1374E-002
	105.31	20.70	1.8151E+000		-6.0682E-001
Am-241	59.54	35.90	4.6970E+000	4.70E+000	4.0282E+000
Cm-243	228.19	10.56	1.6435E+000	1.09E+000	-4.3983E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0888E+000	1.09E+000	5.9082E-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 7/26/2006 9:34:03 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-10-04-121-F-

Sample Title: OOL-10-04-121-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 9:24:01 PM

Live Time: 600.0 seconds

Real Time: 601.0 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

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

Filename: ORG7829
Log Number: OOL-10-04-121-F-
Title: OOL-10-04-121-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	295-	306	300.85	75.17	0.96	1.13E+002	91.26	8.15E+002
2	1394-	1413	1405.63	351.40	1.08	1.01E+002	40.63	9.40E+001
3	2321-	2338	2329.67	582.44	1.54	6.55E+001	26.84	3.65E+001
4	2425-	2443	2434.52	608.65	1.02	8.84E+001	29.90	4.26E+001
5	3867-	3878	3872.98	968.32	0.44	2.40E+001	15.39	1.50E+001
6	5824-	5848	5838.20	1459.69	1.72	2.79E+002	34.01	5.64E+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	0.959	1460.81*	10.67	6.34754E+000	9.28008E-001
TL-208	0.461	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.46109E-001	6.28430E-002
Bi-214	0.394	860.37	12.46		
		609.31*	46.30	3.64032E-001	1.31079E-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	0.959	6.347544E+000	9.280076E-001
TL-208	0.461	1.461088E-001	6.284303E-002
Bi-214	0.394	3.640316E-001	1.310790E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	75.17	1.8785E-001	80.96
2	351.40	1.6826E-001	40.25
5	968.32	4.0000E-002	64.12

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	8.7375E-002	7.03E-002	1.8491E-002
	1332.49	100.00	7.0346E-002		1.5325E-002
Nb-94	702.63	100.00	9.0191E-002	8.51E-002	-2.2765E-002
	871.10	100.00	8.5095E-002		-2.7579E-002
Ag-108m	79.20	7.10	9.8034E+000	1.09E-001	-3.1030E+000
	433.93	89.90	1.1170E-001		-4.9301E-002
	614.37	90.40	1.1757E-001		-5.0213E-002
	722.95	90.50	1.0888E-001		6.9111E-003
Sb-125	176.33	6.89	2.5007E+000	3.52E-001	-8.9615E-001
	427.89	29.33	3.5162E-001		-1.3327E-002
	463.38	10.35	1.0177E+000		3.7174E-001
	600.56	17.80	5.4694E-001		2.0286E-001
	606.64	5.02	2.5934E+000		4.7514E+000
	635.90	11.32	7.9695E-001		1.7529E-001
Cs-134	563.23	8.38	1.0328E+000	1.05E-001	3.4856E-001
	569.32	15.43	5.6296E-001		3.8482E-002
	604.70	97.60	1.3130E-001		1.2906E-002
	795.84	85.40	1.0486E-001		4.1669E-003
	801.93	8.73	9.5698E-001		-9.0911E-001
Cs-137	661.65	85.12	1.0629E-001	1.06E-001	3.1402E-002
Eu-152	121.78	28.40	9.3146E-001	3.41E-001	2.3140E-001
	244.69	7.49	1.9197E+000		-5.0475E-001
	344.27	26.50	4.1203E-001		6.0629E-002
	778.89	12.74	6.9535E-001		-1.2099E+000
	867.32	4.16	2.0997E+000		4.8847E-001
	964.01	14.40	7.2482E-001		4.0370E-001
	1085.78	10.00	7.9380E-001		8.3599E-001
	1112.02	13.30	6.3241E-001		-4.4252E-001
1407.95	20.70	3.4096E-001	6.3710E-002		
Eu-154	123.07	40.50	6.4769E-001	2.26E-001	3.3271E-001
	247.94	6.60	2.0035E+000		-1.8623E+000
	591.81	4.83	1.9525E+000		6.8439E-002
	723.30	19.70	5.0496E-001		2.1900E-001
	756.87	4.33	2.1876E+000		1.5117E+000
	873.19	11.50	7.1940E-001		-1.9310E-001
	996.32	10.30	8.0590E-001		8.3948E-001
	1004.76	17.90	4.4987E-001		1.2001E-001
1274.45	35.50	2.2627E-001	2.5453E-001		
Eu-155	86.54	30.90	1.7115E+000	1.71E+000	1.7260E+000
	105.31	20.70	1.7290E+000		1.1334E+000
Am-241	59.54	35.90	4.5955E+000	4.60E+000	4.1583E+000
Cm-243	228.19	10.56	1.3649E+000	9.21E-001	3.2104E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.2112E-001	9.21E-001	4.6996E-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 7/26/2006 9:21:42 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-122-F-

Sample Title: OOL-10-04-122-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 9:11:39 PM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-122-F-
 Title: OOL-10-04-122-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-	308	291.73	72.89	1.32	1.77E+002	52.80	1.14E+003
m	2	283-	308	300.24	75.02	1.32	3.52E+002	60.31	1.48E+003
	3	947-	961	953.57	238.37	1.43	1.85E+002	64.20	3.08E+002
	4	1173-	1186	1179.71	294.91	1.57	7.56E+001	43.36	1.50E+002
	5	1398-	1416	1406.09	351.51	0.63	1.22E+002	49.58	1.53E+002
	6	2028-	2052	2040.18	510.06	0.95	1.22E+002	46.42	1.06E+002
	7	2323-	2338	2329.82	582.48	1.45	1.22E+002	35.12	6.58E+001
	8	2424-	2445	2433.95	608.51	1.23	1.54E+002	38.83	6.34E+001
	9	3630-	3649	3640.90	910.29	0.75	1.06E+002	29.65	3.50E+001
	10	3866-	3879	3871.46	967.94	1.01	2.64E+001	23.75	4.36E+001
	11	5825-	5851	5838.35	1459.73	2.19	6.19E+002	53.12	2.66E+001
	12	7049-	7062	7055.53	1764.06	0.43	2.73E+001	13.65	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: 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	0.971	511.00*	100.00	2.18396E-001	8.84455E-002
K-40	0.962	1460.81*	10.67	1.40753E+001	1.65996E+000
TL-208	0.740	277.35	6.80		
		510.84*	21.60	1.01109E+000	4.17712E-001
		583.14*	84.20	2.72748E-001	8.60303E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.37304E+001	3.57369E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.684	238.63*	44.60	6.02324E-001	2.29815E-001
		609.31*	46.30	6.32587E-001	1.77925E-001
		1120.29	15.10		
PB-214	0.624	1764.49*	15.80	4.44241E-001	2.26293E-001
		74.82* @	6.21	2.36579E+001	6.39258E+000
		77.11 @	10.50		
		87.30 @	4.67		
Ac-228	0.609	241.98	7.49		
		295.21*	19.20	6.03431E-001	3.60543E-001
		351.92*	37.20	5.24374E-001	2.30315E-001
		338.32	11.40		
		911.07*	27.70	8.06451E-001	2.43999E-001
		969.11*	16.60	3.41215E-001	3.08640E-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	0.971	1.594820E-001	9.035610E-002
K-40	0.962	1.407526E+001	1.659957E+000
TL-208	0.740	2.727485E-001	8.556991E-002
Pb-212 @	0.593	6.023243E-001	2.298153E-001
Bi-214	0.684	5.606327E-001	1.398685E-001
PB-214 @	0.624	5.472851E-001	1.940932E-001
Ac-228	0.609	6.275155E-001	1.914093E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.9491E-001	29.84

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: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	1.1050E-001	1.05E-001	1.4094E-002
	1332.49	100.00	1.0511E-001		2.4989E-002
Nb-94	702.63	100.00	1.1909E-001	1.14E-001	-3.5255E-002
	871.10	100.00	1.1417E-001		6.3265E-002
Ag-108m	79.20	7.10	1.1030E+001	1.41E-001	-3.6855E+000
	433.93	89.90	1.4632E-001		-4.6430E-002
	614.37	90.40	1.4706E-001		-3.2513E-002
	722.95	90.50	1.4133E-001		2.7293E-003
Sb-125	176.33	6.89	2.9552E+000	4.38E-001	-2.6911E+000
	427.89	29.33	4.3793E-001		-2.8838E-001
	463.38	10.35	1.2169E+000		4.2875E-001
	600.56	17.80	6.7777E-001		7.7183E-003
	606.64	5.02	3.1609E+000		5.6190E+000
	635.90	11.32	1.0176E+000		2.5567E-001
Cs-134	563.23	8.38	1.5543E+000	1.31E-001	-3.7898E-001
	569.32	15.43	8.4334E-001		6.0822E-001
	604.70	97.60	1.6318E-001		-1.7184E-002
	795.84	85.40	1.3053E-001		1.5562E-002
	801.93	8.73	1.2692E+000		-4.4056E-001
Cs-137	661.65	85.12	1.4569E-001	1.46E-001	1.5105E-002
Eu-152	121.78	28.40	1.1237E+000	3.81E-001	-1.9374E-001
	244.69	7.49	2.3760E+000		-6.6645E-001
	344.27	26.50	5.4298E-001		-3.0841E-001
	778.89	12.74	8.7077E-001		-7.4388E-001
	867.32	4.16	2.6353E+000		-3.6170E-001
	964.01	14.40	9.5506E-001		1.3037E+000
	1085.78	10.00	9.9052E-001		-7.9877E-001
	1112.02	13.30	8.1515E-001		-1.0166E+000
1407.95	20.70	3.8063E-001	1.7362E-001		
Eu-154	123.07	40.50	7.8396E-001	2.93E-001	3.6309E-001
	247.94	6.60	2.6518E+000		3.2547E-002
	591.81	4.83	2.4432E+000		-3.6442E-001
	723.30	19.70	6.4570E-001		-6.1277E-002
	756.87	4.33	2.7154E+000		-1.0306E+000
	873.19	11.50	9.9328E-001		3.9883E-001
	996.32	10.30	9.6646E-001		-1.2249E+000
	1004.76	17.90	5.9801E-001		2.2009E-001
1274.45	35.50	2.9320E-001	8.4089E-002		
Eu-155	86.54	30.90	1.8998E+000	1.88E+000	2.8071E+000
	105.31	20.70	1.8818E+000		-3.7365E-001
Am-241	59.54	35.90	5.0201E+000	5.02E+000	-1.8443E+000
Cm-243	228.19	10.56	1.6634E+000	1.08E+000	7.6863E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0769E+000	1.08E+000	-1.3747E-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 7/27/2006 8:14:43 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-10-04-123-F-

Sample Title: OOL-10-04-123-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 8:04:40 AM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-123-F-
Title: OOL-10-04-123-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 8 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.993	1460.81*	10.67	1.49439E+001	1.71691E+000
TL-208	0.463	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.53303E-001	8.73073E-002
		860.37	12.46		
Pb-212	0.591	74.81* @	10.70	1.04082E+001	5.05409E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.394	238.63*	44.60	7.57190E-001	2.66850E-001
		609.31*	46.30	5.43719E-001	1.84841E-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	0.993	1.494393E+001	1.716910E+000
TL-208	0.463	2.533027E-001	8.730734E-002
Pb-212 @	0.591	7.571902E-001	2.668500E-001
Bi-214	0.394	5.437186E-001	1.848405E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.48	1.1037E-001	73.23
6	701.25	4.4838E-002	76.96
7	910.85	1.8717E-001	27.38

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: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	1.2056E-001	1.05E-001	3.1940E-002
	1332.49	100.00	1.0511E-001		9.3721E-002
Nb-94	702.63	100.00	1.1947E-001	1.15E-001	7.0698E-002
	871.10	100.00	1.1546E-001		-5.6636E-003
Ag-108m	79.20	7.10	1.1418E+001	1.43E-001	-1.2738E+001
	433.93	89.90	1.5327E-001		-7.7302E-002
	614.37	90.40	1.6573E-001		-1.3282E-002
	722.95	90.50	1.4288E-001		6.3910E-002
Sb-125	176.33	6.89	3.3144E+000	4.71E-001	1.0499E+000
	427.89	29.33	4.7071E-001		1.5289E-001
	463.38	10.35	1.3615E+000		7.1947E-001
	600.56	17.80	7.5817E-001		-1.0365E-001
	606.64	5.02	3.2612E+000		3.9128E+000
	635.90	11.32	1.0653E+000		-5.5659E-001
Cs-134	563.23	8.38	1.5183E+000	1.47E-001	6.8914E-001
	569.32	15.43	8.1357E-001		3.7979E-002
	604.70	97.60	1.6679E-001		-4.2175E-002
	795.84	85.40	1.4695E-001		1.2749E-001
	801.93	8.73	1.3129E+000		-7.9301E-001
Cs-137	661.65	85.12	1.4486E-001	1.45E-001	-2.0421E-002
Eu-152	121.78	28.40	1.1804E+000	4.01E-001	3.6612E-001
	244.69	7.49	2.5594E+000		-5.0496E+000
	344.27	26.50	5.5251E-001		-7.3462E-001
	778.89	12.74	9.2568E-001		-1.2252E+000
	867.32	4.16	2.8440E+000		1.8659E+000
	964.01	14.40	9.8843E-001		5.4288E-001
	1085.78	10.00	1.0349E+000		-3.8272E-001
	1112.02	13.30	7.9525E-001		-9.3697E-001
1407.95	20.70	4.0084E-001	5.7672E-002		
Eu-154	123.07	40.50	8.2083E-001	3.23E-001	6.2777E-001
	247.94	6.60	2.8182E+000		-7.1182E-001
	591.81	4.83	2.8594E+000		1.3500E+000
	723.30	19.70	6.5110E-001		2.6488E-001
	756.87	4.33	2.8050E+000		3.5283E+000
	873.19	11.50	1.0120E+000		1.3613E-001
	996.32	10.30	1.0750E+000		-5.4416E-001
	1004.76	17.90	6.2800E-001		-9.9403E-001
1274.45	35.50	3.2345E-001	-5.3590E-002		
Eu-155	86.54	30.90	2.0453E+000	2.05E+000	3.3413E+000
	105.31	20.70	2.0537E+000		7.1245E-001
Am-241	59.54	35.90	4.7609E+000	4.76E+000	1.1328E-001
Cm-243	228.19	10.56	1.7863E+000	1.22E+000	-1.8408E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2240E+000	1.22E+000	-4.6911E-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 7/27/2006 8:30:24 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-124-F-

Sample Title: OOL-10-04-124-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 8:20:22 AM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-124-F-
Title: OOL-10-04-124-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	948-	960	954.19	238.52	1.51	1.60E+002	63.00	3.31E+002
2	1346-	1360	1352.52	338.12	0.84	3.88E+001	45.88	1.76E+002
3	1399-	1414	1407.72	351.92	1.54	1.04E+002	50.19	1.84E+002
4	2199-	2209	2203.61	550.92	0.32	2.32E+001	24.07	5.28E+001
5	2321-	2339	2330.79	582.72	0.87	1.15E+002	39.88	8.82E+001
6	2425-	2447	2434.76	608.71	1.41	1.81E+002	39.89	6.03E+001
7	3632-	3650	3642.79	910.76	0.92	7.88E+001	35.43	7.32E+001
8	3867-	3882	3874.43	968.68	0.69	5.79E+001	24.59	3.31E+001
9	5829-	5854	5841.46	1460.50	2.21	7.72E+002	58.23	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: 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	0.997	1460.81*	10.67	1.75444E+001	1.94135E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.56176E-001	9.50416E-002
		860.37	12.46		
Pb-212	0.446	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.395	238.63*	44.60	5.23075E-001	2.21377E-001
		609.31*	46.30	7.44446E-001	1.88193E-001
		1120.29	15.10		
Ac-228	0.996	1764.49	15.80		
		338.32*	11.40	5.38761E-001	6.42727E-001
		911.07*	27.70	5.99830E-001	2.78373E-001
		969.11*	16.60	7.47218E-001	3.27036E-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	0.997	1.754441E+001	1.941353E+000
TL-208	0.468	2.561757E-001	9.504157E-002
Pb-212 @	0.446	5.230750E-001	2.213768E-001
Bi-214	0.395	7.444458E-001	1.881934E-001
Ac-228	0.996	6.496871E-001	2.013117E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.92	1.7375E-001	48.14
4	550.92	3.8596E-002	103.96

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	1.2665E-001	1.17E-001	3.1690E-002
	1332.49	100.00	1.1717E-001		1.4224E-001
Nb-94	702.63	100.00	1.3427E-001	1.18E-001	1.7602E-002
	871.10	100.00	1.1800E-001		9.2631E-003
Ag-108m	79.20	7.10	1.1659E+001	1.43E-001	-5.1611E+001
	433.93	89.90	1.5611E-001		-1.0547E-001
	614.37	90.40	1.6542E-001		-1.2097E-001
	722.95	90.50	1.4288E-001		-3.8674E-002
Sb-125	176.33	6.89	3.3716E+000	4.82E-001	-9.3116E-001
	427.89	29.33	4.8164E-001		1.2733E-001
	463.38	10.35	1.4249E+000		1.3067E+000
	600.56	17.80	7.3936E-001		3.3433E-001
	606.64	5.02	3.3727E+000		7.7717E+000
	635.90	11.32	1.1574E+000		-9.9981E-002
Cs-134	563.23	8.38	1.6170E+000	1.42E-001	-1.9961E-001
	569.32	15.43	8.6640E-001		6.0267E-003
	604.70	97.60	1.6780E-001		-2.8700E-002
	795.84	85.40	1.4154E-001		-5.7091E-002
	801.93	8.73	1.3081E+000		-1.2228E+000
Cs-137	661.65	85.12	1.6131E-001	1.61E-001	1.4434E-001
Eu-152	121.78	28.40	1.2223E+000	4.20E-001	-4.8511E-002
	244.69	7.49	2.5759E+000		-5.3690E-001
	344.27	26.50	5.7528E-001		2.7159E-001
	778.89	12.74	9.4119E-001		-7.6107E-001
	867.32	4.16	2.7728E+000		-6.5628E-001
	964.01	14.40	9.9846E-001		1.2995E-001
	1085.78	10.00	1.0978E+000		-4.0072E-001
	1112.02	13.30	8.7926E-001		-2.0483E+000
1407.95	20.70	4.2000E-001	1.4190E-001		
Eu-154	123.07	40.50	8.4845E-001	3.16E-001	1.9531E-001
	247.94	6.60	2.8645E+000		-8.5257E-001
	591.81	4.83	2.7238E+000		-2.6117E+000
	723.30	19.70	6.6000E-001		2.9706E-001
	756.87	4.33	2.8487E+000		-8.9891E-001
	873.19	11.50	1.0230E+000		-6.9878E-001
	996.32	10.30	1.1162E+000		4.6549E-001
	1004.76	17.90	6.4114E-001		8.6098E-002
1274.45	35.50	3.1579E-001	-1.6347E-003		
Eu-155	86.54	30.90	2.1404E+000	2.14E+000	3.3486E+000
	105.31	20.70	2.1407E+000		2.0065E-001
Am-241	59.54	35.90	5.0171E+000	5.02E+000	1.2641E-001
Cm-243	228.19	10.56	1.8945E+000	1.29E+000	-2.9773E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2866E+000	1.29E+000	6.3464E-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 7/27/2006 10:56:43 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-10-04-125-F-

Sample Title: OOL-10-04-125-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 10:46:39 AM

Live Time: 600.0 seconds

Real Time: 601.5 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-125-F-
Title: OOL-10-04-125-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	295-	308	301.27	75.27	1.09	2.76E+002	120.27	1.26E+003
2	944-	963	954.20	238.53	1.30	1.40E+002	78.66	4.20E+002
3	1400-	1414	1407.20	351.79	1.25	1.54E+002	39.44	8.74E+001
4	2321-	2343	2330.91	582.75	1.03	1.29E+002	41.19	8.05E+001
5	2428-	2445	2435.60	608.93	1.26	1.04E+002	37.56	8.04E+001
6	3635-	3653	3642.64	910.72	0.78	8.95E+001	31.52	4.95E+001
7	3850-	3861	3855.44	963.93	1.19	1.60E+001	17.13	2.40E+001
8	5827-	5854	5842.03	1460.65	2.22	6.04E+002	49.41	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	0.999	1460.81*	10.67	1.37269E+001	1.57993E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.86757E-001	9.92177E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.06151E+001	5.07960E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.56927E-001	2.66531E-001
Bi-214	0.400	609.31*	46.30	4.26999E-001	1.63440E-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	0.999	1.372687E+001	1.579929E+000
TL-208	0.468	2.867573E-001	9.921774E-002
Pb-212 @	0.593	4.569272E-001	2.665314E-001
Bi-214	0.400	4.269989E-001	1.634403E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.79	2.5597E-001	25.68
6	910.72	1.4915E-001	35.22
7	963.93	2.6604E-002	107.32

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	1.1259E-001	9.82E-002	-9.9321E-002
	1332.49	100.00	9.8162E-002		7.4118E-002
Nb-94	702.63	100.00	1.1329E-001	9.98E-002	-1.8857E-002
	871.10	100.00	9.9752E-002		-7.2782E-002
Ag-108m	79.20	7.10	1.1855E+001	1.43E-001	-9.3785E-002
	433.93	89.90	1.4660E-001		6.3246E-002
	614.37	90.40	1.6174E-001		3.7333E-002
	722.95	90.50	1.4327E-001		5.5842E-002
Sb-125	176.33	6.89	3.1394E+000	4.49E-001	-2.0124E-001
	427.89	29.33	4.4885E-001		3.1859E-001
	463.38	10.35	1.2653E+000		8.3974E-001
	600.56	17.80	7.0015E-001		-4.1626E-001
	606.64	5.02	3.0939E+000		6.2068E+000
	635.90	11.32	1.0559E+000		4.5132E-001
Cs-134	563.23	8.38	1.5328E+000	1.39E-001	6.1444E-001
	569.32	15.43	7.9307E-001		-2.3018E-001
	604.70	97.60	1.5734E-001		-1.2346E-001
	795.84	85.40	1.3876E-001		1.3431E-002
Cs-137	801.93	8.73	1.3176E+000	1.40E-001	-1.5895E+000
	661.65	85.12	1.4022E-001		6.1376E-002
Eu-152	121.78	28.40	1.1593E+000	3.89E-001	1.6251E-002
	244.69	7.49	2.3438E+000		-1.3733E+000
	344.27	26.50	5.2720E-001		2.0762E-001
	778.89	12.74	9.3502E-001		-2.5495E-001
	867.32	4.16	2.4549E+000		-6.6521E-001
	964.01	14.40	9.6027E-001		9.4117E-001
	1085.78	10.00	9.7334E-001		-7.6689E-002
	1112.02	13.30	7.9121E-001		-4.5005E-001
1407.95	20.70	3.8885E-001	2.9604E-001		
Eu-154	123.07	40.50	8.0006E-001	2.93E-001	3.0699E-004
	247.94	6.60	2.5719E+000		-2.3556E+000
	591.81	4.83	2.5674E+000		7.2302E-001
	723.30	19.70	6.5110E-001		-4.3224E-001
	756.87	4.33	2.7063E+000		1.6806E+000
	873.19	11.50	8.5470E-001		-2.6881E-001
	996.32	10.30	1.0609E+000		6.1850E-001
	1004.76	17.90	5.8096E-001		1.1409E-001
1274.45	35.50	2.9320E-001	4.2722E-002		
Eu-155	86.54	30.90	2.0500E+000	2.05E+000	2.9380E+000
	105.31	20.70	2.0632E+000		1.2052E+000
Am-241	59.54	35.90	5.9470E+000	5.95E+000	6.0669E+000
Cm-243	228.19	10.56	1.7313E+000	1.19E+000	-5.3468E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1887E+000	1.19E+000	6.7979E-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 7/27/2006 2:05:33 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-10-04-126-F-

Sample Title: OOL-10-04-126-F-G

Description: SATURATED SOIL

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 1:55:30 PM

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-10-04-126-F-
Title: OOL-10-04-126-F-G
Description: SATURATED SOIL

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	945-	964	954.18	238.50	1.60	2.81E+002	77.01	3.60E+002
2	1667-	1676	1671.69	417.88	0.38	2.43E+001	22.36	4.67E+001
3	2426-	2448	2436.64	609.12	1.93	1.73E+002	40.01	6.29E+001
4	3866-	3885	3874.21	968.52	1.22	7.87E+001	31.71	5.23E+001
5	5829-	5860	5844.56	1461.11	1.93	8.04E+002	58.91	1.99E+001
6	7054-	7067	7060.90	1765.20	1.04	3.00E+001	14.69	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: 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	1.76539E+001	1.92753E+000
Pb-212	0.453	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.691	238.63*	44.60	9.07962E-001	2.86934E-001
		609.31*	46.30	6.96102E-001	1.82331E-001
		1120.29	15.10		
		1764.49*	15.80	4.86882E-001	2.43496E-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	0.997	1.765395E+001	1.927526E+000
Pb-212 @	0.453	9.079624E-001	2.869340E-001
Bi-214	0.691	6.209365E-001	1.459486E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	417.88	4.0540E-002	91.94
4	968.52	1.3122E-001	40.28

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	1.1643E-001	9.45E-002	2.5445E-004
	1332.49	100.00	9.4531E-002		5.2356E-002
Nb-94	702.63	100.00	1.1695E-001	1.01E-001	-6.7717E-003
	871.10	100.00	1.0103E-001		-9.9778E-002
Ag-108m	79.20	7.10	1.1884E+001	1.36E-001	-1.8633E+001
	433.93	89.90	1.4115E-001		-1.3442E-002
	614.37	90.40	1.6263E-001		4.5941E-003
	722.95	90.50	1.3582E-001		1.1039E-001
Sb-125	176.33	6.89	3.0951E+000	4.52E-001	3.3946E-001
	427.89	29.33	4.5180E-001		2.4946E-001
	463.38	10.35	1.2574E+000		9.8207E-001
	600.56	17.80	6.7093E-001		1.0043E-002
	606.64	5.02	3.1642E+000		2.0027E-001
	635.90	11.32	1.0331E+000		-2.7063E-001
Cs-134	563.23	8.38	1.5190E+000	1.31E-001	1.3960E+000
	569.32	15.43	7.5227E-001		-2.2408E-001
	604.70	97.60	1.5413E-001		-2.5169E-002
	795.84	85.40	1.3071E-001		-1.1414E-001
Cs-137	801.93	8.73	1.2574E+000	1.25E-001	-8.1243E-001
	661.65	85.12	1.2531E-001		-1.1946E-001
Eu-152	121.78	28.40	1.1064E+000	3.85E-001	1.8189E-001
	244.69	7.49	2.3238E+000		-1.4827E+000
	344.27	26.50	5.0943E-001		-1.1204E+000
	778.89	12.74	8.6953E-001		-5.9291E-001
	867.32	4.16	2.5865E+000		-1.1408E+000
	964.01	14.40	1.0173E+000		5.8068E-001
	1085.78	10.00	1.0441E+000		4.6654E-003
	1112.02	13.30	8.3656E-001		-2.0965E-001
1407.95	20.70	3.8467E-001	3.1812E-002		
Eu-154	123.07	40.50	7.5925E-001	2.86E-001	-1.4154E-001
	247.94	6.60	2.5026E+000		-1.1692E+000
	591.81	4.83	2.5656E+000		8.8119E-001
	723.30	19.70	6.2576E-001		4.5827E-001
	756.87	4.33	2.6699E+000		2.4657E-001
	873.19	11.50	9.0640E-001		4.4108E-001
	996.32	10.30	1.0022E+000		3.8430E-001
	1004.76	17.90	5.7786E-001		2.9651E-001
1274.45	35.50	2.8577E-001	2.0313E-001		
Eu-155	86.54	30.90	2.1155E+000	2.08E+000	2.0646E+000
	105.31	20.70	2.0791E+000		2.1226E-001
Am-241	59.54	35.90	5.1728E+000	5.17E+000	-2.7158E+000
Cm-243	228.19	10.56	1.6139E+000	1.12E+000	-1.4497E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1168E+000	1.12E+000	3.1217E-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 7/27/2006 1:17:06 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-127-F-

Sample Title: OOL-10-04-127-F-G

Description: SATURATED SOIL

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 1:07:03 PM

Live Time: 600.0 seconds

Real Time: 601.1 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-10-04-127-F-
Title: OOL-10-04-127-F-G
Description: SATURATED SOIL

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	945-	962	954.50	238.58	1.44	1.91E+002	71.54	3.51E+002
2	1399-	1416	1406.66	351.62	1.49	9.90E+001	48.42	1.56E+002
3	1426-	1440	1435.91	358.94	0.55	3.55E+001	32.05	8.05E+001
4	2428-	2447	2436.47	609.08	1.54	1.19E+002	36.67	6.61E+001
5	2902-	2914	2908.38	727.06	0.96	3.58E+001	20.81	2.93E+001
6	3633-	3653	3644.32	911.04	1.70	9.50E+001	30.82	4.20E+001
7	5829-	5858	5843.41	1460.82	2.04	7.61E+002	58.22	2.58E+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: 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	1.000	1460.81*	10.67	1.67106E+001	1.86110E+000
Bi-212	1.000	727.17*	11.80	5.89934E-001	3.50366E-001
Pb-212	0.454	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.402	238.63*	44.60	6.17601E-001	2.50897E-001
		609.31*	46.30	4.78110E-001	1.58794E-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	1.000	1.671056E+001	1.861102E+000
Bi-212	1.000	5.899342E-001	3.503664E-001
Pb-212 @	0.454	6.176006E-001	2.508970E-001
Bi-214	0.402	4.781099E-001	1.587940E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.62	1.6497E-001	48.91
3	358.94	5.9170E-002	90.28
6	911.04	1.5833E-001	32.45

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	8.88E-002	9.8925E-002
	1332.49	100.00	8.8818E-002		2.7824E-002
Nb-94	702.63	100.00	1.1326E-001	9.24E-002	4.3170E-002
	871.10	100.00	9.2362E-002		5.0356E-004
Ag-108m	79.20	7.10	1.1645E+001	1.30E-001	-1.5969E+001
	433.93	89.90	1.3151E-001		-1.1056E-002
	614.37	90.40	1.5229E-001		-3.1240E-002
	722.95	90.50	1.3032E-001		3.8509E-002
Sb-125	176.33	6.89	2.8331E+000	3.96E-001	1.1731E+000
	427.89	29.33	3.9583E-001		1.7229E-002
	463.38	10.35	1.1671E+000		7.1557E-003
	600.56	17.80	6.0144E-001		-8.5536E-001
	606.64	5.02	2.8954E+000		5.6417E+000
	635.90	11.32	9.7009E-001		7.7251E-001
Cs-134	563.23	8.38	1.4107E+000	1.31E-001	3.4123E-001
	569.32	15.43	7.4596E-001		2.1880E-002
	604.70	97.60	1.4149E-001		-2.8911E-002
	795.84	85.40	1.3118E-001		6.5513E-002
Cs-137	801.93	8.73	1.2480E+000	1.43E-001	-2.6459E-002
	661.65	85.12	1.4283E-001		6.7042E-002
Eu-152	121.78	28.40	1.0580E+000	3.57E-001	3.0561E-002
	244.69	7.49	2.1625E+000		-2.3187E+000
	344.27	26.50	5.2675E-001		-1.5834E-001
	778.89	12.74	8.1776E-001		-5.5804E-001
	867.32	4.16	2.3365E+000		-1.0033E+000
	964.01	14.40	9.4435E-001		1.4793E+000
	1085.78	10.00	1.0636E+000		7.3901E-001
	1112.02	13.30	7.9327E-001		-1.6116E-002
1407.95	20.70	3.5720E-001	1.4535E-001		
Eu-154	123.07	40.50	7.3480E-001	2.71E-001	-2.8387E-001
	247.94	6.60	2.3376E+000		-1.9579E-002
	591.81	4.83	2.3790E+000		2.9110E+000
	723.30	19.70	5.9872E-001		5.1477E-001
	756.87	4.33	2.3932E+000		-3.2949E+000
	873.19	11.50	8.2089E-001		1.2558E-001
	996.32	10.30	9.7391E-001		2.5397E-001
	1004.76	17.90	5.7517E-001		-1.1708E-001
1274.45	35.50	2.7131E-001	1.4907E-001		
Eu-155	86.54	30.90	2.0518E+000	1.98E+000	2.4072E+000
	105.31	20.70	1.9777E+000		3.7105E-001
Am-241	59.54	35.90	5.4414E+000	5.44E+000	1.5015E+000
Cm-243	228.19	10.56	1.5758E+000	1.10E+000	-1.6580E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0997E+000	1.10E+000	1.0592E+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 7/27/2006 2:50:56 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-128-F-

Sample Title: OOL-10-04-128-F-G

Description: 30 % SATURATED SOIL/REBAR/CONCRE

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 2:40:57 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-128-F-
Title: OOL-10-04-128-F-G
Description: 30 % SATURATED SOIL/REBAR/CONCRETE

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1399-	1418	1407.27	351.78	1.00	9.73E+001	55.79	2.03E+002
2	2322-	2344	2333.93	583.44	1.40	1.40E+002	45.32	1.02E+002
3	3635-	3656	3643.03	910.72	1.44	1.21E+002	36.30	5.94E+001
4	5830-	5859	5844.74	1461.15	2.71	7.46E+002	59.48	3.71E+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	0.996	1460.81*	10.67	1.63763E+001	1.86098E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.05389E-001	1.06525E-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	0.996	1.637625E+001	1.860977E+000
TL-208	0.470	3.053889E-001	1.065254E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.78	1.6218E-001	57.33
3	910.72	2.0096E-001	30.10

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	1.0331E-001	9.93E-002	-9.2325E-002
	1332.49	100.00	9.9317E-002		7.0334E-002
Nb-94	702.63	100.00	1.1803E-001	1.14E-001	-8.6966E-002
	871.10	100.00	1.1353E-001		-8.3562E-003
Ag-108m	79.20	7.10	1.2375E+001	1.37E-001	-2.3955E+001
	433.93	89.90	1.4332E-001		-7.2886E-002
	614.37	90.40	1.5633E-001		-1.8578E-003
	722.95	90.50	1.3659E-001		1.6403E-003
Sb-125	176.33	6.89	3.2957E+000	4.54E-001	2.0199E+000
	427.89	29.33	4.5417E-001		-7.9058E-003
	463.38	10.35	1.3617E+000		1.3465E+000
	600.56	17.80	6.9776E-001		-2.6033E-003
	606.64	5.02	3.0405E+000		2.6312E+000
	635.90	11.32	1.1374E+000		9.5189E-001
Cs-134	563.23	8.38	1.5803E+000	1.46E-001	4.3965E-001
	569.32	15.43	8.3165E-001		-1.5346E-001
	604.70	97.60	1.5254E-001		1.4748E-001
	795.84	85.40	1.4613E-001		1.0728E-001
	801.93	8.73	1.3032E+000		-1.0384E+000
Cs-137	661.65	85.12	1.4041E-001	1.40E-001	8.1728E-004
Eu-152	121.78	28.40	1.1593E+000	4.47E-001	4.0061E-001
	244.69	7.49	2.3540E+000		-6.9255E+000
	344.27	26.50	5.5834E-001		-6.4164E-001
	778.89	12.74	8.7266E-001		-7.9348E-001
	867.32	4.16	2.7657E+000		-4.8469E-001
	964.01	14.40	9.8972E-001		7.9051E-001
	1085.78	10.00	1.0922E+000		8.3471E-001
	1112.02	13.30	8.1160E-001		-7.5819E-001
1407.95	20.70	4.4708E-001	-2.2784E-001		
Eu-154	123.07	40.50	7.9621E-001	3.17E-001	-2.1009E-001
	247.94	6.60	2.5832E+000		-9.3910E-001
	591.81	4.83	2.5911E+000		1.0208E+000
	723.30	19.70	6.3103E-001		1.4218E-001
	756.87	4.33	2.6959E+000		-1.7941E+000
	873.19	11.50	1.0121E+000		5.1587E-001
	996.32	10.30	1.0476E+000		-5.1514E-001
	1004.76	17.90	6.5304E-001		7.2464E-001
1274.45	35.50	3.1681E-001	1.9320E-001		
Eu-155	86.54	30.90	2.2045E+000	2.14E+000	2.7856E+000
	105.31	20.70	2.1420E+000		-4.4682E-001
Am-241	59.54	35.90	5.7031E+000	5.70E+000	-4.4639E+000
Cm-243	228.19	10.56	1.7337E+000	1.15E+000	5.4699E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1513E+000	1.15E+000	-6.0112E-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 7/26/2006 10:01:28 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-129-F-

Sample Title: OOL-10-04-129-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 9:51:26 PM

Live Time: 600.0 seconds

Real Time: 601.0 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-129-F-
 Title: OOL-10-04-129-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-	308	299.84	74.92	1.06	1.45E+002	115.28	1.20E+003
2	946-	960	953.28	238.30	1.32	1.76E+002	58.31	2.46E+002
3	1170-	1186	1180.84	295.19	0.62	8.93E+001	43.87	1.32E+002
4	1400-	1413	1405.97	351.48	1.33	1.01E+002	40.08	1.15E+002
5	2320-	2339	2329.52	582.40	1.38	9.92E+001	36.71	7.18E+001
6	2425-	2442	2433.53	608.41	0.73	1.05E+002	35.43	6.78E+001
7	3630-	3649	3640.95	910.30	0.36	9.65E+001	28.43	3.25E+001
8	3866-	3880	3871.98	968.07	0.79	4.52E+001	21.88	2.68E+001
9	4472-	4483	4477.22	1119.40	0.29	2.68E+001	17.63	2.02E+001
10	5827-	5851	5838.05	1459.65	2.07	4.96E+002	45.69	1.18E+001
11	7048-	7061	7054.47	1763.79	0.82	2.40E+001	12.60	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: 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	0.956	1460.81*	10.67	1.12743E+001	1.38232E+000
TL-208	0.459	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.21321E-001	8.68265E-002
		860.37	12.46		
Pb-212	0.592	74.81* @	10.70	5.66592E+000	4.65017E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.74312E-001	2.10489E-001
Bi-214	0.976	609.31*	46.30	4.33436E-001	1.55378E-001
		1120.29*	15.10	3.95238E-001	2.63382E-001
		1764.49*	15.80	3.90760E-001	2.08537E-001
PB-214	0.625	74.82* @	6.21	9.76253E+000	8.04364E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	7.12323E-001	3.70085E-001
		351.92*	37.20	4.34975E-001	1.86895E-001
Ac-228	0.613	338.32	11.40		
		911.07*	27.70	7.34245E-001	2.32284E-001
		969.11*	16.60	5.83540E-001	2.88923E-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	0.956	1.127434E+001	1.382321E+000
TL-208	0.459	2.213210E-001	8.682648E-002
Pb-212 @	0.592	5.743123E-001	2.104889E-001
Bi-214	0.976	4.140023E-001	1.126289E-001
PB-214 @	0.625	4.913342E-001	1.668287E-001
Ac-228	0.613	6.750788E-001	1.810326E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	9.3887E-002	7.91E-002	6.9585E-003
	1332.49	100.00	7.9147E-002		-3.1347E-002
Nb-94	702.63	100.00	1.0375E-001	8.57E-002	-2.1380E-002
	871.10	100.00	8.5686E-002		-5.0006E-002
Ag-108m	79.20	7.10	1.0881E+001	1.26E-001	-5.7369E+000
	433.93	89.90	1.3342E-001		-4.2986E-002
	614.37	90.40	1.3637E-001		-1.5344E-002
	722.95	90.50	1.2642E-001		6.6444E-002
Sb-125	176.33	6.89	2.8271E+000	4.00E-001	-1.8826E+000
	427.89	29.33	3.9957E-001		-2.7104E-002
	463.38	10.35	1.1219E+000		-9.3317E-001
	600.56	17.80	6.6435E-001		-1.0524E-001
	606.64	5.02	3.0253E+000		4.0960E+000
	635.90	11.32	9.0697E-001		1.5227E-001
Cs-134	563.23	8.38	1.4280E+000	1.21E-001	1.0175E+000
	569.32	15.43	7.4811E-001		3.5325E-001
	604.70	97.60	1.5489E-001		6.8239E-003
	795.84	85.40	1.2063E-001		1.1082E-002
Cs-137	801.93	8.73	1.0933E+000	1.28E-001	1.3846E-001
	661.65	85.12	1.2760E-001		3.1700E-002
Eu-152	121.78	28.40	1.0383E+000	3.31E-001	-1.0248E+000
	244.69	7.49	2.1905E+000		-2.1570E+000
	344.27	26.50	5.0538E-001		-2.7815E-001
	778.89	12.74	7.8639E-001		-9.6953E-002
	867.32	4.16	2.2074E+000		-6.0722E-002
	964.01	14.40	8.9282E-001		2.9977E-001
	1085.78	10.00	9.8483E-001		2.1723E-001
	1112.02	13.30	7.7065E-001		-7.6891E-001
1407.95	20.70	3.3143E-001	-2.5848E-001		
Eu-154	123.07	40.50	7.2918E-001	2.49E-001	1.8274E-001
	247.94	6.60	2.4016E+000		-1.8010E+000
	591.81	4.83	2.2969E+000		-4.8885E-001
	723.30	19.70	5.7271E-001		7.7944E-002
	756.87	4.33	2.5163E+000		1.2628E+000
	873.19	11.50	7.3518E-001		-3.6232E-001
	996.32	10.30	9.1258E-001		-3.3009E-002
	1004.76	17.90	5.2949E-001		1.6786E-001
1274.45	35.50	2.4940E-001	-1.7869E-002		
Eu-155	86.54	30.90	1.8295E+000	1.83E+000	1.7898E+000
	105.31	20.70	1.8917E+000		1.0804E+000
Am-241	59.54	35.90	4.8968E+000	4.90E+000	-5.7136E+000
Cm-243	228.19	10.56	1.5925E+000	1.04E+000	-8.2615E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0402E+000	1.04E+000	-1.7784E-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 7/26/2006 10:15:42 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-130-F-

Sample Title: OOL-10-04-130-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 10:05:39 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-130-F-
Title: OOL-10-04-130-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 10 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.957	1460.81*	10.67	6.31499E+000	9.40836E-001
TL-208	0.455	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.41666E-001	6.41455E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.31211E+001	5.40074E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.386	238.63*	44.60	3.54628E-001	1.49248E-001
		609.31*	46.30	4.59622E-001	1.48682E-001
		1120.29	15.10		
Ac-228	0.609	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	1.58604E-001	1.59101E-001
		969.11*	16.60	2.70491E-001	2.46686E-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	0.957	6.314991E+000	9.408363E-001
TL-208	0.455	1.416659E-001	6.414548E-002
Pb-212 @	0.593	3.546284E-001	1.492484E-001
Bi-214	0.386	4.596224E-001	1.486822E-001
Ac-228	0.609	1.914729E-001	1.337046E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.1755E-001	67.27
4	351.48	1.1932E-001	50.52
5	573.73	2.3333E-002	84.62

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	9.5748E-002	7.83E-002	5.9914E-002
	1332.49	100.00	7.8316E-002		6.1617E-002
Nb-94	702.63	100.00	9.0694E-002	9.07E-002	9.2912E-002
	871.10	100.00	9.4075E-002		3.3215E-002
Ag-108m	79.20	7.10	9.7609E+000	1.07E-001	-3.1816E+000
	433.93	89.90	1.0764E-001		-2.4008E-002
	614.37	90.40	1.3222E-001		-2.0917E-002
	722.95	90.50	1.0680E-001		9.5828E-002
Sb-125	176.33	6.89	2.5177E+000	3.42E-001	5.4241E-001
	427.89	29.33	3.4185E-001		6.3753E-002
	463.38	10.35	9.8584E-001		2.1520E-001
	600.56	17.80	5.2011E-001		-3.2701E-001
	606.64	5.02	2.7275E+000		3.8379E+000
	635.90	11.32	8.2591E-001		-2.8031E-001
Cs-134	563.23	8.38	1.2036E+000	1.07E-001	3.6626E-001
	569.32	15.43	6.1953E-001		2.8692E-001
	604.70	97.60	1.3798E-001		-3.7913E-002
	795.84	85.40	1.0735E-001		1.1018E-001
Cs-137	801.93	8.73	9.8327E-001	1.11E-001	-6.7062E-001
	661.65	85.12	1.1134E-001		7.9509E-002
Eu-152	121.78	28.40	9.6029E-001	3.27E-001	4.8876E-001
	244.69	7.49	1.8974E+000		-1.1288E+000
	344.27	26.50	4.4873E-001		-3.3539E-001
	778.89	12.74	6.9110E-001		-3.4798E-001
	867.32	4.16	2.3223E+000		3.1782E-001
	964.01	14.40	7.6552E-001		9.9023E-001
	1085.78	10.00	7.9380E-001		-4.5124E-001
	1112.02	13.30	6.2723E-001		-6.5414E-001
1407.95	20.70	3.2655E-001	9.5952E-002		
Eu-154	123.07	40.50	6.6256E-001	2.26E-001	1.0167E-001
	247.94	6.60	2.0767E+000		1.8065E-001
	591.81	4.83	2.0229E+000		1.1846E+000
	723.30	19.70	4.9788E-001		5.8694E-001
	756.87	4.33	2.1761E+000		-1.4652E-001
	873.19	11.50	8.0915E-001		3.8603E-001
	996.32	10.30	8.0590E-001		-9.9572E-002
Eu-155	1004.76	17.90	4.4987E-001	1.66E+000	1.3128E-001
	1274.45	35.50	2.2627E-001		4.5494E-002
	86.54	30.90	1.6600E+000		9.1098E-001
Am-241	105.31	20.70	1.6610E+000	4.26E+000	-1.1982E+000
	59.54	35.90	4.2588E+000		-1.1098E-001
Cm-243	228.19	10.56	1.4155E+000	9.57E-001	-5.6550E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.5709E-001	9.57E-001	-4.5820E-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 7/26/2006 10:30:16 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-10-04-131-F-

Sample Title: OOL-10-04-131-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 10:20:13 PM

Live Time: 600.0 seconds

Real Time: 600.9 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-131-F-
Title: OOL-10-04-131-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Rows 1-10 with peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.972	511.00*	100.00	1.95543E-001	6.95829E-002
K-40	0.948	1460.81*	10.67	1.29115E+001	1.51262E+000
TL-208	0.739	277.35	6.80		
		510.84*	21.60	9.05294E-001	3.30518E-001
		583.14*	84.20	1.62941E-001	7.67752E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.47344E+001	3.64323E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.671	238.63*	44.60	4.21172E-001	2.33169E-001
		609.31*	46.30	4.93092E-001	1.67898E-001
		1120.29	15.10		
		1764.49*	15.80	4.83258E-001	2.47555E-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	0.972	1.603482E-001	7.152251E-002
K-40	0.948	1.291148E+001	1.512621E+000
TL-208	0.739	1.629409E-001	7.659138E-002
Pb-212 @	0.593	4.211719E-001	2.331691E-001
Bi-214	0.671	4.899937E-001	1.389540E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.3450E-001	24.82
7	910.19	1.1926E-001	41.33
8	1237.94	2.5833E-002	103.71

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: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	1.1959E-001	1.12E-001	9.2674E-002
	1332.49	100.00	1.1160E-001		1.4917E-001
Nb-94	702.63	100.00	1.1526E-001	9.82E-002	-7.8167E-002
	871.10	100.00	9.8238E-002		-4.1047E-002
Ag-108m	79.20	7.10	1.0390E+001	1.35E-001	-2.4314E+001
	433.93	89.90	1.3610E-001		-3.4496E-002
	614.37	90.40	1.4775E-001		5.2911E-003
	722.95	90.50	1.3492E-001		1.1474E-001
Sb-125	176.33	6.89	2.9044E+000	4.28E-001	-3.5064E-001
	427.89	29.33	4.2845E-001		3.5933E-002
	463.38	10.35	1.1416E+000		-6.6659E-001
	600.56	17.80	6.6046E-001		-1.3175E-001
	606.64	5.02	3.0624E+000		4.3281E+000
	635.90	11.32	9.6394E-001		-6.2075E-001
Cs-134	563.23	8.38	1.4511E+000	1.38E-001	-6.6664E-001
	569.32	15.43	7.7838E-001		2.5139E-002
	604.70	97.60	1.5922E-001		-1.4305E-002
	795.84	85.40	1.3781E-001		2.3344E-002
Cs-137	801.93	8.73	1.2238E+000	1.41E-001	3.4096E-001
	661.65	85.12	1.4150E-001		1.1938E-001
Eu-152	121.78	28.40	9.9049E-001	3.76E-001	-2.5651E-001
	244.69	7.49	2.1593E+000		-1.4830E+000
	344.27	26.50	5.0538E-001		-6.0320E-001
	778.89	12.74	9.4426E-001		2.7914E-001
	867.32	4.16	2.2720E+000		2.4140E-001
	964.01	14.40	9.4718E-001		1.4970E+000
	1085.78	10.00	1.0403E+000		-3.7949E-001
	1112.02	13.30	7.6227E-001		-1.4910E+000
1407.95	20.70	3.7645E-001	1.6669E-002		
Eu-154	123.07	40.50	6.8690E-001	2.70E-001	-7.2991E-001
	247.94	6.60	2.3925E+000		-4.5148E-001
	591.81	4.83	2.3712E+000		-1.5465E+000
	723.30	19.70	6.1417E-001		2.5148E-001
	756.87	4.33	2.4865E+000		-7.7970E-001
	873.19	11.50	8.2310E-001		-5.9199E-001
	996.32	10.30	1.0466E+000		-6.3972E-001
	1004.76	17.90	6.1727E-001		-6.2462E-002
1274.45	35.50	2.7041E-001	1.3424E-001		
Eu-155	86.54	30.90	1.7918E+000	1.79E+000	1.7521E+000
	105.31	20.70	1.7851E+000		-7.7105E-001
Am-241	59.54	35.90	4.6003E+000	4.60E+000	1.5830E+000
Cm-243	228.19	10.56	1.6029E+000	1.06E+000	6.5734E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0648E+000	1.06E+000	2.3267E-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 7/27/2006 8:59:02 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-132-F-

Sample Title: OOL-10-04-132-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 8:49:00 AM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-132-F-
Title: OOL-10-04-132-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	327-	345	336.37	84.05	0.94	1.76E+002	152.85	1.75E+003
2	944-	963	954.30	238.55	1.49	1.86E+002	86.70	5.04E+002
3	1346-	1357	1352.83	338.20	0.98	4.62E+001	38.36	1.34E+002
4	1395-	1412	1406.53	351.62	1.30	1.44E+002	48.49	1.44E+002
5	2034-	2052	2040.80	510.21	1.56	1.51E+002	39.98	7.81E+001
6	2323-	2340	2331.67	582.94	1.74	1.46E+002	37.81	6.84E+001
7	2427-	2445	2434.95	608.76	0.57	1.11E+002	36.63	7.05E+001
8	3633-	3651	3641.76	910.51	0.41	5.68E+001	29.96	5.23E+001
9	3850-	3881	3872.74	968.26	0.62	6.84E+001	48.03	1.03E+002
10	5323-	5335	5328.40	1332.22	0.25	3.17E+001	15.03	1.03E+001
11	5828-	5854	5840.96	1460.38	2.20	6.86E+002	54.58	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: 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	0.980	511.00*	100.00	2.70877E-001	8.06296E-002
K-40	0.994	1460.81*	10.67	1.55805E+001	1.76909E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	1.25406E+000	3.87080E-001
		583.14*	84.20	3.24908E-001	9.43938E-002
		860.37	12.46		
Pb-212	0.446	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.397	238.63*	44.60	6.05535E-001	2.98471E-001
		609.31*	46.30	4.59299E-001	1.61171E-001
		1120.29	15.10		
Ac-228	0.988	1764.49	15.80		
		338.32*	11.40	6.41762E-001	5.42141E-001
		911.07*	27.70	4.31884E-001	2.33329E-001
		969.11*	16.60	8.82909E-001	6.26868E-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	0.980	2.006969E-001	8.313610E-002
K-40	0.994	1.558048E+001	1.769092E+000
TL-208	0.750	3.249075E-001	9.379804E-002
Pb-212 @	0.446	6.055346E-001	2.984714E-001
Bi-214	0.397	4.592991E-001	1.611707E-001
Ac-228	0.988	5.084542E-001	2.027970E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.05	2.9314E-001	86.91
4	351.62	2.4022E-001	33.65
10	1332.22	5.2857E-002	47.40

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: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	1.1959E-001	1.08E-001	-3.2539E-002
	1332.49	100.00	1.0752E-001		1.1243E-001
Nb-94	702.63	100.00	1.2532E-001	1.17E-001	1.2081E-001
	871.10	100.00	1.1674E-001		3.7073E-002
Ag-108m	79.20	7.10	1.1971E+001	1.39E-001	-2.6117E+001
	433.93	89.90	1.5713E-001		2.9739E-002
	614.37	90.40	1.6298E-001		-4.6584E-002
	722.95	90.50	1.3936E-001		1.2553E-001
Sb-125	176.33	6.89	3.3678E+000	4.85E-001	-2.0178E+000
	427.89	29.33	4.8472E-001		-6.6708E-002
	463.38	10.35	1.4093E+000		7.3470E-002
	600.56	17.80	7.4968E-001		-9.9691E-002
	606.64	5.02	3.1198E+000		3.5859E+000
	635.90	11.32	1.0653E+000		2.3168E-001
Cs-134	563.23	8.38	1.5790E+000	1.42E-001	-2.4039E-001
	569.32	15.43	8.1559E-001		-1.7741E-001
	604.70	97.60	1.5869E-001		-1.1047E-001
	795.84	85.40	1.4246E-001		-1.4835E-002
	801.93	8.73	1.3411E+000		-1.5225E+000
Cs-137	661.65	85.12	1.4486E-001	1.45E-001	4.9129E-002
Eu-152	121.78	28.40	1.1910E+000	3.50E-001	-5.1885E-001
	244.69	7.49	2.5759E+000		-9.4167E-001
	344.27	26.50	5.8220E-001		-5.9217E-001
	778.89	12.74	9.7440E-001		-4.9515E-001
	867.32	4.16	2.8739E+000		-1.1345E-001
	964.01	14.40	1.0495E+000		1.1569E-001
	1085.78	10.00	1.0773E+000		-3.7307E-002
	1112.02	13.30	8.4596E-001		-1.4826E+000
1407.95	20.70	3.5020E-001	-6.1882E-001		
Eu-154	123.07	40.50	8.3239E-001	2.92E-001	-4.6053E-002
	247.94	6.60	2.7691E+000		1.8941E+000
	591.81	4.83	2.6598E+000		-1.3704E+000
	723.30	19.70	6.4570E-001		5.3702E-001
	756.87	4.33	2.8226E+000		6.1160E-001
	873.19	11.50	9.7420E-001		7.1580E-002
	996.32	10.30	1.1162E+000		7.4364E-001
	1004.76	17.90	6.4632E-001		4.9881E-002
1274.45	35.50	2.9151E-001	3.2432E-002		
Eu-155	86.54	30.90	2.1380E+000	2.14E+000	-2.1782E-002
	105.31	20.70	2.1390E+000		1.5565E+000
Am-241	59.54	35.90	5.0068E+000	5.01E+000	8.0261E-002
Cm-243	228.19	10.56	1.8749E+000	1.31E+000	4.0199E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3055E+000	1.31E+000	-5.5716E-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 7/27/2006 9:58:49 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-10-04-133-F-

Sample Title: OOL-10-04-133-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 9:48:47 AM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-133-F-
Title: OOL-10-04-133-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	296-	307	300.62	75.11	0.85	1.99E+002	125.09	1.54E+003
2	332-	347	340.14	84.99	1.19	1.36E+002	140.77	1.67E+003
3	944-	962	955.39	238.83	1.12	1.74E+002	79.01	4.29E+002
4	1399-	1415	1407.22	351.80	1.34	1.08E+002	51.69	1.87E+002
5	2323-	2342	2331.74	582.96	1.20	1.43E+002	39.30	7.43E+001
6	3634-	3653	3643.41	910.92	1.41	9.64E+001	32.85	5.26E+001
7	3865-	3883	3874.88	968.79	1.16	6.04E+001	27.81	4.16E+001
8	5828-	5856	5842.90	1460.86	1.95	7.69E+002	58.31	2.52E+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	1.000	1460.81*	10.67	1.74724E+001	1.93841E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.18583E-001	9.70187E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	7.72234E+000	5.08594E+000
		77.11 @	18.00		
		87.30 @	8.00		
Ac-228	0.631	238.63*	44.60	5.69118E-001	2.72941E-001
		338.32	11.40		
		911.07*	27.70	7.33778E-001	2.63918E-001
		969.11*	16.60	7.79749E-001	3.68197E-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	1.000	1.747240E+001	1.938406E+000
TL-208	0.471	3.185832E-001	9.701874E-002
Pb-212 @	0.593	5.691183E-001	2.729405E-001
Ac-228	0.631	7.493809E-001	2.145052E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.99	2.2654E-001	103.57
4	351.80	1.7922E-001	48.07

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: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	1.2619E-001	1.10E-001	-4.8880E-002
	1332.49	100.00	1.1045E-001		8.2522E-002
Nb-94	702.63	100.00	1.1795E-001	1.08E-001	7.0603E-002
	871.10	100.00	1.0791E-001		4.9546E-002
Ag-108m	79.20	7.10	1.3691E+001	1.41E-001	-1.7637E+000
	433.93	89.90	1.4714E-001		9.4716E-002
	614.37	90.40	1.5311E-001		-2.5688E-001
	722.95	90.50	1.4093E-001		-1.7072E-002
Sb-125	176.33	6.89	3.4524E+000	4.56E-001	2.7267E+000
	427.89	29.33	4.5626E-001		-2.9367E-001
	463.38	10.35	1.3522E+000		-2.6302E-002
	600.56	17.80	7.0015E-001		1.5657E-001
	606.64	5.02	3.1301E+000		3.9927E+000
	635.90	11.32	1.1402E+000		-1.0005E+000
Cs-134	563.23	8.38	1.4776E+000	1.41E-001	2.0870E-001
	569.32	15.43	8.4139E-001		2.4732E-001
	604.70	97.60	1.6266E-001		2.2753E-001
	795.84	85.40	1.4108E-001		-8.2945E-002
	801.93	8.73	1.3271E+000		-9.9070E-001
Cs-137	661.65	85.12	1.5449E-001	1.54E-001	8.4204E-002
Eu-152	121.78	28.40	1.2481E+000	4.16E-001	-6.9029E-001
	244.69	7.49	2.6646E+000		-3.2040E-001
	344.27	26.50	5.9648E-001		-4.3806E-001
	778.89	12.74	9.1940E-001		3.1129E-001
	867.32	4.16	2.6569E+000		-5.8129E+000
	964.01	14.40	9.5506E-001		-4.9754E-001
	1085.78	10.00	1.0876E+000		4.3828E-001
	1112.02	13.30	8.4973E-001		7.2295E-001
	1407.95	20.70	4.1624E-001		-3.8328E-002
Eu-154	123.07	40.50	8.5822E-001	3.13E-001	-9.6281E-001
	247.94	6.60	2.8798E+000		-3.6686E+000
	591.81	4.83	2.5808E+000		1.4351E+000
	723.30	19.70	6.4751E-001		3.9993E-002
	756.87	4.33	2.7516E+000		2.1509E-002
	873.19	11.50	9.4283E-001		3.7520E-001
	996.32	10.30	1.0074E+000		6.5508E-001
	1004.76	17.90	6.0909E-001		8.8944E-003
	1274.45	35.50	3.1267E-001		-1.4713E-002
Eu-155	86.54	30.90	2.2300E+000	2.23E+000	1.0407E+000
	105.31	20.70	2.2278E+000		-3.0208E-001
Am-241	59.54	35.90	6.0060E+000	6.01E+000	-7.8992E+000
Cm-243	228.19	10.56	1.8749E+000	1.28E+000	-1.1239E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2765E+000	1.28E+000	-6.9620E-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 7/27/2006 10:13:23 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-134-F-

Sample Title: OOL-10-04-134-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 10:03:19 AM

Live Time: 600.0 seconds

Real Time: 601.7 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-134-F-
Title: OOL-10-04-134-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Rows 1-11 with various peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.000	1460.81*	10.67	1.66682E+001	1.88366E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.44415E-001	1.06272E-001
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	1.92983E+001	4.74746E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.71100E-001	2.57618E-001
Bi-214	0.692	609.31*	46.30	5.88698E-001	1.97082E-001
		1120.29	15.10		
		1764.49*	15.80	4.22305E-001	2.05247E-001
Ac-228	0.628	338.32	11.40		
		911.07*	27.70	9.09252E-001	3.00045E-001
		969.11*	16.60	4.81092E-001	3.38207E-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	1.000	1.666822E+001	1.883664E+000
TL-208	0.468	3.444146E-001	1.062720E-001
Pb-212 @	0.594	5.711000E-001	2.576185E-001
Bi-214	0.692	5.088771E-001	1.421568E-001
Ac-228	0.628	7.206815E-001	2.244488E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.9082E-001	28.41
3	84.64	5.0382E-001	47.13
5	351.62	1.6604E-001	59.33

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: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	9.48E-002	9.3465E-002
	1332.49	100.00	9.4824E-002		5.4029E-002
Nb-94	702.63	100.00	1.1947E-001	1.14E-001	3.5655E-002
	871.10	100.00	1.1417E-001		1.6147E-002
Ag-108m	79.20	7.10	1.3697E+001	1.55E-001	-6.9235E+000
	433.93	89.90	1.5789E-001		-1.2366E-001
	614.37	90.40	1.6843E-001		-7.7846E-002
	722.95	90.50	1.5510E-001		1.4026E-001
Sb-125	176.33	6.89	3.6121E+000	5.02E-001	-1.8092E+000
	427.89	29.33	5.0203E-001		1.5418E-001
	463.38	10.35	1.3287E+000		4.0627E-002
	600.56	17.80	7.0745E-001		-4.0176E-001
	606.64	5.02	3.3391E+000		4.4743E+000
	635.90	11.32	1.1256E+000		2.5374E-001
Cs-134	563.23	8.38	1.6707E+000	1.41E-001	-7.4142E-001
	569.32	15.43	8.8328E-001		1.7897E-001
	604.70	97.60	1.6907E-001		4.5434E-002
	795.84	85.40	1.4062E-001		-4.6687E-002
	801.93	8.73	1.2790E+000		-1.2752E+000
Cs-137	661.65	85.12	1.5449E-001	1.54E-001	-5.1318E-002
Eu-152	121.78	28.40	1.3318E+000	3.72E-001	-5.7893E-001
	244.69	7.49	2.8349E+000		-2.7410E+000
	344.27	26.50	6.3295E-001		-8.1524E-002
	778.89	12.74	9.4119E-001		-1.0639E+000
	867.32	4.16	2.7313E+000		-3.8840E+000
	964.01	14.40	1.0448E+000		-2.7728E-001
	1085.78	10.00	1.1180E+000		-6.3048E-001
	1112.02	13.30	8.9364E-001		-7.1013E-001
1407.95	20.70	3.7222E-001	-2.3037E-001		
Eu-154	123.07	40.50	9.2057E-001	3.00E-001	-5.4946E-001
	247.94	6.60	3.1118E+000		4.0219E-001
	591.81	4.83	2.7677E+000		9.2626E-001
	723.30	19.70	7.1258E-001		5.8170E-001
	756.87	4.33	2.7962E+000		-1.7918E+000
	873.19	11.50	9.5865E-001		-1.3626E+000
	996.32	10.30	1.0703E+000		-9.8350E-001
	1004.76	17.90	6.3329E-001		6.8000E-001
1274.45	35.50	2.9983E-001	-2.4684E-001		
Eu-155	86.54	30.90	2.3998E+000	2.39E+000	4.3361E+000
	105.31	20.70	2.3912E+000		5.5568E-002
Am-241	59.54	35.90	6.3785E+000	6.38E+000	-3.1557E+000
Cm-243	228.19	10.56	1.9927E+000	1.35E+000	-5.0688E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3529E+000	1.35E+000	7.1949E-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 7/27/2006 1:11:49 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-135-F-

Sample Title: OOL-10-04-135-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 1:01:45 PM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

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

Filename: ORG7829
Log Number: OOL-10-04-135-F-
Title: OOL-10-04-135-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	291-	309	300.23	75.01	1.72	5.69E+002	161.12	1.83E+003
2	946-	962	954.75	238.67	1.31	1.82E+002	72.03	3.73E+002
3	1401-	1415	1407.74	351.93	0.75	1.23E+002	43.88	1.31E+002
4	2321-	2340	2331.38	582.87	2.09	1.56E+002	38.33	6.47E+001
5	2428-	2447	2436.99	609.27	1.55	1.15E+002	35.52	6.12E+001
6	3634-	3652	3643.61	910.97	1.95	6.75E+001	29.58	4.75E+001
7	5830-	5854	5842.24	1460.70	2.20	6.39E+002	52.37	1.85E+001
8	7050-	7063	7056.64	1764.34	1.09	3.00E+001	16.26	1.40E+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	1.000	1460.81*	10.67	1.45122E+001	1.67245E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.48927E-001	9.68645E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	2.21728E+001	7.63886E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.95327E-001	2.52959E-001
Bi-214	0.697	609.31*	46.30	4.72892E-001	1.57533E-001
		1120.29	15.10		
		1764.49*	15.80	4.87633E-001	2.68925E-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	1.000	1.451218E+001	1.672447E+000
TL-208	0.470	3.489270E-001	9.686454E-002
Pb-212 @	0.594	5.953266E-001	2.529593E-001
Bi-214	0.697	4.766581E-001	1.359280E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.0519E-001	35.64
6	910.97	1.1250E-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: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	9.3887E-002	9.39E-002	-9.5808E-002
	1332.49	100.00	1.0327E-001		1.0350E-001
Nb-94	702.63	100.00	1.2279E-001	1.12E-001	-1.8026E-002
	871.10	100.00	1.1197E-001		8.5715E-002
Ag-108m	79.20	7.10	1.2691E+001	1.41E-001	-2.9504E-001
	433.93	89.90	1.4660E-001		1.4866E-002
	614.37	90.40	1.5179E-001		-2.1528E-002
	722.95	90.50	1.4133E-001		7.6564E-002
Sb-125	176.33	6.89	3.5885E+000	4.51E-001	1.9060E+000
	427.89	29.33	4.5051E-001		-1.0400E-001
	463.38	10.35	1.2324E+000		-3.4170E-002
	600.56	17.80	6.7205E-001		-1.4503E-001
	606.64	5.02	2.9878E+000		4.4238E+000
	635.90	11.32	1.0305E+000		7.5718E-001
Cs-134	563.23	8.38	1.4888E+000	1.39E-001	2.7212E-001
	569.32	15.43	8.0747E-001		1.8232E-001
	604.70	97.60	1.5239E-001		-9.3001E-002
	795.84	85.40	1.3876E-001		1.1493E-001
	801.93	8.73	1.2135E+000		-1.5324E+000
Cs-137	661.65	85.12	1.4064E-001	1.41E-001	1.2357E-002
Eu-152	121.78	28.40	1.2800E+000	3.41E-001	-9.8763E-001
	244.69	7.49	2.6439E+000		7.1974E-001
	344.27	26.50	5.9581E-001		2.8513E-001
	778.89	12.74	9.2568E-001		1.9558E-001
	867.32	4.16	2.6135E+000		-3.5614E+000
	964.01	14.40	9.1223E-001		4.9551E-001
	1085.78	10.00	1.0668E+000		-2.8546E-001
	1112.02	13.30	7.8714E-001		-4.1040E-001
1407.95	20.70	3.4096E-001	6.3710E-002		
Eu-154	123.07	40.50	8.9148E-001	2.70E-001	8.9772E-002
	247.94	6.60	2.8855E+000		-1.1070E+000
	591.81	4.83	2.5267E+000		2.2977E+000
	723.30	19.70	6.4751E-001		4.5654E-001
	756.87	4.33	2.6694E+000		-9.6657E-001
	873.19	11.50	9.8949E-001		1.2972E-001
	996.32	10.30	1.0272E+000		-3.5229E-001
	1004.76	17.90	6.0909E-001		3.1666E-001
1274.45	35.50	2.7041E-001	6.2617E-002		
Eu-155	86.54	30.90	2.1963E+000	2.20E+000	1.6760E+000
	105.31	20.70	2.2408E+000		6.7204E-001
Am-241	59.54	35.90	5.9864E+000	5.99E+000	2.7248E+000
Cm-243	228.19	10.56	1.8989E+000	1.25E+000	-8.5511E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2479E+000	1.25E+000	1.1913E+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 7/27/2006 3:08:35 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-10-04-136-F-

Sample Title: OOL-10-04-136-F-G

Description: /REBAR/CONCRETEO/ADJ TO O/S WALL

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 2:58:33 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-136-F-
Title: OOL-10-04-136-F-G
Description: /REBAR/CONCRETEO/ADJ TO O/S WALL

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2322-	2343	2330.98	582.70	1.81	1.85E+002	42.05	7.34E+001
2	2424-	2447	2437.24	609.27	1.08	1.06E+002	44.51	1.02E+002
3	3635-	3654	3645.93	911.45	1.67	1.05E+002	28.40	3.00E+001
4	5831-	5859	5844.44	1461.08	2.09	6.80E+002	57.93	4.25E+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: 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	0.998	1460.81*	10.67	1.49182E+001	1.75387E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.02447E-001	1.05594E-001
Bi-214	0.403	860.37	12.46		
		609.31*	46.30	4.25711E-001	1.86556E-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	0.998	1.491821E+001	1.753873E+000
TL-208	0.467	4.024469E-001	1.055935E-001
Bi-214	0.403	4.257111E-001	1.865561E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	911.45	1.7500E-001	27.05

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: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	8.75E-002	2.2545E-002
	1332.49	100.00	8.7494E-002		-2.0380E-001
Nb-94	702.63	100.00	1.1438E-001	1.00E-001	3.3789E-002
	871.10	100.00	1.0010E-001		-5.0964E-002
Ag-108m	79.20	7.10	1.2760E+001	1.37E-001	-2.6238E+001
	433.93	89.90	1.3866E-001		-6.0394E-002
	614.37	90.40	1.6056E-001		-2.1761E-002
	722.95	90.50	1.3735E-001		5.1422E-002
Sb-125	176.33	6.89	3.5385E+000	4.29E-001	3.3336E+000
	427.89	29.33	4.2898E-001		1.2163E-001
	463.38	10.35	1.2379E+000		7.1095E-001
	600.56	17.80	7.0820E-001		5.8686E-001
	606.64	5.02	3.0955E+000		2.4357E+000
	635.90	11.32	9.5034E-001		-3.7143E-001
Cs-134	563.23	8.38	1.4404E+000	1.38E-001	4.2547E-001
	569.32	15.43	8.3542E-001		-1.5310E-001
	604.70	97.60	1.5700E-001		-2.5019E-003
	795.84	85.40	1.3798E-001		8.7158E-002
Cs-137	801.93	8.73	1.3299E+000	1.38E-001	-3.2338E-001
	661.65	85.12	1.3836E-001		3.0925E-002
Eu-152	121.78	28.40	1.2648E+000	4.21E-001	-4.7856E-002
	244.69	7.49	2.5520E+000		-3.4029E+000
	344.27	26.50	5.5625E-001		-9.0066E-001
	778.89	12.74	9.0933E-001		2.4900E-001
	867.32	4.16	2.5132E+000		-2.5702E+000
	964.01	14.40	1.0127E+000		1.5970E+000
	1085.78	10.00	1.0140E+000		-8.3884E-001
	1112.02	13.30	8.7762E-001		-3.2615E-001
1407.95	20.70	4.2057E-001	3.1682E-001		
Eu-154	123.07	40.50	8.7149E-001	3.02E-001	2.2050E-001
	247.94	6.60	2.6954E+000		-5.4789E-003
	591.81	4.83	2.4741E+000		-1.3333E+000
	723.30	19.70	6.3277E-001		4.9334E-001
	756.87	4.33	2.7892E+000		3.5653E-001
	873.19	11.50	8.8683E-001		-9.1914E-002
	996.32	10.30	1.0160E+000		6.0499E-002
	1004.76	17.90	6.0146E-001		3.9479E-001
1274.45	35.50	3.0245E-001	1.3035E-001		
Eu-155	86.54	30.90	2.2543E+000	2.25E+000	2.7765E+000
	105.31	20.70	2.2568E+000		-1.7478E+000
Am-241	59.54	35.90	5.4383E+000	5.44E+000	1.8035E+000
Cm-243	228.19	10.56	1.8985E+000	1.22E+000	-9.6590E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2183E+000	1.22E+000	1.0516E+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 7/27/2006 11:15:31 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-137-F-

Sample Title: OOL-10-04-137-F-G

Description: concrete wall on outer frame

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 11:05:29 AM

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

Filename: GRN7780
Log Number: OOL-10-04-137-F-
Title: OOL-10-04-137-F-G
Description: concrete wall on outer frame

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1347-	1360	1352.12	337.99	0.62	6.79E+001	48.14	1.94E+002
2	2322-	2343	2331.73	582.89	2.23	1.71E+002	47.14	1.08E+002
3	3635-	3655	3645.27	911.28	1.89	1.31E+002	37.25	6.30E+001
4	5830-	5859	5844.23	1461.03	2.56	9.32E+002	61.49	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: 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	0.998	1460.81*	10.67	2.04581E+001	2.13681E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.73179E-001	1.13664E-001
Ac-228	0.538	860.37	12.46		
		338.32*	11.40	9.28629E-001	6.74520E-001
		911.07*	27.70	9.61430E-001	2.94902E-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	0.998	2.045813E+001	2.136808E+000
TL-208	0.470	3.731792E-001	1.136644E-001
Ac-228	0.538	9.561664E-001	2.702065E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.1643E-001	1.15E-001	-2.2209E-002
	1332.49	100.00	1.1541E-001		1.5308E-001
Nb-94	702.63	100.00	1.3222E-001	1.16E-001	5.8527E-002
	871.10	100.00	1.1594E-001		-6.5463E-002
Ag-108m	79.20	7.10	1.4061E+001	1.52E-001	-3.1950E+001
	433.93	89.90	1.6220E-001		-5.8755E-002
	614.37	90.40	1.8333E-001		-3.1493E-002
	722.95	90.50	1.5245E-001		1.6135E-002
Sb-125	176.33	6.89	3.7833E+000	5.17E-001	1.4407E+000
	427.89	29.33	5.1680E-001		1.2800E-001
	463.38	10.35	1.4395E+000		3.3441E-001
	600.56	17.80	8.0033E-001		1.2733E-001
	606.64	5.02	3.5945E+000		5.5106E+000
	635.90	11.32	1.1374E+000		-5.5122E-001
	722.95	90.50	1.5245E-001		1.6135E-002
Cs-134	563.23	8.38	1.7718E+000	1.61E-001	7.8405E-001
	569.32	15.43	9.2941E-001		2.6935E-001
	604.70	97.60	1.7869E-001		-1.4672E-003
	795.84	85.40	1.6076E-001		1.2832E-001
	801.93	8.73	1.4598E+000		-2.8297E+000
Cs-137	661.65	85.12	1.6639E-001	1.66E-001	4.8743E-002
Eu-152	121.78	28.40	1.3059E+000	4.41E-001	-3.6148E-001
	244.69	7.49	2.6633E+000		-8.0247E+000
	344.27	26.50	6.3821E-001		-6.3236E-001
	778.89	12.74	9.7560E-001		6.2529E-002
	867.32	4.16	2.9871E+000		4.5646E-001
	964.01	14.40	1.0441E+000		1.4403E+000
	1085.78	10.00	1.2207E+000		-1.2620E+000
	1112.02	13.30	9.1034E-001		-1.0322E+000
Eu-154	1407.95	20.70	4.4061E-001	3.20E-001	3.3481E-002
	123.07	40.50	9.0500E-001		8.5743E-002
	247.94	6.60	2.9488E+000		7.9712E-001
	591.81	4.83	2.9409E+000		-3.5552E-001
	723.30	19.70	6.9093E-001		-1.9548E-001
	756.87	4.33	3.1337E+000		-3.3982E-001
	873.19	11.50	1.0326E+000		-7.1623E-001
	996.32	10.30	1.1488E+000		-2.3529E-001
Eu-155	1004.76	17.90	6.3391E-001	2.46E+000	-3.9065E-001
	1274.45	35.50	3.1960E-001		-2.5435E-001
	86.54	30.90	2.4736E+000		4.1513E+000
Am-241	105.31	20.70	2.4615E+000	6.22E+000	-1.6717E-001
	59.54	35.90	6.2170E+000		-8.2399E-001
Cm-243	228.19	10.56	2.0110E+000	1.29E+000	-5.7317E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2935E+000	1.29E+000	-5.0895E-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 7/27/2006 11:30:53 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-138-F-

Sample Title: OOL-10-04-138-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 11:20:50 AM

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-10-04-138-F-
Title: OOL-10-04-138-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 7 rows of peak data.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.000	1460.81*	10.67	1.97920E+001	2.11065E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.15385E-001	1.29465E-001
		860.37	12.46		
Pb-212	0.587	74.81* @	10.70	3.02857E+001	9.26814E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.400	238.63*	44.60	5.70818E-001	2.71750E-001
		609.31*	46.30	5.10755E-001	1.81782E-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	1.000	1.979202E+001	2.110652E+000
TL-208	0.470	4.153851E-001	1.294655E-001
Pb-212 @	0.587	5.708179E-001	2.717496E-001
Bi-214	0.400	5.107545E-001	1.817817E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	118.29	1.2559E-001	112.45
4	351.96	1.9124E-001	47.49

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.3615E-001	1.17E-001	4.9900E-003
	1332.49	100.00	1.1689E-001		1.1550E-001
Nb-94	702.63	100.00	1.4498E-001	1.32E-001	-5.5452E-002
	871.10	100.00	1.3188E-001		5.9199E-002
Ag-108m	79.20	7.10	1.4184E+001	1.65E-001	-2.4353E+001
	433.93	89.90	1.6548E-001		-2.4221E-002
	614.37	90.40	1.7992E-001		9.2367E-003
	722.95	90.50	1.7285E-001		6.7465E-002
Sb-125	176.33	6.89	3.7988E+000	5.00E-001	4.7508E-001
	427.89	29.33	4.9994E-001		-5.6542E-002
	463.38	10.35	1.4849E+000		-2.5378E-002
	600.56	17.80	8.5039E-001		3.7491E-001
	606.64	5.02	3.4557E+000		4.3151E+000
	635.90	11.32	1.2626E+000		-2.2165E-001
Cs-134	563.23	8.38	1.8157E+000	1.47E-001	-9.1220E-001
	569.32	15.43	9.7049E-001		5.9438E-002
	604.70	97.60	1.7687E-001		-8.9458E-002
	795.84	85.40	1.4696E-001		-2.7180E-002
	801.93	8.73	1.5451E+000		7.8097E-001
Cs-137	661.65	85.12	1.5977E-001	1.60E-001	-1.3167E-001
Eu-152	121.78	28.40	1.3365E+000	4.17E-001	-1.1572E+000
	244.69	7.49	2.8027E+000		-3.9094E+000
	344.27	26.50	6.5677E-001		-3.6326E-001
	778.89	12.74	9.9757E-001		-5.7004E-001
	867.32	4.16	3.1426E+000		1.1909E+000
	964.01	14.40	1.1568E+000		8.3427E-001
	1085.78	10.00	1.2165E+000		-2.1437E-001
	1112.02	13.30	9.2940E-001		-2.8358E+000
	1407.95	20.70	4.1713E-001		-1.4491E-001
Eu-154	123.07	40.50	9.2031E-001	3.33E-001	-4.7782E-001
	247.94	6.60	3.1049E+000		3.1949E-001
	591.81	4.83	2.9130E+000		-1.6212E+000
	723.30	19.70	7.9689E-001		5.3325E-001
	756.87	4.33	2.8551E+000		-1.5248E+000
	873.19	11.50	1.1594E+000		4.7854E-001
	996.32	10.30	1.1648E+000		2.3220E-001
	1004.76	17.90	6.7388E-001		5.9386E-001
	1274.45	35.50	3.3318E-001		-2.5178E-002
Eu-155	86.54	30.90	2.5150E+000	2.41E+000	2.4888E+000
	105.31	20.70	2.4056E+000		-1.1894E+000
Am-241	59.54	35.90	6.2836E+000	6.28E+000	-1.7480E+000
Cm-243	228.19	10.56	2.0703E+000	1.43E+000	-8.7820E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.4319E+000	1.43E+000	-6.0639E-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 7/27/2006 10:11:32 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-139-F-

Sample Title: OOL-10-04-139-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 10:01:28 AM

Live Time: 600.0 seconds

Real Time: 602.0 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-139-F-
Title: OOL-10-04-139-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	945-	966	956.06	238.97	2.54	3.07E+002	105.72	6.90E+002
2	2321-	2342	2331.50	582.84	1.12	1.20E+002	53.84	1.69E+002
3	3868-	3885	3874.81	968.67	1.46	5.53E+001	31.95	6.47E+001
4	4949-	4960	4954.83	1238.67	0.34	1.69E+001	20.14	3.51E+001
5	5828-	5859	5843.84	1460.93	2.30	9.86E+002	64.59	2.00E+001
6	7055-	7069	7061.40	1765.32	0.53	2.97E+001	16.34	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: 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	1.000	1460.81*	10.67	2.16456E+001	2.25431E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.61079E-001	1.22185E-001
		860.37	12.46		
Pb-212	0.452	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.93489E-001	3.75931E-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	1.000	2.164560E+001	2.254310E+000
TL-208	0.470	2.610787E-001	1.221855E-001
Pb-212 @	0.452	9.934890E-001	3.759313E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	968.67	9.2229E-002	57.74
4	1238.67	2.8141E-002	119.27
6	1765.32	4.9464E-002	55.05

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: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	1.4405E-001	1.28E-001	-3.6996E-002
	1332.49	100.00	1.2765E-001		1.7926E-001
Nb-94	702.63	100.00	1.4265E-001	1.38E-001	-3.9478E-002
	871.10	100.00	1.3799E-001		1.6721E-001
Ag-108m	79.20	7.10	1.5281E+001	1.71E-001	-3.1636E+001
	433.93	89.90	1.8076E-001		7.5158E-002
	614.37	90.40	1.8744E-001		-2.3489E-001
	722.95	90.50	1.7105E-001		8.4339E-002
Sb-125	176.33	6.89	4.0015E+000	5.68E-001	-4.5396E+000
	427.89	29.33	5.6806E-001		-2.1623E-001
	463.38	10.35	1.6504E+000		6.4825E-001
	600.56	17.80	8.3889E-001		-4.8160E-001
	606.64	5.02	3.7075E+000		6.8341E+000
	635.90	11.32	1.3135E+000		-4.9829E-002
Cs-134	563.23	8.38	1.8215E+000	1.63E-001	-5.8391E-001
	569.32	15.43	9.5917E-001		-1.6745E+000
	604.70	97.60	1.8205E-001		-2.9732E-002
	795.84	85.40	1.6301E-001		-2.8408E-002
Cs-137	801.93	8.73	1.6005E+000	1.77E-001	1.6942E-001
	661.65	85.12	1.7696E-001		-4.4212E-002
Eu-152	121.78	28.40	1.4689E+000	4.57E-001	1.2551E+000
	244.69	7.49	3.0311E+000		-7.0464E-001
	344.27	26.50	7.1219E-001		-1.2138E-001
	778.89	12.74	1.0530E+000		-7.8617E-001
	867.32	4.16	3.1760E+000		-4.7766E+000
	964.01	14.40	1.0999E+000		-2.0722E-001
	1085.78	10.00	1.2038E+000		4.3135E-001
	1112.02	13.30	9.4188E-001		-2.9516E-001
1407.95	20.70	4.5659E-001	-3.0243E-002		
Eu-154	123.07	40.50	1.0186E+000	3.50E-001	5.7628E-001
	247.94	6.60	3.2894E+000		-1.4055E+000
	591.81	4.83	3.2067E+000		2.4324E+000
	723.30	19.70	7.8862E-001		5.0632E-001
	756.87	4.33	3.2778E+000		-1.4072E+000
	873.19	11.50	1.1771E+000		5.4094E-001
	996.32	10.30	1.2744E+000		-9.0898E-002
Eu-155	1004.76	17.90	7.1365E-001	2.64E+000	2.1215E-001
	1274.45	35.50	3.5001E-001		1.8187E-001
	86.54	30.90	2.6586E+000		2.2175E+000
Am-241	105.31	20.70	2.6405E+000	6.51E+000	-5.4872E-001
	59.54	35.90	6.5060E+000		2.3224E+000
Cm-243	228.19	10.56	2.2726E+000	1.47E+000	2.3586E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.4665E+000	1.47E+000	-1.3224E-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 7/27/2006 9:49:14 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-140-F-

Sample Title: OOL-10-04-140-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 9:39:14 AM

Live Time: 600.0 seconds

Real Time: 602.0 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-140-F-
Title: OOL-10-04-140-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	288-	311	296.95	74.19	1.78	1.10E+003	228.99	3.13E+003
2	333-	345	338.28	84.53	0.48	1.53E+002	143.13	1.97E+003
3	2324-	2344	2332.01	582.96	0.96	1.50E+002	52.89	1.58E+002
4	5830-	5860	5845.03	1461.23	2.73	1.00E+003	64.35	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	0.994	1460.81*	10.67	2.20110E+001	2.27419E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.26676E-001	1.22905E-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	0.994	2.201097E+001	2.274190E+000
TL-208	0.471	3.266756E-001	1.229054E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	74.19	1.8262E+000	20.90
2	84.53	2.5560E-001	93.33

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	1.4147E-001	1.23E-001	1.4924E-001
	1332.49	100.00	1.2310E-001		1.2892E-001
Nb-94	702.63	100.00	1.4498E-001	1.34E-001	2.9060E-002
	871.10	100.00	1.3395E-001		-6.0157E-002
Ag-108m	79.20	7.10	1.5351E+001	1.62E-001	-1.0440E+000
	433.93	89.90	1.8411E-001		1.2360E-002
	614.37	90.40	1.8921E-001		-2.3471E-001
	722.95	90.50	1.6234E-001		1.0045E-001
Sb-125	176.33	6.89	4.1367E+000	5.61E-001	-1.5900E+000
	427.89	29.33	5.6112E-001		-5.2703E-001
	463.38	10.35	1.6246E+000		1.0949E+000
	600.56	17.80	8.8943E-001		-5.6128E-001
	606.64	5.02	3.7565E+000		7.0449E+000
	635.90	11.32	1.3370E+000		9.7294E-002
Cs-134	563.23	8.38	1.8838E+000	1.73E-001	1.6043E-001
	569.32	15.43	1.0668E+000		2.7662E-001
	604.70	97.60	1.8643E-001		9.3944E-002
	795.84	85.40	1.7273E-001		1.2976E-001
	801.93	8.73	1.6364E+000		-4.0839E-001
Cs-137	661.65	85.12	1.7759E-001	1.78E-001	2.2482E-002
Eu-152	121.78	28.40	1.4591E+000	4.17E-001	7.1474E-001
	244.69	7.49	3.1488E+000		-4.5032E+000
	344.27	26.50	7.0400E-001		-2.9716E-001
	778.89	12.74	1.0808E+000		-1.7020E+000
	867.32	4.16	3.3460E+000		1.1542E+000
	964.01	14.40	1.1823E+000		1.8317E+000
	1085.78	10.00	1.3626E+000		-1.7274E-001
	1112.02	13.30	9.8129E-001		-7.2906E-001
1407.95	20.70	4.1713E-001	2.4198E-001		
Eu-154	123.07	40.50	1.0065E+000	3.01E-001	-1.3536E-001
	247.94	6.60	3.4701E+000		1.7163E-001
	591.81	4.83	3.2421E+000		1.6100E+000
	723.30	19.70	7.4145E-001		3.1648E-001
	756.87	4.33	3.3198E+000		2.2650E+000
	873.19	11.50	1.1594E+000		1.4808E-001
	996.32	10.30	1.3342E+000		9.0098E-001
	1004.76	17.90	7.8695E-001		2.5611E-001
	1274.45	35.50	3.0097E-001		-4.3002E-001
	Eu-155	86.54	30.90		2.7190E+000
	105.31	20.70	2.7034E+000		2.9731E+000
Am-241	59.54	35.90	6.7358E+000	6.74E+000	-3.6530E-001
Cm-243	228.19	10.56	2.2990E+000	1.50E+000	-1.1452E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.4978E+000	1.50E+000	-5.8247E-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 7/27/2006 8:33:40 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-141-F-

Sample Title: OOL-10-04-141-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 8:23:37 AM

Live Time: 600.0 seconds

Real Time: 602.2 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-10-04-141-F-
Title: OOL-10-04-141-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	5830-	5859	5843.81	1460.92	2.67	9.52E+002	65.70	3.66E+001
2	7055-	7069	7061.30	1765.30	0.33	4.85E+001	16.43	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	1.000	1460.81*	10.67	2.09080E+001	2.22391E+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	1.000	2.090803E+001	2.223908E+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	1765.30	8.0833E-002	33.88

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: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	1.3261E-001	1.25E-001	-8.4093E-002
	1332.49	100.00	1.2540E-001		1.5298E-001
Nb-94	702.63	100.00	1.5205E-001	1.36E-001	1.1199E-001
	871.10	100.00	1.3632E-001		7.5527E-002
Ag-108m	79.20	7.10	1.6078E+001	1.71E-001	-3.7644E+001
	433.93	89.90	1.8923E-001		-2.5159E-003
	614.37	90.40	1.8693E-001		-2.6867E-001
	722.95	90.50	1.7135E-001		8.2474E-002
Sb-125	176.33	6.89	4.4628E+000	5.76E-001	6.0395E-001
	427.89	29.33	5.7615E-001		-4.4678E-002
	463.38	10.35	1.6339E+000		1.1098E+000
	600.56	17.80	9.0027E-001		-4.6928E-001
	606.64	5.02	3.6660E+000		4.7163E+000
	635.90	11.32	1.2895E+000		-5.1239E-001
Cs-134	563.23	8.38	1.9031E+000	1.73E-001	1.2960E+000
	569.32	15.43	1.0206E+000		-3.0663E-001
	604.70	97.60	1.8686E-001		7.1303E-002
	795.84	85.40	1.7308E-001		8.1030E-002
	801.93	8.73	1.5223E+000		-7.8915E-001
Cs-137	661.65	85.12	1.8013E-001	1.80E-001	2.1799E-001
Eu-152	121.78	28.40	1.5559E+000	4.27E-001	6.1188E-001
	244.69	7.49	3.1553E+000		-6.9825E+000
	344.27	26.50	7.0783E-001		-5.3491E-001
	778.89	12.74	1.1391E+000		-7.3242E-001
	867.32	4.16	3.4007E+000		-2.1050E+000
	964.01	14.40	1.1308E+000		1.2222E+000
	1085.78	10.00	1.1780E+000		-5.0895E-001
	1112.02	13.30	1.0105E+000		-5.4181E-001
1407.95	20.70	4.2736E-001	1.2044E-001		
Eu-154	123.07	40.50	1.0714E+000	3.28E-001	-5.7389E-001
	247.94	6.60	3.5237E+000		-2.6822E+000
	591.81	4.83	3.3460E+000		8.8412E-001
	723.30	19.70	7.8306E-001		4.1532E-001
	756.87	4.33	3.2495E+000		-7.0560E-001
	873.19	11.50	1.1564E+000		2.0450E-001
	996.32	10.30	1.2598E+000		5.4807E-001
	1004.76	17.90	6.9627E-001		-8.5591E-002
1274.45	35.50	3.2782E-001	-1.0927E-001		
Eu-155	86.54	30.90	2.8366E+000	2.84E+000	4.1388E+000
	105.31	20.70	2.8647E+000		2.1359E+000
Am-241	59.54	35.90	6.9615E+000	6.96E+000	-7.9566E+000
Cm-243	228.19	10.56	2.4392E+000	1.58E+000	8.3024E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.5849E+000	1.58E+000	9.8047E-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 7/27/2006 8:18:15 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-10-04-142-F-

Sample Title: OOL-10-04-142-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 8:08:11 AM

Live Time: 600.0 seconds

Real Time: 602.2 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-10-04-142-F-
Title: OOL-10-04-142-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	288-	305	297.05	74.22	1.15	7.61E+002	196.08	2.83E+003
2	1909-	1918	1913.54	478.34	0.83	2.83E+001	28.72	8.17E+001
3	3866-	3882	3874.27	968.53	0.80	5.76E+001	35.70	8.74E+001
4	5828-	5859	5844.00	1460.97	2.47	9.29E+002	62.85	1.99E+001
5	7056-	7071	7062.98	1765.72	0.31	3.92E+001	18.00	1.38E+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
Be-7	0.982	477.60*	10.40	4.67591E-001	4.79750E-001
K-40	0.999	1460.81*	10.67	2.03964E+001	2.15197E+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
Be-7	0.982	4.675911E-001	4.797495E-001
K-40	0.999	2.039644E+001	2.151967E+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	74.22	1.2682E+000	25.77
3	968.53	9.6066E-002	61.93
5	1765.72	6.5409E-002	45.86

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: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	1.3959E-001	1.21E-001	5.7488E-002
	1332.49	100.00	1.2075E-001		1.3205E-001
Nb-94	702.63	100.00	1.5370E-001	1.44E-001	5.7959E-002
	871.10	100.00	1.4414E-001		4.8528E-002
Ag-108m	79.20	7.10	1.6116E+001	1.72E-001	-3.0941E+001
	433.93	89.90	1.9637E-001		-9.9216E-003
	614.37	90.40	2.0232E-001		-1.6631E-001
	722.95	90.50	1.7195E-001		6.8782E-002
Sb-125	176.33	6.89	4.4496E+000	5.94E-001	5.4627E+000
	427.89	29.33	5.9438E-001		-3.0347E-001
	463.38	10.35	1.6847E+000		7.8125E-001
	600.56	17.80	8.6454E-001		-1.6451E-001
	606.64	5.02	3.7849E+000		3.9825E+000
	635.90	11.32	1.3323E+000		1.2162E+000
Cs-134	563.23	8.38	1.9734E+000	1.79E-001	-1.0240E-001
	569.32	15.43	1.0827E+000		6.6628E-001
	604.70	97.60	1.9007E-001		4.1398E-002
	795.84	85.40	1.7925E-001		3.5171E-002
	801.93	8.73	1.5969E+000		-1.5393E+000
Cs-137	661.65	85.12	1.7696E-001	1.77E-001	-1.9395E-002
Eu-152	121.78	28.40	1.5553E+000	4.63E-001	-1.9709E-001
	244.69	7.49	3.3483E+000		-4.4744E+000
	344.27	26.50	7.3779E-001		-2.9495E-001
	778.89	12.74	1.1272E+000		3.3995E-001
	867.32	4.16	3.4545E+000		-2.7887E+000
	964.01	14.40	1.1628E+000		2.2289E-001
	1085.78	10.00	1.3476E+000		-5.6656E-001
	1112.02	13.30	1.0191E+000		7.8144E-002
1407.95	20.70	4.6282E-001	4.6133E-001		
Eu-154	123.07	40.50	1.0754E+000	3.59E-001	1.5088E-002
	247.94	6.60	3.6299E+000		-7.5233E-001
	591.81	4.83	3.2572E+000		7.9736E-001
	723.30	19.70	7.9414E-001		3.4305E-001
	756.87	4.33	3.3406E+000		-1.9831E+000
	873.19	11.50	1.2373E+000		-1.7554E-001
	996.32	10.30	1.2451E+000		-2.0683E-001
	1004.76	17.90	7.7326E-001		1.0020E+000
1274.45	35.50	3.5873E-001	1.8651E-001		
Eu-155	86.54	30.90	2.8544E+000	2.83E+000	4.9867E+000
	105.31	20.70	2.8268E+000		-1.4034E+000
Am-241	59.54	35.90	6.9388E+000	6.94E+000	1.2791E+000
Cm-243	228.19	10.56	2.3493E+000	1.56E+000	-1.5940E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.5642E+000	1.56E+000	4.2455E-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 7/27/2006 4:06:51 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-10-04-143-F-

Sample Title: OOL-10-04-143-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 3:56:47 PM

Live Time: 600.0 seconds

Real Time: 601.8 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-143-F-
Title: OOL-10-04-143-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 13 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.997	1460.81*	10.67	1.98721E+001	2.09819E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.25153E-001	9.78150E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	2.71319E+001	5.99429E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.690	238.63*	44.60	7.37520E-001	2.71363E-001
		609.31*	46.30	5.62165E-001	2.03068E-001
		1120.29	15.10		
Ac-228	0.633	1764.49*	15.80	6.35528E-001	2.33631E-001
		338.32	11.40		
		911.07*	27.70	1.10250E+000	2.96746E-001
		969.11*	16.60	7.81399E-001	4.14773E-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	0.997	1.987213E+001	2.098187E+000
TL-208	0.471	3.251525E-001	9.781503E-002
Pb-212 @	0.580	7.375202E-001	2.713634E-001
Bi-214	0.690	5.937369E-001	1.532654E-001
Ac-228	0.633	9.937862E-001	2.413398E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	7.0437E-001	17.14
3	84.68	6.7346E-001	38.63
5	351.85	1.8958E-001	52.23
6	526.34	3.5733E-002	119.11
11	1332.96	1.3177E-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: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	1.4367E-001	1.28E-001	2.0012E-001
	1332.49	100.00	1.2796E-001		1.3722E-001
Nb-94	702.63	100.00	1.4024E-001	1.33E-001	-2.3177E-002
	871.10	100.00	1.3334E-001		-8.0218E-002
Ag-108m	79.20	7.10	1.2174E+001	1.59E-001	-6.3631E+000
	433.93	89.90	1.7049E-001		1.6454E-002
	614.37	90.40	1.7162E-001		-4.3788E-002
	722.95	90.50	1.5936E-001		-1.8616E-001
Sb-125	176.33	6.89	3.6620E+000	5.36E-001	7.6692E-001
	427.89	29.33	5.3557E-001		-2.2993E-001
	463.38	10.35	1.4664E+000		-5.4923E-001
	600.56	17.80	8.0374E-001		-4.4012E-001
	606.64	5.02	3.5996E+000		-1.6105E+000
	635.90	11.32	1.2595E+000		-4.4780E-001
Cs-134	563.23	8.38	1.7618E+000	1.60E-001	5.1284E-001
	569.32	15.43	9.0989E-001		-7.2693E-001
	604.70	97.60	1.8248E-001		4.0721E-002
	795.84	85.40	1.5969E-001		7.8066E-003
	801.93	8.73	1.4624E+000		8.2060E-001
Cs-137	661.65	85.12	1.8203E-001	1.82E-001	4.0062E-002
Eu-152	121.78	28.40	1.3373E+000	4.29E-001	-7.7447E-001
	244.69	7.49	2.7609E+000		3.1723E-001
	344.27	26.50	6.4311E-001		-4.3709E-002
	778.89	12.74	1.0261E+000		-5.3629E-001
	867.32	4.16	3.2647E+000		-5.7444E-001
	964.01	14.40	1.1086E+000		-2.1236E-001
	1085.78	10.00	1.2627E+000		9.5503E-001
	1112.02	13.30	9.5990E-001		-6.4224E-002
	1407.95	20.70	4.2938E-001		4.9191E-002
	Eu-154	123.07	40.50		9.2711E-001
247.94		6.60	2.9869E+000	-1.2958E+000	
591.81		4.83	2.9377E+000	1.6891E+000	
723.30		19.70	7.4337E-001	-2.8538E-001	
756.87		4.33	3.1428E+000	-1.8001E-001	
873.19		11.50	1.1283E+000	3.8196E-002	
996.32		10.30	1.1709E+000	3.5792E-002	
1004.76		17.90	6.9202E-001	4.8102E-002	
1274.45	35.50	3.2564E-001	-2.1971E-001		
Eu-155	86.54	30.90	2.2925E+000	2.29E+000	-5.3138E-001
	105.31	20.70	2.2975E+000		-1.5766E-001
Am-241	59.54	35.90	4.4406E+000	4.44E+000	-4.7926E-001
Cm-243	228.19	10.56	2.1179E+000	1.40E+000	-1.1977E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.3994E+000	1.40E+000	6.4443E-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 7/27/2006 2:43:39 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-10-04-144-F-

Sample Title: OOL-10-04-144-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 2:33:35 PM

Live Time: 600.0 seconds

Real Time: 601.8 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-144-F-
 Title: OOL-10-04-144-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	284-	306	291.37	72.93	1.03	5.37E+002	77.57	2.42E+003
m	2	284-	306	300.09	75.11	1.04	9.90E+002	89.19	2.99E+003
	3	333-	344	339.78	85.03	0.81	3.25E+002	150.56	2.22E+003
	4	945-	959	954.41	238.70	1.00	2.41E+002	86.06	5.87E+002
	5	1342-	1356	1352.10	338.13	1.10	1.05E+002	57.07	2.58E+002
	6	1401-	1415	1406.72	351.78	0.73	1.30E+002	57.19	2.47E+002
	7	2326-	2338	2330.59	582.76	0.94	1.50E+002	40.10	1.00E+002
	8	2428-	2443	2435.75	609.06	0.44	1.14E+002	45.30	1.40E+002
	9	3634-	3653	3643.95	911.13	1.51	1.45E+002	36.37	5.70E+001
M	10	3853-	3882	3858.52	964.77	1.20	2.77E+001	15.65	4.61E+001
m	11	3853-	3882	3875.56	969.03	1.20	6.75E+001	20.15	4.56E+001
	12	5324-	5339	5330.26	1332.73	0.35	6.00E+001	24.03	3.00E+001
	13	5830-	5856	5844.29	1461.24	1.89	9.52E+002	62.41	1.38E+001
	14	7054-	7067	7060.92	1765.42	0.44	3.91E+001	17.24	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: 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	0.993	1460.81*	10.67	2.01995E+001	2.10412E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.17288E-001	9.43308E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.21651E+001	6.93809E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.53132E-001	2.93259E-001
Bi-214	0.687	609.31*	46.30	4.45064E-001	1.84997E-001
		1120.29	15.10		
		1764.49*	15.80	6.10037E-001	2.75733E-001
Ac-228	1.000	338.32*	11.40	1.38976E+000	7.88286E-001
		911.07*	27.70	1.04136E+000	2.87367E-001
		969.11*	16.60	8.19232E-001	2.59259E-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	0.993	2.019953E+001	2.104123E+000
TL-208	0.468	3.172878E-001	9.433079E-002
Pb-212 @	0.580	7.531315E-001	2.932590E-001
Bi-214	0.687	4.962740E-001	1.536241E-001
Ac-228	1.000	9.454023E-001	1.870011E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	8.9418E-001	14.46
3	85.03	5.4101E-001	46.38
6	351.78	2.1682E-001	43.96
M 10	964.77	4.6206E-002	56.46
12	1332.73	9.9944E-002	40.06

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: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	1.3875E-001	1.27E-001	-4.3916E-003
	1332.49	100.00	1.2670E-001		1.4424E-001
Nb-94	702.63	100.00	1.3622E-001	1.31E-001	-9.0087E-002
	871.10	100.00	1.3069E-001		2.4470E-002
Ag-108m	79.20	7.10	1.2479E+001	1.61E-001	-8.8802E+000
	433.93	89.90	1.7218E-001		-1.0331E-001
	614.37	90.40	1.7575E-001		4.0232E-002
	722.95	90.50	1.6058E-001		-7.8850E-002
Sb-125	176.33	6.89	3.6820E+000	5.22E-001	8.5172E-001
	427.89	29.33	5.2219E-001		-9.2577E-002
	463.38	10.35	1.4761E+000		-4.9868E-001
	600.56	17.80	8.1363E-001		-1.6625E-001
	606.64	5.02	3.5675E+000		5.9704E+000
	635.90	11.32	1.2144E+000		6.0618E-002
Cs-134	563.23	8.38	1.7048E+000	1.56E-001	-7.8991E-001
	569.32	15.43	9.5248E-001		7.9453E-001
	604.70	97.60	1.7526E-001		2.4792E-002
	795.84	85.40	1.5567E-001		-6.7292E-002
	801.93	8.73	1.5254E+000		-6.5796E-001
Cs-137	661.65	85.12	1.7730E-001	1.77E-001	6.7549E-002
Eu-152	121.78	28.40	1.3351E+000	3.65E-001	-1.4678E-001
	244.69	7.49	2.9062E+000		1.4169E+000
	344.27	26.50	6.2410E-001		5.8730E-001
	778.89	12.74	1.0915E+000		4.6813E-002
	867.32	4.16	3.0981E+000		-5.2802E+000
	964.01	14.40	1.0200E+000		-4.3550E-001
	1085.78	10.00	1.1336E+000		-7.2361E-001
	1112.02	13.30	9.4836E-001		-2.4657E-001
1407.95	20.70	3.6475E-001	-2.9723E-001		
Eu-154	123.07	40.50	9.2567E-001	3.34E-001	-2.0659E-001
	247.94	6.60	3.1369E+000		-1.7390E+000
	591.81	4.83	3.0355E+000		1.9004E+000
	723.30	19.70	7.4058E-001		-2.9758E-001
	756.87	4.33	3.1219E+000		-9.5945E-001
	873.19	11.50	1.1515E+000		-1.8642E-001
	996.32	10.30	1.2005E+000		1.0086E+000
	1004.76	17.90	6.9202E-001		1.1887E-001
1274.45	35.50	3.3446E-001	-3.4842E-002		
Eu-155	86.54	30.90	2.3422E+000	2.34E+000	4.6208E-001
	105.31	20.70	2.3519E+000		5.8876E-001
Am-241	59.54	35.90	4.4787E+000	4.48E+000	-3.9694E+000
Cm-243	228.19	10.56	2.0966E+000	1.36E+000	-1.3827E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.3602E+000	1.36E+000	-7.2617E-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 7/27/2006 1:47:07 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-145-F-

Sample Title: OOL-10-04-145-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 1:37:04 PM

Live Time: 600.0 seconds

Real Time: 601.7 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-145-F-
 Title: OOL-10-04-145-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-	307	291.49	72.96	1.06	5.83E+002	77.80	2.36E+003
m	2	284-	307	300.18	75.13	1.06	1.01E+003	89.31	2.94E+003
M	3	334-	356	339.61	84.99	1.04	4.27E+002	77.61	2.13E+003
m	4	334-	356	350.08	87.61	1.05	1.88E+002	70.60	2.97E+003
	5	947-	961	954.25	238.66	1.07	2.15E+002	84.89	5.76E+002
	6	1171-	1186	1179.43	294.96	0.44	7.71E+001	64.42	3.33E+002
	7	1399-	1416	1406.72	351.78	0.72	2.03E+002	57.35	2.01E+002
	8	2034-	2048	2042.27	510.68	0.83	8.64E+001	47.08	1.71E+002
	9	2320-	2338	2331.37	582.96	1.22	1.86E+002	46.49	1.12E+002
	10	2429-	2445	2435.73	609.05	1.14	1.56E+002	43.35	1.06E+002
	11	3634-	3653	3643.61	911.04	1.57	1.53E+002	35.73	5.15E+001
	12	3867-	3882	3875.30	968.97	0.66	5.40E+001	30.78	6.40E+001
	13	4473-	4487	4480.45	1120.26	0.87	4.57E+001	25.63	4.33E+001
	14	5835-	5858	5844.36	1461.26	1.70	8.74E+002	61.65	2.88E+001
	15	7053-	7067	7059.83	1765.15	0.80	3.93E+001	18.96	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: 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	0.992	1460.81*	10.67	1.85459E+001	1.99128E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	6.82620E-001	3.87403E-001
		583.14*	84.20	3.94258E-001	1.10920E-001
		860.37	12.46		
Pb-212	0.726	74.81* @	10.70	3.28817E+001	7.06656E+000
		77.11 @	18.00		
		87.30* @	8.00	5.10682E+000	2.16274E+000
		238.63*	44.60	6.70670E-001	2.84874E-001
Bi-214	0.995	609.31*	46.30	6.06513E-001	1.84854E-001
		1120.29*	15.10	6.28657E-001	3.58836E-001
		1764.49*	15.80	6.12128E-001	3.02019E-001
PB-214	0.697	74.82* @	6.21	5.66560E+001	1.28517E+001
		77.11 @	10.50		
		87.30* @	4.67	8.74830E+000	3.76339E+000
		241.98	7.49		
		295.21*	19.20	5.87745E-001	5.01167E-001
		351.92*	37.20	8.35652E-001	2.73880E-001
Ac-228	0.635	338.32	11.40		
		911.07*	27.70	1.09558E+000	2.85930E-001
		969.11*	16.60	6.55555E-001	3.79977E-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	0.996		
	K-40	0.992	1.854593E+001	1.991281E+000
	TL-208	0.752	4.161060E-001	1.066350E-001
	Pb-212 @	0.726	6.706700E-001	2.848738E-001
	Bi-214	0.995	6.113791E-001	1.443468E-001
	PB-214 @	0.697	7.786412E-001	2.403341E-001
	Ac-228	0.635	9.364966E-001	2.284704E-001

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	72.96	9.7103E-001	13.35
M 3	84.99	7.1168E-001	18.17

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: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	1.2030E-001	1.17E-001	5.8409E-002
	1332.49	100.00	1.1748E-001		1.2760E-001
Nb-94	702.63	100.00	1.2779E-001	1.26E-001	2.6337E-002
	871.10	100.00	1.2626E-001		3.1717E-002
Ag-108m	79.20	7.10	1.2397E+001	1.55E-001	-1.1450E+001
	433.93	89.90	1.6289E-001		-5.1282E-004
	614.37	90.40	1.6550E-001		1.1499E-002
	722.95	90.50	1.5531E-001		8.4579E-002
Sb-125	176.33	6.89	3.5884E+000	4.90E-001	1.0138E+000
	427.89	29.33	4.8951E-001		-5.7402E-002
	463.38	10.35	1.3719E+000		2.9223E-001
	600.56	17.80	7.6734E-001		-8.9908E-002
	606.64	5.02	3.4194E+000		-1.1383E+000
	635.90	11.32	1.1850E+000		1.2916E+000
Cs-134	563.23	8.38	1.7478E+000	1.58E-001	5.5855E-001
	569.32	15.43	9.2112E-001		2.3763E-001
	604.70	97.60	1.7043E-001		-1.0518E-001
	795.84	85.40	1.5824E-001		7.6971E-002
	801.93	8.73	1.4471E+000		9.5285E-002
Cs-137	661.65	85.12	1.6679E-001	1.67E-001	-5.5678E-002
Eu-152	121.78	28.40	1.3528E+000	4.17E-001	-3.5978E-001
	244.69	7.49	2.8609E+000		7.9941E-001
	344.27	26.50	5.8667E-001		1.8961E-001
	778.89	12.74	1.0034E+000		-1.0184E-001
	867.32	4.16	2.9816E+000		-1.9030E+000
	964.01	14.40	1.0621E+000		7.6502E-002
	1085.78	10.00	1.2000E+000		-4.5559E-001
	1112.02	13.30	8.2022E-001		-4.0935E-001
	1407.95	20.70	4.1667E-001		8.8496E-002
Eu-154	123.07	40.50	9.2882E-001	3.41E-001	-4.6274E-001
	247.94	6.60	3.1528E+000		8.4567E-001
	591.81	4.83	2.7705E+000		-1.4419E+000
	723.30	19.70	7.1789E-001		4.6847E-001
	756.87	4.33	2.6829E+000		-2.7451E+000
	873.19	11.50	1.0924E+000		3.3586E-002
	996.32	10.30	1.1405E+000		3.4250E-001
	1004.76	17.90	6.3708E-001		1.8304E-002
1274.45	35.50	3.4061E-001	2.6621E-001		
Eu-155	86.54	30.90	2.3372E+000	2.32E+000	4.5081E+000
	105.31	20.70	2.3245E+000		2.7504E-001
Am-241	59.54	35.90	4.4919E+000	4.49E+000	-2.1268E+000
Cm-243	228.19	10.56	2.1390E+000	1.31E+000	7.1931E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.3092E+000	1.31E+000	-7.6853E-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 7/27/2006 2:07:38 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-146-F-

Sample Title: OOL-10-04-146-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 1:57:34 PM

Live Time: 600.0 seconds

Real Time: 601.8 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-146-F-
 Title: OOL-10-04-146-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	286-	306	291.32	72.92	1.04	4.51E+002	75.95	2.10E+003
m	2	286-	306	299.92	75.07	1.05	9.48E+002	88.67	3.02E+003
	3	332-	345	339.28	84.91	0.88	3.08E+002	167.68	2.53E+003
	4	945-	962	953.68	238.52	1.02	3.25E+002	94.28	6.12E+002
	5	1403-	1413	1406.09	351.63	0.92	8.43E+001	47.11	2.01E+002
	6	2035-	2050	2042.94	510.85	1.27	1.40E+002	50.53	1.75E+002
	7	2323-	2340	2331.47	582.99	1.21	1.50E+002	44.47	1.12E+002
	8	2428-	2444	2436.22	609.18	0.86	1.44E+002	43.38	1.09E+002
	9	2901-	2915	2907.67	727.04	0.91	3.93E+001	30.91	7.27E+001
	10	3635-	3651	3643.93	911.12	1.44	1.23E+002	34.76	6.14E+001
	11	3854-	3884	3874.63	968.80	0.77	6.63E+001	54.40	1.44E+002
	12	5325-	5338	5331.38	1333.01	0.89	4.00E+001	19.46	2.10E+001
	13	5830-	5858	5844.55	1461.31	2.13	9.06E+002	62.66	2.52E+001
	14	7054-	7069	7060.96	1765.43	0.70	4.40E+001	16.23	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	0.999	511.00*	100.00	2.39663E-001	9.21823E-002
K-40	0.990	1460.81*	10.67	1.92165E+001	2.04631E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	1.10955E+000	4.36284E-001
		583.14*	84.20	3.16713E-001	1.02701E-001
		860.37	12.46		
Bi-212	0.999	727.17*	11.80	6.29948E-001	5.01392E-001
Pb-212	0.580	74.81* @	10.70	3.08460E+001	6.69883E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.01350E+000	3.34224E-001
Bi-214	0.688	609.31*	46.30	5.60338E-001	1.82741E-001
		1120.29	15.10		
		1764.49*	15.80	6.86257E-001	2.62335E-001
Ac-228	0.634	338.32	11.40		
		911.07*	27.70	8.80476E-001	2.69407E-001
		969.11*	16.60	8.04673E-001	6.65696E-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	1.712531E-001	9.478772E-002
K-40	0.990	1.921646E+001	2.046313E+000
TL-208	0.752	3.167126E-001	1.021809E-001
Bi-212	0.999	6.299477E-001	5.013918E-001
Pb-212 @	0.580	1.013497E+000	3.342242E-001
Bi-214	0.688	6.014768E-001	1.499467E-001
Ac-228	0.634	8.698083E-001	2.497312E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	72.92	7.5168E-001	16.84
3	84.91	5.1353E-001	54.42
5	351.63	1.4054E-001	55.86
12	1333.01	6.6667E-002	48.64

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: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	1.07E-001	1.0191E-001
	1332.49	100.00	1.0742E-001		6.7509E-002
Nb-94	702.63	100.00	1.3939E-001	1.22E-001	6.7240E-002
	871.10	100.00	1.2237E-001		-1.0270E-001
Ag-108m	79.20	7.10	1.2383E+001	1.65E-001	-6.4051E+000
	433.93	89.90	1.7736E-001		-1.0364E-002
	614.37	90.40	1.7214E-001		-1.7957E-002
	722.95	90.50	1.6480E-001		8.0844E-002
Sb-125	176.33	6.89	3.5276E+000	5.30E-001	-2.3750E+000
	427.89	29.33	5.2988E-001		-2.2688E-001
	463.38	10.35	1.5310E+000		5.9410E-001
	600.56	17.80	7.9228E-001		-5.0463E-001
	606.64	5.02	3.3514E+000		3.6142E+000
	635.90	11.32	1.2217E+000		8.6379E-001
Cs-134	563.23	8.38	1.8089E+000	1.52E-001	1.8050E+000
	569.32	15.43	9.8874E-001		1.4048E-001
	604.70	97.60	1.6976E-001		-4.5077E-002
	795.84	85.40	1.5230E-001		-3.0115E-003
	801.93	8.73	1.4004E+000		4.9179E-001
Cs-137	661.65	85.12	1.8664E-001	1.87E-001	1.4588E-001
Eu-152	121.78	28.40	1.3459E+000	3.79E-001	-7.4441E-002
	244.69	7.49	2.7790E+000		-2.2143E-001
	344.27	26.50	6.3396E-001		-2.3589E-001
	778.89	12.74	1.0311E+000		-3.1431E-001
	867.32	4.16	3.0570E+000		2.3331E-001
	964.01	14.40	1.0806E+000		-1.6077E-001
	1085.78	10.00	1.1919E+000		4.4131E-001
	1112.02	13.30	9.2482E-001		-4.4509E-001
1407.95	20.70	3.7935E-001	-2.3231E-001		
Eu-154	123.07	40.50	9.3496E-001	3.15E-001	-1.5960E-001
	247.94	6.60	3.0579E+000		-1.6611E+000
	591.81	4.83	3.0507E+000		1.4951E-002
	723.30	19.70	7.6258E-001		4.5724E-001
	756.87	4.33	3.1981E+000		-7.9006E-001
	873.19	11.50	1.0832E+000		-4.1054E-001
	996.32	10.30	1.2294E+000		6.0316E-001
	1004.76	17.90	6.7711E-001		-4.9691E-001
1274.45	35.50	3.1524E-001	6.9014E-002		
Eu-155	86.54	30.90	2.2960E+000	2.29E+000	4.3970E-001
	105.31	20.70	2.2901E+000		-1.9944E+000
Am-241	59.54	35.90	4.5538E+000	4.55E+000	3.4784E+000
Cm-243	228.19	10.56	2.0751E+000	1.40E+000	-4.3812E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.3977E+000	1.40E+000	1.8402E-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 7/27/2006 10:08:49 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-147-F-

Sample Title: OOL-10-04-147-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 9:58:45 AM

Live Time: 600.0 seconds

Real Time: 601.8 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-147-F-
Title: OOL-10-04-147-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 12 peaks with their respective parameters.

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	2.63383E-001	1.08030E-001
K-40	0.968	1460.81*	10.67	1.70745E+001	1.85919E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	1.21937E+000	5.09956E-001
		583.14*	84.20	3.86857E-001	1.14640E-001
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	2.38055E+001	5.38880E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.402	238.63*	44.60	7.89091E-001	2.75056E-001
		609.31*	46.30	6.55789E-001	2.05811E-001
		1120.29	15.10		
PB-214	0.620	1764.49	15.80		
		74.82* @	6.21	4.10176E+001	9.75080E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
Ac-228	0.631	295.21*	19.20	5.64316E-001	4.18346E-001
		351.92*	37.20	6.67900E-001	2.99568E-001
		338.32	11.40		
		911.07*	27.70	7.59112E-001	2.62799E-001
		969.11*	16.60	8.90000E-001	6.29864E-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	1.798224E-001	1.107981E-001
K-40	0.968	1.707450E+001	1.859191E+000
TL-208	0.752	3.868570E-001	1.139451E-001
Pb-212 @	0.580	7.890910E-001	2.750557E-001
Bi-214	0.402	6.557886E-001	2.058109E-001
PB-214 @	0.620	6.327895E-001	2.435622E-001
Ac-228	0.631	7.785188E-001	2.425349E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	7.5727E-001	16.14
11	1333.40	1.2458E-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: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	1.25E-001	7.2435E-002
	1332.49	100.00	1.2543E-001		1.3693E-001
Nb-94	702.63	100.00	1.3026E-001	1.28E-001	-1.2625E-001
	871.10	100.00	1.2832E-001		1.2938E-002
Ag-108m	79.20	7.10	1.2014E+001	1.58E-001	-1.8685E+001
	433.93	89.90	1.7572E-001		-8.9009E-002
	614.37	90.40	1.8397E-001		2.5002E-002
	722.95	90.50	1.5781E-001		3.0319E-002
Sb-125	176.33	6.89	3.5166E+000	5.41E-001	1.6441E+000
	427.89	29.33	5.4057E-001		6.1373E-002
	463.38	10.35	1.4991E+000		4.4563E-001
	600.56	17.80	8.6661E-001		2.9734E-001
	606.64	5.02	3.5836E+000		-5.9493E-001
	635.90	11.32	1.2548E+000		-1.4019E-002
Cs-134	563.23	8.38	1.7646E+000	1.53E-001	2.6271E-001
	569.32	15.43	9.3379E-001		2.6918E-002
	604.70	97.60	1.7065E-001		-1.0470E-001
	795.84	85.40	1.5306E-001		-1.2468E-004
	801.93	8.73	1.4775E+000		9.2189E-002
Cs-137	661.65	85.12	1.6964E-001	1.70E-001	2.2331E-001
Eu-152	121.78	28.40	1.3377E+000	4.32E-001	5.4745E-001
	244.69	7.49	2.7942E+000		1.6185E+000
	344.27	26.50	6.2116E-001		7.8186E-003
	778.89	12.74	1.0630E+000		1.0562E-001
	867.32	4.16	3.1144E+000		-1.4779E+000
	964.01	14.40	1.0434E+000		2.0903E-001
	1085.78	10.00	1.2966E+000		1.7377E+000
	1112.02	13.30	8.3363E-001		-2.2181E-001
	1407.95	20.70	4.3250E-001		5.6706E-002
Eu-154	123.07	40.50	9.2380E-001	2.99E-001	-3.4765E-001
	247.94	6.60	3.0301E+000		1.6655E-002
	591.81	4.83	2.9999E+000		-1.0668E+000
	723.30	19.70	7.2649E-001		9.5388E-002
	756.87	4.33	3.0292E+000		2.3065E+000
	873.19	11.50	1.1075E+000		-4.6477E-001
	996.32	10.30	1.1895E+000		-9.0032E-001
	1004.76	17.90	6.5296E-001		-1.5598E-001
	1274.45	35.50	2.9892E-001		-3.1569E-001
Eu-155	86.54	30.90	2.3149E+000	2.30E+000	3.7015E+000
	105.31	20.70	2.3050E+000		9.9005E-002
Am-241	59.54	35.90	4.4549E+000	4.45E+000	-2.4734E-001
Cm-243	228.19	10.56	2.1082E+000	1.37E+000	6.9936E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.3688E+000	1.37E+000	8.9350E-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 7/27/2006 9:53:41 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-148-F-

Sample Title: OOL-10-04-148-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 9:43:35 AM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-148-F-
Title: OOL-10-04-148-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	285-	306	291.32	72.92	1.25	4.86E+002	74.89	1.97E+003
m	2	285-	306	299.96	75.08	1.25	9.74E+002	86.03	2.83E+003
	3	332-	345	339.43	84.95	0.55	3.80E+002	156.90	2.19E+003
	4	946-	960	954.42	238.70	0.74	1.75E+002	80.06	5.19E+002
	5	1400-	1413	1407.95	352.09	0.95	7.23E+001	53.71	2.47E+002
	6	2322-	2340	2332.40	583.22	1.55	1.54E+002	45.49	1.14E+002
	7	2427-	2447	2436.70	609.29	1.65	1.43E+002	47.23	1.21E+002
	8	5323-	5337	5331.16	1332.95	0.92	5.20E+001	20.52	2.00E+001
	9	5833-	5860	5846.66	1461.84	1.82	7.97E+002	57.39	1.36E+001
	10	6351-	6364	6357.72	1589.61	0.78	1.30E+001	11.14	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
K-40	0.960	1460.81*	10.67	1.69197E+001	1.83282E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.25837E-001	1.05151E-001
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.16649E+001	6.80783E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.44792E-001	2.63913E-001
Bi-214	0.402	609.31*	46.30	5.59368E-001	1.96691E-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	0.960	1.691970E+001	1.832818E+000
TL-208	0.472	3.258367E-001	1.051506E-001
Pb-212 @	0.580	5.447918E-001	2.639135E-001
Bi-214	0.402	5.593678E-001	1.966907E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	72.92	8.0989E-001	15.41
3	84.95	6.3335E-001	41.29
5	352.09	1.2049E-001	74.29
8	1332.95	8.6725E-002	39.43
10	1589.61	2.1667E-002	85.66

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: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	1.3139E-001	1.14E-001	9.0728E-002
	1332.49	100.00	1.1423E-001		1.3359E-001
Nb-94	702.63	100.00	1.2965E-001	1.21E-001	3.0261E-002
	871.10	100.00	1.2129E-001		8.6830E-002
Ag-108m	79.20	7.10	1.1508E+001	1.53E-001	-1.2337E+001
	433.93	89.90	1.6986E-001		-2.6593E-002
	614.37	90.40	1.7447E-001		-1.0249E-001
	722.95	90.50	1.5340E-001		2.8753E-002
Sb-125	176.33	6.89	3.1754E+000	5.23E-001	-1.9251E+000
	427.89	29.33	5.2348E-001		-1.1261E-001
	463.38	10.35	1.4586E+000		6.6193E-001
	600.56	17.80	7.8503E-001		-3.2509E-001
	606.64	5.02	3.3813E+000		1.2881E+000
	635.90	11.32	1.1776E+000		-2.6361E-001
Cs-134	563.23	8.38	1.7221E+000	1.41E-001	1.4023E-002
	569.32	15.43	9.2272E-001		5.2686E-001
	604.70	97.60	1.5816E-001		8.9900E-002
	795.84	85.40	1.4087E-001		5.1250E-002
Cs-137	801.93	8.73	1.3683E+000	1.65E-001	-3.0722E-001
	661.65	85.12	1.6519E-001		5.8069E-002
Eu-152	121.78	28.40	1.2156E+000	4.10E-001	1.6145E-001
	244.69	7.49	2.6089E+000		3.1657E-002
	344.27	26.50	6.0568E-001		-7.4975E-001
	778.89	12.74	9.7743E-001		-1.4181E-001
	867.32	4.16	2.9128E+000		-4.4448E+000
	964.01	14.40	9.8265E-001		-9.4389E-001
	1085.78	10.00	1.1714E+000		-3.5608E-001
	1112.02	13.30	9.5126E-001		5.5740E-001
Eu-154	1407.95	20.70	4.1016E-001	3.04E-001	-1.9097E-002
	123.07	40.50	8.4958E-001		1.5722E-001
	247.94	6.60	2.9192E+000		-4.0953E-002
	591.81	4.83	2.9325E+000		1.5217E+000
	723.30	19.70	7.0773E-001		3.5436E-001
	756.87	4.33	2.9781E+000		1.9336E+000
	873.19	11.50	1.0101E+000		-2.1345E-001
	996.32	10.30	1.1171E+000		6.9394E-001
Eu-155	1004.76	17.90	6.7711E-001	2.13E+000	1.7486E-001
	1274.45	35.50	3.0446E-001		1.3410E-001
	86.54	30.90	2.1831E+000		-8.0938E-002
Am-241	105.31	20.70	2.1310E+000	4.28E+000	1.0509E+000
	59.54	35.90	4.2752E+000		-6.5366E-001
Cm-243	228.19	10.56	1.8782E+000	1.29E+000	-5.8469E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.2875E+000	1.29E+000	1.9802E-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 7/26/2006 9:54:02 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-140-F-

Sample Title: OOL-10-04-149-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 9:44:00 PM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-140-F-
 Title: OOL-10-04-149-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	284-	306	290.92	72.82	1.00	4.38E+002	71.52	1.98E+003
m	2	284-	306	299.61	74.99	1.01	7.03E+002	80.79	2.56E+003
	3	332-	344	339.32	84.92	0.87	2.85E+002	151.98	2.17E+003
	4	947-	959	953.04	238.36	1.10	2.32E+002	72.56	4.32E+002
	5	1389-	1413	1403.92	351.09	0.98	9.10E+001	79.55	3.74E+002
	6	1699-	1709	1704.10	426.13	1.05	4.66E+001	32.02	9.24E+001
	7	2033-	2050	2039.88	510.09	1.55	1.66E+002	45.84	1.17E+002
	8	2320-	2338	2327.95	582.11	0.99	1.60E+002	44.94	1.06E+002
	9	2425-	2440	2432.33	608.20	1.25	1.11E+002	38.17	8.85E+001
	10	3629-	3648	3637.80	909.59	1.15	8.66E+001	34.23	6.24E+001
	11	3864-	3880	3870.52	967.77	0.73	6.65E+001	30.97	5.85E+001
	12	5316-	5333	5324.34	1331.25	0.83	4.87E+001	22.48	2.53E+001
	13	5824-	5850	5835.98	1459.17	1.62	7.49E+002	56.59	1.96E+001
	14	7043-	7057	7050.20	1762.74	0.37	3.91E+001	13.08	1.85E+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	0.968	511.00*	100.00	2.82747E-001	8.71114E-002
K-40	0.901	1460.81*	10.67	1.58885E+001	1.75893E+000
TL-208	0.722	277.35	6.80		
		510.84*	21.60	1.30902E+000	4.17222E-001
		583.14*	84.20	3.37877E-001	1.04705E-001
		860.37	12.46		
Pb-212	0.579	74.81* @	10.70	2.29550E+001	5.21503E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.644	238.63*	44.60	7.22769E-001	2.53037E-001
		609.31*	46.30	4.34583E-001	1.58155E-001
Ac-228	0.574	1120.29	15.10		
		1764.49*	15.80	6.10138E-001	2.12786E-001
		338.32	11.40		
		911.07*	27.70	6.21728E-001	2.56037E-001
		969.11*	16.60	8.07121E-001	3.85284E-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	0.968	2.097660E-001	8.996801E-002
K-40	0.901	1.588846E+001	1.758930E+000
TL-208	0.722	3.378769E-001	1.041244E-001
Pb-212 @	0.579	7.227695E-001	2.530367E-001
Bi-214	0.644	4.970541E-001	1.269337E-001
Ac-228	0.574	6.785195E-001	2.132444E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	7.2939E-001	16.34
3	84.92	4.7492E-001	53.34
5	351.09	1.5167E-001	87.42
6	426.13	7.7743E-002	68.64
12	1331.25	8.1137E-002	46.18

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: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	1.12E-001	-1.4809E-001
	1332.49	100.00	1.1233E-001		1.9017E-001
Nb-94	702.63	100.00	1.2717E-001	1.24E-001	-2.9601E-002
	871.10	100.00	1.2415E-001		-5.3074E-002
Ag-108m	79.20	7.10	1.1813E+001	1.49E-001	-6.8863E+000
	433.93	89.90	1.5630E-001		1.0402E-001
	614.37	90.40	1.4920E-001		2.3674E-002
	722.95	90.50	1.4984E-001		1.0692E-001
Sb-125	176.33	6.89	3.3809E+000	5.03E-001	9.2545E-001
	427.89	29.33	5.0311E-001		-2.2737E-001
	463.38	10.35	1.2611E+000		-9.6405E-002
	600.56	17.80	7.2431E-001		-1.7536E-001
	606.64	5.02	3.2155E+000		3.9421E+000
	635.90	11.32	1.1053E+000		6.2000E-001
Cs-134	563.23	8.38	1.6814E+000	1.38E-001	8.4982E-001
	569.32	15.43	8.9358E-001		-1.1866E+000
	604.70	97.60	1.6453E-001		-1.7925E-002
	795.84	85.40	1.3839E-001		-9.3862E-002
Cs-137	801.93	8.73	1.2668E+000	1.59E-001	3.1025E-001
	661.65	85.12	1.5927E-001		7.4579E-002
Eu-152	121.78	28.40	1.2511E+000	4.23E-001	-6.9338E-002
	244.69	7.49	2.5202E+000		1.1757E+000
	344.27	26.50	5.7850E-001		3.5920E-001
	778.89	12.74	8.4431E-001		-1.3038E+000
	867.32	4.16	3.0237E+000		1.2657E+000
	964.01	14.40	1.0026E+000		-1.6682E-001
	1085.78	10.00	1.1548E+000		-5.1925E-001
	1112.02	13.30	8.4683E-001		-9.7501E-001
Eu-154	1407.95	20.70	4.2308E-001	3.09E-001	3.1035E-001
	123.07	40.50	8.7290E-001		1.3840E-001
	247.94	6.60	2.7372E+000		-5.0033E-001
	591.81	4.83	2.6452E+000		-4.4281E-001
	723.30	19.70	6.8844E-001		6.3595E-001
	756.87	4.33	2.7156E+000		3.0245E-001
	873.19	11.50	1.0489E+000		4.3088E-001
	996.32	10.30	1.0563E+000		1.6776E-001
Eu-155	1004.76	17.90	6.1605E-001	2.17E+000	2.6964E-001
	1274.45	35.50	3.0855E-001		-4.0791E-002
	86.54	30.90	2.1979E+000		-1.7211E-001
Am-241	105.31	20.70	2.1715E+000	4.29E+000	-2.6723E-001
	59.54	35.90	4.2870E+000		4.6020E-001
Cm-243	228.19	10.56	1.8752E+000	1.24E+000	3.3057E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.2429E+000	1.24E+000	6.9961E-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 7/26/2006 7:23:32 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-10-04-150-F-

Sample Title: OOL-10-04-150-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 7:13:29 PM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-150-F-
 Title: OOL-10-04-150-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-	306	290.66	72.75	0.99	4.85E+002	72.83	2.00E+003
m	2	284-	306	299.76	75.03	0.99	6.79E+002	80.98	2.47E+003
	3	332-	344	338.74	84.77	0.63	2.65E+002	149.99	2.11E+003
	4	944-	960	953.27	238.42	0.88	2.45E+002	87.55	5.58E+002
	5	1398-	1411	1405.99	351.60	1.09	1.40E+002	48.65	1.73E+002
	6	2031-	2046	2038.73	509.80	0.94	8.10E+001	50.48	1.94E+002
	7	2323-	2339	2328.81	582.32	0.96	1.35E+002	40.77	9.45E+001
	8	2425-	2439	2433.30	608.45	0.86	1.10E+002	39.24	1.01E+002
	9	3630-	3650	3639.43	910.00	1.37	1.20E+002	35.03	5.50E+001
	10	3861-	3879	3869.72	967.57	1.04	8.16E+001	31.95	5.44E+001
	11	4468-	4484	4475.71	1119.08	1.30	6.35E+001	25.91	3.55E+001
	12	5317-	5331	5324.42	1331.27	0.88	3.78E+001	20.89	2.63E+001
	13	5824-	5850	5837.58	1459.57	2.03	8.66E+002	59.13	1.01E+001
	14	7045-	7060	7051.87	1763.16	0.63	4.14E+001	17.05	1.06E+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: 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	0.946	511.00*	100.00	1.38117E-001	8.81362E-002
K-40	0.942	1460.81*	10.67	1.83595E+001	1.94454E+000
TL-208	0.728	277.35	6.80		
		510.84*	21.60	6.39432E-001	4.11366E-001
		583.14*	84.20	2.84349E-001	9.38116E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	2.21174E+001	5.07523E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.958	238.63*	44.60	7.64583E-001	2.98174E-001
		609.31*	46.30	4.27963E-001	1.61842E-001
		1120.29*	15.10	8.73628E-001	3.68200E-001
Ac-228	0.587	1764.49*	15.80	6.45017E-001	2.73414E-001
		338.32	11.40		
		911.07*	27.70	8.61315E-001	2.70437E-001
		969.11*	16.60	9.89797E-001	4.01417E-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	0.946	7.669797E-002	9.041342E-002
K-40	0.942	1.835948E+001	1.944536E+000
TL-208	0.728	2.843485E-001	9.335282E-002
Pb-212 @	0.580	7.645834E-001	2.981741E-001
Bi-214	0.958	5.330143E-001	1.302642E-001
Ac-228	0.587	9.014248E-001	2.242858E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	8.0761E-001	15.03
3	84.77	4.4182E-001	56.58
5	351.60	2.3310E-001	34.79
12	1331.27	6.2917E-002	55.33

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: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	1.2478E-001	1.12E-001	-2.1496E-002
	1332.49	100.00	1.1233E-001		8.0937E-002
Nb-94	702.63	100.00	1.3796E-001	1.29E-001	4.3552E-002
	871.10	100.00	1.2866E-001		-4.1923E-002
Ag-108m	79.20	7.10	1.1920E+001	1.45E-001	6.3264E+000
	433.93	89.90	1.5037E-001		-1.1244E-001
	614.37	90.40	1.4491E-001		-8.2303E-002
	722.95	90.50	1.4619E-001		1.3571E-002
Sb-125	176.33	6.89	3.4116E+000	4.86E-001	3.8829E+000
	427.89	29.33	4.8605E-001		7.9397E-002
	463.38	10.35	1.3445E+000		-7.7432E-002
	600.56	17.80	7.5379E-001		-3.3491E-001
	606.64	5.02	3.2245E+000		3.0808E+000
	635.90	11.32	1.1650E+000		7.4301E-001
Cs-134	563.23	8.38	1.6092E+000	1.58E-001	6.6130E-001
	569.32	15.43	8.8863E-001		1.4223E-001
	604.70	97.60	1.6818E-001		-1.3288E-002
	795.84	85.40	1.5751E-001		5.0885E-002
Cs-137	801.93	8.73	1.3723E+000	1.48E-001	-3.8186E-001
	661.65	85.12	1.4815E-001		5.9029E-002
Eu-152	121.78	28.40	1.2683E+000	3.72E-001	-3.0560E-001
	244.69	7.49	2.5807E+000		-1.2196E+000
	344.27	26.50	5.9656E-001		9.8481E-002
	778.89	12.74	1.0008E+000		-1.6123E-001
	867.32	4.16	3.0487E+000		-3.9191E-001
	964.01	14.40	1.0286E+000		5.8215E-002
	1085.78	10.00	1.1421E+000		-9.7376E-002
	1112.02	13.30	8.9756E-001		-6.4498E-001
1407.95	20.70	3.7213E-001	-2.3710E-001		
Eu-154	123.07	40.50	8.8184E-001	3.02E-001	-1.2924E-001
	247.94	6.60	2.8831E+000		-1.7625E+000
	591.81	4.83	2.7816E+000		1.7393E+000
	723.30	19.70	6.7474E-001		4.2912E-002
	756.87	4.33	3.0509E+000		1.9869E+000
	873.19	11.50	1.1370E+000		-1.6253E-001
Eu-155	996.32	10.30	1.1747E+000	2.17E+000	6.8860E-001
	1004.76	17.90	6.4394E-001		3.9054E-001
	1274.45	35.50	3.0171E-001		2.8000E-001
	86.54	30.90	2.1788E+000		-4.1674E-002
Am-241	105.31	20.70	2.1657E+000	4.25E+000	-6.7587E-001
	59.54	35.90	4.2523E+000		-1.4607E+000
Cm-243	228.19	10.56	1.9438E+000	1.26E+000	8.2761E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.2645E+000	1.26E+000	-1.6804E-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 7/26/2006 7:08:24 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-151-F-

Sample Title: OOL-10-04-151-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 6:58:21 PM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-151-F-
 Title: OOL-10-04-151-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	287-	306	291.05	72.85	0.93	3.78E+002	70.11	1.55E+003
m	2	287-	306	299.51	74.97	0.93	7.36E+002	80.79	2.38E+003
	3	331-	345	338.70	84.76	0.94	2.48E+002	169.05	2.49E+003
	4	944-	959	953.06	238.36	1.31	2.21E+002	84.34	5.43E+002
	5	1399-	1413	1404.51	351.23	0.91	1.19E+002	52.91	2.11E+002
	6	2030-	2051	2040.94	510.35	0.83	1.80E+002	55.10	1.62E+002
	7	2322-	2336	2328.95	582.36	0.94	9.65E+001	40.48	1.15E+002
	8	2428-	2438	2432.74	608.31	1.35	9.56E+001	33.31	8.04E+001
	9	3630-	3650	3640.27	910.21	0.62	1.28E+002	36.64	6.06E+001
M	10	3849-	3878	3854.44	963.75	0.99	2.99E+001	14.88	4.02E+001
m	11	3849-	3878	3871.35	967.98	0.99	6.31E+001	20.22	5.54E+001
	12	5317-	5334	5325.35	1331.50	0.35	5.66E+001	20.82	1.74E+001
	13	5824-	5850	5837.77	1459.61	1.65	8.24E+002	60.19	2.71E+001
	14	7046-	7059	7052.47	1763.31	0.42	3.53E+001	13.32	3.69E+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: 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	0.984	511.00*	100.00	3.06521E-001	1.02804E-001
K-40	0.946	1460.81*	10.67	1.74693E+001	1.90497E+000
TL-208	0.735	277.35	6.80		
		510.84*	21.60	1.41908E+000	4.89850E-001
		583.14*	84.20	2.03936E-001	8.96143E-002
		860.37	12.46		
Pb-212	0.579	74.81* @	10.70	2.40637E+001	5.40492E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.661	238.63*	44.60	6.88051E-001	2.84243E-001
		609.31*	46.30	3.72524E-001	1.37758E-001
		1120.29	15.10		
Ac-228	0.606	1764.49*	15.80	5.50388E-001	2.14866E-001
		338.32	11.40		
		911.07*	27.70	9.22269E-001	2.83735E-001
		969.11*	16.60	7.65337E-001	2.58243E-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	0.984	2.624710E-001	1.046005E-001
K-40	0.946	1.746926E+001	1.904973E+000
TL-208	0.735	2.039360E-001	8.936747E-002
Pb-212 @	0.579	6.880506E-001	2.842430E-001
Bi-214	0.661	4.243377E-001	1.159700E-001
Ac-228	0.606	8.364380E-001	1.909830E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	6.2958E-001	18.56
3	84.76	4.1294E-001	68.23
5	351.23	1.9848E-001	44.43
M 10	963.75	4.9885E-002	49.72
12	1331.50	9.4392E-002	36.76

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	1.1607E-001	1.09E-001	-3.6463E-002
	1332.49	100.00	1.0941E-001		9.1053E-002
Nb-94	702.63	100.00	1.3238E-001	1.20E-001	-1.5218E-002
	871.10	100.00	1.1983E-001		2.0208E-002
Ag-108m	79.20	7.10	1.1846E+001	1.46E-001	-3.6121E+000
	433.93	89.90	1.6900E-001		6.7322E-002
	614.37	90.40	1.4646E-001		-1.9361E-001
	722.95	90.50	1.5594E-001		2.5199E-002
Sb-125	176.33	6.89	3.3243E+000	4.98E-001	1.2744E+000
	427.89	29.33	4.9840E-001		-5.5628E-002
	463.38	10.35	1.3925E+000		2.2005E-001
	600.56	17.80	7.3062E-001		-1.4632E+000
	606.64	5.02	3.2155E+000		4.1644E+000
	635.90	11.32	1.1650E+000		5.1526E-002
Cs-134	563.23	8.38	1.6902E+000	1.52E-001	-8.1413E-002
	569.32	15.43	9.2112E-001		4.3412E-003
	604.70	97.60	1.6290E-001		-1.1883E-001
	795.84	85.40	1.5154E-001		1.5233E-001
	801.93	8.73	1.3143E+000		-2.0955E-001
Cs-137	661.65	85.12	1.6357E-001	1.64E-001	2.1166E-001
Eu-152	121.78	28.40	1.2544E+000	3.90E-001	3.0968E-001
	244.69	7.49	2.5400E+000		-1.5239E+000
	344.27	26.50	5.7850E-001		-7.7444E-002
	778.89	12.74	9.5074E-001		-9.6547E-001
	867.32	4.16	2.9128E+000		1.4464E+000
	964.01	14.40	1.0866E+000		-1.4653E-001
	1085.78	10.00	1.1797E+000		8.5744E-002
	1112.02	13.30	9.5126E-001		-9.7571E-001
1407.95	20.70	3.8991E-001	5.8785E-002		
Eu-154	123.07	40.50	8.7031E-001	2.99E-001	-2.9036E-001
	247.94	6.60	2.7897E+000		6.1588E-001
	591.81	4.83	2.9947E+000		7.0853E-001
	723.30	19.70	7.2364E-001		3.6312E-001
	756.87	4.33	3.0292E+000		-1.2126E+000
	873.19	11.50	1.0199E+000		-6.8852E-001
	996.32	10.30	1.1709E+000		5.2186E-001
	1004.76	17.90	7.0660E-001		3.2267E-001
1274.45	35.50	2.9892E-001	2.9976E-002		
Eu-155	86.54	30.90	2.1871E+000	2.19E+000	6.1769E-002
	105.31	20.70	2.1963E+000		1.5930E+000
Am-241	59.54	35.90	4.2212E+000	4.22E+000	-3.0599E+000
Cm-243	228.19	10.56	1.9342E+000	1.23E+000	-8.1285E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.2277E+000	1.23E+000	5.1533E-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 7/26/2006 2:15:51 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-10-04-152-F-

Sample Title: OOL-10-04-152-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 2:05:47 PM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

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

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-152-F-
 Title: OOL-10-04-152-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	272-	306	291.01	72.84	0.95	2.53E+002	60.03	1.69E+003
m	2	272-	306	299.81	75.04	0.95	5.29E+002	70.97	1.87E+003
M	3	333-	354	340.19	85.14	0.70	1.94E+002	59.25	1.25E+003
m	4	333-	354	349.65	87.50	0.70	9.90E+001	53.70	1.25E+003
	5	948-	959	953.09	238.37	0.91	2.14E+002	61.67	3.08E+002
	6	1348-	1355	1351.95	338.09	0.64	2.36E+001	29.70	1.02E+002
	7	1401-	1411	1405.70	351.53	0.84	9.78E+001	38.57	1.21E+002
	8	2030-	2049	2038.73	509.80	1.19	1.73E+002	49.37	1.32E+002
	9	2321-	2338	2330.32	582.70	0.90	1.11E+002	39.72	9.21E+001
	10	2425-	2441	2434.57	608.76	0.94	1.27E+002	39.25	8.71E+001
	11	2902-	2911	2906.10	726.65	0.29	2.15E+001	21.46	4.15E+001
	12	3172-	3181	3176.92	794.36	0.51	2.94E+001	19.64	3.06E+001
	13	3634-	3650	3641.60	910.54	1.25	1.15E+002	32.14	4.78E+001
	14	3863-	3881	3872.38	968.24	1.17	9.51E+001	30.54	4.39E+001
	15	4470-	4484	4476.56	1119.29	0.57	2.73E+001	25.21	4.77E+001
	16	5827-	5853	5840.60	1460.32	1.63	8.78E+002	62.78	3.37E+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: 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	0.946	511.00*	100.00	2.95399E-001	9.32724E-002
K-40	0.991	1460.81*	10.67	1.86274E+001	2.01173E+000
TL-208	0.741	277.35	6.80		
		510.84*	21.60	1.36759E+000	4.46026E-001
		583.14*	84.20	2.34476E-001	8.93751E-002
		860.37	12.46		
Bi-212	0.990	727.17*	11.80	3.45290E-001	3.46643E-001
Pb-212	0.726	74.81* @	10.70	1.72380E+001	4.09380E+000
		77.11 @	18.00		
		87.30* @	8.00	2.69725E+000	1.55633E+000
		238.63*	44.60	6.68267E-001	2.18999E-001
Bi-214	0.693	609.31*	46.30	4.94847E-001	1.64746E-001
		1120.29*	15.10	3.76007E-001	3.49027E-001
		1764.49	15.80		
PB-214	0.302	74.82* @	6.21	2.97015E+001	7.37590E+000
		77.11 @	10.50		
		87.30* @	4.67	4.62056E+000	2.68885E+000
		241.98	7.49		
		295.21	19.20		
Ac-228	0.985	351.92*	37.20	4.01818E-001	1.72049E-001
		338.32*	11.40	3.13625E-001	3.97370E-001
		911.07*	27.70	8.27151E-001	2.49699E-001
		969.11*	16.60	1.15490E+000	3.89944E-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	0.946	2.447522E-001	9.523500E-002
K-40	0.991	1.862738E+001	2.011726E+000
TL-208	0.741	2.344758E-001	8.904785E-002
Bi-212	0.990	3.452901E-001	3.466433E-001
Pb-212 @	0.726	6.682675E-001	2.189986E-001
Bi-214	0.693	4.731936E-001	1.489833E-001
PB-214 @	0.302	4.018177E-001	1.705349E-001
Ac-228	0.985	7.892652E-001	1.858616E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	4.2190E-001	23.71
M 3	85.14	3.2292E-001	30.58
12	794.36	4.9042E-002	66.76

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	1.1988E-001	9.51E-002	-4.6918E-003
	1332.49	100.00	9.5113E-002		6.1947E-004
Nb-94	702.63	100.00	1.2432E-001	1.11E-001	1.3873E-002
	871.10	100.00	1.1105E-001		1.0588E-001
Ag-108m	79.20	7.10	1.0331E+001	1.36E-001	-2.5178E+000
	433.93	89.90	1.3853E-001		-4.8162E-002
	614.37	90.40	1.3623E-001		-4.3010E-002
	722.95	90.50	1.4140E-001		-8.3704E-002
Sb-125	176.33	6.89	2.8101E+000	4.24E-001	1.5421E+000
	427.89	29.33	4.2433E-001		6.4743E-002
	463.38	10.35	1.2542E+000		6.0530E-001
	600.56	17.80	7.0177E-001		-3.3523E-001
	606.64	5.02	3.1061E+000		6.0573E+000
	635.90	11.32	1.0249E+000		3.0844E-001
Cs-134	563.23	8.38	1.4083E+000	1.44E-001	1.0484E-001
	569.32	15.43	7.4198E-001		-1.6630E-001
	604.70	97.60	1.5983E-001		-1.4905E-002
	795.84	85.40	1.4372E-001		1.0757E-001
	801.93	8.73	1.3058E+000		-9.9522E-001
Cs-137	661.65	85.12	1.4375E-001	1.44E-001	-7.5713E-003
Eu-152	121.78	28.40	1.0990E+000	4.07E-001	-3.7151E-002
	244.69	7.49	2.2584E+000		-1.6120E+000
	344.27	26.50	5.1338E-001		-4.8755E-002
	778.89	12.74	9.2881E-001		2.4216E-001
	867.32	4.16	2.6860E+000		-7.9580E-001
	964.01	14.40	1.0286E+000		-1.5982E-001
	1085.78	10.00	1.0674E+000		-1.3413E-001
	1112.02	13.30	8.7574E-001		3.3832E-001
Eu-154	1407.95	20.70	4.0686E-001	2.79E-001	3.3049E-001
	123.07	40.50	7.6081E-001		-4.1457E-002
	247.94	6.60	2.5496E+000		1.0694E+000
	591.81	4.83	2.6857E+000		7.5092E-001
	723.30	19.70	6.4323E-001		3.5031E-001
	756.87	4.33	2.7876E+000		1.8024E+000
	873.19	11.50	9.3810E-001		2.2829E-001
	996.32	10.30	9.7344E-001		-6.3489E-001
Eu-155	1004.76	17.90	6.5519E-001	1.93E+000	5.2181E-001
	1274.45	35.50	2.7861E-001		-1.2939E-001
	86.54	30.90	1.9394E+000		8.9139E-002
Am-241	105.31	20.70	1.9341E+000	3.74E+000	1.3336E-001
	59.54	35.90	3.7378E+000		-2.2321E+000
Cm-243	228.19	10.56	1.6945E+000	1.03E+000	1.0685E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.0280E+000	1.03E+000	-2.2186E-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 7/26/2006 2:58:05 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-10-04-153-F-

Sample Title: OOL-10-04-153-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 2:48:02 PM

Live Time: 600.0 seconds

Real Time: 601.5 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-153-F-
 Title: OOL-10-04-153-F-G
 Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	304	291.34	72.92	0.94	3.79E+002	69.77	1.71E+003
m	2	286-	304	299.57	74.98	0.94	6.84E+002	81.01	2.30E+003
	3	334-	344	339.24	84.90	0.84	2.00E+002	133.87	1.86E+003
	4	948-	961	953.30	238.42	1.02	2.43E+002	76.83	4.63E+002
	5	1347-	1360	1351.29	337.93	0.95	6.30E+001	49.21	2.04E+002
	6	1400-	1414	1405.68	351.52	0.86	1.13E+002	54.50	2.29E+002
	7	2323-	2340	2329.44	582.48	1.29	1.62E+002	40.78	8.16E+001
	8	2428-	2443	2434.43	608.73	1.17	1.36E+002	40.72	9.84E+001
	9	2900-	2913	2906.10	726.65	0.55	4.84E+001	26.49	4.86E+001
	10	3631-	3650	3642.46	910.75	1.57	1.17E+002	38.99	7.96E+001
	11	5827-	5852	5840.82	1460.38	2.02	9.35E+002	62.87	2.24E+001
	12	7051-	7064	7057.84	1764.65	0.91	3.01E+001	14.29	7.86E+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: 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	0.993	1460.81*	10.67	1.98206E+001	2.08644E+000
TL-208	0.461	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.43287E-001	9.71240E-002
		860.37	12.46		
Bi-212	0.990	727.17*	11.80	7.76064E-001	4.34575E-001
Pb-212	0.580	74.81* @	10.70	2.23393E+001	5.11542E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.687	238.63*	44.60	7.58789E-001	2.67497E-001
		609.31*	46.30	5.28660E-001	1.71646E-001
		1120.29	15.10		
Ac-228	0.536	1764.49*	15.80	4.69964E-001	2.27665E-001
		338.32*	11.40	8.36495E-001	6.66283E-001
		911.07*	27.70	8.43486E-001	2.96361E-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: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	0.993	1.982057E+001	2.086444E+000
TL-208	0.461	3.432874E-001	9.712400E-002
Bi-212	0.990	7.760643E-001	4.345754E-001
Pb-212 @	0.580	7.587886E-001	2.674973E-001
Bi-214	0.687	5.073873E-001	1.370570E-001
Ac-228	0.536	8.423310E-001	2.707828E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	72.92	6.3111E-001	18.42
3	84.90	3.3345E-001	66.91
6	351.52	1.8789E-001	48.34

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.2030E-001	1.07E-001	-2.4672E-002
	1332.49	100.00	1.0742E-001		1.2516E-001
Nb-94	702.63	100.00	1.3622E-001	1.18E-001	1.8232E-001
	871.10	100.00	1.1798E-001		3.9099E-002
Ag-108m	79.20	7.10	1.1772E+001	1.36E-001	-1.9917E+001
	433.93	89.90	1.4940E-001		6.2577E-002
	614.37	90.40	1.3557E-001		-7.0109E-002
	722.95	90.50	1.4619E-001		2.8029E-002
Sb-125	176.33	6.89	3.3533E+000	4.69E-001	6.6889E-002
	427.89	29.33	4.6906E-001		-1.5164E-001
	463.38	10.35	1.4028E+000		8.8920E-001
	600.56	17.80	7.5379E-001		5.1001E-001
	606.64	5.02	3.3212E+000		6.2068E+000
	635.90	11.32	1.0478E+000		-5.2115E-001
Cs-134	563.23	8.38	1.4604E+000	1.43E-001	-2.6253E-001
	569.32	15.43	8.4094E-001		4.4239E-001
	604.70	97.60	1.6886E-001		-3.9261E-002
	795.84	85.40	1.4332E-001		6.5968E-002
	801.93	8.73	1.2580E+000		-7.3253E-002
Cs-137	661.65	85.12	1.5589E-001	1.56E-001	5.3500E-002
Eu-152	121.78	28.40	1.2693E+000	4.54E-001	5.1163E-001
	244.69	7.49	2.6192E+000		-3.5859E-001
	344.27	26.50	5.7150E-001		2.9878E-001
	778.89	12.74	9.5344E-001		-3.1359E-001
	867.32	4.16	2.9301E+000		5.6904E-001
	964.01	14.40	1.0264E+000		9.1597E-001
	1085.78	10.00	1.1506E+000		-2.2461E-001
	1112.02	13.30	8.1683E-001		-3.4818E-001
1407.95	20.70	4.5366E-001	2.0432E-001		
Eu-154	123.07	40.50	8.7715E-001	2.95E-001	-3.0767E-003
	247.94	6.60	2.8657E+000		-2.4429E+000
	591.81	4.83	2.7761E+000		-5.0742E-001
	723.30	19.70	6.7628E-001		1.4266E-001
	756.87	4.33	2.6829E+000		-2.2565E-001
	873.19	11.50	9.9680E-001		-2.9220E-001
	996.32	10.30	1.1520E+000		-4.4401E-001
	1004.76	17.90	6.7278E-001		2.2718E-001
1274.45	35.50	2.9470E-001	-4.5446E-002		
Eu-155	86.54	30.90	2.2130E+000	2.21E+000	9.3415E-001
	105.31	20.70	2.2051E+000		1.3630E+000
Am-241	59.54	35.90	4.1492E+000	4.15E+000	-9.2637E-001
Cm-243	228.19	10.56	1.9216E+000	1.25E+000	-4.1460E-003

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.2523E+000	1.25E+000	4.4193E-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 7/26/2006 3:57:09 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-10-04-154-F-

Sample Title: OOL-10-04-154-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 3:47:06 PM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-154-F-
Title: OOL-10-04-154-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Rows 1-14 with peak data.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.966	511.00*	100.00	1.75959E-001	8.39764E-002
K-40	0.976	1460.81*	10.67	1.88644E+001	2.01051E+000
TL-208	0.742	277.35	6.80		
		510.84*	21.60	8.14623E-001	3.94431E-001
		583.14*	84.20	3.46097E-001	1.00612E-001
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	2.48447E+001	5.53059E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.681	238.63*	44.60	9.68889E-001	3.00976E-001
		609.31*	46.30	6.20239E-001	1.76256E-001
		1120.29	15.10		
PB-214	0.615	1764.49*	15.80	6.77230E-001	2.45040E-001
		74.82* @	6.21	4.28081E+001	1.00232E+001
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
Ac-228	0.613	295.21*	19.20	4.99769E-001	3.99685E-001
		351.92*	37.20	2.81354E-001	2.24936E-001
		338.32	11.40		
		911.07*	27.70	7.34305E-001	2.63349E-001
		969.11*	16.60	9.98606E-001	4.02632E-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	0.966	1.012017E-001	8.670865E-002
K-40	0.976	1.886442E+001	2.010506E+000
TL-208	0.742	3.460970E-001	9.997817E-002
Pb-212 @	0.580	9.688894E-001	3.009757E-001
Bi-214	0.681	6.396711E-001	1.430856E-001
PB-214 @	0.615	3.338916E-001	1.960248E-001
Ac-228	0.613	8.134964E-001	2.203927E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	8.4973E-001	14.22
3	84.79	3.4177E-001	63.92
12	1331.57	9.1124E-002	39.61

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: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	1.2154E-001	1.22E-001	-3.9154E-002
	1332.49	100.00	1.2284E-001		1.2751E-001
Nb-94	702.63	100.00	1.2841E-001	1.28E-001	-3.9579E-002
	871.10	100.00	1.3530E-001		7.9070E-002
Ag-108m	79.20	7.10	1.1637E+001	1.50E-001	-3.6141E+000
	433.93	89.90	1.5951E-001		-2.7139E-002
	614.37	90.40	1.5308E-001		-6.8018E-002
	722.95	90.50	1.4951E-001		-1.3212E-001
Sb-125	176.33	6.89	3.4014E+000	4.73E-001	1.2772E+000
	427.89	29.33	4.7337E-001		-1.3556E-001
	463.38	10.35	1.4349E+000		1.7394E+000
	600.56	17.80	7.4153E-001		5.2739E-001
	606.64	5.02	3.3126E+000		4.3261E+000
	635.90	11.32	1.1238E+000		-6.2555E-002
Cs-134	563.23	8.38	1.7164E+000	1.50E-001	6.2956E-001
	569.32	15.43	9.1150E-001		-4.4675E-001
	604.70	97.60	1.6682E-001		3.3750E-002
	795.84	85.40	1.5040E-001		-3.8446E-002
Cs-137	801.93	8.73	1.4510E+000	1.52E-001	-1.2879E-001
	661.65	85.12	1.5242E-001		1.8201E-002
Eu-152	121.78	28.40	1.2655E+000	4.32E-001	1.2009E-002
	244.69	7.49	2.6207E+000		-1.3677E-001
	344.27	26.50	5.9656E-001		-2.4676E-001
	778.89	12.74	9.6684E-001		-8.4653E-001
	867.32	4.16	3.1547E+000		1.8176E-001
	964.01	14.40	1.0947E+000		1.0205E-001
	1085.78	10.00	1.0720E+000		-8.4856E-001
	1112.02	13.30	8.7574E-001		-7.5130E-002
Eu-154	1407.95	20.70	4.3250E-001	2.95E-001	-8.2888E-002
	123.07	40.50	8.8003E-001		4.9561E-001
	247.94	6.60	2.9278E+000		2.7443E+000
	591.81	4.83	2.7482E+000		2.0703E+000
	723.30	19.70	6.8390E-001		-3.3722E-001
	756.87	4.33	3.0652E+000		1.9372E+000
	873.19	11.50	1.1486E+000		5.0075E-001
	996.32	10.30	1.1821E+000		-1.4433E+000
Eu-155	1004.76	17.90	6.7061E-001	2.17E+000	3.3464E-001
	1274.45	35.50	2.9470E-001		-2.2142E-001
	86.54	30.90	2.1675E+000		1.0937E+000
Am-241	105.31	20.70	2.1872E+000	4.25E+000	1.4077E+000
	59.54	35.90	4.2543E+000		1.5262E+000
Cm-243	228.19	10.56	1.9342E+000	1.27E+000	5.5558E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.2682E+000	1.27E+000	6.2021E-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 7/27/2006 12:34:31 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-155-F-

Sample Title: OOL-10-04-155-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 12:24:29 AM

Live Time: 600.0 seconds

Real Time: 601.0 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C SP E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: OOL-10-04-155-F-
Title: OOL-10-04-155-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	296-	306	300.53	75.09	1.04	1.54E+002	84.07	7.04E+002
2	948-	960	954.36	238.57	1.00	1.14E+002	45.86	1.63E+002
3	1398-	1417	1406.70	351.67	0.65	1.19E+002	38.50	7.64E+001
4	2323-	2339	2332.01	583.02	0.34	6.43E+001	26.92	3.97E+001
5	2429-	2444	2436.56	609.17	0.60	7.50E+001	27.40	4.00E+001
6	3634-	3652	3642.76	910.76	0.80	5.98E+001	25.72	3.33E+001
7	3866-	3881	3873.58	968.47	1.00	5.14E+001	18.81	1.36E+001
8	5830-	5853	5841.16	1460.43	2.14	3.96E+002	40.70	8.83E+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	0.995	1460.81*	10.67	9.00314E+000	1.17755E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.43536E-001	6.29177E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	5.96748E+000	3.46977E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.71861E-001	1.60647E-001
Bi-214	0.402	609.31*	46.30	3.09023E-001	1.19124E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.627	338.32	11.40		
		911.07*	27.70	4.54748E-001	2.02651E-001
		969.11*	16.60	6.64031E-001	2.52619E-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	0.995	9.003140E+000	1.177550E+000
TL-208	0.471	1.435359E-001	6.291774E-002
Pb-212 @	0.594	3.718608E-001	1.606473E-001
Bi-214	0.402	3.090230E-001	1.191244E-001
Ac-228	0.627	5.366925E-001	1.580738E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.67	1.9773E-001	32.45

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: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	8.6009E-002	7.40E-002	5.4578E-002
	1332.49	100.00	7.4004E-002		3.4591E-002
Nb-94	702.63	100.00	8.1125E-002	8.11E-002	1.1384E-002
	871.10	100.00	9.5659E-002		2.5192E-002
Ag-108m	79.20	7.10	9.5997E+000	1.06E-001	-1.0035E+001
	433.93	89.90	1.1838E-001		3.6236E-002
	614.37	90.40	1.3374E-001		-2.9314E-002
	722.95	90.50	1.0628E-001		4.2887E-002
Sb-125	176.33	6.89	2.4956E+000	3.69E-001	-9.9296E-001
	427.89	29.33	3.6935E-001		-7.3374E-003
	463.38	10.35	1.0425E+000		8.6125E-001
	600.56	17.80	5.2261E-001		8.0421E-002
	606.64	5.02	2.4649E+000		2.9656E+000
	635.90	11.32	8.5384E-001		-9.3853E-002
Cs-134	563.23	8.38	1.1943E+000	9.56E-002	3.0281E-001
	569.32	15.43	6.6613E-001		-1.6019E-001
	604.70	97.60	1.2562E-001		-3.0187E-002
	795.84	85.40	9.5597E-002		-1.5562E-002
	801.93	8.73	9.1604E-001		-1.3257E+000
Cs-137	661.65	85.12	1.1024E-001	1.10E-001	-4.7618E-002
Eu-152	121.78	28.40	9.7294E-001	3.46E-001	1.1952E-001
	244.69	7.49	1.9657E+000		-4.7644E-001
	344.27	26.50	4.1595E-001		-4.7844E-001
	778.89	12.74	6.6942E-001		-1.0303E+000
	867.32	4.16	2.1408E+000		-2.7013E+000
	964.01	14.40	7.8183E-001		-1.3677E-001
	1085.78	10.00	7.6443E-001		3.6391E-001
	1112.02	13.30	6.8657E-001		-2.3463E-001
1407.95	20.70	3.4561E-001	-3.4922E-003		
Eu-154	123.07	40.50	6.6782E-001	2.39E-001	-2.0910E-001
	247.94	6.60	2.0740E+000		-1.1626E+000
	591.81	4.83	1.9072E+000		3.0688E-001
	723.30	19.70	4.8095E-001		-1.0244E-001
	756.87	4.33	2.0938E+000		1.5675E-001
	873.19	11.50	8.3226E-001		4.4922E-001
	996.32	10.30	7.2539E-001		-8.8422E-002
	1004.76	17.90	4.7203E-001		5.0736E-002
1274.45	35.50	2.3918E-001	1.7303E-002		
Eu-155	86.54	30.90	1.6936E+000	1.68E+000	2.3422E+000
	105.31	20.70	1.6764E+000		-4.6629E-001
Am-241	59.54	35.90	4.5014E+000	4.50E+000	-2.9054E+000
Cm-243	228.19	10.56	1.3512E+000	9.08E-001	1.3638E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.0833E-001	9.08E-001	3.0889E-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 7/27/2006 12:20:47 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-10-04-156-F-

Sample Title: OOL-10-04-156-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 12:10:45 AM

Live Time: 600.0 seconds

Real Time: 601.1 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-156-F-
Title: OOL-10-04-156-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	294-	309	300.49	75.08	1.42	3.30E+002	114.82	1.02E+003
2	947-	961	953.62	238.38	0.60	9.66E+001	47.21	1.67E+002
3	1402-	1414	1406.97	351.74	0.82	5.92E+001	31.55	7.58E+001
4	2324-	2338	2330.42	582.63	1.40	6.14E+001	24.63	3.36E+001
5	2428-	2444	2435.91	609.00	1.31	9.04E+001	27.85	3.56E+001
6	3633-	3649	3641.20	910.37	0.82	5.58E+001	20.58	1.72E+001
7	5829-	5852	5841.50	1460.51	1.87	2.49E+002	33.67	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	0.997	1460.81*	10.67	5.66800E+000	8.92305E-001
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.37044E-001	5.77942E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.28455E+001	5.12458E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.15325E-001	1.61784E-001
Bi-214	0.401	609.31*	46.30	3.72404E-001	1.23557E-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	0.997	5.667998E+000	8.923052E-001
TL-208	0.466	1.370440E-001	5.779421E-002
Pb-212 @	0.593	3.153245E-001	1.617842E-001
Bi-214	0.401	3.724044E-001	1.235566E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.74	9.8593E-002	53.33
6	910.37	9.3019E-002	36.88

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: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	8.3204E-002	8.16E-002	3.5079E-003
	1332.49	100.00	8.1587E-002		3.0676E-002
Nb-94	702.63	100.00	9.4138E-002	8.57E-002	6.5398E-002
	871.10	100.00	8.5686E-002		2.6760E-002
Ag-108m	79.20	7.10	9.9742E+000	1.07E-001	-2.5998E+000
	433.93	89.90	1.0876E-001		5.6063E-002
	614.37	90.40	1.3260E-001		-1.1192E-002
	722.95	90.50	1.0733E-001		9.9953E-002
Sb-125	176.33	6.89	2.4904E+000	3.21E-001	1.0295E-001
	427.89	29.33	3.2137E-001		-1.6371E-001
	463.38	10.35	8.5327E-001		-2.9527E-001
	600.56	17.80	5.6562E-001		-1.6880E-001
	606.64	5.02	2.5556E+000		3.6624E+000
	635.90	11.32	7.3538E-001		-5.8489E-002
Cs-134	563.23	8.38	1.1753E+000	1.06E-001	-5.3460E-001
	569.32	15.43	6.4327E-001		2.0839E-001
	604.70	97.60	1.3195E-001		3.3406E-003
	795.84	85.40	1.0612E-001		8.1374E-002
	801.93	8.73	9.5698E-001		-3.4272E-001
Cs-137	661.65	85.12	1.0686E-001	1.07E-001	3.4824E-002
Eu-152	121.78	28.40	9.4648E-001	3.06E-001	-7.3932E-002
	244.69	7.49	1.8100E+000		-5.5906E-001
	344.27	26.50	4.1203E-001		-6.0300E-001
	778.89	12.74	6.7382E-001		-5.7235E-002
	867.32	4.16	2.0004E+000		-1.3873E+000
	964.01	14.40	7.5221E-001		5.4696E-001
	1085.78	10.00	8.1508E-001		-6.9832E-001
	1112.02	13.30	6.4766E-001		-7.1347E-001
1407.95	20.70	3.0616E-001	2.1396E-001		
Eu-154	123.07	40.50	6.5610E-001	2.17E-001	4.6091E-002
	247.94	6.60	1.9673E+000		-1.3744E-001
	591.81	4.83	2.0571E+000		2.0398E+000
	723.30	19.70	4.8585E-001		8.5502E-002
	756.87	4.33	2.0818E+000		1.2863E+000
	873.19	11.50	7.5060E-001		-5.1274E-001
	996.32	10.30	8.3088E-001		-1.5922E-001
	1004.76	17.90	4.6477E-001		1.6935E-001
1274.45	35.50	2.1720E-001	1.2432E-002		
Eu-155	86.54	30.90	1.6809E+000	1.68E+000	-7.4845E-002
	105.31	20.70	1.6775E+000		5.9288E-001
Am-241	59.54	35.90	4.6687E+000	4.67E+000	-6.0031E+000
Cm-243	228.19	10.56	1.3830E+000	8.79E-001	8.0359E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.7921E-001	8.79E-001	-3.1958E-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 7/26/2006 10:50:08 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-157-F-

Sample Title: OOL-10-04-157-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 10:40:06 PM

Live Time: 600.0 seconds

Real Time: 600.6 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C SP E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: OOL-10-04-157-F-
Title: OOL-10-04-157-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	295-	307	300.22	75.01	0.56	2.21E+002	95.51	8.15E+002
2	947-	963	954.43	238.59	0.82	1.10E+002	55.81	2.23E+002
3	1400-	1412	1406.37	351.58	1.70	8.86E+001	34.00	7.84E+001
4	2322-	2336	2328.50	582.15	1.70	6.78E+001	30.26	5.92E+001
5	2426-	2442	2434.25	608.59	1.41	1.02E+002	31.78	5.12E+001
6	3631-	3647	3639.67	909.98	0.91	5.08E+001	25.14	3.62E+001
7	5827-	5850	5837.90	1459.61	1.78	4.37E+002	42.56	8.73E+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	0.954	1460.81*	10.67	9.93560E+000	1.25794E+000
TL-208	0.450	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.51158E-001	7.03253E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	8.62679E+000	4.09021E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.58073E-001	1.90631E-001
Bi-214	0.392	609.31*	46.30	4.19172E-001	1.40709E-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	0.954	9.935605E+000	1.257942E+000
TL-208	0.450	1.511577E-001	7.032529E-002
Pb-212 @	0.594	3.580726E-001	1.906309E-001
Bi-214	0.392	4.191724E-001	1.407089E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.58	1.4761E-001	38.39
6	909.98	8.4612E-002	49.51

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.0227E-001	8.85E-002	-3.5302E-003
	1332.49	100.00	8.8473E-002		3.7135E-002
Nb-94	702.63	100.00	9.9749E-002	9.72E-002	1.7115E-002
	871.10	100.00	9.7215E-002		-6.6687E-003
Ag-108m	79.20	7.10	9.6268E+000	1.18E-001	-1.1993E+001
	433.93	89.90	1.2108E-001		-9.0724E-002
	614.37	90.40	1.3450E-001		7.2435E-003
	722.95	90.50	1.1823E-001		1.0826E-001
Sb-125	176.33	6.89	2.6109E+000	3.80E-001	1.7156E+000
	427.89	29.33	3.8036E-001		-1.8345E-001
	463.38	10.35	1.1416E+000		-4.2683E-001
	600.56	17.80	5.8367E-001		-5.1313E-001
	606.64	5.02	2.7511E+000		3.4153E+000
	635.90	11.32	8.0534E-001		-7.5248E-001
Cs-134	563.23	8.38	1.3355E+000	1.15E-001	-3.5945E-001
	569.32	15.43	6.8819E-001		-8.3235E-001
	604.70	97.60	1.4225E-001		-6.4827E-003
	795.84	85.40	1.1506E-001		3.0287E-002
	801.93	8.73	1.0875E+000		1.3490E-001
Cs-137	661.65	85.12	1.2901E-001	1.29E-001	5.3963E-002
Eu-152	121.78	28.40	9.6809E-001	3.31E-001	-1.5516E-001
	244.69	7.49	1.9743E+000		-6.4294E-001
	344.27	26.50	4.3406E-001		-7.3801E-001
	778.89	12.74	7.9009E-001		2.9533E-002
	867.32	4.16	2.3470E+000		-4.4088E-001
	964.01	14.40	7.5557E-001		-2.9181E-001
	1085.78	10.00	9.3796E-001		5.9918E-002
	1112.02	13.30	7.1877E-001		-7.9733E-001
1407.95	20.70	3.3143E-001	-4.3159E-002		
Eu-154	123.07	40.50	6.7054E-001	2.53E-001	2.4079E-001
	247.94	6.60	2.1084E+000		-1.0646E+000
	591.81	4.83	2.2356E+000		-7.9351E-001
	723.30	19.70	5.3886E-001		2.3120E-001
	756.87	4.33	2.2329E+000		-2.7832E-001
	873.19	11.50	8.5912E-001		1.1344E-001
	996.32	10.30	9.6646E-001		-7.2032E-001
	1004.76	17.90	5.4517E-001		-2.2748E-001
1274.45	35.50	2.5336E-001	1.2386E-001		
Eu-155	86.54	30.90	1.7080E+000	1.71E+000	2.4039E+000
	105.31	20.70	1.7177E+000		6.5991E-001
Am-241	59.54	35.90	3.8945E+000	3.89E+000	-7.4816E-001
Cm-243	228.19	10.56	1.4140E+000	9.65E-001	9.3397E-004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.6519E-001	9.65E-001	6.0845E-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 7/27/2006 10:41:22 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-158-F-

Sample Title: OOL-10-04-158-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 10:31:19 AM

Live Time: 600.0 seconds

Real Time: 601.4 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-158-F-
 Title: OOL-10-04-158-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	291-	306	300.90	75.18	1.52	5.77E+002	142.36	1.56E+003
2	335-	346	338.96	84.70	0.68	1.52E+002	106.02	1.10E+003
3	944-	961	954.67	238.64	1.54	1.64E+002	70.90	3.50E+002
4	2323-	2342	2332.20	583.07	1.17	8.92E+001	40.55	9.68E+001
5	2427-	2443	2435.40	608.88	1.55	6.49E+001	36.98	9.31E+001
6	2787-	2798	2792.55	698.17	0.74	1.42E+001	17.51	2.58E+001
7	3633-	3654	3643.32	910.89	1.20	9.82E+001	32.18	4.58E+001
8	3923-	3934	3928.81	982.28	0.82	2.02E+001	15.69	1.68E+001
9	4473-	4485	4479.76	1120.03	0.32	3.19E+001	20.40	2.91E+001
10	5321-	5336	5328.02	1332.13	0.38	4.94E+001	19.53	1.66E+001
11	5830-	5856	5842.05	1460.65	2.15	6.48E+002	53.05	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	0.999	1460.81*	10.67	1.47360E+001	1.69621E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.99182E-001	9.41403E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	2.23169E+001	7.03356E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.35217E-001	2.46190E-001
Bi-214	0.701	609.31*	46.30	2.67516E-001	1.55856E-001
		1120.29*	15.10	4.70583E-001	3.05087E-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: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	1.473599E+001	1.696210E+000
TL-208	0.471	1.991818E-001	9.414032E-002
Pb-212 @	0.593	5.352175E-001	2.461899E-001
Bi-214	0.701	3.095430E-001	1.387937E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	2.5260E-001	69.95
6	698.17	2.3729E-002	123.00
7	910.89	1.6366E-001	32.77
8	982.28	3.3694E-002	77.61
10	1332.13	8.2367E-002	39.51

M = First peak in a multiplet region
 m = Other peak in a multiplet region
 F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.2710E-001	1.08E-001	6.0323E-002
	1332.49	100.00	1.0811E-001		9.2487E-002
Nb-94	702.63	100.00	1.2059E-001	1.09E-001	9.9526E-002
	871.10	100.00	1.0928E-001		-5.6564E-002
Ag-108m	79.20	7.10	1.2295E+001	1.33E-001	-1.0749E+001
	433.93	89.90	1.4850E-001		-1.3652E-001
	614.37	90.40	1.5986E-001		3.0037E-002
	722.95	90.50	1.3285E-001		1.0785E-002
Sb-125	176.33	6.89	3.2628E+000	4.67E-001	1.2942E+000
	427.89	29.33	4.6674E-001		9.5379E-002
	463.38	10.35	1.3522E+000		5.4552E-002
	600.56	17.80	7.4968E-001		-4.4859E-001
	606.64	5.02	3.1353E+000		3.8908E+000
	635.90	11.32	1.0898E+000		-2.5300E-001
Cs-134	563.23	8.38	1.5578E+000	1.42E-001	1.6815E+000
	569.32	15.43	8.4334E-001		4.0758E-001
	604.70	97.60	1.5976E-001		6.5702E-003
	795.84	85.40	1.4246E-001		4.5117E-002
Cs-137	801.93	8.73	1.3824E+000	1.47E-001	-9.6125E-001
	661.65	85.12	1.4733E-001		-3.6614E-003
Eu-152	121.78	28.40	1.1685E+000	3.89E-001	-1.9937E-001
	244.69	7.49	2.4359E+000		1.1593E+000
	344.27	26.50	5.5396E-001		-7.1572E-001
	778.89	12.74	9.0989E-001		-1.5970E+000
	867.32	4.16	2.6677E+000		-1.7657E+000
	964.01	14.40	9.6286E-001		1.0463E+000
	1085.78	10.00	1.0721E+000		-1.6494E-001
	1112.02	13.30	8.6831E-001		-1.5533E-001
1407.95	20.70	3.8885E-001	1.1584E-001		
Eu-154	123.07	40.50	8.0892E-001	3.06E-001	-1.0196E-001
	247.94	6.60	2.6826E+000		5.4141E-001
	591.81	4.83	2.7364E+000		4.5096E-001
	723.30	19.70	6.1226E-001		1.2540E-001
	756.87	4.33	2.7426E+000		-2.0478E+000
	873.19	11.50	9.6646E-001		5.7088E-001
	996.32	10.30	1.0514E+000		-8.9524E-001
	1004.76	17.90	6.1997E-001		7.9607E-002
1274.45	35.50	3.0632E-001	1.4455E-001		
Eu-155	86.54	30.90	2.1101E+000	2.05E+000	4.0883E+000
	105.31	20.70	2.0529E+000		-1.0011E+000
Am-241	59.54	35.90	5.3053E+000	5.31E+000	-3.2052E+000
Cm-243	228.19	10.56	1.7805E+000	1.23E+000	-4.2019E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2334E+000	1.23E+000	7.0669E-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 7/27/2006 10:27:16 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-159-F-

Sample Title: OOL-10-04-159-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 10:17:12 AM

Live Time: 600.0 seconds

Real Time: 601.7 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-159-F-
Title: OOL-10-04-159-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 10 rows of peak data.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.000	1460.81*	10.67	1.66307E+001	1.85493E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	4.86690E-001	3.53852E-001
		583.14*	84.20	2.27050E-001	9.21701E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.24150E+001	6.27193E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.03450E-001	2.78678E-001
Bi-214	0.402	609.31*	46.30	5.81188E-001	1.91843E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.629	338.32	11.40		
		911.07*	27.70	1.00171E+000	2.68169E-001
		969.11*	16.60	7.74614E-001	3.46944E-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	0.991		
	K-40	1.000	1.663069E+001	1.854928E+000
	TL-208	0.751	2.435471E-001	8.919396E-002
	Pb-212 @	0.593	7.034500E-001	2.786775E-001
	Bi-214	0.402	5.811877E-001	1.918427E-001
	Ac-228	0.629	9.167777E-001	2.121755E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	84.33	3.4505E-001	74.76
3	132.45	1.0993E-001	105.92

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: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	1.2294E-001	1.14E-001	-2.1596E-003
	1332.49	100.00	1.1386E-001		1.7886E-001
Nb-94	702.63	100.00	1.1833E-001	1.18E-001	-1.2878E-001
	871.10	100.00	1.2413E-001		1.1994E-001
Ag-108m	79.20	7.10	1.3237E+001	1.49E-001	-6.4811E+000
	433.93	89.90	1.6770E-001		-5.1075E-002
	614.37	90.40	1.6932E-001		-2.4304E-002
	722.95	90.50	1.4931E-001		1.3344E-001
Sb-125	176.33	6.89	3.5097E+000	5.14E-001	-3.1725E+000
	427.89	29.33	5.1444E-001		1.6926E-001
	463.38	10.35	1.3800E+000		4.2176E-001
	600.56	17.80	7.1467E-001		-1.2955E-001
	606.64	5.02	3.2759E+000		-6.5734E-001
	635.90	11.32	1.1049E+000		-7.5833E-001
Cs-134	563.23	8.38	1.6033E+000	1.43E-001	-5.7919E-001
	569.32	15.43	9.1429E-001		4.5645E-001
	604.70	97.60	1.6628E-001		1.5544E-002
	795.84	85.40	1.4337E-001		-1.5495E-001
Cs-137	801.93	8.73	1.3224E+000	1.62E-001	-1.5181E+000
	661.65	85.12	1.6242E-001		9.8787E-002
Eu-152	121.78	28.40	1.2350E+000	4.20E-001	-1.3963E-001
	244.69	7.49	2.6693E+000		-6.8192E-001
	344.27	26.50	5.8769E-001		-7.0096E-001
	778.89	12.74	8.6070E-001		-1.1408E+000
	867.32	4.16	3.0283E+000		1.2061E+000
	964.01	14.40	1.0034E+000		1.4716E-001
	1085.78	10.00	1.1130E+000		-1.0792E+000
	1112.02	13.30	8.0327E-001		-1.4063E+000
1407.95	20.70	4.2000E-001	4.2927E-001		
Eu-154	123.07	40.50	8.5397E-001	2.93E-001	-1.4639E-001
	247.94	6.60	2.9530E+000		3.8083E-001
	591.81	4.83	2.7175E+000		3.9391E-003
	723.30	19.70	6.7743E-001		1.8671E-001
	756.87	4.33	2.8832E+000		-6.3809E-002
	873.19	11.50	1.0730E+000		4.2607E-001
	996.32	10.30	1.1645E+000		-8.7060E-002
	1004.76	17.90	6.6411E-001		4.3056E-001
1274.45	35.50	2.9320E-001	-2.2242E-001		
Eu-155	86.54	30.90	2.2465E+000	2.19E+000	-7.9119E-002
	105.31	20.70	2.1905E+000		-5.0684E-001
Am-241	59.54	35.90	6.5332E+000	6.53E+000	-2.4963E+000
Cm-243	228.19	10.56	1.8815E+000	1.23E+000	-6.3834E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2303E+000	1.23E+000	3.6495E-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 7/27/2006 11:41:30 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-160-F-

Sample Title: OOL-10-04-160-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 11:31:22 AM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-160-F-
Title: OOL-10-04-160-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 9 peaks with their respective parameters.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.994	511.00*	100.00	1.83098E-001	7.68960E-002
K-40	0.992	1460.81*	10.67	1.62126E+001	1.81544E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	8.47677E-001	3.62668E-001
		583.14*	84.20	2.17124E-001	1.11804E-001
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.83372E+001	7.42728E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.43095E-001	3.02111E-001
Bi-214	0.695	609.31*	46.30	3.12323E-001	1.71691E-001
		1120.29*	15.10	7.58036E-001	3.29167E-001
		1764.49	15.80		
Ac-228	0.629	338.32	11.40		
		911.07*	27.70	5.45954E-001	2.24588E-001
		969.11*	16.60	7.78275E-001	3.66425E-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	0.994	1.361994E-001	8.058456E-002
K-40	0.992	1.621265E+001	1.815439E+000
TL-208	0.752	2.171241E-001	1.115803E-001
Pb-212 @	0.593	6.430948E-001	3.021109E-001
Bi-214	0.695	4.076489E-001	1.522275E-001
Ac-228	0.629	6.093965E-001	1.914829E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.2388E-001	1.02E-001	2.0806E-002
	1332.49	100.00	1.0202E-001		6.1744E-002
Nb-94	702.63	100.00	1.2316E-001	1.15E-001	3.9334E-002
	871.10	100.00	1.1460E-001		-6.6716E-002
Ag-108m	79.20	7.10	1.3331E+001	1.37E-001	-7.5374E+000
	433.93	89.90	1.6090E-001		-1.3595E-001
	614.37	90.40	1.5507E-001		-1.0528E-002
	722.95	90.50	1.3736E-001		4.8824E-002
Sb-125	176.33	6.89	3.6086E+000	4.83E-001	-5.3192E-001
	427.89	29.33	4.8318E-001		3.6374E-001
	463.38	10.35	1.3358E+000		-2.6288E-001
	600.56	17.80	6.9832E-001		1.5916E-001
	606.64	5.02	3.0939E+000		5.8577E+000
	635.90	11.32	1.0776E+000		3.5349E-001
Cs-134	563.23	8.38	1.4701E+000	1.50E-001	-4.7525E-001
	569.32	15.43	8.4917E-001		-6.3263E-001
	604.70	97.60	1.5598E-001		4.6503E-003
	795.84	85.40	1.5000E-001		1.6958E-002
Cs-137	801.93	8.73	1.4699E+000	1.53E-001	5.6956E-001
	661.65	85.12	1.5293E-001		5.3661E-003
Eu-152	121.78	28.40	1.3578E+000	4.05E-001	-3.2355E-002
	244.69	7.49	2.7442E+000		-9.5889E-001
	344.27	26.50	6.1629E-001		-9.6431E-002
	778.89	12.74	9.3192E-001		-3.2791E-001
	867.32	4.16	2.7933E+000		-1.7978E+000
	964.01	14.40	9.7828E-001		2.5442E-001
	1085.78	10.00	1.1230E+000		1.3497E-001
	1112.02	13.30	8.3070E-001		-4.3783E-001
1407.95	20.70	4.0475E-001	-8.6998E-002		
Eu-154	123.07	40.50	9.3994E-001	3.31E-001	1.2422E-001
	247.94	6.60	3.0281E+000		3.9897E-001
	591.81	4.83	2.6920E+000		6.4921E-001
	723.30	19.70	6.2736E-001		2.6491E-002
	756.87	4.33	2.6971E+000		2.6832E+000
	873.19	11.50	9.9705E-001		2.6166E-001
	996.32	10.30	1.0562E+000		7.6613E-002
	1004.76	17.90	5.9801E-001		-8.0945E-002
1274.45	35.50	3.3093E-001	6.3754E-002		
Eu-155	86.54	30.90	2.2701E+000	2.27E+000	1.6250E+000
	105.31	20.70	2.3340E+000		-3.6210E-001
Am-241	59.54	35.90	5.9938E+000	5.99E+000	4.6891E-001
Cm-243	228.19	10.56	1.9845E+000	1.31E+000	-1.6201E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3143E+000	1.31E+000	7.9516E-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 7/27/2006 12:55:55 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-10-04-161-F-

Sample Title: OOL-10-04-161-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 12:45:50 PM

Live Time: 600.0 seconds

Real Time: 601.7 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-161-F-
Title: OOL-10-04-161-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 9 peaks with their respective parameters.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.988	511.00*	100.00	2.43414E-001	9.66662E-002
K-40	0.999	1460.81*	10.67	1.96167E+001	2.10242E+000
TL-208	0.748	277.35	6.80		
		510.84*	21.60	1.12692E+000	4.56893E-001
		583.14*	84.20	3.19139E-001	1.12396E-001
		860.37	12.46		
Pb-212	0.446	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.399	238.63*	44.60	6.20859E-001	2.52703E-001
		609.31*	46.30	6.59289E-001	1.93286E-001
		1120.29	15.10		
Ac-228	0.626	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	9.50723E-001	2.71335E-001
		969.11*	16.60	7.74582E-001	3.97133E-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	0.988	1.744799E-001	9.964286E-002
K-40	0.999	1.961670E+001	2.102423E+000
TL-208	0.748	3.191390E-001	1.119133E-001
Pb-212 @	0.446	6.208585E-001	2.527032E-001
Bi-214	0.399	6.592890E-001	1.932859E-001
Ac-228	0.626	8.946666E-001	2.240368E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	84.77	5.4994E-001	49.48
7	938.72	2.8423E-002	95.40

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: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	1.2846E-001	1.06E-001	6.7652E-002
	1332.49	100.00	1.0572E-001		-9.8868E-002
Nb-94	702.63	100.00	1.3226E-001	1.25E-001	-1.9088E-001
	871.10	100.00	1.2452E-001		4.5144E-002
Ag-108m	79.20	7.10	1.3470E+001	1.52E-001	-1.4701E+001
	433.93	89.90	1.6554E-001		-6.9730E-002
	614.37	90.40	1.7342E-001		-1.3845E-001
	722.95	90.50	1.5223E-001		4.1105E-002
Sb-125	176.33	6.89	3.4939E+000	5.22E-001	8.1994E-001
	427.89	29.33	5.2231E-001		3.1532E-001
	463.38	10.35	1.3429E+000		-2.5544E-001
	600.56	17.80	7.9441E-001		-4.5438E-001
	606.64	5.02	3.4527E+000		2.7884E+000
	635.90	11.32	1.1460E+000		3.6633E-001
Cs-134	563.23	8.38	1.6373E+000	1.56E-001	-7.2582E-001
	569.32	15.43	8.8883E-001		3.5867E-001
	604.70	97.60	1.8000E-001		2.7391E-003
	795.84	85.40	1.5593E-001		-1.6733E-002
	801.93	8.73	1.4909E+000		1.2831E-001
Cs-137	661.65	85.12	1.6020E-001	1.60E-001	8.5929E-002
Eu-152	121.78	28.40	1.2938E+000	4.12E-001	1.8528E-002
	244.69	7.49	2.6295E+000		2.5699E+000
	344.27	26.50	6.1107E-001		-4.9560E-001
	778.89	12.74	1.0179E+000		-1.4280E+000
	867.32	4.16	3.0000E+000		-3.3615E+000
	964.01	14.40	1.0182E+000		-3.5825E-001
	1085.78	10.00	1.2362E+000		2.1652E-001
	1112.02	13.30	8.9364E-001		1.1929E-001
1407.95	20.70	4.1245E-001	-2.1719E-001		
Eu-154	123.07	40.50	8.9605E-001	3.32E-001	-2.0819E-001
	247.94	6.60	2.7928E+000		-2.9584E+000
	591.81	4.83	2.8952E+000		-8.8996E-001
	723.30	19.70	6.9941E-001		3.5334E-001
	756.87	4.33	2.9592E+000		-1.5238E+000
	873.19	11.50	1.0519E+000		-1.3148E+000
	996.32	10.30	1.1731E+000		4.9126E-002
	1004.76	17.90	6.9588E-001		-1.6318E-001
1274.45	35.50	3.3240E-001	8.4563E-002		
Eu-155	86.54	30.90	2.3123E+000	2.25E+000	2.2016E-001
	105.31	20.70	2.2550E+000		-1.7519E+000
Am-241	59.54	35.90	6.4369E+000	6.44E+000	-3.2391E+000
Cm-243	228.19	10.56	1.9268E+000	1.25E+000	1.0755E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2541E+000	1.25E+000	8.4476E-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 7/27/2006 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-162-F-

Sample Title: OOL-10-04-162-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 2:10:37 PM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-162-F-
 Title: OOL-10-04-162-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	294-	310	301.30	75.28	1.39	3.60E+002	154.27	1.86E+003
2	947-	960	954.88	238.70	1.05	1.53E+002	64.00	3.32E+002
3	1173-	1189	1180.25	295.05	0.93	8.44E+001	55.12	2.26E+002
4	1345-	1359	1354.47	338.61	0.52	5.89E+001	47.08	1.80E+002
5	2032-	2051	2043.76	510.95	1.39	1.30E+002	48.60	1.38E+002
6	2325-	2340	2332.13	583.06	1.29	1.16E+002	38.12	8.70E+001
7	2428-	2447	2436.90	609.25	1.54	1.51E+002	42.96	9.28E+001
8	2900-	2916	2908.35	727.13	0.77	5.35E+001	27.26	4.45E+001
9	3633-	3652	3643.34	910.90	0.70	1.00E+002	31.82	4.66E+001
10	3865-	3883	3874.04	968.58	0.32	6.58E+001	30.50	5.23E+001
11	4474-	4489	4479.80	1120.04	0.43	4.54E+001	22.65	2.86E+001
12	5325-	5336	5330.05	1332.63	1.14	2.04E+001	13.47	1.06E+001
13	5829-	5856	5842.91	1460.87	1.98	8.90E+002	63.87	3.84E+001
14	7053-	7067	7059.53	1765.06	0.38	3.21E+001	16.31	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: 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	2.33800E-001	9.28728E-002
K-40	1.000	1460.81*	10.67	2.02192E+001	2.18795E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	1.08241E+000	4.38959E-001
		583.14*	84.20	2.58953E-001	9.15153E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	9.09080E-001	4.75162E-001
Pb-212	0.593	74.81* @	10.70	1.38836E+001	6.53505E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.00115E-001	2.23141E-001
Bi-214	0.997	609.31*	46.30	6.22961E-001	1.92944E-001
		1120.29*	15.10	6.70378E-001	3.41690E-001
		1764.49*	15.80	5.21308E-001	2.70352E-001
Ac-228	0.996	338.32*	11.40	8.18906E-001	6.66522E-001
		911.07*	27.70	7.64288E-001	2.57664E-001
		969.11*	16.60	8.48808E-001	4.03711E-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	1.778661E-001	9.493568E-002
K-40	1.000	2.021918E+001	2.187946E+000
TL-208	0.752	2.589532E-001	9.112537E-002
Bi-212	1.000	9.090804E-001	4.751617E-001
Pb-212 @	0.593	5.001145E-001	2.231406E-001
Bi-214	0.997	6.029102E-001	1.426988E-001
Ac-228	0.996	7.916462E-001	2.065085E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	295.05	1.4072E-001	65.29
12	1332.63	3.4005E-002	66.00

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	1.2891E-001	1.04E-001	4.0426E-002
	1332.49	100.00	1.0450E-001		8.9889E-003
Nb-94	702.63	100.00	1.3124E-001	1.18E-001	2.1901E-002
	871.10	100.00	1.1800E-001		-2.5719E-002
Ag-108m	79.20	7.10	1.3276E+001	1.52E-001	-4.4086E-001
	433.93	89.90	1.5713E-001		-4.1621E-002
	614.37	90.40	1.8352E-001		8.8106E-002
	722.95	90.50	1.5223E-001		-3.4952E-002
Sb-125	176.33	6.89	3.3552E+000	4.67E-001	-5.4062E-001
	427.89	29.33	4.6674E-001		9.5104E-002
	463.38	10.35	1.3685E+000		-5.1615E-001
	600.56	17.80	7.7816E-001		-4.4606E-001
	606.64	5.02	3.4527E+000		5.4410E+000
	635.90	11.32	1.2130E+000		1.4638E+000
Cs-134	563.23	8.38	1.6508E+000	1.47E-001	1.6969E-001
	569.32	15.43	8.9618E-001		4.7171E-001
	604.70	97.60	1.7595E-001		-5.2877E-002
	795.84	85.40	1.4739E-001		1.2825E-001
Cs-137	801.93	8.73	1.4137E+000	1.53E-001	-2.5899E-001
	661.65	85.12	1.5253E-001		1.4485E-001
Eu-152	121.78	28.40	1.2259E+000	4.49E-001	7.4312E-001
	244.69	7.49	2.5345E+000		-3.3963E+000
	344.27	26.50	5.9244E-001		-3.4069E-001
	778.89	12.74	8.7077E-001		-1.5778E+000
	867.32	4.16	2.8137E+000		-1.7199E+000
	964.01	14.40	1.0495E+000		1.2889E-001
	1085.78	10.00	1.2451E+000		7.0936E-001
	1112.02	13.30	8.6093E-001		-5.9705E-001
1407.95	20.70	4.4882E-001	4.6103E-001		
Eu-154	123.07	40.50	8.4612E-001	3.28E-001	6.1490E-002
	247.94	6.60	2.8085E+000		-2.4377E+000
	591.81	4.83	3.0342E+000		4.4680E-001
	723.30	19.70	7.0603E-001		-7.7147E-002
	756.87	4.33	3.0169E+000		4.7633E-001
	873.19	11.50	1.0519E+000		-3.2757E-001
	996.32	10.30	1.1340E+000		2.4996E-001
	1004.76	17.90	6.7897E-001		2.9488E-001
1274.45	35.50	3.2796E-001	1.4486E-001		
Eu-155	86.54	30.90	2.1845E+000	2.18E+000	1.4091E+000
	105.31	20.70	2.1941E+000		9.7111E-001
Am-241	59.54	35.90	6.2152E+000	6.22E+000	-1.7426E-001
Cm-243	228.19	10.56	1.8159E+000	1.26E+000	-7.0648E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2623E+000	1.26E+000	-7.1284E-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 7/27/2006 11:00:37 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-10-04-163-F-

Sample Title: OOL-10-04-163-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 10:50:34 AM

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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-163-F-
Title: OOL-10-04-163-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	947-	962	952.58	238.10	1.51	2.07E+002	79.17	4.73E+002
2	2031-	2053	2043.89	510.93	0.74	1.55E+002	53.89	1.55E+002
3	2324-	2342	2330.13	582.49	2.00	1.32E+002	44.20	1.10E+002
4	5829-	5859	5844.24	1461.03	2.39	9.99E+002	67.58	3.88E+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: 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	2.72585E-001	1.01693E-001
K-40	0.998	1460.81*	10.67	2.19353E+001	2.31415E+000
TL-208	0.743	277.35	6.80		
		510.84*	21.60	1.26197E+000	4.81948E-001
		583.14*	84.20	2.88025E-001	1.03380E-001
		860.37	12.46		
Pb-212	0.449	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.70001E-001	2.76734E-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	1.000	2.103718E-001	1.040958E-001
K-40	0.998	2.193528E+001	2.314154E+000
TL-208	0.743	2.880248E-001	1.029529E-001
Pb-212 @	0.449	6.700014E-001	2.767339E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.12E-001	1.1567E-002
	1332.49	100.00	1.1188E-001		9.1482E-002
Nb-94	702.63	100.00	1.3754E-001	1.29E-001	-4.6837E-002
	871.10	100.00	1.2943E-001		-1.1664E-001
Ag-108m	79.20	7.10	1.4076E+001	1.57E-001	-2.7604E+001
	433.93	89.90	1.6915E-001		-1.2511E-001
	614.37	90.40	1.7671E-001		-9.9374E-002
	722.95	90.50	1.5682E-001		6.8121E-002
Sb-125	176.33	6.89	3.7498E+000	5.44E-001	1.0442E+000
	427.89	29.33	5.4371E-001		3.8431E-001
	463.38	10.35	1.4951E+000		-1.8124E-001
	600.56	17.80	7.8653E-001		2.0224E-001
	606.64	5.02	3.4822E+000		6.4014E+000
	635.90	11.32	1.2919E+000		1.0785E-001
Cs-134	563.23	8.38	1.6960E+000	1.69E-001	4.8510E-001
	569.32	15.43	9.0729E-001		-5.2942E-001
	604.70	97.60	1.6916E-001		-8.1079E-002
	795.84	85.40	1.7027E-001		1.2131E-001
	801.93	8.73	1.5261E+000		-8.5592E-001
Cs-137	661.65	85.12	1.7010E-001	1.70E-001	4.9432E-002
Eu-152	121.78	28.40	1.3468E+000	4.41E-001	7.3967E-001
	244.69	7.49	2.8101E+000		-2.6122E+000
	344.27	26.50	6.2282E-001		-8.7385E-001
	778.89	12.74	1.0296E+000		-1.8192E-001
	867.32	4.16	3.1760E+000		-2.0708E+000
	964.01	14.40	1.0681E+000		9.0458E-002
	1085.78	10.00	1.1867E+000		-7.4724E-001
	1112.02	13.30	9.5419E-001		-1.0865E+000
1407.95	20.70	4.4061E-001	8.5534E-002		
Eu-154	123.07	40.50	9.2999E-001	3.35E-001	-3.2053E-001
	247.94	6.60	3.0332E+000		-4.7615E-001
	591.81	4.83	2.9686E+000		1.7176E+000
	723.30	19.70	7.2047E-001		3.2974E-001
	756.87	4.33	3.0665E+000		7.0869E-002
	873.19	11.50	1.1136E+000		1.0791E-001
	996.32	10.30	1.2227E+000		-2.3819E-001
	1004.76	17.90	6.7615E-001		-3.9448E-002
1274.45	35.50	3.3451E-001	-2.3799E-001		
Eu-155	86.54	30.90	2.4925E+000	2.47E+000	3.5919E+000
	105.31	20.70	2.4681E+000		-5.7749E-001
Am-241	59.54	35.90	6.1484E+000	6.15E+000	-2.6444E+000
Cm-243	228.19	10.56	2.0080E+000	1.35E+000	-4.5205E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3497E+000	1.35E+000	-2.2005E-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 7/27/2006 10:40:18 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-10-04-164-F-

Sample Title: OOL-10-04-164-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 10:30:15 AM

Live Time: 600.0 seconds

Real Time: 601.8 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-164-F-
Title: OOL-10-04-164-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2426-	2448	2437.26	609.28	1.22	1.64E+002	50.35	1.27E+002
2	3633-	3654	3642.91	910.69	0.81	1.11E+002	37.82	6.98E+001
3	5829-	5860	5844.61	1461.12	2.47	8.31E+002	59.58	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: 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	1.82409E+001	1.97274E+000
Bi-214	0.403	609.31*	46.30	6.59765E-001	2.18210E-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	1.824086E+001	1.972739E+000
Bi-214	0.403	6.597645E-001	2.182102E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	910.69	1.8533E-001	34.01

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	1.3537E-001	1.17E-001	5.9000E-002
	1332.49	100.00	1.1689E-001		5.1846E-002
Nb-94	702.63	100.00	1.3191E-001	1.25E-001	-1.4425E-002
	871.10	100.00	1.2547E-001		-7.0057E-002
Ag-108m	79.20	7.10	1.4593E+001	1.67E-001	-2.2227E+001
	433.93	89.90	1.8055E-001		-3.0515E-002
	614.37	90.40	1.8488E-001		4.1645E-002
	722.95	90.50	1.6675E-001		-4.7918E-002
Sb-125	176.33	6.89	3.8055E+000	5.32E-001	-2.7067E-001
	427.89	29.33	5.3244E-001		-7.2054E-001
	463.38	10.35	1.4951E+000		-4.8255E-001
	600.56	17.80	8.2723E-001		1.2842E-001
	606.64	5.02	3.6368E+000		4.4667E-001
	635.90	11.32	1.1726E+000		-1.3371E+000
Cs-134	563.23	8.38	1.8810E+000	1.59E-001	5.3536E-002
	569.32	15.43	9.9115E-001		3.5074E-001
	604.70	97.60	1.8205E-001		-2.1782E-002
	795.84	85.40	1.5887E-001		9.6385E-002
	801.93	8.73	1.4356E+000		-1.6221E+000
Cs-137	661.65	85.12	1.7176E-001	1.72E-001	-1.4119E-002
Eu-152	121.78	28.40	1.3784E+000	4.47E-001	-1.5320E+000
	244.69	7.49	2.8321E+000		-3.3418E+000
	344.27	26.50	6.4845E-001		7.5467E-003
	778.89	12.74	9.6160E-001		-8.3891E-001
	867.32	4.16	3.0831E+000		-1.4863E+000
	964.01	14.40	1.0915E+000		9.7434E-001
	1085.78	10.00	1.1693E+000		8.4851E-001
	1112.02	13.30	8.8095E-001		-1.3688E+000
1407.95	20.70	4.4708E-001	8.1192E-002		
Eu-154	123.07	40.50	9.6144E-001	2.89E-001	3.0668E-001
	247.94	6.60	3.0736E+000		-1.5554E+000
	591.81	4.83	3.1190E+000		6.7048E-001
	723.30	19.70	7.7181E-001		9.8643E-002
	756.87	4.33	2.9667E+000		-2.1480E+000
	873.19	11.50	1.1105E+000		-2.5321E-001
	996.32	10.30	1.1883E+000		2.2829E-001
	1004.76	17.90	6.4831E-001		4.2224E-001
1274.45	35.50	2.8888E-001	-2.4971E-001		
Eu-155	86.54	30.90	2.5629E+000	2.50E+000	3.6835E+000
	105.31	20.70	2.5000E+000		-4.6062E-001
Am-241	59.54	35.90	6.5442E+000	6.54E+000	-2.4120E+000
Cm-243	228.19	10.56	2.0917E+000	1.38E+000	-4.1407E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3810E+000	1.38E+000	-6.9689E-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 7/27/2006 10:24:54 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-165-F-

Sample Title: OOL-10-04-165-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 10:14:51 AM

Live Time: 600.0 seconds

Real Time: 601.9 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-10-04-165-F-
Title: OOL-10-04-165-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	947-	966	956.01	238.96	0.83	2.70E+002	97.68	6.31E+002
2	2031-	2053	2041.34	510.30	0.45	1.15E+002	61.21	2.22E+002
3	3635-	3656	3643.93	910.95	0.41	1.21E+002	37.07	6.31E+001
4	5828-	5859	5844.28	1461.04	2.68	8.79E+002	61.32	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: 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	0.984	511.00*	100.00	2.02855E-001	1.11045E-001
K-40	0.998	1460.81*	10.67	1.92985E+001	2.06234E+000
Pb-212	0.452	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.73595E-001	3.44529E-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	0.984	2.028550E-001	1.110455E-001
K-40	0.998	1.929847E+001	2.062342E+000
Pb-212 @	0.452	8.735952E-001	3.445291E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	910.95	2.0157E-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: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	1.3340E-001	1.23E-001	-5.2522E-002
	1332.49	100.00	1.2263E-001		1.2674E-001
Nb-94	702.63	100.00	1.4235E-001	1.32E-001	-9.0184E-002
	871.10	100.00	1.3223E-001		-1.5107E-003
Ag-108m	79.20	7.10	1.5036E+001	1.67E-001	-4.1666E+001
	433.93	89.90	1.8139E-001		8.3163E-002
	614.37	90.40	1.8436E-001		-4.3419E-002
	722.95	90.50	1.6738E-001		6.4727E-003
Sb-125	176.33	6.89	4.0214E+000	5.63E-001	1.6153E+000
	427.89	29.33	5.6302E-001		-6.5364E-002
	463.38	10.35	1.6041E+000		1.1558E+000
	600.56	17.80	9.1891E-001		1.2674E+000
	606.64	5.02	3.6827E+000		6.3423E+000
	635.90	11.32	1.3370E+000		5.7540E-001
Cs-134	563.23	8.38	1.8358E+000	1.57E-001	2.9780E-001
	569.32	15.43	9.8167E-001		2.6249E-001
	604.70	97.60	1.8686E-001		3.7060E-002
	795.84	85.40	1.5733E-001		5.0043E-002
Cs-137	801.93	8.73	1.4192E+000	1.71E-001	-2.3916E+000
	661.65	85.12	1.7076E-001		4.1015E-002
Eu-152	121.78	28.40	1.4514E+000	4.24E-001	4.3989E-001
	244.69	7.49	2.9284E+000		-1.9389E-001
	344.27	26.50	6.9292E-001		1.9981E-001
	778.89	12.74	1.1391E+000		2.1739E-002
	867.32	4.16	3.1926E+000		-1.5934E+000
	964.01	14.40	1.0894E+000		8.6832E-001
	1085.78	10.00	1.1337E+000		3.6207E-001
	1112.02	13.30	1.0191E+000		-5.4358E-001
1407.95	20.70	4.2398E-001	3.3617E-001		
Eu-154	123.07	40.50	1.0006E+000	3.41E-001	5.0080E-001
	247.94	6.60	3.1901E+000		-1.5256E+000
	591.81	4.83	3.0927E+000		-7.1323E-002
	723.30	19.70	7.6755E-001		2.4687E-001
	756.87	4.33	3.4089E+000		2.2229E+000
	873.19	11.50	1.1830E+000		1.1106E+000
	996.32	10.30	1.2923E+000		7.4181E-001
Eu-155	1004.76	17.90	6.7842E-001	2.66E+000	-1.1845E-001
	1274.45	35.50	3.4106E-001		3.0798E-001
	86.54	30.90	2.6687E+000		3.4735E+000
Am-241	105.31	20.70	2.6625E+000	6.78E+000	-8.1106E-001
	59.54	35.90	6.7788E+000		-7.4517E-001
Cm-243	228.19	10.56	2.2024E+000	1.45E+000	6.9100E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.4493E+000	1.45E+000	3.8618E-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 7/27/2006 9:36:32 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-166-F-

Sample Title: OOL-10-04-166-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 9:26:32 AM

Live Time: 600.0 seconds

Real Time: 602.1 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-10-04-166-F-
Title: OOL-10-04-166-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	292-	300	296.63	74.11	0.57	1.30E+002	120.57	1.71E+003
2	947-	962	952.30	238.03	0.58	2.01E+002	87.61	5.97E+002
3	2324-	2344	2333.19	583.26	0.72	1.18E+002	50.42	1.47E+002
4	2424-	2449	2436.98	609.21	1.24	1.79E+002	55.43	1.46E+002
5	3633-	3657	3644.99	911.21	0.84	1.22E+002	42.70	8.48E+001
6	5831-	5859	5843.53	1460.85	2.45	7.85E+002	57.85	1.84E+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	1.000	1460.81*	10.67	1.72235E+001	1.88614E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.56368E-001	1.14900E-001
		860.37	12.46		
Pb-212	0.591	74.81* @	10.70	5.47633E+000	5.20553E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.49342E-001	3.01019E-001
Bi-214	0.403	609.31*	46.30	7.19942E-001	2.39913E-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	1.000	1.722352E+001	1.886138E+000
TL-208	0.471	2.563675E-001	1.148996E-001
Pb-212 @	0.591	6.493423E-001	3.010185E-001
Bi-214	0.403	7.199420E-001	2.399134E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	911.21	2.0363E-001	34.95

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	1.3498E-001	1.33E-001	4.1961E-002
	1332.49	100.00	1.3333E-001		1.5106E-001
Nb-94	702.63	100.00	1.5343E-001	1.39E-001	1.7648E-001
	871.10	100.00	1.3931E-001		5.0465E-002
Ag-108m	79.20	7.10	1.5906E+001	1.64E-001	-3.2253E+001
	433.93	89.90	1.8139E-001		3.3838E-002
	614.37	90.40	1.9539E-001		-4.9258E-002
	722.95	90.50	1.6362E-001		-1.1390E-001
Sb-125	176.33	6.89	4.2784E+000	5.67E-001	-2.2120E+000
	427.89	29.33	5.6680E-001		-1.0815E-001
	463.38	10.35	1.5330E+000		8.5296E-002
	600.56	17.80	8.9757E-001		3.1427E-001
	606.64	5.02	3.7646E+000		5.0747E-001
	635.90	11.32	1.2476E+000		-7.7025E-001
Cs-134	563.23	8.38	1.9059E+000	1.66E-001	6.9852E-001
	569.32	15.43	1.0160E+000		-1.1020E-001
	604.70	97.60	1.8729E-001		3.6928E-002
	795.84	85.40	1.6632E-001		6.6633E-002
	801.93	8.73	1.5601E+000		-1.5732E+000
Cs-137	661.65	85.12	1.7567E-001	1.76E-001	1.0939E-001
Eu-152	121.78	28.40	1.5349E+000	4.53E-001	-9.1423E-002
	244.69	7.49	3.1918E+000		-1.6288E+000
	344.27	26.50	7.3147E-001		-6.5199E-001
	778.89	12.74	1.0957E+000		-4.4615E-001
	867.32	4.16	3.4469E+000		9.2357E-002
	964.01	14.40	1.0745E+000		9.1785E-001
	1085.78	10.00	1.3015E+000		4.2233E-001
	1112.02	13.30	9.5419E-001		-1.5996E+000
1407.95	20.70	4.5344E-001	2.0209E-001		
Eu-154	123.07	40.50	1.0620E+000	3.28E-001	5.5164E-001
	247.94	6.60	3.4125E+000		-8.2007E-001
	591.81	4.83	3.2672E+000		5.6730E-001
	723.30	19.70	7.5607E-001		-6.4635E-001
	756.87	4.33	3.2066E+000		1.9680E+000
	873.19	11.50	1.2062E+000		2.2032E-001
	996.32	10.30	1.1999E+000		5.6439E-001
	1004.76	17.90	7.0066E-001		3.6337E-001
1274.45	35.50	3.2782E-001	8.6031E-003		
Eu-155	86.54	30.90	2.8620E+000	2.86E+000	5.7525E+000
	105.31	20.70	2.8688E+000		1.5757E+000
Am-241	59.54	35.90	7.0681E+000	7.07E+000	-2.2707E+000
Cm-243	228.19	10.56	2.3008E+000	1.55E+000	9.9976E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.5529E+000	1.55E+000	1.3681E+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 7/27/2006 8:48:29 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-167-F-

Sample Title: OOL-10-04-167-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 8:38:25 AM

Live Time: 600.0 seconds

Real Time: 602.1 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-167-F-
Title: OOL-10-04-167-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	2230-	2243	2237.35	559.30	0.60	3.79E+001	29.42	6.71E+001
2	2426-	2447	2434.95	608.70	0.41	1.22E+002	48.67	1.32E+002
3	3635-	3655	3643.78	910.91	0.34	1.04E+002	40.49	8.88E+001
4	3866-	3884	3875.19	968.76	1.98	9.59E+001	32.00	5.01E+001
5	5828-	5859	5843.61	1460.87	2.49	7.78E+002	56.74	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: 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	1.000	1460.81*	10.67	1.70789E+001	1.86108E+000
Bi-214	0.396	609.31*	46.30	4.91930E-001	2.04879E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.634	338.32	11.40		
		911.07*	27.70	7.64718E-001	3.09920E-001
		969.11*	16.60	1.19193E+000	4.16896E-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	1.000	1.707890E+001	1.861079E+000
Bi-214	0.396	4.919305E-001	2.048792E-001
Ac-228	0.634	9.167784E-001	2.487221E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	559.30	6.3087E-002	77.72

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: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	1.3997E-001	1.23E-001	1.5811E-001
	1332.49	100.00	1.2310E-001		4.8058E-002
Nb-94	702.63	100.00	1.4265E-001	1.37E-001	-6.1462E-002
	871.10	100.00	1.3666E-001		1.5518E-003
Ag-108m	79.20	7.10	1.6701E+001	1.71E-001	-2.8444E+001
	433.93	89.90	1.8782E-001		-2.7151E-003
	614.37	90.40	1.8150E-001		-4.0934E-002
	722.95	90.50	1.7105E-001		9.4960E-002
Sb-125	176.33	6.89	4.2656E+000	5.65E-001	-3.6392E-001
	427.89	29.33	5.6491E-001		-1.4563E-001
	463.38	10.35	1.5290E+000		-7.2809E-001
	600.56	17.80	8.7431E-001		5.7972E-001
	606.64	5.02	3.5646E+000		5.9857E+000
	635.90	11.32	1.3276E+000		1.1148E+000
Cs-134	563.23	8.38	1.7924E+000	1.56E-001	1.6875E-001
	569.32	15.43	9.2941E-001		-9.0886E-001
	604.70	97.60	1.7846E-001		-1.3009E-002
	795.84	85.40	1.5578E-001		7.6782E-002
	801.93	8.73	1.5337E+000		-3.9598E-001
Cs-137	661.65	85.12	1.7438E-001	1.74E-001	-4.4647E-002
Eu-152	121.78	28.40	1.5567E+000	4.03E-001	-6.3999E-001
	244.69	7.49	3.1264E+000		-6.1713E+000
	344.27	26.50	7.1868E-001		-7.1715E-001
	778.89	12.74	1.1224E+000		-6.0793E-001
	867.32	4.16	3.2581E+000		-3.3432E+000
	964.01	14.40	1.0978E+000		-4.6064E-001
	1085.78	10.00	1.2937E+000		-5.1740E-001
	1112.02	13.30	9.7832E-001		-1.1607E+000
1407.95	20.70	4.0305E-001	-1.3837E-001		
Eu-154	123.07	40.50	1.0755E+000	3.38E-001	-6.2638E-001
	247.94	6.60	3.3825E+000		-2.7107E+000
	591.81	4.83	3.1502E+000		1.7827E+000
	723.30	19.70	7.8306E-001		5.8451E-001
	756.87	4.33	3.1703E+000		-3.0477E+000
	873.19	11.50	1.1653E+000		-4.5584E-001
	996.32	10.30	1.1844E+000		-2.8268E-001
	1004.76	17.90	7.1151E-001		4.3328E-001
1274.45	35.50	3.3846E-001	-9.3039E-002		
Eu-155	86.54	30.90	2.8727E+000	2.83E+000	2.6121E+000
	105.31	20.70	2.8337E+000		6.0342E-001
Am-241	59.54	35.90	7.0657E+000	7.07E+000	-6.0499E+000
Cm-243	228.19	10.56	2.3130E+000	1.52E+000	-1.9318E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.5227E+000	1.52E+000	2.0428E-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 7/27/2006 8:04:27 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-168-F-

Sample Title: OOL-10-04-168-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 7:54:22 AM

Live Time: 600.0 seconds

Real Time: 602.4 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-10-04-168-F-
Title: OOL-10-04-168-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5829-	5858	5843.27	1460.79	2.92	6.89E+002	55.75	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	1.000	1460.81*	10.67	1.51347E+001	1.73176E+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	1.000	1.513466E+001	1.731757E+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	1.2265E-001	1.23E-001	1.2173E-001
	1332.49	100.00	1.2854E-001		1.3512E-001
Nb-94	702.63	100.00	1.5397E-001	1.42E-001	2.2294E-001
	871.10	100.00	1.4158E-001		1.2053E-001
Ag-108m	79.20	7.10	1.6993E+001	1.73E-001	-4.5581E+001
	433.93	89.90	2.0079E-001		2.0364E-001
	614.37	90.40	1.8946E-001		-1.5213E-001
	722.95	90.50	1.7255E-001		-1.2020E-001
Sb-125	176.33	6.89	4.6071E+000	6.17E-001	-5.1412E-001
	427.89	29.33	6.1668E-001		3.7655E-001
	463.38	10.35	1.6449E+000		-6.7466E-001
	600.56	17.80	8.6454E-001		-1.6100E-002
	606.64	5.02	3.6660E+000		5.9219E+000
	635.90	11.32	1.3532E+000		9.8427E-001
Cs-134	563.23	8.38	1.9114E+000	1.72E-001	2.0362E-001
	569.32	15.43	1.0521E+000		6.5242E-002
	604.70	97.60	1.8293E-001		-2.5586E-002
	795.84	85.40	1.7203E-001		5.6816E-002
	801.93	8.73	1.5712E+000		-1.6749E-001
Cs-137	661.65	85.12	1.8200E-001	1.82E-001	3.9642E-002
Eu-152	121.78	28.40	1.6226E+000	4.34E-001	-7.6520E-001
	244.69	7.49	3.4299E+000		-2.4467E+000
	344.27	26.50	7.5077E-001		-5.9621E-001
	778.89	12.74	1.1625E+000		4.7222E-001
	867.32	4.16	3.4316E+000		-5.4259E-001
	964.01	14.40	1.0894E+000		1.3773E+000
	1085.78	10.00	1.2818E+000		4.2871E-001
	1112.02	13.30	8.5735E-001		-1.0978E+000
1407.95	20.70	4.3404E-001	2.8046E-001		
Eu-154	123.07	40.50	1.1264E+000	3.55E-001	4.1605E-001
	247.94	6.60	3.6593E+000		-7.7710E-001
	591.81	4.83	3.3557E+000		7.6383E-001
	723.30	19.70	7.9001E-001		-4.4929E-001
	756.87	4.33	3.4358E+000		-2.7975E-001
	873.19	11.50	1.1859E+000		7.6677E-001
	996.32	10.30	1.2562E+000		-1.3145E+000
	1004.76	17.90	7.2430E-001		1.5215E-001
1274.45	35.50	3.5502E-001	2.9092E-001		
Eu-155	86.54	30.90	3.0134E+000	2.94E+000	4.5111E+000
	105.31	20.70	2.9440E+000		-2.6799E+000
Am-241	59.54	35.90	7.3243E+000	7.32E+000	-8.7266E-001
Cm-243	228.19	10.56	2.4808E+000	1.64E+000	-4.1227E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.6370E+000	1.64E+000	-2.2455E-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 7/27/2006 4:22:31 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-10-04-169-F-

Sample Title: OOL-10-04-169-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 4:12:27 PM

Live Time: 600.0 seconds

Real Time: 601.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-169-F-
 Title: OOL-10-04-169-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	284-	306	291.22	72.89	0.93	4.31E+002	76.99	2.51E+003
m	2	284-	306	299.89	75.06	0.93	8.74E+002	89.81	2.80E+003
	3	332-	344	339.07	84.86	1.28	4.13E+002	165.19	2.54E+003
	4	948-	977	953.61	238.50	1.00	3.05E+002	146.50	1.10E+003
	5	1346-	1359	1350.63	337.76	1.02	8.58E+001	52.72	2.30E+002
	6	1398-	1413	1406.33	351.69	0.72	1.04E+002	56.24	2.39E+002
	7	2033-	2051	2041.61	510.52	1.85	1.95E+002	52.28	1.53E+002
	8	2323-	2336	2331.40	582.97	1.11	1.31E+002	40.67	1.09E+002
	9	2426-	2444	2435.03	608.88	1.29	1.42E+002	47.07	1.25E+002
	10	3631-	3654	3643.68	911.06	0.67	1.45E+002	42.83	8.33E+001
M	11	3853-	3881	3858.77	964.83	1.22	2.58E+001	16.10	5.79E+001
m	12	3853-	3881	3874.71	968.82	1.23	5.68E+001	20.17	5.85E+001
	13	4475-	4486	4480.41	1120.25	0.32	2.17E+001	20.94	3.63E+001
	14	5321-	5339	5329.36	1332.50	1.01	9.16E+001	25.58	2.34E+001
	15	5832-	5855	5843.84	1461.13	1.70	7.80E+002	58.67	2.94E+001
	16	7052-	7065	7058.50	1764.81	0.60	2.51E+001	15.76	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: 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	3.32605E-001	9.99844E-002
K-40	0.996	1460.81*	10.67	1.65387E+001	1.82810E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.53984E+000	4.79669E-001
		583.14*	84.20	2.77477E-001	9.32839E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	2.84526E+001	6.29624E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.995	238.63*	44.60	9.50182E-001	4.80525E-001
		609.31*	46.30	5.53222E-001	1.95802E-001
		1120.29*	15.10	2.98173E-001	2.89761E-001
Ac-228	0.997	1764.49*	15.80	3.91057E-001	2.48829E-001
		338.32*	11.40	1.13870E+000	7.22155E-001
		911.07*	27.70	1.03917E+000	3.30028E-001
		969.11*	16.60	6.88976E-001	2.55335E-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	2.726702E-001	1.019758E-001
K-40	0.996	1.653869E+001	1.828096E+000
TL-208	0.751	2.774773E-001	9.284454E-002
Pb-212 @	0.580	9.501816E-001	4.805246E-001
Bi-214	0.995	4.487462E-001	1.359007E-001
Ac-228	0.997	8.432139E-001	1.944884E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	7.1842E-001	17.86
3	84.86	6.8890E-001	39.96
6	351.69	1.7401E-001	53.87
M 11	964.83	4.2938E-002	62.47
14	1332.50	1.5262E-001	27.94

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: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	1.3063E-001	1.29E-001	1.5119E-001
	1332.49	100.00	1.2921E-001		1.7353E-001
Nb-94	702.63	100.00	1.3680E-001	1.33E-001	1.0285E-003
	871.10	100.00	1.3302E-001		1.3314E-001
Ag-108m	79.20	7.10	1.2950E+001	1.51E-001	-8.7448E+000
	433.93	89.90	1.6771E-001		-2.9908E-002
	614.37	90.40	1.6304E-001		-3.9699E-002
	722.95	90.50	1.5082E-001		-6.2006E-002
Sb-125	176.33	6.89	3.7112E+000	5.16E-001	1.5056E+000
	427.89	29.33	5.1635E-001		3.5423E-001
	463.38	10.35	1.3843E+000		4.4951E-002
	600.56	17.80	7.5682E-001		1.5191E-001
	606.64	5.02	3.3856E+000		5.5949E+000
	635.90	11.32	1.1650E+000		-6.7186E-001
Cs-134	563.23	8.38	1.7048E+000	1.53E-001	-5.9625E-001
	569.32	15.43	9.1150E-001		-4.3949E-001
	604.70	97.60	1.6659E-001		-6.0712E-002
	795.84	85.40	1.5343E-001		-1.3618E-002
	801.93	8.73	1.4699E+000		1.0996E+000
Cs-137	661.65	85.12	1.7182E-001	1.72E-001	9.3971E-002
Eu-152	121.78	28.40	1.4000E+000	4.26E-001	1.2680E+000
	244.69	7.49	2.8595E+000		-4.0338E-001
	344.27	26.50	6.1585E-001		-7.4878E-002
	778.89	12.74	9.8267E-001		-1.7785E-001
	867.32	4.16	3.3184E+000		1.4486E+000
	964.01	14.40	1.0392E+000		-9.7858E-002
	1085.78	10.00	1.1379E+000		-9.0201E-001
	1112.02	13.30	8.3695E-001		-6.4029E-001
	1407.95	20.70	4.2624E-001		1.3135E-001
Eu-154	123.07	40.50	9.6351E-001	3.20E-001	-4.1937E-002
	247.94	6.60	3.0791E+000		-3.5882E+000
	591.81	4.83	2.8527E+000		3.8938E-001
	723.30	19.70	7.0332E-001		4.6909E-001
	756.87	4.33	3.1007E+000		-8.6861E-001
	873.19	11.50	1.1194E+000		-8.3832E-001
	996.32	10.30	1.1289E+000		3.9522E-001
	1004.76	17.90	6.9622E-001		-3.2897E-001
1274.45	35.50	3.2048E-001	1.7850E-001		
Eu-155	86.54	30.90	2.4097E+000	2.41E+000	-3.2311E-001
	105.31	20.70	2.4105E+000		2.2219E+000
Am-241	59.54	35.90	4.6596E+000	4.66E+000	3.8704E+000
Cm-243	228.19	10.56	2.2111E+000	1.34E+000	8.5307E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.3402E+000	1.34E+000	1.2982E+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 7/27/2006 2:56:50 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-170-F-

Sample Title: OOL-10-04-170-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 2:46:46 PM

Live Time: 600.0 seconds

Real Time: 602.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-170-F-
Title: OOL-10-04-170-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Rows 1-14 with M/m labels.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.94250E-001	7.98815E-002
K-40	0.995	1460.81*	10.67	1.66844E+001	1.80931E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	8.99307E-001	3.77044E-001
		583.14*	84.20	3.25523E-001	9.76610E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.25635E+001	7.07055E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.704	238.63*	44.60	6.77676E-001	3.00677E-001
		609.31*	46.30	5.00580E-001	1.89351E-001
		1120.29*	15.10	5.90967E-001	3.54715E-001
Ac-228	0.632	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	7.61818E-001	2.71966E-001
		969.11*	16.60	6.83888E-001	2.60894E-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	1.239375E-001	8.258811E-002
K-40	0.995	1.668437E+001	1.809308E+000
TL-208	0.751	3.255228E-001	9.708314E-002
Pb-212 @	0.580	6.776762E-001	3.006768E-001
Bi-214	0.704	5.206243E-001	1.670411E-001
Ac-228	0.632	7.212344E-001	1.882726E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1.0641E+000	12.96
3	84.97	6.0494E-001	39.36
5	351.65	2.5318E-001	41.36
M 10	964.27	3.7909E-002	66.72
13	1332.74	1.2066E-001	35.49

M = First peak in a multiplet region
 m = Other peak in a multiplet region
 F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.2755E-001	1.28E-001	2.4299E-003
	1332.49	100.00	1.2755E-001		1.3346E-001
Nb-94	702.63	100.00	1.3910E-001	1.30E-001	1.4181E-001
	871.10	100.00	1.3036E-001		3.0666E-003
Ag-108m	79.20	7.10	1.3490E+001	1.51E-001	-5.0881E+001
	433.93	89.90	1.7427E-001		-8.4715E-002
	614.37	90.40	1.6165E-001		2.4033E-002
	722.95	90.50	1.5082E-001		-2.3108E-001
Sb-125	176.33	6.89	3.8861E+000	5.52E-001	-8.9929E-001
	427.89	29.33	5.5167E-001		1.0834E-001
	463.38	10.35	1.5347E+000		6.5895E-001
	600.56	17.80	8.0374E-001		-7.6797E-001
	606.64	5.02	3.4152E+000		2.2727E+000
	635.90	11.32	1.2711E+000		-4.2687E-001
Cs-134	563.23	8.38	1.7897E+000	1.53E-001	-1.0425E-001
	569.32	15.43	9.6472E-001		2.1474E-001
	604.70	97.60	1.7526E-001		3.5862E-002
	795.84	85.40	1.5306E-001		1.4842E-001
Cs-137	801.93	8.73	1.3723E+000	1.65E-001	6.3712E-001
	661.65	85.12	1.6519E-001		1.3077E-002
Eu-152	121.78	28.40	1.4463E+000	4.17E-001	1.1490E-001
	244.69	7.49	3.0166E+000		3.5746E-001
	344.27	26.50	6.6815E-001		3.1094E-001
	778.89	12.74	9.8005E-001		-1.1339E+000
	867.32	4.16	3.2337E+000		2.5056E+000
	964.01	14.40	1.0580E+000		1.7350E-001
	1085.78	10.00	1.2435E+000		-7.0614E-001
	1112.02	13.30	8.2359E-001		-6.1384E-001
1407.95	20.70	4.1667E-001	4.0327E-003		
Eu-154	123.07	40.50	1.0032E+000	3.41E-001	-3.7123E-001
	247.94	6.60	3.3147E+000		-2.3056E-001
	591.81	4.83	3.0857E+000		2.4450E-001
	723.30	19.70	6.9889E-001		-7.2863E-001
	756.87	4.33	2.9485E+000		-2.1774E+000
	873.19	11.50	1.1458E+000		1.5491E-001
	996.32	10.30	1.1520E+000		4.6533E-002
	1004.76	17.90	7.0247E-001		2.7116E-001
1274.45	35.50	3.4061E-001	1.4663E-001		
Eu-155	86.54	30.90	2.5182E+000	2.52E+000	-1.1511E+000
	105.31	20.70	2.5555E+000		1.2568E+000
Am-241	59.54	35.90	4.8817E+000	4.88E+000	-4.9928E-001
Cm-243	228.19	10.56	2.2338E+000	1.46E+000	-4.0387E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.4601E+000	1.46E+000	8.4338E-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 7/27/2006 1:26:35 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-10-04-171-F-

Sample Title: OOL-10-04-171-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 1:16:32 PM

Live Time: 600.0 seconds

Real Time: 602.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-171-F-
Title: OOL-10-04-171-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Rows 1-12 with various numerical values.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.992	1460.81*	10.67	1.68938E+001	1.82725E+000
Co-60	0.990	1173.22*	100.00	4.40471E-002	4.70957E-002
		1332.49*	100.00	1.60075E-001	5.12223E-002
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.08235E-001	1.02317E-001
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.71213E+001	7.90627E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.401	238.63*	44.60	6.48144E-001	2.39258E-001
		609.31*	46.30	6.17717E-001	2.04124E-001
		1120.29	15.10		
Ac-228	0.633	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	7.38685E-001	2.75857E-001
		969.11*	16.60	5.12883E-001	3.15715E-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	0.992	1.689377E+001	1.827254E+000
Co-60	0.990	9.719962E-002	3.466891E-002
TL-208	0.471	3.082348E-001	1.023168E-001
Pb-212 @	0.580	6.481441E-001	2.392580E-001
Bi-214	0.401	6.177175E-001	2.041238E-001
Ac-228	0.633	6.409286E-001	2.077319E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	72.92	1.1648E+000	11.97
3	84.89	8.0883E-001	37.20
5	351.80	1.8167E-001	51.66

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: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	7.7897E-002	6.23E-002	4.4047E-002
		1332.49*	100.00	6.2319E-002		1.6007E-001
	Nb-94	702.63	100.00	1.4713E-001	1.22E-001	1.7370E-001
		871.10	100.00	1.2201E-001		-4.4495E-002
	Ag-108m	79.20	7.10	1.3276E+001	1.61E-001	-8.7338E+000
		433.93	89.90	1.7092E-001		6.3867E-003
		614.37	90.40	1.6248E-001		-4.1196E-002
		722.95	90.50	1.6058E-001		6.1520E-002
	Sb-125	176.33	6.89	3.8007E+000	5.15E-001	2.0078E+000
		427.89	29.33	5.1504E-001		-6.7696E-002
		463.38	10.35	1.4857E+000		2.6365E-001
		600.56	17.80	8.3305E-001		-8.2394E-002
		606.64	5.02	3.4278E+000		-1.2754E+000
		635.90	11.32	1.1650E+000		-1.0739E+000
	Cs-134	563.23	8.38	1.7562E+000	1.50E-001	1.0468E+000
		569.32	15.43	9.3222E-001		2.0631E-001
		604.70	97.60	1.7198E-001		-2.8326E-002
		795.84	85.40	1.5001E-001		6.4606E-002
		801.93	8.73	1.3683E+000		2.6004E-001
	Cs-137	661.65	85.12	1.6647E-001	1.66E-001	-1.0245E-002
	Eu-152	121.78	28.40	1.4512E+000	4.23E-001	-4.7485E-003
		244.69	7.49	2.9794E+000		1.1576E+000
		344.27	26.50	6.6046E-001		5.6558E-001
		778.89	12.74	9.3434E-001		-1.7374E-001
		867.32	4.16	2.9816E+000		-4.1568E+000
		964.01	14.40	1.0200E+000		-3.3901E-001
		1085.78	10.00	1.2512E+000		4.5196E-001
		1112.02	13.30	8.6940E-001		-4.4950E-001
		1407.95	20.70	4.2308E-001		-7.1982E-003
	Eu-154	123.07	40.50	1.0039E+000	3.42E-001	8.6174E-002
		247.94	6.60	3.1983E+000		3.9184E-003
		591.81	4.83	2.8902E+000		-8.0465E-001
		723.30	19.70	7.3779E-001		3.3000E-001
		756.87	4.33	3.0220E+000		-2.8424E+000
		873.19	11.50	1.0134E+000		-1.4340E+000
		996.32	10.30	1.1289E+000		4.0342E-001
		1004.76	17.90	6.6843E-001		-3.4563E-001
		1274.45	35.50	3.4183E-001		1.0898E-001
	Eu-155	86.54	30.90	2.4749E+000	2.47E+000	-4.6382E-001
		105.31	20.70	2.4935E+000		-3.3650E-001
	Am-241	59.54	35.90	4.7622E+000	4.76E+000	-1.1624E+000
	Cm-243	228.19	10.56	2.2170E+000	1.34E+000	2.1274E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.3429E+000	1.34E+000	2.8229E-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 7/27/2006 2:22:59 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-172-F-

Sample Title: OOL-10-04-172-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 2:12:56 PM

Live Time: 600.0 seconds

Real Time: 602.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-172-F-
 Title: OOL-10-04-172-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	284-	306	291.30	72.91	0.94	5.58E+002	80.25	2.53E+003
m	2	284-	306	300.04	75.10	0.94	1.05E+003	93.68	2.85E+003
	3	332-	344	339.08	84.86	1.13	4.07E+002	170.20	2.70E+003
	4	951-	960	954.52	238.73	0.75	1.35E+002	65.77	4.33E+002
	5	1175-	1186	1179.87	295.07	0.65	5.44E+001	56.18	3.05E+002
	6	1398-	1413	1407.60	352.00	1.49	1.85E+002	56.71	2.17E+002
	7	2031-	2052	2041.89	510.59	0.83	1.95E+002	57.00	1.73E+002
	8	2323-	2337	2331.32	582.95	1.31	1.26E+002	41.99	1.16E+002
	9	2426-	2443	2436.65	609.28	1.51	1.31E+002	45.75	1.27E+002
	10	3634-	3652	3643.12	910.92	1.56	1.13E+002	38.29	7.65E+001
	11	3865-	3884	3875.24	968.95	1.19	6.66E+001	36.02	7.74E+001
	12	4688-	4700	4693.34	1173.49	0.52	2.48E+001	21.69	3.32E+001
	13	5322-	5337	5328.96	1332.40	0.41	6.63E+001	24.89	3.17E+001
	14	5626-	5637	5631.50	1408.04	0.44	9.13E+000	12.14	1.09E+001
	15	5830-	5857	5844.38	1461.27	1.56	8.40E+002	60.37	2.43E+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: 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	3.32831E-001	1.07248E-001
K-40	0.992	1460.81*	10.67	1.78131E+001	1.92872E+000
Co-60	0.998	1173.22*	100.00	5.20889E-002	4.56667E-002
		1332.49*	100.00	1.44078E-001	5.52259E-002
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.54088E+000	5.12215E-001
		583.14*	84.20	2.67095E-001	9.53704E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.40780E+001	7.34034E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.402	238.63*	44.60	4.20971E-001	2.15502E-001
		609.31*	46.30	5.11028E-001	1.89224E-001
		1120.29	15.10		
PB-214	0.619	1764.49	15.80		
		74.82* @	6.21	5.87173E+001	1.33466E+001
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
Ac-228	0.634	295.21*	19.20	4.14988E-001	4.34093E-001
		351.92*	37.20	7.58500E-001	2.65251E-001
		338.32	11.40		
		911.07*	27.70	8.14983E-001	2.90562E-001
		969.11*	16.60	8.08903E-001	4.45379E-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	2.751386E-001	1.091919E-001
K-40	0.992	1.781309E+001	1.928724E+000
Co-60	0.998	8.944551E-002	3.519310E-002
TL-208	0.751	2.670952E-001	9.497237E-002
Pb-212 @	0.580	4.209706E-001	2.155016E-001
Bi-214	0.402	5.110276E-001	1.892241E-001
PB-214 @	0.619	6.651101E-001	2.263404E-001
Ac-228	0.634	8.131675E-001	2.433537E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	9.2984E-001	14.38
3	84.86	6.7857E-001	41.80
14	1408.04	1.5208E-002	133.03

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: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	7.3840E-002	7.38E-002	5.2089E-002
		1332.49*	100.00	7.5499E-002		1.4408E-001
	Nb-94	702.63	100.00	1.3767E-001	1.30E-001	1.3344E-001
		871.10	100.00	1.3002E-001		4.2925E-002
	Ag-108m	79.20	7.10	1.3299E+001	1.52E-001	-5.7330E+000
		433.93	89.90	1.7071E-001		-8.4256E-003
		614.37	90.40	1.7421E-001		-4.0464E-002
		722.95	90.50	1.5180E-001		-1.5545E-002
	Sb-125	176.33	6.89	3.8702E+000	5.28E-001	1.2543E+000
		427.89	29.33	5.2797E-001		2.1450E-001
		463.38	10.35	1.5495E+000		2.0149E+000
		600.56	17.80	7.5682E-001		-2.8717E-001
		606.64	5.02	3.3856E+000		3.9111E+000
		635.90	11.32	1.2192E+000		2.5898E-001
	Cs-134	563.23	8.38	1.6607E+000	1.47E-001	-7.9816E-001
		569.32	15.43	9.1632E-001		-5.4172E-001
		604.70	97.60	1.6078E-001		-3.9653E-002
		795.84	85.40	1.4690E-001		1.3143E-002
		801.93	8.73	1.4737E+000		-7.9094E-001
	Cs-137	661.65	85.12	1.6454E-001	1.65E-001	2.0395E-002
	Eu-152	121.78	28.40	1.4723E+000	4.26E-001	5.2134E-001
		244.69	7.49	2.9009E+000		2.1970E+000
		344.27	26.50	6.3281E-001		-1.0748E-001
		778.89	12.74	1.0186E+000		7.6194E-001
		867.32	4.16	3.1062E+000		-6.1557E-001
		964.01	14.40	1.0135E+000		4.6771E-001
		1085.78	10.00	1.2589E+000		4.5314E-001
		1112.02	13.30	8.3030E-001		-2.7893E-001
		1407.95	20.70	4.2624E-001		1.0754E-001
	Eu-154	123.07	40.50	1.0201E+000	3.13E-001	-1.1149E-001
		247.94	6.60	3.2076E+000		1.0307E+000
		591.81	4.83	2.9793E+000		4.3645E-001
		723.30	19.70	7.0773E-001		3.7672E-001
		756.87	4.33	3.1007E+000		6.9896E-001
		873.19	11.50	1.1312E+000		6.0413E-001
		996.32	10.30	1.2114E+000		-2.6078E-001
		1004.76	17.90	7.1683E-001		5.5779E-002
		1274.45	35.50	3.1258E-001		1.6959E-002
	Eu-155	86.54	30.90	2.4819E+000	2.48E+000	2.9849E-001
		105.31	20.70	2.5313E+000		-2.0958E-001
	Am-241	59.54	35.90	4.8451E+000	4.85E+000	2.0302E-001
	Cm-243	228.19	10.56	2.2238E+000	1.42E+000	5.0699E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.4235E+000	1.42E+000	6.2041E-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 7/27/2006 11:07:40 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-173-F-

Sample Title: OOL-10-04-173-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 10:57:36 AM

Live Time: 600.0 seconds

Real Time: 602.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-173-F-
 Title: OOL-10-04-173-F-G
 Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.96	73.08	1.00	5.35E+002	81.27	2.66E+003
m	2	285-	305	300.04	75.10	1.00	1.06E+003	95.38	3.16E+003
	3	333-	343	339.41	84.94	0.90	3.18E+002	151.41	2.38E+003
	4	949-	961	954.26	238.66	1.13	2.41E+002	82.13	5.72E+002
	5	1398-	1413	1407.49	351.98	0.74	8.87E+001	62.29	3.06E+002
	6	2323-	2341	2332.16	583.16	1.06	1.55E+002	44.20	1.05E+002
	7	2428-	2447	2436.71	609.30	1.69	1.72E+002	48.53	1.26E+002
	8	3636-	3655	3645.37	911.48	1.23	1.10E+002	39.07	8.22E+001
	9	3869-	3886	3877.95	969.63	1.19	7.44E+001	33.48	6.46E+001
	10	4477-	4491	4482.66	1120.81	0.49	4.03E+001	27.85	5.57E+001
	11	4689-	4701	4695.51	1174.03	0.78	2.30E+001	23.17	4.40E+001
	12	5834-	5857	5846.83	1461.88	1.98	7.85E+002	60.16	3.91E+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: 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	0.957	1460.81*	10.67	1.66532E+001	1.85668E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.28762E-001	1.02825E-001
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.45249E+001	7.44304E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.52784E-001	2.82035E-001
Bi-214	0.705	609.31*	46.30	6.70616E-001	2.06530E-001
		1120.29*	15.10	5.54575E-001	3.87672E-001
		1764.49	15.80		
Ac-228	0.628	338.32	11.40		
		911.07*	27.70	7.88930E-001	2.94935E-001
		969.11*	16.60	9.03372E-001	4.17317E-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	0.957	1.665324E+001	1.856678E+000
TL-208	0.472	3.287618E-001	1.028250E-001
Pb-212 @	0.580	7.527837E-001	2.820350E-001
Bi-214	0.705	6.449624E-001	1.822772E-001
Ac-228	0.628	8.270508E-001	2.408547E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	8.9156E-001	15.19
3	84.94	5.2950E-001	47.66
5	351.98	1.4776E-001	70.25
11	1174.03	3.8252E-002	100.95

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	1.2716E-001	1.26E-001	-8.6427E-002
	1332.49	100.00	1.2628E-001		2.1190E-001
Nb-94	702.63	100.00	1.4080E-001	1.33E-001	7.7165E-002
	871.10	100.00	1.3302E-001		3.9352E-002
Ag-108m	79.20	7.10	1.3544E+001	1.61E-001	-2.2505E+001
	433.93	89.90	1.9334E-001		2.6377E-001
	614.37	90.40	1.7828E-001		-7.6097E-002
	722.95	90.50	1.6150E-001		1.2688E-001
Sb-125	176.33	6.89	3.8821E+000	5.39E-001	-3.6872E-001
	427.89	29.33	5.3933E-001		-7.7000E-001
	463.38	10.35	1.5180E+000		-3.4884E-001
	600.56	17.80	7.8794E-001		-2.2414E-001
	606.64	5.02	3.5433E+000		-8.0411E-001
	635.90	11.32	1.2642E+000		-1.4790E-002
Cs-134	563.23	8.38	1.7841E+000	1.64E-001	-9.2561E-001
	569.32	15.43	9.8577E-001		-5.3255E-003
	604.70	97.60	1.6796E-001		7.2206E-003
	795.84	85.40	1.6396E-001		1.1300E-002
	801.93	8.73	1.5577E+000		2.4027E-001
Cs-137	661.65	85.12	1.8720E-001	1.87E-001	2.3915E-001
Eu-152	121.78	28.40	1.4608E+000	3.93E-001	-7.2281E-001
	244.69	7.49	3.0025E+000		6.6010E-001
	344.27	26.50	6.5100E-001		-2.4908E-001
	778.89	12.74	1.0606E+000		5.0572E-001
	867.32	4.16	3.1305E+000		-6.0403E+000
	964.01	14.40	9.7591E-001		-1.2992E-002
	1085.78	10.00	1.2551E+000		-4.1788E-001
	1112.02	13.30	9.3076E-001		-7.7576E-001
1407.95	20.70	3.9336E-001	-4.4405E-001		
Eu-154	123.07	40.50	1.0128E+000	3.29E-001	4.4312E-001
	247.94	6.60	3.3132E+000		-1.3547E-001
	591.81	4.83	3.1055E+000		2.5989E+000
	723.30	19.70	7.4058E-001		6.0378E-001
	756.87	4.33	3.1567E+000		1.5802E-001
	873.19	11.50	1.1370E+000		-5.3871E-001
	996.32	10.30	1.1969E+000		2.9960E-001
	1004.76	17.90	7.3089E-001		-1.6448E-001
1274.45	35.50	3.2945E-001	1.0875E-001		
Eu-155	86.54	30.90	2.5004E+000	2.50E+000	-8.2982E-001
	105.31	20.70	2.5380E+000		-4.9868E-001
Am-241	59.54	35.90	4.8669E+000	4.87E+000	-4.3802E-001
Cm-243	228.19	10.56	2.2670E+000	1.47E+000	4.3746E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.4704E+000	1.47E+000	1.1543E-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 7/27/2006 12:55:53 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-174-F-

Sample Title: OOL-10-04-174-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 12:45:50 AM

Live Time: 600.0 seconds

Real Time: 602.1 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-174-F-
 Title: OOL-10-04-174-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	285-	306	291.07	72.86	1.04	5.19E+002	81.58	2.65E+003
m	2	285-	306	299.81	75.04	1.05	1.01E+003	93.86	3.50E+003
	3	332-	343	338.99	84.84	1.52	4.79E+002	161.38	2.52E+003
	4	948-	959	953.83	238.56	1.02	2.16E+002	74.56	4.92E+002
	5	1175-	1184	1179.37	294.94	0.35	5.29E+001	50.09	2.64E+002
	6	1396-	1414	1406.04	351.62	1.61	1.45E+002	68.66	3.18E+002
	7	2321-	2339	2330.87	582.84	0.60	1.70E+002	50.67	1.47E+002
	8	2427-	2443	2435.07	608.89	0.95	1.52E+002	44.25	1.14E+002
	9	3636-	3651	3643.02	910.89	0.84	1.02E+002	34.34	6.80E+001
	10	3866-	3883	3874.21	968.70	0.83	7.65E+001	30.00	4.85E+001
	11	5323-	5337	5329.04	1332.42	1.08	5.89E+001	21.17	2.01E+001
	12	5829-	5854	5842.22	1460.73	1.93	7.90E+002	59.70	3.25E+001
	13	7051-	7065	7058.09	1764.71	0.95	4.05E+001	15.48	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: 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	1.67458E+001	1.85508E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.59181E-001	1.16907E-001
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.29474E+001	7.14489E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.74642E-001	2.55469E-001
Bi-214	0.691	609.31*	46.30	5.90839E-001	1.87294E-001
		1120.29	15.10		
		1764.49*	15.80	6.31553E-001	2.49516E-001
PB-214	0.618	74.82* @	6.21	5.67693E+001	1.29823E+001
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.03164E-001	3.87965E-001
		351.92*	37.20	5.97058E-001	2.99127E-001
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	7.32573E-001	2.60655E-001
		969.11*	16.60	9.29037E-001	3.76951E-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	1.674577E+001	1.855083E+000
TL-208	0.470	3.591813E-001	1.169071E-001
Pb-212 @	0.580	6.746424E-001	2.554688E-001
Bi-214	0.691	6.055120E-001	1.497898E-001
PB-214 @	0.618	5.247684E-001	2.368908E-001
Ac-228	0.632	7.961247E-001	2.143911E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	8.6438E-001	15.73
3	84.84	7.9818E-001	33.70
11	1332.42	9.8233E-002	35.92

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: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	1.2716E-001	1.17E-001	5.1705E-002
	1332.49	100.00	1.1748E-001		1.4056E-001
Nb-94	702.63	100.00	1.3117E-001	1.31E-001	-4.3239E-002
	871.10	100.00	1.3136E-001		8.8063E-003
Ag-108m	79.20	7.10	1.3387E+001	1.60E-001	-9.3650E+000
	433.93	89.90	1.7979E-001		-8.5056E-003
	614.37	90.40	1.7292E-001		8.2673E-002
	722.95	90.50	1.5967E-001		1.5190E-001
Sb-125	176.33	6.89	3.8291E+000	5.47E-001	-2.9916E+000
	427.89	29.33	5.4677E-001		2.9634E-001
	463.38	10.35	1.4876E+000		4.4014E-001
	600.56	17.80	8.7316E-001		-1.3375E-001
	606.64	5.02	3.6432E+000		6.5656E+000
	635.90	11.32	1.2288E+000		-5.4397E-001
Cs-134	563.23	8.38	1.7250E+000	1.53E-001	1.8084E+000
	569.32	15.43	9.4629E-001		4.6878E-001
	604.70	97.60	1.8434E-001		3.0369E-003
	795.84	85.40	1.5268E-001		6.8896E-002
	801.93	8.73	1.4278E+000		-6.4839E-001
Cs-137	661.65	85.12	1.6964E-001	1.70E-001	-2.3453E-003
Eu-152	121.78	28.40	1.4497E+000	4.79E-001	3.4000E-001
	244.69	7.49	3.0583E+000		2.7600E-001
	344.27	26.50	6.3569E-001		3.0424E-002
	778.89	12.74	1.0211E+000		-2.9867E-001
	867.32	4.16	3.1547E+000		-1.9456E+000
	964.01	14.40	1.0371E+000		1.9250E-001
	1085.78	10.00	1.1590E+000		7.4414E-002
	1112.02	13.30	8.9448E-001		-3.2822E-001
	1407.95	20.70	4.7942E-001		2.8342E-001
Eu-154	123.07	40.50	1.0023E+000	2.95E-001	3.3506E-001
	247.94	6.60	3.3654E+000		-6.3283E-001
	591.81	4.83	3.1546E+000		2.4009E-001
	723.30	19.70	7.3498E-001		7.0389E-001
	756.87	4.33	3.0365E+000		1.9196E+000
	873.19	11.50	1.0893E+000		-1.6455E+000
	996.32	10.30	1.2576E+000		-1.1247E-001
	1004.76	17.90	6.7711E-001		-4.3216E-001
1274.45	35.50	2.9470E-001	8.9382E-002		
Eu-155	86.54	30.90	2.5106E+000	2.47E+000	-1.0665E+000
	105.31	20.70	2.4680E+000		-2.0174E+000
Am-241	59.54	35.90	4.8179E+000	4.82E+000	-4.3437E-001
Cm-243	228.19	10.56	2.2221E+000	1.44E+000	-2.0773E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.4366E+000	1.44E+000	-3.3961E-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 7/26/2006 10:08:26 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-175-F-

Sample Title: OOL-10-04-175-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 9:58:04 PM

Live Time: 600.0 seconds

Real Time: 601.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-175-F-
 Title: OOL-10-04-175-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	285-	306	290.77	72.78	1.09	5.17E+002	79.87	2.46E+003
m	2	285-	306	299.44	74.95	1.09	1.13E+003	94.95	3.49E+003
	3	332-	345	339.12	84.87	1.02	4.05E+002	182.16	2.98E+003
	4	944-	957	952.57	238.24	0.92	2.96E+002	82.45	5.33E+002
	5	1400-	1411	1404.48	351.23	0.71	9.13E+001	46.42	1.86E+002
	6	2320-	2333	2328.31	582.20	1.00	1.31E+002	38.03	8.93E+001
	7	2424-	2439	2432.41	608.22	1.10	1.29E+002	40.37	9.79E+001
	8	3629-	3648	3638.65	909.80	1.09	1.19E+002	35.23	5.78E+001
	9	3859-	3877	3869.69	967.56	0.69	7.67E+001	30.89	5.03E+001
	10	5315-	5331	5323.16	1330.95	1.14	6.03E+001	20.19	1.47E+001
	11	5824-	5850	5835.96	1459.16	1.53	7.98E+002	59.35	2.70E+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: 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	0.900	1460.81*	10.67	1.69179E+001	1.85995E+000
TL-208	0.449	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.76294E-001	8.80898E-002
		860.37	12.46		
Pb-212	0.578	74.81* @	10.70	3.68317E+001	7.85820E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.22906E-001	2.94983E-001
Bi-214	0.375	609.31*	46.30	5.03179E-001	1.69179E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.578	338.32	11.40		
		911.07*	27.70	8.55702E-001	2.71503E-001
		969.11*	16.60	9.30811E-001	3.87368E-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	0.900	1.691790E+001	1.859947E+000
TL-208	0.449	2.762937E-001	8.808983E-002
Pb-212 @	0.578	9.229065E-001	2.949831E-001
Bi-214	0.375	5.031794E-001	1.691789E-001
Ac-228	0.578	8.804446E-001	2.223306E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	8.6128E-001	15.46
3	84.87	6.7555E-001	44.94
5	351.23	1.5208E-001	50.87
10	1330.95	1.0058E-001	33.45

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	1.2676E-001	1.12E-001	4.0370E-002
	1332.49	100.00	1.1233E-001		1.1385E-001
Nb-94	702.63	100.00	1.1840E-001	1.15E-001	-5.1102E-002
	871.10	100.00	1.1496E-001		-6.4034E-003
Ag-108m	79.20	7.10	1.3136E+001	1.39E-001	-7.5179E+000
	433.93	89.90	1.6466E-001		4.5091E-002
	614.37	90.40	1.3854E-001		-1.9065E-001
	722.95	90.50	1.4720E-001		4.9016E-002
Sb-125	176.33	6.89	3.8391E+000	4.96E-001	-6.8930E-001
	427.89	29.33	4.9636E-001		-3.6462E-001
	463.38	10.35	1.3572E+000		-6.1293E-001
	600.56	17.80	7.6883E-001		8.8736E-002
	606.64	5.02	3.3082E+000		5.4092E+000
	635.90	11.32	1.1420E+000		-2.6531E-001
Cs-134	563.23	8.38	1.5844E+000	1.32E-001	-1.0306E+000
	569.32	15.43	8.7863E-001		9.5103E-002
	604.70	97.60	1.6863E-001		1.6983E-002
	795.84	85.40	1.3239E-001		-4.2168E-003
	801.93	8.73	1.3228E+000		1.0225E+000
Cs-137	661.65	85.12	1.5589E-001	1.56E-001	1.5757E-001
Eu-152	121.78	28.40	1.4347E+000	3.79E-001	4.7107E-001
	244.69	7.49	2.8257E+000		-1.3080E+000
	344.27	26.50	5.9900E-001		2.1309E-001
	778.89	12.74	9.3434E-001		-3.8062E-001
	867.32	4.16	2.7973E+000		2.1343E+000
	964.01	14.40	1.0070E+000		6.8883E-001
	1085.78	10.00	1.1250E+000		1.3413E-001
	1112.02	13.30	8.5009E-001		-4.1045E-001
1407.95	20.70	3.7935E-001	-3.5499E-002		
Eu-154	123.07	40.50	9.9137E-001	2.98E-001	-3.9914E-001
	247.94	6.60	3.1512E+000		1.0180E+000
	591.81	4.83	2.9220E+000		2.8848E+000
	723.30	19.70	6.7474E-001		1.7356E-002
	756.87	4.33	2.9707E+000		-1.1960E+000
	873.19	11.50	9.9680E-001		-5.5964E-001
	996.32	10.30	1.1132E+000		-8.5523E-001
	1004.76	17.90	6.5071E-001		1.5992E-001
1274.45	35.50	2.9752E-001	1.0467E-001		
Eu-155	86.54	30.90	2.4850E+000	2.48E+000	-3.2643E-002
	105.31	20.70	2.4830E+000		1.5569E+000
Am-241	59.54	35.90	4.7488E+000	4.75E+000	-1.0133E+000
Cm-243	228.19	10.56	2.2120E+000	1.31E+000	6.5994E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.3083E+000	1.31E+000	4.5980E-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 7/26/2006 10:25:33 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-176-F-

Sample Title: OOL-10-04-176-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 10:15:21 PM

Live Time: 600.0 seconds

Real Time: 601.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-176-F-
Title: OOL-10-04-176-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 13 peaks with their respective parameters.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.901	1460.81*	10.67	1.53390E+001	1.71545E+000
TL-208	0.444	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.62765E-001	9.38035E-002
		860.37	12.46		
Pb-212	0.578	74.81* @	10.70	3.16394E+001	6.89879E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.15536E-001	2.83412E-001
Bi-214	0.655	609.31*	46.30	3.15442E-001	1.54583E-001
		1120.29*	15.10	3.43497E-001	3.58559E-001
		1764.49	15.80		
Ac-228	0.946	338.32*	11.40	8.46092E-001	6.81593E-001
		911.07*	27.70	8.90328E-001	2.55925E-001
		969.11*	16.60	6.03199E-001	3.41663E-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	0.901	1.533902E+001	1.715454E+000
TL-208	0.444	2.627648E-001	9.380353E-002
Pb-212 @	0.578	5.155360E-001	2.834120E-001
Bi-214	0.655	3.198393E-001	1.419528E-001
Ac-228	0.946	7.920123E-001	1.961660E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	7.8046E-001	16.68
3	84.86	6.7633E-001	41.74
6	351.29	2.1783E-001	44.79
12	1331.02	1.0474E-001	33.91

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	1.1564E-001	1.16E-001	-2.7453E-003
	1332.49	100.00	1.2064E-001		1.4738E-001
Nb-94	702.63	100.00	1.2810E-001	1.28E-001	-5.0970E-002
	871.10	100.00	1.3136E-001		-3.7083E-002
Ag-108m	79.20	7.10	1.3315E+001	1.37E-001	-5.6163E+000
	433.93	89.90	1.6771E-001		1.9252E-001
	614.37	90.40	1.3690E-001		-2.6687E-001
	722.95	90.50	1.4886E-001		1.3215E-001
Sb-125	176.33	6.89	3.8321E+000	4.97E-001	8.7049E-001
	427.89	29.33	4.9704E-001		2.1955E-001
	463.38	10.35	1.3802E+000		-1.4774E-001
	600.56	17.80	7.2905E-001		-3.4642E-001
	606.64	5.02	3.1061E+000		2.8908E+000
	635.90	11.32	1.0919E+000		-9.0637E-001
Cs-134	563.23	8.38	1.5302E+000	1.50E-001	-3.2884E-001
	569.32	15.43	8.4094E-001		-1.4603E-001
	604.70	97.60	1.6031E-001		-6.0924E-003
	795.84	85.40	1.4963E-001		-3.1762E-002
	801.93	8.73	1.4043E+000		7.4349E-001
Cs-137	661.65	85.12	1.6422E-001	1.64E-001	1.0945E-001
Eu-152	121.78	28.40	1.4301E+000	3.65E-001	9.0869E-001
	244.69	7.49	2.8635E+000		9.9823E-001
	344.27	26.50	6.1228E-001		-1.2226E-001
	778.89	12.74	9.5614E-001		-5.2302E-001
	867.32	4.16	3.0817E+000		-1.4918E+000
	964.01	14.40	1.0048E+000		1.2440E+000
	1085.78	10.00	1.1755E+000		9.9853E-001
	1112.02	13.30	8.3695E-001		4.6030E-002
1407.95	20.70	3.6475E-001	-1.8550E-001		
Eu-154	123.07	40.50	9.8559E-001	2.85E-001	-5.3101E-001
	247.94	6.60	3.1225E+000		-1.4102E+000
	591.81	4.83	2.7927E+000		1.6081E+000
	723.30	19.70	6.8542E-001		8.7175E-001
	756.87	4.33	2.9035E+000		-1.3090E-001
	873.19	11.50	1.0954E+000		-9.7931E-001
	996.32	10.30	1.0851E+000		3.1343E-001
	1004.76	17.90	6.3938E-001		2.3666E-001
1274.45	35.50	2.8457E-001	2.6561E-004		
Eu-155	86.54	30.90	2.4775E+000	2.48E+000	-1.1530E-001
	105.31	20.70	2.4842E+000		-7.6002E-001
Am-241	59.54	35.90	4.8538E+000	4.85E+000	2.3672E+000
Cm-243	228.19	10.56	2.1390E+000	1.34E+000	3.9007E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.3367E+000	1.34E+000	2.3397E-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 7/26/2006 6:47:59 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-177-F-

Sample Title: OOL-10-04-177-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 6:37:54 PM

Live Time: 600.0 seconds

Real Time: 601.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-177-F-
 Title: OOL-10-04-177-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-	305	291.16	72.88	0.94	5.39E+002	78.39	2.40E+003
m	2	284-	305	299.54	74.97	0.94	9.23E+002	90.53	2.96E+003
	3	333-	344	339.49	84.96	0.54	2.98E+002	159.23	2.51E+003
	4	948-	959	953.17	238.39	1.00	1.56E+002	75.28	5.22E+002
	5	1399-	1410	1405.34	351.44	0.98	8.60E+001	50.47	2.28E+002
	6	2030-	2050	2041.34	510.45	0.67	1.84E+002	56.50	1.78E+002
	7	2319-	2336	2328.93	582.35	1.35	1.42E+002	46.65	1.31E+002
	8	2426-	2443	2433.26	608.43	0.70	1.49E+002	42.98	1.01E+002
	9	3061-	3074	3069.39	767.48	1.08	4.22E+001	29.10	6.48E+001
	10	3169-	3182	3174.28	793.70	1.04	3.54E+001	27.31	5.76E+001
	11	3630-	3648	3640.43	910.25	1.44	1.20E+002	37.64	7.36E+001
	12	3864-	3879	3871.15	967.93	1.45	5.68E+001	30.41	6.12E+001
	13	5085-	5099	5091.58	1273.05	1.41	4.20E+001	16.83	1.10E+001
	14	5316-	5334	5325.48	1331.53	0.88	9.10E+001	22.54	1.20E+001
	15	5825-	5851	5838.37	1459.76	1.67	8.25E+002	58.74	1.67E+001
	16	7047-	7062	7054.23	1763.75	0.43	3.45E+001	13.13	3.54E+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	3.13827E-001	1.05408E-001
K-40	0.959	1460.81*	10.67	1.74992E+001	1.88641E+000
TL-208	0.736	277.35	6.80		
		510.84*	21.60	1.45290E+000	5.02218E-001
		583.14*	84.20	2.99153E-001	1.06038E-001
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.01528E+001	6.60845E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.673	238.63*	44.60	4.86979E-001	2.46847E-001
		609.31*	46.30	5.81205E-001	1.82256E-001
		1120.29	15.10		
Ac-228	0.606	1764.49*	15.80	5.37242E-001	2.11559E-001
		338.32	11.40		
		911.07*	27.70	8.64499E-001	2.88076E-001
		969.11*	16.60	6.88811E-001	3.76153E-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	2.492102E-001	1.078471E-001
K-40	0.959	1.749916E+001	1.886409E+000
TL-208	0.736	2.991526E-001	1.055890E-001
Pb-212 @	0.580	4.869786E-001	2.468474E-001
Bi-214	0.673	5.624767E-001	1.380820E-001
Ac-228	0.606	7.995491E-001	2.287094E-001

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	8.9902E-001	14.53
3	84.96	4.9620E-001	53.48
5	351.44	1.4330E-001	58.70
9	767.48	7.0378E-002	68.92
10	793.70	5.8952E-002	77.21
13	1273.05	6.9921E-002	40.12
14	1331.53	1.5160E-001	24.78

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	1.3586E-001	1.25E-001	8.1330E-002
	1332.49	100.00	1.2457E-001		1.5378E-001
Nb-94	702.63	100.00	1.4165E-001	1.28E-001	-9.2232E-002
	871.10	100.00	1.2764E-001		-3.9405E-003
Ag-108m	79.20	7.10	1.3133E+001	1.52E-001	-1.3574E+001
	433.93	89.90	1.6532E-001		-1.1153E-001
	614.37	90.40	1.5249E-001		3.6527E-002
	722.95	90.50	1.5531E-001		1.0400E-001
Sb-125	176.33	6.89	3.8960E+000	5.31E-001	1.8043E+000
	427.89	29.33	5.3115E-001		-3.4409E-002
	463.38	10.35	1.4722E+000		7.2346E-001
	600.56	17.80	7.5531E-001		-9.0159E-002
	606.64	5.02	3.3771E+000		6.5484E+000
	635.90	11.32	1.1212E+000		-8.5750E-001
Cs-134	563.23	8.38	1.6184E+000	1.54E-001	-1.9886E+000
	569.32	15.43	8.9850E-001		-1.0465E+000
	604.70	97.60	1.7330E-001		-3.0533E-002
	795.84	85.40	1.5418E-001		3.5725E-002
	801.93	8.73	1.4317E+000		-1.4711E-001
Cs-137	661.65	85.12	1.6422E-001	1.64E-001	1.0970E-001
Eu-152	121.78	28.40	1.4278E+000	3.93E-001	-4.1168E-002
	244.69	7.49	2.9181E+000		-2.4434E-001
	344.27	26.50	6.5268E-001		3.4885E-001
	778.89	12.74	1.0059E+000		-1.6136E-001
	867.32	4.16	2.9388E+000		-2.9935E+000
	964.01	14.40	1.0806E+000		9.3360E-001
	1085.78	10.00	1.1548E+000		-1.7411E-001
	1112.02	13.30	8.9448E-001		-1.0648E+000
	1407.95	20.70	3.9336E-001		-2.8498E-001
Eu-154	123.07	40.50	9.8922E-001	3.36E-001	2.3768E-002
	247.94	6.60	3.2123E+000		1.7277E+000
	591.81	4.83	2.8581E+000		4.7277E-001
	723.30	19.70	7.1355E-001		4.5774E-001
	756.87	4.33	2.9186E+000		1.8386E+000
	873.19	11.50	1.1715E+000		6.9610E-001
	996.32	10.30	1.2610E+000		1.1246E+000
	1004.76	17.90	6.6624E-001		-2.2120E-001
1274.45	35.50	3.3570E-001	8.1651E-002		
Eu-155	86.54	30.90	2.4463E+000	2.44E+000	3.8755E-001
	105.31	20.70	2.4387E+000		-1.3058E+000
Am-241	59.54	35.90	4.6967E+000	4.70E+000	-1.8324E+000
Cm-243	228.19	10.56	2.1135E+000	1.39E+000	-8.8012E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.3876E+000	1.39E+000	6.6990E-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 7/26/2006 1:40:32 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-10-04-174-F-

Sample Title: OOL-10-04-178-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 1:30:28 PM

Live Time: 600.0 seconds

Real Time: 600.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\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: 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
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
I N T E R 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
_____	_____	_____	_____
_____	_____	_____	_____

? = nuclide is part of an undetermined 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: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	1.5433E-002	1.54E-002	2.0972E-003
	1332.49	100.00	1.5981E-002		2.1716E-003
Nb-94	702.63	100.00	1.3827E-002	1.38E-002	1.8790E-003
	871.10	100.00	2.1210E-002		-1.4777E-002
Ag-108m	79.20	7.10	5.3109E+000	1.86E-002	-2.6853E+000
	433.93	89.90	2.3630E-002		-6.7591E-003
	614.37	90.40	1.8601E-002		-4.7574E-003
	722.95	90.50	1.9402E-002		-6.2680E-003
Sb-125	176.33	6.89	5.7459E-001	9.38E-002	-9.9812E-002
	427.89	29.33	9.5807E-002		3.6300E-002
	463.38	10.35	1.7211E-001		-1.4789E-001
	600.56	17.80	9.3784E-002		2.0199E-002
	606.64	5.02	3.8674E-001		-4.1914E-002
	635.90	11.32	1.5019E-001		3.2347E-002
Cs-134	563.23	8.38	2.5245E-001	1.66E-002	8.4068E-002
	569.32	15.43	1.3757E-001		-2.6486E-002
	604.70	97.60	2.2173E-002		7.3839E-003
	795.84	85.40	1.6642E-002		-7.3501E-003
	801.93	8.73	5.9967E-002		0.0000E+000
Cs-137	661.65	85.12	2.6166E-002	2.62E-002	8.7135E-003
Eu-152	121.78	28.40	2.0955E-001	2.91E-002	-2.3785E-002
	244.69	7.49	3.5171E-001		-1.1094E-001
	344.27	26.50	9.9916E-002		-3.6566E-002
	778.89	12.74	4.0829E-002		0.0000E+000
	867.32	4.16	5.6835E-001		1.8927E-001
	964.01	14.40	1.2982E-001		2.7959E-002
	1085.78	10.00	5.5841E-002		0.0000E+000
	1112.02	13.30	4.2195E-002		0.0000E+000
1407.95	20.70	2.9100E-002	0.0000E+000		
Eu-154	123.07	40.50	1.4706E-001	1.64E-002	-4.4387E-002
	247.94	6.60	4.5346E-001		6.6475E-003
	591.81	4.83	3.9879E-001		-1.2349E-001
	723.30	19.70	8.9139E-002		-2.6398E-002
	756.87	4.33	3.2462E-001		4.4113E-002
	873.19	11.50	1.5918E-001		3.4284E-002
	996.32	10.30	1.4481E-001		1.9679E-002
	1004.76	17.90	3.0696E-002		0.0000E+000
	1274.45	35.50	1.6353E-002		0.0000E+000
Eu-155	86.54	30.90	5.5124E-001	4.37E-001	1.2492E-001
	105.31	20.70	4.3723E-001		2.2197E-002
Am-241	59.54	35.90	2.2456E+001	2.25E+001	1.5743E+001
Cm-243	228.19	10.56	3.1309E-001	1.94E-001	2.2617E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.9400E-001	1.94E-001	5.7543E-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 7/26/2006 3:13:25 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-179-F-

Sample Title: OOL-10-04-179-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 3:03:21 PM

Live Time: 600.0 seconds

Real Time: 601.7 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-179-F-
 Title: OOL-10-04-179-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-	306	291.39	72.94	1.00	4.89E+002	75.45	2.37E+003
m	2	284-	306	299.79	75.04	1.01	7.68E+002	83.76	2.58E+003
	3	334-	345	338.70	84.76	1.06	2.56E+002	148.88	2.19E+003
	4	947-	960	953.66	238.51	0.76	1.94E+002	83.52	5.84E+002
	5	1397-	1412	1406.10	351.63	0.90	1.44E+002	59.29	2.56E+002
	6	2031-	2049	2040.47	510.23	0.57	1.53E+002	54.20	1.81E+002
	7	2325-	2339	2330.10	582.64	1.81	1.44E+002	41.29	1.03E+002
	8	2429-	2444	2434.20	608.67	0.98	1.20E+002	43.05	1.18E+002
	9	2639-	2649	2644.87	661.34	0.70	3.64E+001	26.95	6.26E+001
	10	3633-	3650	3641.90	910.61	1.32	1.50E+002	34.37	4.78E+001
M	11	3851-	3883	3855.74	964.08	1.52	1.93E+001	13.46	6.03E+001
m	12	3851-	3883	3872.64	968.30	1.52	7.41E+001	19.31	7.73E+001
	13	5070-	5081	5075.32	1268.99	0.56	2.10E+001	12.99	9.00E+000
	14	5320-	5335	5327.66	1332.08	0.38	5.28E+001	24.49	3.42E+001
	15	5827-	5853	5840.63	1460.33	1.78	9.43E+002	62.50	1.69E+001
	16	7048-	7063	7056.15	1764.23	1.07	3.89E+001	17.07	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: 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	0.977	511.00*	100.00	2.61559E-001	9.90674E-002
K-40	0.991	1460.81*	10.67	2.00021E+001	2.09273E+000
Cs-137	0.996	661.65*	85.12	7.93669E-002	5.94486E-002
TL-208	0.744	277.35	6.80		
		510.84*	21.60	1.21092E+000	4.69186E-001
		583.14*	84.20	3.03579E-001	9.58451E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	2.50338E+001	5.61453E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.685	238.63*	44.60	6.03709E-001	2.77128E-001
		609.31*	46.30	4.66752E-001	1.77452E-001
		1120.29	15.10		
Ac-228	0.623	1764.49*	15.80	6.06252E-001	2.72925E-001
		338.32	11.40		
		911.07*	27.70	1.07904E+000	2.76315E-001
		969.11*	16.60	8.99642E-001	2.52688E-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	0.977	1.959854E-001	1.011849E-001
K-40	0.991	2.000212E+001	2.092726E+000
Cs-137	0.996	7.936691E-002	5.944859E-002
TL-208	0.744	3.035794E-001	9.533318E-002
Pb-212 @	0.580	6.037091E-001	2.771283E-001
Bi-214	0.685	5.082022E-001	1.487711E-001
Ac-228	0.623	9.813443E-001	1.864721E-001

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	8.1459E-001	15.44
3	84.76	4.2606E-001	58.24
5	351.63	2.3924E-001	41.30
M 11	964.08	3.2174E-002	69.71
13	1268.99	3.5000E-002	61.86
14	1332.08	8.8080E-002	46.33

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: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	1.4263E-001	1.26E-001	1.1767E-001
	1332.49	100.00	1.2628E-001		1.1614E-001
Nb-94	702.63	100.00	1.4387E-001	1.28E-001	-1.7235E-002
	871.10	100.00	1.2764E-001		-4.8272E-002
Ag-108m	79.20	7.10	1.2030E+001	1.56E-001	-7.9710E+000
	433.93	89.90	1.7344E-001		1.1894E-001
	614.37	90.40	1.6110E-001		-5.3083E-002
	722.95	90.50	1.5625E-001		-9.7729E-002
Sb-125	176.33	6.89	3.4945E+000	5.30E-001	1.2597E+000
	427.89	29.33	5.2988E-001		-1.0541E-001
	463.38	10.35	1.4761E+000		8.2422E-001
	600.56	17.80	8.0232E-001		3.4986E-001
	606.64	5.02	3.4152E+000		3.2963E+000
	635.90	11.32	1.2312E+000		5.5304E-001
Cs-134	563.23	8.38	1.7250E+000	1.52E-001	-5.9079E-002
	569.32	15.43	9.1311E-001		-9.4673E-001
	604.70	97.60	1.7505E-001		-1.2869E-001
	795.84	85.40	1.5230E-001		4.7985E-003
	801.93	8.73	1.4775E+000		5.5176E-001
+ Cs-137	661.65*	85.12	9.4441E-002	9.44E-002	7.9367E-002
Eu-152	121.78	28.40	1.3256E+000	3.86E-001	4.8658E-001
	244.69	7.49	2.7983E+000		4.9034E-001
	344.27	26.50	6.3626E-001		-1.3224E-001
	778.89	12.74	1.0008E+000		-3.4265E-001
	867.32	4.16	3.1305E+000		1.6210E+000
	964.01	14.40	1.1165E+000		1.7425E-002
	1085.78	10.00	1.1838E+000		1.8056E-001
	1112.02	13.30	9.5990E-001		-1.2061E+000
1407.95	20.70	3.8642E-001	5.1450E-002		
Eu-154	123.07	40.50	9.1658E-001	3.29E-001	3.0098E-001
	247.94	6.60	3.0333E+000		-1.9672E+000
	591.81	4.83	2.9220E+000		7.1810E-001
	723.30	19.70	7.1645E-001		-5.1127E-001
	756.87	4.33	3.1219E+000		-5.7130E-001
	873.19	11.50	1.0985E+000		-2.9570E-001
	996.32	10.30	1.2078E+000		-3.3334E-001
Eu-155	1004.76	17.90	7.3288E-001	2.27E+000	-4.1497E-003
	1274.45	35.50	3.2945E-001		2.8412E-001
	86.54	30.90	2.2836E+000		1.4884E-001
Am-241	105.31	20.70	2.2702E+000	4.37E+000	-6.7982E-001
	59.54	35.90	4.3713E+000		-2.9487E+000
Cm-243	228.19	10.56	2.0120E+000	1.33E+000	-8.3220E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.3261E+000	1.33E+000	-2.3789E-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 7/26/2006 3:28:56 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-10-04-180-F-

Sample Title: OOL-10-04-180-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 3:18:53 PM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-180-F-
 Title: OOL-10-04-180-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	284-	306	290.93	72.82	1.04	4.16E+002	71.12	2.15E+003
m	2	284-	306	299.67	75.01	1.04	7.89E+002	83.49	2.59E+003
	3	332-	352	339.34	84.92	0.90	3.12E+002	225.77	3.56E+003
	4	948-	960	953.33	238.43	1.02	2.11E+002	74.85	4.72E+002
	5	1175-	1184	1179.14	294.89	0.69	4.73E+001	44.75	2.08E+002
	6	1399-	1411	1405.84	351.56	1.18	1.17E+002	49.48	1.98E+002
	7	2031-	2050	2040.40	510.22	1.24	1.68E+002	54.16	1.70E+002
	8	2319-	2338	2329.62	582.52	1.34	1.30E+002	46.00	1.20E+002
	9	2425-	2443	2434.44	608.73	1.58	1.13E+002	47.08	1.37E+002
	10	3170-	3184	3176.24	794.19	1.10	2.89E+001	28.85	6.51E+001
	11	3634-	3650	3641.56	910.53	1.46	1.04E+002	33.28	5.90E+001
	12	3864-	3878	3872.36	968.23	0.89	9.15E+001	32.11	6.15E+001
	13	5826-	5852	5840.53	1460.30	1.85	8.65E+002	60.94	2.34E+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: 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	0.976	511.00*	100.00	2.86776E-001	1.00268E-001
K-40	0.990	1460.81*	10.67	1.83364E+001	1.96824E+000
TL-208	0.740	277.35	6.80		
		510.84*	21.60	1.32767E+000	4.76697E-001
		583.14*	84.20	2.74633E-001	1.03629E-001
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	2.57270E+001	5.73093E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.395	238.63*	44.60	6.56816E-001	2.55106E-001
		609.31*	46.30	4.38739E-001	1.91389E-001
		1120.29	15.10		
PB-214	0.617	1764.49	15.80		
		74.82* @	6.21	4.43283E+001	1.03857E+001
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
Ac-228	0.620	295.21*	19.20	3.60848E-001	3.46612E-001
		351.92*	37.20	4.79473E-001	2.18424E-001
		338.32	11.40		
		911.07*	27.70	7.47095E-001	2.53984E-001
		969.11*	16.60	1.11078E+000	4.06778E-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	0.976	2.274554E-001	1.027176E-001
K-40	0.990	1.833641E+001	1.968241E+000
TL-208	0.740	2.746331E-001	1.032420E-001
Pb-212 @	0.580	6.568163E-001	2.551061E-001
Bi-214	0.395	4.387390E-001	1.913888E-001
PB-214 @	0.617	4.457549E-001	1.847927E-001
Ac-228	0.620	8.491093E-001	2.154379E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	6.9347E-001	17.09
3	84.92	5.2076E-001	72.26
10	794.19	4.8249E-002	99.65

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	1.3767E-001	1.17E-001	-1.4560E-002
	1332.49	100.00	1.1656E-001		1.6226E-001
Nb-94	702.63	100.00	1.3417E-001	1.30E-001	-2.4769E-002
	871.10	100.00	1.3036E-001		5.8488E-002
Ag-108m	79.20	7.10	1.1868E+001	1.55E-001	-4.6179E+000
	433.93	89.90	1.6466E-001		4.7953E-003
	614.37	90.40	1.5969E-001		6.2293E-002
	722.95	90.50	1.5531E-001		2.6117E-003
Sb-125	176.33	6.89	3.3877E+000	4.90E-001	6.7818E-001
	427.89	29.33	4.8951E-001		-4.1870E-001
	463.38	10.35	1.4488E+000		-8.6869E-001
	600.56	17.80	8.3031E-001		-3.1598E-001
	606.64	5.02	3.4236E+000		5.6929E+000
	635.90	11.32	1.1625E+000		8.1505E-001
Cs-134	563.23	8.38	1.7307E+000	1.60E-001	1.3493E+000
	569.32	15.43	8.6171E-001		3.0578E-002
	604.70	97.60	1.7396E-001		-1.1643E-002
	795.84	85.40	1.6005E-001		7.1482E-002
Cs-137	801.93	8.73	1.4240E+000	1.71E-001	2.2721E-001
	661.65	85.12	1.7120E-001		8.8224E-002
Eu-152	121.78	28.40	1.2799E+000	4.39E-001	-3.2073E-001
	244.69	7.49	2.7693E+000		1.4164E+000
	344.27	26.50	5.6893E-001		-3.0490E-001
	778.89	12.74	1.0484E+000		-2.0404E-001
	867.32	4.16	3.1547E+000		-1.1443E+000
	964.01	14.40	1.1184E+000		2.7101E-001
	1085.78	10.00	1.1919E+000		-1.6391E-001
	1112.02	13.30	9.7695E-001		1.2301E-001
Eu-154	1407.95	20.70	4.3866E-001	3.15E-001	7.6321E-002
	123.07	40.50	8.8650E-001		-1.1196E-001
	247.94	6.60	3.0416E+000		-9.4759E-002
	591.81	4.83	2.9999E+000		-2.4653E+000
	723.30	19.70	7.1355E-001		1.1999E-002
	756.87	4.33	2.9110E+000		-9.0425E-001
	873.19	11.50	1.1194E+000		2.8727E-001
	996.32	10.30	1.1250E+000		-1.9589E-001
Eu-155	1004.76	17.90	6.8779E-001	2.22E+000	9.3512E-002
	1274.45	35.50	3.1524E-001		1.0394E-001
	86.54	30.90	2.2263E+000		-2.3579E-001
Am-241	105.31	20.70	2.2182E+000	4.31E+000	3.1233E-001
	59.54	35.90	4.3137E+000		1.0308E-001
Cm-243	228.19	10.56	2.0073E+000	1.28E+000	-4.1506E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.2802E+000	1.28E+000	-2.1293E-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 7/26/2006 3:43:09 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-10-04-181-F-

Sample Title: OOL-10-04-181-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 3:33:04 PM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-181-F-
 Title: OOL-10-04-181-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	284-	313	291.48	72.96	1.04	4.48E+002	72.03	2.10E+003
m	2	284-	313	299.78	75.03	1.04	8.49E+002	82.03	2.56E+003
	3	332-	344	339.47	84.96	1.01	3.25E+002	147.61	2.03E+003
	4	948-	959	953.13	238.38	1.04	3.01E+002	70.39	3.93E+002
	5	1173-	1183	1178.61	294.75	1.13	8.51E+001	46.52	2.01E+002
	6	1398-	1414	1405.52	351.48	0.67	1.52E+002	55.52	2.08E+002
	7	2032-	2051	2041.19	510.41	0.89	1.53E+002	51.92	1.57E+002
	8	2324-	2338	2329.54	582.50	1.39	1.43E+002	43.21	1.15E+002
	9	2373-	2384	2379.05	594.88	0.99	3.80E+001	28.43	6.80E+001
	10	2427-	2443	2433.81	608.57	0.90	1.42E+002	43.43	1.11E+002
	11	3631-	3649	3641.07	910.41	1.70	1.30E+002	37.42	6.88E+001
	12	3865-	3882	3872.50	968.27	1.45	8.97E+001	28.15	3.53E+001
	13	4469-	4482	4476.40	1119.25	0.61	3.67E+001	24.10	4.03E+001
	14	5319-	5334	5325.94	1331.65	1.24	4.13E+001	22.45	2.97E+001
	15	5828-	5851	5840.19	1460.22	1.99	8.24E+002	60.22	3.00E+001
	16	7049-	7062	7055.94	1764.17	0.98	3.65E+001	14.27	5.52E+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: 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	0.987	511.00*	100.00	2.61915E-001	9.54559E-002
K-40	0.987	1460.81*	10.67	1.74748E+001	1.90595E+000
TL-208	0.741	277.35	6.80		
		510.84*	21.60	1.21257E+000	4.52885E-001
		583.14*	84.20	3.01537E-001	9.94443E-002
		860.37	12.46		
Pb-212	0.579	74.81* @	10.70	2.76607E+001	6.04454E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.979	238.63*	44.60	9.39575E-001	2.64344E-001
		609.31*	46.30	5.52065E-001	1.82484E-001
		1120.29*	15.10	5.05017E-001	3.35814E-001
		1764.49*	15.80	5.68821E-001	2.29575E-001
PB-214	0.615	74.82* @	6.21	4.76601E+001	1.09745E+001
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	6.48811E-001	3.71158E-001
Ac-228	0.618	351.92*	37.20	6.25710E-001	2.50861E-001
		338.32	11.40		
		911.07*	27.70	9.35318E-001	2.89525E-001
		969.11*	16.60	1.08825E+000	3.60226E-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	0.987	1.967826E-001	9.781981E-002
K-40	0.987	1.747480E+001	1.905955E+000
TL-208	0.741	3.015375E-001	9.895761E-002
Pb-212 @	0.579	9.395746E-001	2.643440E-001
Bi-214	0.979	5.503497E-001	1.314528E-001
PB-214 @	0.615	6.329540E-001	2.078402E-001
Ac-228	0.618	9.953383E-001	2.256698E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	72.96	7.4726E-001	16.06
3	84.96	5.4185E-001	45.40
9	594.88	6.3314E-002	74.83
14	1331.65	6.8832E-002	54.37

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	1.2676E-001	1.16E-001	1.1834E-001
	1332.49	100.00	1.1610E-001		1.2284E-001
Nb-94	702.63	100.00	1.3738E-001	1.25E-001	-7.0862E-002
	871.10	100.00	1.2451E-001		3.3503E-002
Ag-108m	79.20	7.10	1.1733E+001	1.52E-001	3.4894E-001
	433.93	89.90	1.6466E-001		8.2252E-003
	614.37	90.40	1.6054E-001		3.3081E-002
	722.95	90.50	1.5212E-001		-9.6243E-002
Sb-125	176.33	6.89	3.3371E+000	4.89E-001	1.0413E+000
	427.89	29.33	4.8882E-001		-5.6398E-001
	463.38	10.35	1.4310E+000		7.9931E-001
	600.56	17.80	7.7180E-001		3.9633E-002
	606.64	5.02	3.3856E+000		6.9889E+000
	635.90	11.32	1.2192E+000		1.5020E-001
Cs-134	563.23	8.38	1.6215E+000	1.56E-001	-6.9668E-001
	569.32	15.43	8.7191E-001		1.3454E-002
	604.70	97.60	1.7021E-001		-5.7039E-002
	795.84	85.40	1.5567E-001		2.1475E-001
	801.93	8.73	1.3642E+000		-2.6274E+000
Cs-137	661.65	85.12	1.6647E-001	1.66E-001	1.6241E-001
Eu-152	121.78	28.40	1.2494E+000	4.57E-001	8.1324E-001
	244.69	7.49	2.5881E+000		5.9892E-001
	344.27	26.50	5.8354E-001		4.6224E-001
	778.89	12.74	1.0186E+000		-4.9032E-001
	867.32	4.16	3.0404E+000		-9.1673E-001
	964.01	14.40	9.8041E-001		-1.5533E-002
	1085.78	10.00	1.0899E+000		1.9631E-001
	1112.02	13.30	8.2696E-001		1.5593E-002
1407.95	20.70	4.5660E-001	7.6161E-002		
Eu-154	123.07	40.50	8.5877E-001	2.88E-001	-4.9658E-002
	247.94	6.60	2.8848E+000		8.0640E-001
	591.81	4.83	2.9690E+000		-2.0190E+000
	723.30	19.70	6.9592E-001		-3.9125E-001
	756.87	4.33	2.9707E+000		1.5277E+000
	873.19	11.50	1.0954E+000		3.5918E-003
	996.32	10.30	1.1405E+000		-7.9477E-001
	1004.76	17.90	7.2289E-001		7.4812E-001
1274.45	35.50	2.8750E-001	-1.5920E-002		
Eu-155	86.54	30.90	2.1791E+000	2.18E+000	4.3232E-001
	105.31	20.70	2.1773E+000		5.5121E-002
Am-241	59.54	35.90	4.2363E+000	4.24E+000	-1.5847E+000
Cm-243	228.19	10.56	1.9601E+000	1.25E+000	-5.5182E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.2476E+000	1.25E+000	-9.9888E-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 7/27/2006 12:49:42 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-182-F-

Sample Title: OOL-10-04-182-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 12:39:40 AM

Live Time: 600.0 seconds

Real Time: 601.2 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-182-F-
 Title: OOL-10-04-182-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	947-	961	954.22	238.53	1.18	1.52E+002	58.67	2.58E+002
2	1348-	1357	1352.92	338.22	0.82	3.25E+001	28.54	7.95E+001
3	1396-	1416	1407.04	351.75	1.44	1.22E+002	50.31	1.47E+002
4	2035-	2048	2042.44	510.62	0.83	3.99E+001	35.92	1.07E+002
5	2321-	2339	2331.17	582.81	1.56	1.08E+002	36.38	6.93E+001
6	2425-	2445	2435.76	608.97	0.56	1.42E+002	35.71	5.25E+001
7	3635-	3650	3643.63	910.97	1.08	8.50E+001	26.83	3.40E+001
M 8	3849-	3884	3854.39	963.67	1.34	1.86E+001	13.84	3.76E+001
m 9	3849-	3884	3876.46	969.19	1.35	3.95E+001	15.23	2.33E+001
10	4475-	4486	4480.31	1120.17	1.04	2.30E+001	18.94	2.80E+001
11	5829-	5854	5841.28	1460.46	2.34	6.02E+002	52.54	2.81E+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	0.996	1460.81*	10.67	1.36783E+001	1.62856E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	3.32044E-001	3.03215E-001
		583.14*	84.20	2.40316E-001	8.70189E-002
		860.37	12.46		
Pb-212	0.446	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.97492E-001	2.06756E-001
Bi-214	0.703	609.31*	46.30	5.82958E-001	1.63719E-001
		1120.29*	15.10	3.39286E-001	2.81654E-001
		1764.49	15.80		
Ac-228	1.000	338.32*	11.40	4.51616E-001	4.02711E-001
		911.07*	27.70	6.46962E-001	2.17337E-001
		969.11*	16.60	5.09940E-001	2.03749E-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	0.995		
	K-40	0.996	1.367831E+001	1.628561E+000
	TL-208	0.750	2.472962E-001	8.364254E-002
	Pb-212 @	0.446	4.974924E-001	2.067559E-001
	Bi-214	0.703	5.214189E-001	1.415433E-001
	Ac-228	1.000	5.593556E-001	1.394481E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.75	2.0267E-001	41.38
M 8	963.67	3.1065E-002	74.23

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: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	1.1050E-001	9.55E-002	-4.1001E-003
	1332.49	100.00	9.5502E-002		9.3131E-002
Nb-94	702.63	100.00	1.0243E-001	1.02E-001	2.9904E-002
	871.10	100.00	1.0463E-001		7.4249E-002
Ag-108m	79.20	7.10	1.0335E+001	1.23E-001	-2.0455E+001
	433.93	89.90	1.3160E-001		-1.5258E-002
	614.37	90.40	1.4706E-001		-1.9377E-002
	722.95	90.50	1.2331E-001		-1.0271E-002
Sb-125	176.33	6.89	2.6594E+000	4.05E-001	-2.0202E+000
	427.89	29.33	4.0515E-001		-1.4266E-001
	463.38	10.35	1.0932E+000		-6.8169E-001
	600.56	17.80	6.0115E-001		-7.1911E-002
	606.64	5.02	2.9715E+000		5.8570E+000
	635.90	11.32	8.9958E-001		-8.7911E-001
Cs-134	563.23	8.38	1.3396E+000	1.30E-001	1.0531E+000
	569.32	15.43	7.1650E-001		9.4238E-002
	604.70	97.60	1.5239E-001		2.3586E-002
	795.84	85.40	1.2952E-001		6.7038E-002
Cs-137	801.93	8.73	1.2543E+000	1.19E-001	-3.6330E-001
	661.65	85.12	1.1925E-001		-2.7266E-002
Eu-152	121.78	28.40	9.9648E-001	2.90E-001	4.7392E-001
	244.69	7.49	2.0792E+000		-1.6431E+000
	344.27	26.50	4.8003E-001		-2.4925E-001
	778.89	12.74	8.0474E-001		-3.8733E-001
	867.32	4.16	2.4898E+000		1.1641E-001
	964.01	14.40	9.2042E-001		-1.8688E-001
	1085.78	10.00	9.9618E-001		-5.7403E-001
	1112.02	13.30	7.3650E-001		-5.8753E-001
Eu-154	1407.95	20.70	2.8982E-001	2.85E-001	3.6010E-002
	123.07	40.50	6.9021E-001		-3.3881E-001
	247.94	6.60	2.2938E+000		7.7155E-001
	591.81	4.83	2.3418E+000		3.8325E-001
	723.30	19.70	5.5816E-001		-1.0397E-001
	756.87	4.33	2.5652E+000		2.2659E+000
	873.19	11.50	8.8937E-001		-8.4563E-002
	996.32	10.30	9.4530E-001		-3.9829E-001
Eu-155	1004.76	17.90	5.3267E-001	1.75E+000	1.1653E-001
	1274.45	35.50	2.8466E-001		9.8317E-002
	86.54	30.90	1.7614E+000		2.0404E+000
Am-241	105.31	20.70	1.7454E+000	5.20E+000	1.3862E-001
	59.54	35.90	5.2044E+000		-4.6429E+000
Cm-243	228.19	10.56	1.4936E+000	1.03E+000	2.1801E-003

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0339E+000	1.03E+000	-9.7179E-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 7/28/2006 1:28:24 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-182-F

Sample Title: OOL-10-04-182-F-R

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 1:18:22 PM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-182-F
Title: OOL-10-04-182-F-R
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	300.35	75.18	1.11	2.12E+002	94.23	8.33E+002
2	947-	961	954.00	238.60	0.67	1.24E+002	51.68	1.98E+002
3	1175-	1187	1179.17	294.89	0.79	6.19E+001	32.43	7.71E+001
4	1400-	1413	1406.22	351.66	0.88	9.11E+001	33.35	7.19E+001
5	2321-	2338	2331.63	583.03	1.11	7.28E+001	32.76	6.32E+001
6	2426-	2444	2435.50	608.99	0.82	1.18E+002	33.21	5.00E+001
7	3635-	3653	3643.26	910.95	0.38	6.08E+001	25.85	3.33E+001
8	3866-	3882	3873.71	968.57	0.55	5.02E+001	19.86	1.68E+001
9	4471-	4484	4477.85	1119.61	0.64	4.62E+001	17.47	1.18E+001
10	4687-	4698	4692.41	1173.26	0.63	1.80E+001	12.49	9.00E+000
11	5832-	5853	5842.08	1460.69	1.91	3.87E+002	41.67	1.69E+001
12	7052-	7065	7058.04	1764.70	0.98	2.73E+001	14.42	9.70E+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	8.21041E+000	1.10587E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.53893E-001	7.21217E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	6.87178E+000	3.33632E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.994	238.63*	44.60	3.86438E-001	1.72196E-001
		609.31*	46.30	4.60368E-001	1.41382E-001
		1120.29*	15.10	6.34869E-001	2.49550E-001
		1764.49*	15.80	4.25670E-001	2.28788E-001
PB-214	0.617	74.82* @	6.21	1.18403E+001	5.81248E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.72337E-001	2.59744E-001
		351.92*	37.20	3.74282E-001	1.50601E-001
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	4.36318E-001	1.92307E-001
		969.11*	16.60	6.09253E-001	2.49450E-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	8.210407E+000	1.105871E+000
TL-208	0.472	1.538926E-001	7.212168E-002
Pb-212 @	0.580	3.864385E-001	1.721962E-001
Bi-214	0.994	4.854793E-001	1.083445E-001
PB-214 @	0.617	3.989520E-001	1.302857E-001
Ac-228	0.631	5.007838E-001	1.523024E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
10	1173.26	3.0000E-002	69.41

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: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	8.7313E-002	8.22E-002	-6.9206E-003
	1332.49	100.00	8.2161E-002		6.8406E-002
Nb-94	702.63	100.00	8.8940E-002	8.15E-002	9.6451E-003
	871.10	100.00	8.1480E-002		-4.1418E-002
Ag-108m	79.20	7.10	7.1989E+000	1.04E-001	-3.7470E+000
	433.93	89.90	1.0446E-001		-2.3643E-002
	614.37	90.40	1.1209E-001		4.3019E-002
	722.95	90.50	1.1214E-001		-3.8413E-002
Sb-125	176.33	6.89	2.0146E+000	3.17E-001	-1.3732E+000
	427.89	29.33	3.1659E-001		-2.9073E-002
	463.38	10.35	9.4824E-001		7.7671E-001
	600.56	17.80	4.9958E-001		-1.6159E-001
	606.64	5.02	2.5539E+000		4.4881E+000
	635.90	11.32	7.2935E-001		-7.0443E-002
Cs-134	563.23	8.38	1.1146E+000	9.96E-002	-9.6642E-002
	569.32	15.43	5.5585E-001		-3.5355E-001
	604.70	97.60	1.2646E-001		-2.2572E-002
	795.84	85.40	9.9646E-002		3.6278E-002
	801.93	8.73	9.6474E-001		-2.0096E-001
Cs-137	661.65	85.12	1.1364E-001	1.14E-001	5.5674E-002
Eu-152	121.78	28.40	7.8018E-001	3.03E-001	1.7540E-001
	244.69	7.49	1.5911E+000		-3.1576E-001
	344.27	26.50	3.6143E-001		-3.9759E-002
	778.89	12.74	7.0681E-001		-4.5704E-001
	867.32	4.16	1.9961E+000		-1.2565E+000
	964.01	14.40	7.6795E-001		3.9287E-001
	1085.78	10.00	7.9334E-001		1.2390E-001
	1112.02	13.30	5.2888E-001		4.2881E-002
1407.95	20.70	3.0316E-001	-9.9832E-002		
Eu-154	123.07	40.50	5.3651E-001	2.01E-001	-1.6601E-001
	247.94	6.60	1.7401E+000		-7.9236E-002
	591.81	4.83	1.8580E+000		-1.3645E+000
	723.30	19.70	5.1930E-001		3.4758E-002
	756.87	4.33	1.8488E+000		-5.9878E-001
	873.19	11.50	6.6418E-001		-5.9182E-001
	996.32	10.30	8.3018E-001		-3.1815E-001
	1004.76	17.90	4.4292E-001		2.5523E-002
1274.45	35.50	2.0073E-001	-1.3035E-001		
Eu-155	86.54	30.90	1.3746E+000	1.35E+000	1.6093E+000
	105.31	20.70	1.3506E+000		-5.5077E-001
Am-241	59.54	35.90	2.6000E+000	2.60E+000	-8.1724E-001
Cm-243	228.19	10.56	1.3012E+000	7.78E-001	6.1375E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	7.7846E-001	7.78E-001	6.0127E-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 7/27/2006 1:03:09 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-183-F-

Sample Title: OOL-10-04-183-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 12:53:05 AM

Live Time: 600.0 seconds

Real Time: 601.4 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-183-F-
Title: OOL-10-04-183-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	291-	309	300.35	75.04	1.20	4.74E+002	147.54	1.54E+003
2	944-	961	954.77	238.67	1.57	2.59E+002	66.07	2.70E+002
3	1346-	1357	1352.13	338.02	0.95	2.80E+001	33.84	1.08E+002
4	1400-	1414	1406.73	351.68	1.81	8.11E+001	39.88	1.15E+002
5	2322-	2341	2331.00	582.77	1.16	1.30E+002	40.67	8.54E+001
6	2425-	2444	2435.93	609.01	1.31	1.18E+002	34.91	5.69E+001
7	2901-	2914	2906.97	726.78	1.08	2.43E+001	22.23	3.77E+001
8	3633-	3652	3642.86	910.78	1.37	9.23E+001	29.42	3.77E+001
9	3867-	3882	3874.18	968.62	1.03	4.75E+001	26.85	4.65E+001
10	4471-	4483	4477.39	1119.44	0.54	2.50E+001	18.26	2.30E+001
11	5829-	5855	5841.51	1460.51	2.07	6.88E+002	53.43	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: 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	0.997	1460.81*	10.67	1.56368E+001	1.75421E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.89299E-001	9.82697E-002
		860.37	12.46		
Bi-212	0.995	727.17*	11.80	4.12211E-001	3.80528E-001
Pb-212	0.594	74.81* @	10.70	1.84387E+001	6.78692E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.45645E-001	2.53175E-001
Bi-214	0.699	609.31*	46.30	4.86389E-001	1.55788E-001
		1120.29*	15.10	3.69339E-001	2.72113E-001
		1764.49	15.80		
Ac-228	0.996	338.32*	11.40	3.88765E-001	4.73848E-001
		911.07*	27.70	7.02515E-001	2.38062E-001
		969.11*	16.60	6.13007E-001	3.52553E-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	0.997	1.563680E+001	1.754212E+000
TL-208	0.469	2.892988E-001	9.826973E-002
Bi-212	0.995	4.122112E-001	3.805283E-001
Pb-212 @	0.594	8.456446E-001	2.531750E-001
Bi-214	0.699	4.574942E-001	1.351988E-001
Ac-228	0.996	6.322697E-001	1.821375E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.68	1.3510E-001	49.20

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: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	1.0340E-001	9.62E-002	-1.3762E-001
	1332.49	100.00	9.6174E-002		7.7674E-002
Nb-94	702.63	100.00	1.1048E-001	1.10E-001	3.6431E-002
	871.10	100.00	1.0973E-001		3.2444E-002
Ag-108m	79.20	7.10	1.1516E+001	1.34E-001	-1.2008E+001
	433.93	89.90	1.3372E-001		-4.7238E-004
	614.37	90.40	1.5700E-001		5.4579E-002
	722.95	90.50	1.3368E-001		4.5121E-002
Sb-125	176.33	6.89	2.8719E+000	4.40E-001	-1.2716E+000
	427.89	29.33	4.4047E-001		1.7666E-001
	463.38	10.35	1.1772E+000		-2.0092E-001
	600.56	17.80	6.5064E-001		2.5772E-001
	606.64	5.02	2.9606E+000		5.6732E+000
	635.90	11.32	1.0528E+000		9.9400E-001
Cs-134	563.23	8.38	1.4473E+000	1.18E-001	-6.1390E-001
	569.32	15.43	8.0338E-001		1.0325E+000
	604.70	97.60	1.5099E-001		5.9279E-002
	795.84	85.40	1.1843E-001		7.3024E-002
	801.93	8.73	1.0875E+000		-5.6366E-001
Cs-137	661.65	85.12	1.3629E-001	1.36E-001	-5.1822E-002
Eu-152	121.78	28.40	1.0613E+000	3.76E-001	-2.6672E-001
	244.69	7.49	2.1749E+000		-2.4456E+000
	344.27	26.50	5.1952E-001		5.1232E-002
	778.89	12.74	8.9381E-001		-6.2503E-001
	867.32	4.16	2.6353E+000		-1.3329E+000
	964.01	14.40	9.7317E-001		5.4308E-003
	1085.78	10.00	9.7910E-001		-1.8087E-001
	1112.02	13.30	7.0973E-001		-8.4546E-002
1407.95	20.70	3.7645E-001	8.1510E-002		
Eu-154	123.07	40.50	7.3788E-001	2.61E-001	-5.2993E-002
	247.94	6.60	2.4470E+000		5.5307E-001
	591.81	4.83	2.4502E+000		1.1079E-001
	723.30	19.70	6.2174E-001		8.3461E-001
	756.87	4.33	2.6036E+000		3.7537E-002
	873.19	11.50	9.4283E-001		-1.8426E-001
	996.32	10.30	9.3993E-001		-1.0961E+000
	1004.76	17.90	6.0634E-001		4.2217E-001
1274.45	35.50	2.6109E-001	1.0289E-001		
Eu-155	86.54	30.90	1.9996E+000	1.93E+000	1.3429E+000
	105.31	20.70	1.9274E+000		4.2032E-001
Am-241	59.54	35.90	5.5797E+000	5.58E+000	-2.6998E+000
Cm-243	228.19	10.56	1.5821E+000	1.09E+000	8.8615E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0900E+000	1.09E+000	3.8256E-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 7/28/2006 1:13:52 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-10-04-183-F

Sample Title: OOL-10-04-183-F-R

Description:

Sample Type:

Geometry:

Acquisition Started: 7/28/2006 1:03:50 PM

Live Time: 600.0 seconds

Real Time: 600.8 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-183-F
Title: OOL-10-04-183-F-R
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 11 rows of peak data.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.19482E-001	6.21868E-002
K-40	1.000	1460.81*	10.67	7.12683E+000	9.98315E-001
TL-208	0.742	277.35	6.80		
		510.84*	21.60	5.53158E-001	2.91424E-001
		583.14*	84.20	1.57606E-001	5.92140E-002
		860.37	12.46		
Pb-212	0.426	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.689	238.63*	44.60	3.41368E-001	1.42380E-001
		609.31*	46.30	5.10965E-001	1.30469E-001
		1120.29	15.10		
PB-214	0.536	1764.49*	15.80	4.93858E-001	2.07436E-001
		74.82 @	6.21		
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.04884E-001	2.72367E-001
351.92*	37.20	3.46310E-001	1.35637E-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	8.543931E-002	6.347876E-002
K-40	1.000	7.126829E+000	9.983150E-001
TL-208	0.742	1.576060E-001	5.899082E-002
Pb-212 @	0.426	3.413681E-001	1.423798E-001
Bi-214	0.689	5.061157E-001	1.104404E-001
PB-214 @	0.536	3.380779E-001	1.214151E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	84.71	1.1432E-001	110.35
8	910.88	8.7993E-002	47.03
9	1332.31	4.6553E-002	45.35

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	8.3124E-002	8.31E-002	4.2260E-002
	1332.49	100.00	8.3487E-002		8.9285E-002
Nb-94	702.63	100.00	8.3767E-002	7.87E-002	-6.9708E-002
	871.10	100.00	7.8669E-002		-8.1474E-002
Ag-108m	79.20	7.10	7.3845E+000	9.26E-002	-9.2354E+000
	433.93	89.90	9.6361E-002		4.9450E-002
	614.37	90.40	1.0047E-001		-5.6667E-003
	722.95	90.50	9.2603E-002		1.7237E-002
Sb-125	176.33	6.89	2.0010E+000	2.86E-001	1.4398E+000
	427.89	29.33	2.8570E-001		-1.3285E-001
	463.38	10.35	8.9142E-001		6.2246E-001
	600.56	17.80	4.9251E-001		-2.5666E-001
	606.64	5.02	2.5196E+000		4.9061E+000
	635.90	11.32	6.5047E-001		-5.2981E-001
Cs-134	563.23	8.38	1.0150E+000	9.79E-002	-2.6403E-001
	569.32	15.43	5.5854E-001		2.8529E-001
	604.70	97.60	1.2767E-001		-2.5984E-002
	795.84	85.40	9.7853E-002		6.8591E-002
	801.93	8.73	9.0394E-001		2.3682E-001
Cs-137	661.65	85.12	9.1897E-002	9.19E-002	1.1762E-002
Eu-152	121.78	28.40	7.4662E-001	3.29E-001	-1.9053E-001
	244.69	7.49	1.5563E+000		4.8035E-001
	344.27	26.50	3.6451E-001		-1.2715E-001
	778.89	12.74	5.7546E-001		2.5650E-001
	867.32	4.16	1.9030E+000		-1.6996E+000
	964.01	14.40	6.7180E-001		3.3698E-001
	1085.78	10.00	8.2993E-001		2.5374E-001
	1112.02	13.30	6.0417E-001		3.1440E-001
1407.95	20.70	3.2931E-001	3.8714E-001		
Eu-154	123.07	40.50	5.1952E-001	2.01E-001	9.7963E-002
	247.94	6.60	1.6225E+000		-3.2210E-001
	591.81	4.83	1.9567E+000		-1.5170E-002
	723.30	19.70	4.3288E-001		3.0478E-001
	756.87	4.33	1.6825E+000		2.9928E-001
	873.19	11.50	6.8444E-001		-4.2051E-001
	996.32	10.30	7.7421E-001		5.4483E-001
	1004.76	17.90	4.8778E-001		1.1381E-001
1274.45	35.50	2.0073E-001	-6.4155E-002		
Eu-155	86.54	30.90	1.3370E+000	1.34E+000	3.9008E-001
	105.31	20.70	1.3742E+000		2.5479E-001
Am-241	59.54	35.90	2.7001E+000	2.70E+000	-1.3045E-001
Cm-243	228.19	10.56	1.0713E+000	7.47E-001	-1.1900E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	7.4717E-001	7.47E-001	1.7383E-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 7/27/2006 1:15:54 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-184-F-

Sample Title: OOL-10-04-184-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 1:05:51 AM

Live Time: 600.0 seconds

Real Time: 601.0 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-184-F-
Title: OOL-10-04-184-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It contains 9 rows of peak data.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.986	511.00*	100.00	6.94034E-002	4.57102E-002
K-40	0.997	1460.81*	10.67	7.69856E+000	1.05449E+000
TL-208	0.743	277.35	6.80		
		510.84*	21.60	3.21312E-001	2.13242E-001
		583.14*	84.20	1.30168E-001	6.89829E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	8.58654E+000	4.30547E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.694	238.63*	44.60	3.17046E-001	1.77555E-001
		609.31*	46.30	4.26250E-001	1.50584E-001
		1120.29	15.10		
		1764.49*	15.80	4.47154E-001	2.16369E-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	0.986	4.128716E-002	4.806872E-002
K-40	0.997	7.698557E+000	1.054488E+000
TL-208	0.743	1.301677E-001	6.885234E-002
Pb-212 @	0.593	3.170460E-001	1.775553E-001
Bi-214	0.694	4.330706E-001	1.235971E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.67	1.0414E-001	55.64
7	910.89	1.2054E-001	33.47

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: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	9.1985E-002	8.55E-002	6.1223E-002
	1332.49	100.00	8.5487E-002		2.3986E-002
Nb-94	702.63	100.00	9.6518E-002	9.30E-002	3.3113E-003
	871.10	100.00	9.3003E-002		3.8671E-002
Ag-108m	79.20	7.10	9.9088E+000	1.09E-001	-6.4382E+000
	433.93	89.90	1.1562E-001		3.6845E-002
	614.37	90.40	1.3930E-001		-6.4271E-002
	722.95	90.50	1.0888E-001		8.8656E-002
Sb-125	176.33	6.89	2.4279E+000	3.40E-001	4.4890E-001
	427.89	29.33	3.3964E-001		-4.2681E-001
	463.38	10.35	1.0486E+000		-1.6315E-001
	600.56	17.80	5.5403E-001		-4.2733E-001
	606.64	5.02	2.7920E+000		4.7957E+000
	635.90	11.32	8.5384E-001		2.0829E-001
Cs-134	563.23	8.38	1.1896E+000	1.09E-001	-4.4759E-001
	569.32	15.43	6.5099E-001		5.8372E-001
	604.70	97.60	1.3891E-001		-5.0956E-002
	795.84	85.40	1.0918E-001		4.9715E-002
Cs-137	801.93	8.73	1.0520E+000	1.17E-001	8.2113E-001
	661.65	85.12	1.1668E-001		5.4733E-002
Eu-152	121.78	28.40	9.3146E-001	3.59E-001	-2.7504E-001
	244.69	7.49	1.8657E+000		1.3519E+000
	344.27	26.50	4.2558E-001		-3.4801E-001
	778.89	12.74	7.0376E-001		1.2884E-001
	867.32	4.16	2.1677E+000		-2.0060E+000
	964.01	14.40	7.6222E-001		1.0105E+000
	1085.78	10.00	8.1508E-001		-9.0818E-002
	1112.02	13.30	6.3754E-001		-4.1126E-001
1407.95	20.70	3.5918E-001	2.4420E-002		
Eu-154	123.07	40.50	6.4132E-001	2.39E-001	2.4463E-002
	247.94	6.60	2.0255E+000		-2.2262E-001
	591.81	4.83	1.9968E+000		2.4533E-001
	723.30	19.70	5.0729E-001		5.4488E-001
	756.87	4.33	2.1529E+000		-2.3724E-001
	873.19	11.50	8.4131E-001		9.4711E-001
	996.32	10.30	8.3088E-001		-4.2699E-001
	1004.76	17.90	4.7203E-001		-1.1133E-001
1274.45	35.50	2.3918E-001	1.6674E-001		
Eu-155	86.54	30.90	1.6975E+000	1.68E+000	1.7713E+000
	105.31	20.70	1.6843E+000		-4.8535E-001
Am-241	59.54	35.90	4.7918E+000	4.79E+000	9.7851E-001
Cm-243	228.19	10.56	1.3343E+000	8.61E-001	4.0356E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.6125E-001	8.61E-001	-5.8344E-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 7/27/2006 11:11:44 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-185-F-

Sample Title: OOL-10-04-185-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 11:01:44 AM

Live Time: 600.0 seconds

Real Time: 601.5 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-185-F-
Title: OOL-10-04-185-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	307	300.34	75.04	1.45	4.37E+002	145.69	1.62E+003
2	945-	962	954.77	238.67	1.26	1.33E+002	70.67	3.58E+002
3	2035-	2053	2042.04	510.52	0.92	8.95E+001	40.83	1.02E+002
4	2323-	2338	2331.00	582.77	1.19	7.42E+001	31.95	6.38E+001
5	2429-	2446	2436.01	609.03	0.41	8.08E+001	33.78	6.62E+001
6	3633-	3653	3642.07	910.58	0.58	8.40E+001	34.70	6.30E+001
7	3867-	3883	3874.72	968.75	1.83	5.36E+001	23.15	2.74E+001
8	5828-	5854	5841.73	1460.57	2.39	6.97E+002	54.42	1.69E+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	0.992	511.00*	100.00	1.60688E-001	7.64867E-002
K-40	0.998	1460.81*	10.67	1.58430E+001	1.78185E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	7.43927E-001	3.59279E-001
		583.14*	84.20	1.65486E-001	7.44840E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	1.70266E+001	6.58249E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.401	238.63*	44.60	4.33356E-001	2.40479E-001
		609.31*	46.30	3.33060E-001	1.45088E-001
		1120.29	15.10		
Ac-228	0.628	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	6.39279E-001	2.74116E-001
		969.11*	16.60	6.92092E-001	3.07540E-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	0.992	1.249431E-001	7.815181E-002
K-40	0.998	1.584295E+001	1.781854E+000
TL-208	0.749	1.654865E-001	7.428850E-002
Pb-212 @	0.594	4.333561E-001	2.404792E-001
Bi-214	0.401	3.330603E-001	1.450882E-001
Ac-228	0.628	6.626605E-001	2.046299E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.3288E-001	1.16E-001	1.8064E-001
	1332.49	100.00	1.1608E-001		8.5999E-002
Nb-94	702.63	100.00	1.2206E-001	1.09E-001	3.6296E-002
	871.10	100.00	1.0928E-001		-1.3380E-001
Ag-108m	79.20	7.10	1.2390E+001	1.32E-001	-1.0665E+001
	433.93	89.90	1.4796E-001		5.3525E-002
	614.37	90.40	1.5311E-001		-1.8079E-002
	722.95	90.50	1.3243E-001		6.0459E-002
Sb-125	176.33	6.89	3.1717E+000	4.20E-001	-7.2265E-002
	427.89	29.33	4.1965E-001		-2.1722E-001
	463.38	10.35	1.2999E+000		1.2316E-001
	600.56	17.80	7.1825E-001		2.5518E-001
	606.64	5.02	2.9606E+000		4.8980E+000
	635.90	11.32	9.9448E-001		-1.6427E-001
Cs-134	563.23	8.38	1.4084E+000	1.37E-001	6.8907E-001
	569.32	15.43	7.6986E-001		-1.6460E-001
	604.70	97.60	1.5295E-001		1.0528E-002
	795.84	85.40	1.3687E-001		-9.1007E-003
Cs-137	801.93	8.73	1.3081E+000	1.57E-001	-5.3707E-001
	661.65	85.12	1.5718E-001		1.8556E-001
Eu-152	121.78	28.40	1.2084E+000	4.16E-001	3.6528E-001
	244.69	7.49	2.5111E+000		-9.8435E-001
	344.27	26.50	5.2029E-001		-7.3566E-001
	778.89	12.74	9.2880E-001		4.8511E-001
	867.32	4.16	2.6461E+000		-4.5658E+000
	964.01	14.40	9.4454E-001		-1.6604E-001
	1085.78	10.00	1.0616E+000		-1.7388E-001
	1112.02	13.30	8.0327E-001		-1.1793E+000
1407.95	20.70	4.1624E-001	2.7222E-001		
Eu-154	123.07	40.50	8.3403E-001	2.98E-001	-1.3291E-001
	247.94	6.60	2.8492E+000		2.6094E+000
	591.81	4.83	2.5267E+000		-5.6773E-001
	723.30	19.70	6.1797E-001		5.1546E-001
	756.87	4.33	2.5458E+000		1.1457E+000
	873.19	11.50	1.0194E+000		5.1298E-001
	996.32	10.30	1.0124E+000		-9.2345E-001
	1004.76	17.90	5.7224E-001		2.0223E-001
1274.45	35.50	2.9819E-001	-7.1620E-002		
Eu-155	86.54	30.90	2.1164E+000	2.12E+000	7.9474E-001
	105.31	20.70	2.1282E+000		4.2732E-001
Am-241	59.54	35.90	5.9962E+000	6.00E+000	-8.5936E+000
Cm-243	228.19	10.56	1.7747E+000	1.16E+000	-6.3163E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1612E+000	1.16E+000	8.5292E-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 7/27/2006 11:24:52 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-186-F-

Sample Title: OOL-10-04-186-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 11:14:51 AM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-186-F-
Title: OOL-10-04-186-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 7 rows of peak data.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.43686E-001	7.64046E-002
K-40	0.997	1460.81*	10.67	1.70971E+001	1.88751E+000
TL-208	0.747	277.35	6.80		
		510.84*	21.60	6.65211E-001	3.57872E-001
		583.14*	84.20	3.23413E-001	1.05394E-001
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	1.14992E+001	6.32227E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.399	238.63*	44.60	4.41708E-001	2.25462E-001
		609.31*	46.30	4.29569E-001	1.49854E-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
ANN	0.995	7.382851E-002	7.969149E-002
K-40	0.997	1.709713E+001	1.887509E+000
TL-208	0.747	3.234126E-001	1.048660E-001
Pb-212 @	0.594	4.417084E-001	2.254618E-001
Bi-214	0.399	4.295692E-001	1.498538E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
6	910.65	1.7799E-001	29.58

M = First peak in a multiplet region
 m = Other peak in a multiplet region
 F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.2756E-001	1.19E-001	9.2045E-002
	1332.49	100.00	1.1932E-001		1.5367E-001
Nb-94	702.63	100.00	1.2953E-001	1.15E-001	1.0392E-002
	871.10	100.00	1.1546E-001		-2.9202E-002
Ag-108m	79.20	7.10	1.3569E+001	1.43E-001	-1.8687E+000
	433.93	89.90	1.5688E-001		1.2098E-001
	614.37	90.40	1.5828E-001		-8.4886E-002
	722.95	90.50	1.4288E-001		1.8361E-002
Sb-125	176.33	6.89	3.3412E+000	4.64E-001	1.1911E+000
	427.89	29.33	4.6435E-001		3.2176E-001
	463.38	10.35	1.3334E+000		9.7036E-001
	600.56	17.80	7.3589E-001		4.4054E-002
	606.64	5.02	3.1043E+000		4.1919E+000
	635.90	11.32	1.0273E+000		-2.1076E-001
Cs-134	563.23	8.38	1.5109E+000	1.39E-001	-1.2279E-001
	569.32	15.43	8.6260E-001		-1.2372E-002
	604.70	97.60	1.5707E-001		-9.6963E-002
	795.84	85.40	1.3876E-001		0.0000E+000
	801.93	8.73	1.4004E+000		-3.2204E-001
Cs-137	661.65	85.12	1.4651E-001	1.47E-001	6.9868E-002
Eu-152	121.78	28.40	1.2443E+000	3.89E-001	-3.1995E-003
	244.69	7.49	2.4114E+000		-2.3454E+000
	344.27	26.50	5.5829E-001		-9.8847E-002
	778.89	12.74	9.0989E-001		-1.0173E+000
	867.32	4.16	2.7521E+000		-6.1432E-002
	964.01	14.40	9.4981E-001		1.0949E+000
	1085.78	10.00	1.0456E+000		-1.1862E-001
	1112.02	13.30	9.1476E-001		-1.0061E+000
1407.95	20.70	3.8885E-001	-2.0923E-001		
Eu-154	123.07	40.50	8.6735E-001	3.19E-001	4.4596E-001
	247.94	6.60	2.6703E+000		-1.1506E+000
	591.81	4.83	2.7552E+000		1.0660E+000
	723.30	19.70	6.5823E-001		4.4042E-001
	756.87	4.33	2.9592E+000		1.7439E+000
	873.19	11.50	1.0267E+000		1.0284E-001
	996.32	10.30	1.1072E+000		-2.3258E-001
	1004.76	17.90	6.8141E-001		2.2063E-001
1274.45	35.50	3.1888E-001	1.9126E-001		
Eu-155	86.54	30.90	2.2789E+000	2.17E+000	2.5299E+000
	105.31	20.70	2.1747E+000		-2.2856E-001
Am-241	59.54	35.90	6.3195E+000	6.32E+000	3.5770E+000
Cm-243	228.19	10.56	1.8046E+000	1.21E+000	1.1615E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2070E+000	1.21E+000	-3.9347E-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 7/27/2006 1:26:50 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-187-F-

Sample Title: OOL-10-04-187-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 1:16:46 PM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C SP E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: OOL-10-04-187-F-
Title: OOL-10-04-187-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	292-	309	301.04	75.21	1.27	5.28E+002	164.84	2.01E+003
2	949-	964	954.10	238.50	1.11	2.14E+002	68.75	3.38E+002
3	1400-	1416	1406.45	351.61	1.40	1.21E+002	47.58	1.48E+002
4	2324-	2341	2331.79	582.97	1.02	1.00E+002	40.41	9.98E+001
5	2426-	2446	2436.20	609.08	2.10	1.26E+002	39.13	7.52E+001
6	3634-	3651	3641.95	910.55	2.19	7.77E+001	31.68	5.63E+001
7	5829-	5856	5842.47	1460.76	2.12	7.39E+002	56.52	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: 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	1.000	1460.81*	10.67	1.68028E+001	1.87095E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.23610E-001	9.47732E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	2.03965E+001	7.51895E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.99156E-001	2.49725E-001
Bi-214	0.401	609.31*	46.30	5.18174E-001	1.73404E-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	1.000	1.680279E+001	1.870953E+000
TL-208	0.471	2.236103E-001	9.477319E-002
Pb-212 @	0.593	6.991565E-001	2.497251E-001
Bi-214	0.401	5.181744E-001	1.734039E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.61	2.0185E-001	39.29
6	910.55	1.2943E-001	40.79

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: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	1.2527E-001	1.09E-001	8.3822E-002
	1332.49	100.00	1.0870E-001		2.6911E-002
Nb-94	702.63	100.00	1.3022E-001	1.15E-001	1.6487E-002
	871.10	100.00	1.1503E-001		4.6245E-002
Ag-108m	79.20	7.10	1.3504E+001	1.37E-001	-8.1703E+000
	433.93	89.90	1.5117E-001		-1.1832E-001
	614.37	90.40	1.6813E-001		8.0425E-002
	722.95	90.50	1.3736E-001		1.0063E-001
Sb-125	176.33	6.89	3.4302E+000	4.56E-001	8.3534E-001
	427.89	29.33	4.5626E-001		2.5903E-001
	463.38	10.35	1.3023E+000		1.3127E-001
	600.56	17.80	7.2181E-001		-1.0378E-002
	606.64	5.02	3.1506E+000		5.5189E+000
	635.90	11.32	1.0838E+000		-5.6588E-003
Cs-134	563.23	8.38	1.5364E+000	1.39E-001	-1.9027E-001
	569.32	15.43	8.1357E-001		-1.1477E-001
	604.70	97.60	1.6055E-001		-3.1130E-003
	795.84	85.40	1.3876E-001		5.2758E-002
Cs-137	801.93	8.73	1.2790E+000	1.71E-001	-1.1904E+000
	661.65	85.12	1.7138E-001		1.9527E-001
Eu-152	121.78	28.40	1.2697E+000	4.42E-001	-1.2110E+000
	244.69	7.49	2.5677E+000		-1.8730E+000
	344.27	26.50	5.8220E-001		1.8297E-001
	778.89	12.74	9.2880E-001		-3.5938E-001
	867.32	4.16	2.8339E+000		-9.9722E-001
	964.01	14.40	1.0231E+000		1.1810E+000
	1085.78	10.00	1.0876E+000		2.5250E-001
	1112.02	13.30	7.8305E-001		-1.0053E+000
Eu-154	1407.95	20.70	4.4181E-001	3.13E-001	2.5889E-001
	123.07	40.50	8.7933E-001		-2.2223E-001
	247.94	6.60	2.7711E+000		-1.7571E+000
	591.81	4.83	2.4922E+000		-2.0252E+000
	723.30	19.70	6.1797E-001		1.5241E-001
	756.87	4.33	2.8917E+000		-3.9714E-001
	873.19	11.50	9.7420E-001		-2.5009E-001
	996.32	10.30	1.0750E+000		1.3780E-001
Eu-155	1004.76	17.90	6.3853E-001	2.23E+000	1.5112E-002
	1274.45	35.50	3.1267E-001		-2.4399E-001
	86.54	30.90	2.2863E+000		2.9230E+000
Am-241	105.31	20.70	2.2329E+000	6.46E+000	1.6009E-001
	59.54	35.90	6.4597E+000		-7.9362E+000
Cm-243	228.19	10.56	1.8573E+000	1.24E+000	8.0744E-004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2376E+000	1.24E+000	7.0874E-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 7/27/2006 1:48:50 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-188-F-

Sample Title: OOL-10-04-188-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 1:38:49 PM

Live Time: 600.0 seconds

Real Time: 601.7 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-188-F-
Title: OOL-10-04-188-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	307	300.49	75.08	1.22	3.96E+002	127.85	1.46E+003
2	948-	962	954.34	238.56	1.39	2.46E+002	66.94	3.17E+002
3	2034-	2051	2044.05	511.03	1.32	9.24E+001	44.48	1.30E+002
4	2323-	2339	2330.86	582.74	0.79	1.13E+002	39.11	9.13E+001
5	2429-	2447	2436.83	609.23	1.37	1.37E+002	40.93	8.75E+001
6	3635-	3654	3642.35	910.65	1.15	1.18E+002	32.47	4.46E+001
7	3867-	3883	3873.73	968.51	0.47	5.33E+001	27.05	4.37E+001
8	5830-	5856	5842.75	1460.83	2.08	7.63E+002	57.11	1.98E+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: 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	1.65934E-001	8.30027E-002
K-40	1.000	1460.81*	10.67	1.73448E+001	1.91218E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	7.68215E-001	3.89359E-001
		583.14*	84.20	2.51512E-001	9.32176E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	1.53874E+001	5.81389E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.402	238.63*	44.60	8.03681E-001	2.52212E-001
		609.31*	46.30	5.66376E-001	1.82524E-001
		1120.29	15.10		
Ac-228	0.626	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	9.01064E-001	2.68001E-001
		969.11*	16.60	6.88255E-001	3.56610E-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	1.116078E-001	8.539164E-002
K-40	1.000	1.734477E+001	1.912178E+000
TL-208	0.749	2.515124E-001	9.285653E-002
Pb-212 @	0.594	8.036809E-001	2.522121E-001
Bi-214	0.402	5.663761E-001	1.825241E-001
Ac-228	0.626	8.242537E-001	2.142439E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.2801E-001	1.12E-001	1.2737E-001
	1332.49	100.00	1.1217E-001		1.3738E-001
Nb-94	702.63	100.00	1.2779E-001	1.23E-001	4.9905E-002
	871.10	100.00	1.2293E-001		6.2199E-002
Ag-108m	79.20	7.10	1.3531E+001	1.57E-001	-1.2492E+001
	433.93	89.90	1.5688E-001		-1.3402E-001
	614.37	90.40	1.8050E-001		7.6611E-002
	722.95	90.50	1.5756E-001		7.1544E-002
Sb-125	176.33	6.89	3.4054E+000	4.77E-001	2.2065E-001
	427.89	29.33	4.7699E-001		-3.6569E-002
	463.38	10.35	1.3071E+000		-3.6498E-001
	600.56	17.80	7.9441E-001		-1.4045E-001
	606.64	5.02	3.4388E+000		5.8028E+000
	635.90	11.32	1.1168E+000		-1.0491E+000
Cs-134	563.23	8.38	1.6272E+000	1.43E-001	1.2587E+000
	569.32	15.43	8.5687E-001		1.7648E-001
	604.70	97.60	1.7131E-001		-8.8018E-002
	795.84	85.40	1.4337E-001		1.0367E-001
Cs-137	801.93	8.73	1.4181E+000	1.56E-001	1.6754E-001
	661.65	85.12	1.5603E-001		-4.3227E-002
Eu-152	121.78	28.40	1.2343E+000	4.38E-001	-3.2568E-001
	244.69	7.49	2.5693E+000		-6.4049E-001
	344.27	26.50	5.8769E-001		2.5329E-002
	778.89	12.74	1.0122E+000		-7.4648E-001
	867.32	4.16	2.7417E+000		-3.3256E+000
	964.01	14.40	9.8337E-001		-8.3954E-002
	1085.78	10.00	1.0510E+000		-1.3203E+000
	1112.02	13.30	8.9720E-001		-1.1993E+000
Eu-154	1407.95	20.70	4.3825E-001	3.01E-001	-2.9264E-002
	123.07	40.50	8.5521E-001		1.6125E-001
	247.94	6.60	2.8376E+000		-3.5428E+000
	591.81	4.83	2.8774E+000		-8.3602E-001
	723.30	19.70	7.2711E-001		3.9506E-001
	756.87	4.33	2.9257E+000		2.4895E-002
	873.19	11.50	1.0765E+000		1.2205E+000
	996.32	10.30	1.0466E+000		-3.7957E-001
Eu-155	1004.76	17.90	6.4632E-001	2.22E+000	3.6487E-001
	1274.45	35.50	3.0147E-001		-5.2894E-002
	86.54	30.90	2.2805E+000		2.3777E+000
Am-241	105.31	20.70	2.2222E+000	6.65E+000	4.3246E-002
	59.54	35.90	6.6457E+000		-8.6798E+000
Cm-243	228.19	10.56	1.9032E+000	1.27E+000	2.4667E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2735E+000	1.27E+000	-4.5499E-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 7/27/2006 2:43:50 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-189-F-

Sample Title: OOL-10-04-189-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 2:33:48 PM

Live Time: 600.0 seconds

Real Time: 601.7 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-189-F-
Title: OOL-10-04-189-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	211-	219	214.08	53.47	0.86	1.15E+002	89.09	9.07E+002
2	947-	962	955.15	238.76	1.26	1.42E+002	74.30	4.31E+002
3	2032-	2055	2044.40	511.11	1.57	1.72E+002	47.69	1.05E+002
4	2322-	2341	2331.47	582.89	1.95	1.36E+002	39.19	7.52E+001
5	2428-	2446	2435.53	608.91	1.55	1.18E+002	37.81	7.27E+001
6	3637-	3654	3644.01	911.07	1.92	1.08E+002	31.20	4.47E+001
7	3866-	3880	3874.91	968.80	0.92	3.86E+001	26.97	5.24E+001
8	5830-	5855	5842.82	1460.84	2.15	7.10E+002	56.01	2.54E+001
9	7052-	7066	7058.98	1764.92	0.71	2.81E+001	14.14	7.86E+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: 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	3.09306E-001	9.53772E-002
K-40	1.000	1460.81*	10.67	1.61264E+001	1.82346E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.43197E+000	4.56785E-001
		583.14*	84.20	3.03112E-001	9.59564E-002
		860.37	12.46		
Pb-212	0.446	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.693	238.63*	44.60	4.64942E-001	2.53283E-001
		609.31*	46.30	4.87199E-001	1.66931E-001
		1120.29	15.10		
Ac-228	0.632	1764.49*	15.80	4.57602E-001	2.34514E-001
		338.32	11.40		
		911.07*	27.70	8.24172E-001	2.55677E-001
		969.11*	16.60	4.98150E-001	3.52081E-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	2.438337E-001	9.757995E-002
K-40	1.000	1.612635E+001	1.823462E+000
TL-208	0.751	3.031117E-001	9.544662E-002
Pb-212 @	0.446	4.649419E-001	2.532827E-001
Bi-214	0.693	4.772458E-001	1.359958E-001
Ac-228	0.632	7.116061E-001	2.068820E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	53.47	1.9106E-001	77.71

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: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	1.2756E-001	1.00E-001	3.0914E-002
	1332.49	100.00	1.0011E-001		1.2282E-001
Nb-94	702.63	100.00	1.3526E-001	1.21E-001	5.7360E-002
	871.10	100.00	1.2131E-001		1.8034E-001
Ag-108m	79.20	7.10	1.3558E+001	1.49E-001	-3.7683E+001
	433.93	89.90	1.5143E-001		9.6215E-003
	614.37	90.40	1.6298E-001		7.8308E-002
	722.95	90.50	1.4856E-001		1.5048E-001
Sb-125	176.33	6.89	3.5625E+000	4.63E-001	-5.5863E-001
	427.89	29.33	4.6274E-001		1.5527E-001
	463.38	10.35	1.3047E+000		1.2360E+000
	600.56	17.80	6.9092E-001		-3.3437E-001
	606.64	5.02	3.1301E+000		6.8448E+000
	635.90	11.32	1.0929E+000		7.4146E-001
Cs-134	563.23	8.38	1.5578E+000	1.40E-001	-7.1009E-001
	569.32	15.43	8.6640E-001		4.1493E-001
	604.70	97.60	1.5626E-001		-1.0496E-001
	795.84	85.40	1.3969E-001		1.4169E-001
	801.93	8.73	1.2839E+000		-6.1655E-001
Cs-137	661.65	85.12	1.4733E-001	1.47E-001	1.0241E-001
Eu-152	121.78	28.40	1.3158E+000	4.09E-001	-1.4364E-001
	244.69	7.49	2.5922E+000		-2.6939E+000
	344.27	26.50	5.4372E-001		-7.1684E-001
	778.89	12.74	9.0989E-001		-8.2564E-001
	867.32	4.16	2.8739E+000		-3.1526E+000
	964.01	14.40	9.9346E-001		2.7174E-002
	1085.78	10.00	1.1329E+000		7.4445E-001
	1112.02	13.30	8.1121E-001		9.5597E-002
	1407.95	20.70	4.0862E-001		-4.8462E-003
Eu-154	123.07	40.50	9.0981E-001	2.97E-001	-5.9599E-001
	247.94	6.60	2.7948E+000		-1.7062E+000
	591.81	4.83	2.5741E+000		1.6830E+000
	723.30	19.70	6.8257E-001		4.1215E-001
	756.87	4.33	2.6508E+000		-7.9298E-001
	873.19	11.50	1.0339E+000		7.5617E-001
	996.32	10.30	1.0466E+000		-4.5548E-001
	1004.76	17.90	6.3329E-001		3.6891E-001
	1274.45	35.50	2.9653E-001		1.9336E-001
Eu-155	86.54	30.90	2.3946E+000	2.31E+000	3.3010E+000
	105.31	20.70	2.3138E+000		-6.5365E-001
Am-241	59.54	35.90	6.2034E+000	6.20E+000	-3.1734E+000
Cm-243	228.19	10.56	1.8250E+000	1.24E+000	-1.1185E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2365E+000	1.24E+000	-3.6176E-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 7/27/2006 2:56:32 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-10-04-190-F-

Sample Title: OOL-10-04-190-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 2:46:30 PM

Live Time: 600.0 seconds

Real Time: 601.8 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-190-F-
Title: OOL-10-04-190-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 11 peaks with their respective parameters.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.994	511.00*	100.00	1.95301E-001	7.42593E-002
K-40	1.000	1460.81*	10.67	1.66198E+001	1.84990E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	9.04169E-001	3.51633E-001
		583.14*	84.20	2.74029E-001	9.68543E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.56063E+001	6.77036E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.695	238.63*	44.60	4.46312E-001	2.55766E-001
		609.31*	46.30	5.05501E-001	1.61681E-001
		1120.29	15.10		
Ac-228	0.631	1764.49*	15.80	3.69836E-001	2.26936E-001
		338.32	11.40		
		911.07*	27.70	9.76000E-001	2.66452E-001
		969.11*	16.60	6.26484E-001	3.97332E-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	0.994	1.361104E-001	7.712580E-002
K-40	1.000	1.661982E+001	1.849904E+000
TL-208	0.751	2.740289E-001	9.644169E-002
Pb-212 @	0.593	4.463125E-001	2.557663E-001
Bi-214	0.695	4.598238E-001	1.316796E-001
Ac-228	0.631	8.675776E-001	2.212988E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	85.62	2.0876E-001	101.76
4	351.90	9.9404E-002	68.92

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: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	1.2388E-001	1.04E-001	8.9983E-002
	1332.49	100.00	1.0450E-001		9.1363E-002
Nb-94	702.63	100.00	1.2603E-001	1.21E-001	1.1436E-001
	871.10	100.00	1.2131E-001		1.6403E-002
Ag-108m	79.20	7.10	1.4029E+001	1.50E-001	-1.0031E+000
	433.93	89.90	1.6360E-001		1.0144E-001
	614.37	90.40	1.6328E-001		2.7245E-002
	722.95	90.50	1.5041E-001		8.0764E-002
Sb-125	176.33	6.89	3.5386E+000	4.89E-001	-8.7309E-001
	427.89	29.33	4.8930E-001		1.7346E-001
	463.38	10.35	1.3120E+000		1.0480E+000
	600.56	17.80	7.3064E-001		-1.1817E-001
	606.64	5.02	3.1506E+000		3.6240E+000
	635.90	11.32	1.1460E+000		-9.9791E-002
Cs-134	563.23	8.38	1.5578E+000	1.43E-001	-5.6574E-001
	569.32	15.43	8.5303E-001		-4.2219E-001
	604.70	97.60	1.6214E-001		-3.4673E-002
	795.84	85.40	1.4291E-001		2.6751E-002
Cs-137	801.93	8.73	1.3033E+000	1.53E-001	-1.8646E-001
	661.65	85.12	1.5332E-001		4.4362E-002
Eu-152	121.78	28.40	1.3493E+000	3.89E-001	-1.3598E-001
	244.69	7.49	2.6709E+000		-1.5216E+000
	344.27	26.50	5.8632E-001		-9.9601E-001
	778.89	12.74	1.0007E+000		2.8404E-001
	867.32	4.16	2.9618E+000		-2.0600E+000
	964.01	14.40	1.0304E+000		-1.8225E-001
	1085.78	10.00	1.0927E+000		-3.0134E-001
	1112.02	13.30	9.3198E-001		-2.2013E-001
	1407.95	20.70	3.8885E-001		3.1855E-002
	Eu-154	123.07	40.50		9.3006E-001
247.94		6.60	2.9437E+000	-9.7340E-001	
591.81		4.83	2.8109E+000	2.8354E-001	
723.30		19.70	6.8766E-001	4.3402E-001	
756.87		4.33	2.6879E+000	2.9749E+000	
873.19		11.50	1.0519E+000	5.7630E-001	
996.32		10.30	1.0889E+000	-5.9219E-001	
1004.76		17.90	6.0909E-001	1.9429E-002	
1274.45		35.50	2.9653E-001	-9.0221E-002	
Eu-155		86.54	30.90	2.3887E+000	2.39E+000
	105.31	20.70	2.3901E+000	2.2178E-001	
Am-241	59.54	35.90	6.2997E+000	6.30E+000	5.9614E-002
Cm-243	228.19	10.56	1.9585E+000	1.25E+000	1.3797E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2479E+000	1.25E+000	-6.4163E-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 7/27/2006 3:27:01 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-10-04-191-F-

Sample Title: OOL-10-04-191-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 3:16:59 PM

Live Time: 600.0 seconds

Real Time: 601.9 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-191-F-
Title: OOL-10-04-191-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	286-	309	290.77	72.65	1.46	2.03E+002	73.25	1.80E+003
m	2	286-	309	300.43	75.06	1.47	6.27E+002	82.10	3.07E+003
	3	943-	960	954.11	238.50	1.69	2.20E+002	82.54	4.78E+002
	4	1347-	1358	1353.78	338.43	0.38	4.80E+001	41.77	1.62E+002
	5	1399-	1417	1406.95	351.73	0.57	1.03E+002	55.82	2.09E+002
	6	2031-	2053	2042.95	510.75	2.59	2.04E+002	47.30	9.76E+001
	7	2323-	2341	2331.26	582.84	0.43	1.37E+002	39.62	7.78E+001
	8	2426-	2446	2436.43	609.13	1.95	1.29E+002	44.26	1.05E+002
	9	3635-	3652	3642.91	910.79	1.37	1.10E+002	33.53	5.61E+001
	10	3868-	3884	3874.19	968.62	0.35	4.57E+001	29.29	5.63E+001
	11	5503-	5516	5509.86	1377.59	0.30	1.80E+001	14.74	1.40E+001
	12	5830-	5857	5842.52	1460.77	1.86	7.01E+002	56.54	3.00E+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: 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	3.67140E-001	9.84622E-002
K-40	1.000	1460.81*	10.67	1.59311E+001	1.82073E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.69972E+000	4.76510E-001
		583.14*	84.20	3.06118E-001	9.69895E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	2.43841E+001	5.74822E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.402	238.63*	44.60	7.18980E-001	2.92012E-001
		609.31*	46.30	5.31395E-001	1.93747E-001
		1120.29	15.10		
Ac-228	0.996	1764.49	15.80		
		338.32*	11.40	6.67234E-001	5.89540E-001
		911.07*	27.70	8.36617E-001	2.72726E-001
		969.11*	16.60	5.89482E-001	3.83156E-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	3.010188E-001	1.006432E-001
K-40	1.000	1.593113E+001	1.820726E+000
TL-208	0.751	3.061176E-001	9.647506E-002
Pb-212 @	0.594	7.189803E-001	2.920117E-001
Bi-214	0.402	5.313954E-001	1.937470E-001
Ac-228	0.996	7.427814E-001	2.079126E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	72.65	3.3812E-001	36.11
5	351.73	1.7108E-001	54.38
11	1377.59	3.0000E-002	81.87

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: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	1.09E-001	3.2296E-002
	1332.49	100.00	1.0929E-001		6.1174E-002
Nb-94	702.63	100.00	1.2779E-001	1.16E-001	4.1634E-002
	871.10	100.00	1.1589E-001		3.9115E-002
Ag-108m	79.20	7.10	1.4865E+001	1.51E-001	-1.1678E+001
	433.93	89.90	1.5483E-001		-2.5397E-001
	614.37	90.40	1.8325E-001		-3.0063E-002
	722.95	90.50	1.5114E-001		8.4561E-002
Sb-125	176.33	6.89	3.8693E+000	4.97E-001	-5.4749E-002
	427.89	29.33	4.9683E-001		-1.2915E-002
	463.38	10.35	1.3639E+000		-4.5777E-001
	600.56	17.80	7.1467E-001		3.6706E-001
	606.64	5.02	3.3584E+000		5.6149E+000
	635.90	11.32	1.1517E+000		-7.7800E-002
Cs-134	563.23	8.38	1.5183E+000	1.44E-001	-2.3015E+000
	569.32	15.43	8.3551E-001		1.5912E-001
	604.70	97.60	1.6577E-001		-3.0025E-002
	795.84	85.40	1.4382E-001		4.0143E-002
	801.93	8.73	1.3458E+000		-2.0011E+000
Cs-137	661.65	85.12	1.5293E-001	1.53E-001	2.9207E-002
Eu-152	121.78	28.40	1.4433E+000	4.24E-001	1.9735E-001
	244.69	7.49	2.7808E+000		-3.1025E+000
	344.27	26.50	6.2851E-001		-3.4435E-001
	778.89	12.74	9.4119E-001		-3.7185E-001
	867.32	4.16	2.7933E+000		-4.4554E+000
	964.01	14.40	1.0255E+000		-4.6982E-001
	1085.78	10.00	1.2584E+000		4.2476E-002
	1112.02	13.30	8.7562E-001		-9.4597E-001
1407.95	20.70	4.2372E-001	4.2674E-002		
Eu-154	123.07	40.50	1.0009E+000	3.19E-001	4.0228E-001
	247.94	6.60	3.0658E+000		1.3784E+000
	591.81	4.83	2.7986E+000		-4.9796E-001
	723.30	19.70	6.9774E-001		3.1452E-001
	756.87	4.33	2.9341E+000		-1.3869E+000
	873.19	11.50	1.0008E+000		2.0565E-001
	996.32	10.30	1.1027E+000		-2.7566E-001
	1004.76	17.90	6.5145E-001		3.8676E-001
1274.45	35.50	3.1888E-001	-1.1350E-001		
Eu-155	86.54	30.90	2.5792E+000	2.58E+000	5.3058E+000
	105.31	20.70	2.6102E+000		1.5341E+000
Am-241	59.54	35.90	6.4858E+000	6.49E+000	-4.2292E+000
Cm-243	228.19	10.56	2.0516E+000	1.31E+000	1.9246E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3094E+000	1.31E+000	4.4882E-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 7/27/2006 3:55:24 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-192-F-

Sample Title: OOL-10-04-192-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 3:45:22 PM

Live Time: 600.0 seconds

Real Time: 601.9 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-192-F-
Title: OOL-10-04-192-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	301.30	75.28	1.70	7.57E+002	187.71	2.58E+003
2	946-	965	954.82	238.68	1.80	1.86E+002	93.89	6.00E+002
3	1346-	1363	1353.23	338.30	0.97	7.97E+001	53.12	2.00E+002
4	1400-	1417	1406.75	351.68	0.85	1.37E+002	54.51	1.95E+002
5	2323-	2341	2330.52	582.65	0.65	1.26E+002	45.65	1.23E+002
6	2424-	2446	2435.81	608.98	0.67	1.36E+002	41.49	8.05E+001
7	2638-	2649	2643.86	661.00	0.53	2.61E+001	20.40	3.29E+001
8	3635-	3654	3643.43	910.92	1.99	1.19E+002	32.03	4.23E+001
9	3866-	3880	3874.24	968.63	0.73	5.56E+001	25.47	3.94E+001
10	5830-	5856	5842.99	1460.89	1.89	7.30E+002	57.63	3.05E+001
11	7054-	7067	7060.51	1765.31	0.80	3.13E+001	14.56	8.67E+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	1.000	1460.81*	10.67	1.66022E+001	1.87685E+000
Cs-137	0.986	661.65*	85.12	6.02540E-002	4.75583E-002
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.80878E-001	1.08235E-001
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	2.91721E+001	9.21707E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.691	238.63*	44.60	6.07155E-001	3.20940E-001
		609.31*	46.30	5.58319E-001	1.84232E-001
		1120.29	15.10		
Ac-228	0.997	1764.49*	15.80	5.09550E-001	2.42154E-001
		338.32*	11.40	1.10672E+000	7.57862E-001
		911.07*	27.70	9.03618E-001	2.65029E-001
		969.11*	16.60	7.17921E-001	3.37376E-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	1.000	1.660223E+001	1.876854E+000
Cs-137	0.986	6.025399E-002	4.755832E-002
TL-208	0.466	2.808777E-001	1.082350E-001
Pb-212 @	0.593	6.071555E-001	3.209404E-001
Bi-214	0.691	5.404398E-001	1.466216E-001
Ac-228	0.997	8.520163E-001	2.009524E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.68	2.2831E-001	39.79

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: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	1.2619E-001	1.06E-001	-3.3262E-002
	1332.49	100.00	1.0632E-001		1.1572E-001
Nb-94	702.63	100.00	1.2059E-001	1.20E-001	4.0174E-002
	871.10	100.00	1.2008E-001		-2.1135E-002
Ag-108m	79.20	7.10	1.5225E+001	1.59E-001	-1.4003E+001
	433.93	89.90	1.6336E-001		-8.9804E-002
	614.37	90.40	1.6390E-001		-9.4662E-002
	722.95	90.50	1.5930E-001		1.4720E-001
Sb-125	176.33	6.89	3.9708E+000	4.79E-001	-4.0528E-002
	427.89	29.33	4.7932E-001		-3.3630E-001
	463.38	10.35	1.3959E+000		-4.7954E-001
	600.56	17.80	7.4454E-001		-6.1159E-001
	606.64	5.02	3.1609E+000		3.5037E+000
	635.90	11.32	1.2021E+000		3.8609E-001
Cs-134	563.23	8.38	1.5894E+000	1.44E-001	-2.3253E-001
	569.32	15.43	8.3944E-001		-7.5569E-001
	604.70	97.60	1.6055E-001		-4.8346E-002
	795.84	85.40	1.4382E-001		8.7027E-003
	801.93	8.73	1.3914E+000		-3.9749E-001
+ Cs-137	661.65*	85.12	7.4995E-002	7.50E-002	6.0254E-002
Eu-152	121.78	28.40	1.4916E+000	4.20E-001	7.1074E-001
	244.69	7.49	2.8733E+000		-2.7279E-001
	344.27	26.50	5.9983E-001		-3.9652E-002
	778.89	12.74	9.1940E-001		-2.3298E-002
	867.32	4.16	2.9231E+000		-2.2526E+000
	964.01	14.40	1.0519E+000		3.7180E-001
	1085.78	10.00	1.0825E+000		-1.7413E+000
	1112.02	13.30	8.2297E-001		-2.0008E+000
	1407.95	20.70	4.2000E-001		-1.9403E-001
Eu-154	123.07	40.50	1.0251E+000	3.11E-001	-2.8200E-001
	247.94	6.60	3.1311E+000		-2.4228E+000
	591.81	4.83	2.7677E+000		-2.4107E+000
	723.30	19.70	7.3663E-001		1.2485E+000
	756.87	4.33	2.5941E+000		-2.4852E+000
	873.19	11.50	1.0590E+000		-2.3586E-001
	996.32	10.30	1.1296E+000		-3.9049E-001
	1004.76	17.90	6.6661E-001		2.0828E-001
	1274.45	35.50	3.1109E-001		3.7673E-001
Eu-155	86.54	30.90	2.6428E+000	2.64E+000	3.6833E+000
	105.31	20.70	2.6388E+000		-5.8389E-001
Am-241	59.54	35.90	6.8437E+000	6.84E+000	-4.1448E+000
Cm-243	228.19	10.56	2.0455E+000	1.36E+000	-6.3851E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3558E+000	1.36E+000	2.0347E-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 7/27/2006 4:07:38 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-193-F-

Sample Title: OOL-10-04-193-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 3:57:36 PM

Live Time: 600.0 seconds

Real Time: 602.0 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-193-F-
Title: OOL-10-04-193-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	292.08	72.97	1.59	3.25E+002	93.30	2.28E+003
m	2	286-	309	300.37	75.05	1.59	8.63E+002	98.21	3.41E+003
	3	335-	348	340.02	84.96	0.71	2.35E+002	157.51	2.25E+003
	4	945-	963	955.47	238.85	1.34	1.56E+002	92.08	6.07E+002
	5	1174-	1186	1180.89	295.21	0.34	4.89E+001	50.51	2.34E+002
	6	1396-	1413	1407.82	351.95	0.86	9.82E+001	57.44	2.34E+002
	7	2325-	2344	2333.02	583.28	1.87	1.46E+002	39.77	7.56E+001
	8	2426-	2447	2436.63	609.18	1.94	1.32E+002	44.90	1.05E+002
	9	3636-	3653	3642.98	910.81	0.62	8.35E+001	34.55	6.95E+001
	10	3868-	3882	3875.27	968.89	0.56	2.44E+001	28.22	6.36E+001
	11	5829-	5856	5843.21	1460.94	2.11	6.73E+002	54.30	2.10E+001
	12	7051-	7064	7057.93	1764.66	0.40	2.51E+001	14.95	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: 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	1.52959E+001	1.74833E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.26773E-001	9.84438E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	3.35981E+001	7.61458E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.07943E-001	3.10988E-001
Bi-214	0.697	609.31*	46.30	5.41826E-001	1.96676E-001
		1120.29	15.10		
		1764.49*	15.80	4.07417E-001	2.46553E-001
PB-214	0.627	74.82* @	6.21	5.78904E+001	1.37767E+001
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.90083E-001	4.08444E-001
		351.92*	37.20	4.21962E-001	2.56686E-001
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	6.35528E-001	2.72978E-001
		969.11*	16.60	3.14845E-001	3.65893E-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	0.999	1.529595E+001	1.748332E+000
TL-208	0.471	3.267728E-001	9.844383E-002
Pb-212 @	0.593	5.079431E-001	3.109875E-001
Bi-214	0.697	4.895571E-001	1.537506E-001
PB-214 @	0.627	4.129360E-001	2.173319E-001
Ac-228	0.631	5.208596E-001	2.187954E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	5.4089E-001	28.75
3	84.96	3.9175E-001	67.01

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: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	1.2936E-001	1.12E-001	1.0104E-001
	1332.49	100.00	1.1160E-001		3.9531E-002
Nb-94	702.63	100.00	1.4169E-001	1.23E-001	1.5392E-001
	871.10	100.00	1.2293E-001		-9.1369E-002
Ag-108m	79.20	7.10	1.5856E+001	1.53E-001	-1.3769E+001
	433.93	89.90	1.6015E-001		-1.4100E-001
	614.37	90.40	1.7543E-001		-7.6070E-002
	722.95	90.50	1.5295E-001		-4.4036E-002
Sb-125	176.33	6.89	4.1368E+000	5.17E-001	2.2898E+000
	427.89	29.33	5.1731E-001		-8.7314E-002
	463.38	10.35	1.4812E+000		8.5128E-001
	600.56	17.80	7.6154E-001		-1.2521E+000
	606.64	5.02	3.3822E+000		5.7713E+000
	635.90	11.32	1.2425E+000		7.4386E-002
Cs-134	563.23	8.38	1.7259E+000	1.57E-001	5.6656E-001
	569.32	15.43	9.0709E-001		-3.9805E-001
	604.70	97.60	1.6881E-001		-4.8081E-002
	795.84	85.40	1.5676E-001		2.7530E-002
Cs-137	801.93	8.73	1.5034E+000	1.60E-001	7.5574E-001
	661.65	85.12	1.5982E-001		3.0874E-002
Eu-152	121.78	28.40	1.5484E+000	4.24E-001	-5.4206E-001
	244.69	7.49	2.9458E+000		-6.0848E-001
	344.27	26.50	6.3923E-001		-8.0502E-001
	778.89	12.74	1.0403E+000		-9.8506E-001
	867.32	4.16	2.9809E+000		-3.4725E+000
	964.01	14.40	1.0636E+000		6.5365E-001
	1085.78	10.00	1.1857E+000		-1.7664E-001
	1112.02	13.30	8.9720E-001		-1.4080E+000
1407.95	20.70	4.2372E-001	-8.2070E-002		
Eu-154	123.07	40.50	1.0743E+000	3.34E-001	-2.0362E-001
	247.94	6.60	3.2611E+000		-8.1048E-001
	591.81	4.83	2.9829E+000		3.0705E+000
	723.30	19.70	6.9941E-001		-8.1837E-001
	756.87	4.33	3.2143E+000		2.2797E+000
	873.19	11.50	1.0971E+000		1.3485E+000
	996.32	10.30	1.1515E+000		3.3191E-001
	1004.76	17.90	6.8384E-001		5.0771E-001
1274.45	35.50	3.3387E-001	-1.3078E-002		
Eu-155	86.54	30.90	2.7589E+000	2.76E+000	5.6749E+000
	105.31	20.70	2.7976E+000		-1.1411E-001
Am-241	59.54	35.90	6.7585E+000	6.76E+000	1.9024E-001
Cm-243	228.19	10.56	2.2046E+000	1.48E+000	7.9076E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.4843E+000	1.48E+000	4.7299E-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 7/27/2006 3:44:25 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-10-04-194-F-

Sample Title: OOL-10-04-194-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 3:34:23 PM

Live Time: 600.0 seconds

Real Time: 602.1 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-194-F-
Title: OOL-10-04-194-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	2031-	2055	2043.76	510.90	0.99	1.73E+002	59.32	1.80E+002
2	2322-	2341	2332.62	583.12	0.39	1.17E+002	43.17	1.05E+002
3	2434-	2446	2438.78	609.65	0.81	6.27E+001	34.76	9.23E+001
4	3634-	3653	3644.00	910.96	1.33	1.06E+002	35.81	6.49E+001
5	4911-	4922	4916.75	1229.15	1.44	2.50E+001	15.38	1.40E+001
6	5830-	5859	5843.97	1460.96	2.60	7.43E+002	56.30	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
ANN	1.000	511.00*	100.00	3.03674E-001	1.12124E-001
K-40	0.999	1460.81*	10.67	1.63155E+001	1.80894E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	1.40590E+000	5.31640E-001
		583.14*	84.20	2.54941E-001	9.97915E-002
		860.37	12.46		
Bi-214	0.401	609.31*	46.30	2.52293E-001	1.43258E-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	2.486064E-001	1.141634E-001
K-40	0.999	1.631550E+001	1.808941E+000
TL-208	0.752	2.549409E-001	9.944503E-002
Bi-214	0.401	2.522935E-001	1.432577E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	910.96	1.7678E-001	33.76
5	1229.15	4.1731E-002	61.43

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: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	1.2394E-001	1.15E-001	2.0964E-002
	1332.49	100.00	1.1541E-001		1.6930E-001
Nb-94	702.63	100.00	1.3318E-001	1.21E-001	8.9315E-002
	871.10	100.00	1.2137E-001		6.4088E-002
Ag-108m	79.20	7.10	1.6495E+001	1.58E-001	-4.0358E+001
	433.93	89.90	1.7604E-001		1.4314E-002
	614.37	90.40	1.7066E-001		-4.1996E-002
	722.95	90.50	1.5781E-001		1.4693E-001
Sb-125	176.33	6.89	4.4515E+000	5.13E-001	1.6635E+000
	427.89	29.33	5.1333E-001		-1.1947E-001
	463.38	10.35	1.4416E+000		1.0006E-002
	600.56	17.80	8.1539E-001		1.7182E-001
	606.64	5.02	3.3523E+000		3.4163E+000
	635.90	11.32	1.1990E+000		5.1255E-001
Cs-134	563.23	8.38	1.8415E+000	1.63E-001	1.0605E+000
	569.32	15.43	9.3444E-001		4.0348E-001
	604.70	97.60	1.7107E-001		-1.9518E-001
	795.84	85.40	1.6301E-001		1.6411E-001
	801.93	8.73	1.4953E+000		-1.6488E+000
Cs-137	661.65	85.12	1.6398E-001	1.64E-001	8.0631E-002
Eu-152	121.78	28.40	1.5771E+000	3.61E-001	-8.5796E-001
	244.69	7.49	3.0555E+000		-4.6178E+000
	344.27	26.50	6.3577E-001		-6.2946E-001
	778.89	12.74	9.7282E-001		-5.7075E-001
	867.32	4.16	3.0048E+000		-1.8391E+000
	964.01	14.40	1.0441E+000		8.9923E-001
	1085.78	10.00	1.2618E+000		2.2633E-001
	1112.02	13.30	8.6076E-001		-1.8260E+000
1407.95	20.70	3.6126E-001	-7.3443E-001		
Eu-154	123.07	40.50	1.0956E+000	3.45E-001	3.9738E-001
	247.94	6.60	3.3539E+000		-1.0969E+000
	591.81	4.83	2.9409E+000		-3.7387E-001
	723.30	19.70	7.3104E-001		1.0566E+000
	756.87	4.33	3.0055E+000		-8.3902E-001
	873.19	11.50	1.0625E+000		1.2642E-001
	996.32	10.30	1.1285E+000		-1.7544E+000
	1004.76	17.90	6.5068E-001		6.3620E-002
1274.45	35.50	3.4493E-001	3.6926E-001		
Eu-155	86.54	30.90	2.9862E+000	2.90E+000	5.5551E+000
	105.31	20.70	2.8965E+000		1.7028E+000
Am-241	59.54	35.90	7.3027E+000	7.30E+000	-5.9839E+000
Cm-243	228.19	10.56	2.3191E+000	1.47E+000	5.1492E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.4657E+000	1.47E+000	-6.0183E-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 7/27/2006 3:27:05 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-195-F-

Sample Title: OOL-10-04-195-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 3:17:03 PM

Live Time: 600.0 seconds

Real Time: 602.1 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-195-F-
Title: OOL-10-04-195-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-	306	297.73	74.39	1.11	5.13E+002	185.59	2.94E+003
2	945-	966	955.95	238.95	1.02	3.40E+002	108.28	7.18E+002
3	2320-	2341	2329.71	582.39	2.11	1.50E+002	48.15	1.20E+002
4	2427-	2449	2436.84	609.17	0.68	1.32E+002	44.85	9.90E+001
5	3634-	3653	3643.31	910.79	1.06	7.94E+001	37.86	8.26E+001
6	5829-	5859	5843.80	1460.92	2.53	7.56E+002	55.21	7.66E+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: 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	1.000	1460.81*	10.67	1.66040E+001	1.80998E+000
TL-208	0.459	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.26786E-001	1.13238E-001
		860.37	12.46		
Pb-212	0.596	74.81* @	10.70	2.13868E+001	8.79938E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.09945E+000	3.90525E-001
Bi-214	0.403	609.31*	46.30	5.30815E-001	1.91852E-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	1.000	1.660403E+001	1.809976E+000
TL-208	0.459	3.267857E-001	1.132383E-001
Pb-212 @	0.596	1.099447E+000	3.905245E-001
Bi-214	0.403	5.308146E-001	1.918517E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	910.79	1.3226E-001	47.71

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	1.2308E-001	9.70E-002	2.1256E-002
	1332.49	100.00	9.6956E-002		9.4513E-002
Nb-94	702.63	100.00	1.3094E-001	1.13E-001	-7.3883E-002
	871.10	100.00	1.1272E-001		-9.4232E-002
Ag-108m	79.20	7.10	1.6853E+001	1.50E-001	-3.9170E+001
	433.93	89.90	1.5493E-001		-9.6052E-002
	614.37	90.40	1.7399E-001		5.1097E-002
	722.95	90.50	1.5039E-001		4.9079E-002
Sb-125	176.33	6.89	4.5374E+000	5.02E-001	-2.8333E+000
	427.89	29.33	5.0208E-001		8.4857E-003
	463.38	10.35	1.3946E+000		-5.3091E-001
	600.56	17.80	8.0790E-001		2.1292E-001
	606.64	5.02	3.3156E+000		-1.1032E+000
	635.90	11.32	1.0836E+000		5.1832E-001
Cs-134	563.23	8.38	1.6360E+000	1.51E-001	-1.0288E+000
	569.32	15.43	9.2097E-001		-1.6743E-001
	604.70	97.60	1.6578E-001		-7.9431E-002
	795.84	85.40	1.5144E-001		2.1526E-001
Cs-137	801.93	8.73	1.4397E+000	1.55E-001	-1.4890E+000
	661.65	85.12	1.5471E-001		3.6425E-002
Eu-152	121.78	28.40	1.6320E+000	4.37E-001	-2.8167E-001
	244.69	7.49	3.1078E+000		-7.3056E-001
	344.27	26.50	6.4845E-001		-4.4007E-001
	778.89	12.74	9.7002E-001		-1.1681E+000
	867.32	4.16	2.8227E+000		-2.8083E+000
	964.01	14.40	1.0127E+000		3.3787E-001
	1085.78	10.00	1.1246E+000		-1.4378E+000
	1112.02	13.30	8.9740E-001		-5.5394E-002
	1407.95	20.70	4.3734E-001		-1.0283E-001
	Eu-154	123.07	40.50		1.1241E+000
247.94		6.60	3.3905E+000	7.6887E-001	
591.81		4.83	2.9686E+000	-1.2412E+000	
723.30		19.70	6.9568E-001	1.4969E-001	
756.87		4.33	2.9431E+000	-9.7277E-001	
873.19		11.50	1.0017E+000	-6.0455E-001	
996.32		10.30	1.1883E+000	1.2652E+000	
1004.76		17.90	6.3875E-001	-3.3983E-001	
Eu-155	1274.45	35.50	2.6461E-001	2.96E+000	2.8002E-002
	86.54	30.90	3.0178E+000		3.9056E+000
Am-241	105.31	20.70	2.9631E+000	7.29E+000	1.4647E+000
	59.54	35.90	7.2857E+000		-4.9752E+000
Cm-243	228.19	10.56	2.3807E+000	1.43E+000	1.7963E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.4301E+000	1.43E+000	1.0163E-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 7/27/2006 4:39:34 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-196-F-

Sample Title: OOL-10-04-196-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 4:29:32 PM

Live Time: 600.0 seconds

Real Time: 602.3 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-10-04-196-F-
Title: OOL-10-04-196-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	2082-	2091	2086.80	521.66	0.46	2.83E+001	23.72	5.17E+001
2	2322-	2342	2329.82	582.42	1.32	1.25E+002	50.98	1.52E+002
3	3632-	3654	3643.55	910.85	2.30	1.26E+002	42.07	8.63E+001
4	5319-	5334	5327.24	1331.78	1.06	4.08E+001	22.34	2.92E+001
5	5827-	5858	5843.22	1460.77	2.59	7.70E+002	58.45	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
K-40	1.000	1460.81*	10.67	1.69051E+001	1.87606E+000
TL-208	0.460	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.72553E-001	1.16641E-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	1.000	1.690512E+001	1.876061E+000
TL-208	0.460	2.725531E-001	1.166412E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	521.66	4.7135E-002	83.88
3	910.85	2.0945E-001	33.47
4	1331.78	6.7958E-002	54.79

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: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	1.24E-001	3.6337E-004
	1332.49	100.00	1.2448E-001		8.9464E-002
Nb-94	702.63	100.00	1.4643E-001	1.31E-001	-1.2296E-001
	871.10	100.00	1.3084E-001		6.5297E-002
Ag-108m	79.20	7.10	1.7519E+001	1.73E-001	-3.4586E+001
	433.93	89.90	1.8474E-001		4.5172E-002
	614.37	90.40	1.8591E-001		-1.7147E-001
	722.95	90.50	1.7285E-001		-5.0969E-002
Sb-125	176.33	6.89	4.6919E+000	5.63E-001	-1.2273E+000
	427.89	29.33	5.6302E-001		4.9840E-002
	463.38	10.35	1.6079E+000		7.2387E-001
	600.56	17.80	8.0790E-001		-1.3478E+000
	606.64	5.02	3.5775E+000		5.5542E+000
	635.90	11.32	1.2943E+000		-2.7583E-001
Cs-134	563.23	8.38	1.7359E+000	1.57E-001	-2.0269E+000
	569.32	15.43	9.8484E-001		2.6698E-002
	604.70	97.60	1.8049E-001		8.2499E-002
	795.84	85.40	1.5656E-001		1.3526E-002
	801.93	8.73	1.5223E+000		2.0776E-001
Cs-137	661.65	85.12	1.7728E-001	1.77E-001	5.9203E-002
Eu-152	121.78	28.40	1.6747E+000	4.50E-001	1.3251E-001
	244.69	7.49	3.3049E+000		-4.0573E+000
	344.27	26.50	6.9236E-001		-3.8652E-001
	778.89	12.74	1.0375E+000		-2.9565E-001
	867.32	4.16	3.1426E+000		6.6604E-001
	964.01	14.40	1.0788E+000		7.9118E-001
	1085.78	10.00	1.2080E+000		-5.9721E-002
	1112.02	13.30	9.6633E-001		-1.9923E+000
	1407.95	20.70	4.5027E-001		-1.3761E-001
Eu-154	123.07	40.50	1.1589E+000	3.05E-001	-3.2725E-001
	247.94	6.60	3.6753E+000		2.4840E+000
	591.81	4.83	3.2168E+000		2.5011E+000
	723.30	19.70	7.9689E-001		9.2008E-002
	756.87	4.33	3.2848E+000		2.7637E+000
	873.19	11.50	1.1443E+000		3.5724E-002
	996.32	10.30	1.2303E+000		-5.6325E-002
	1004.76	17.90	6.7160E-001		-1.3289E-002
	1274.45	35.50	3.0538E-001		-1.5382E-001
Eu-155	86.54	30.90	3.1196E+000	3.10E+000	6.0406E+000
	105.31	20.70	3.1039E+000		1.5008E+000
Am-241	59.54	35.90	7.6677E+000	7.67E+000	-1.3183E+000
Cm-243	228.19	10.56	2.4654E+000	1.60E+000	5.5287E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.6006E+000	1.60E+000	-4.3086E-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 7/27/2006 3:16:01 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-197-F-

Sample Title: OOL-10-04-197-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 3:05:58 PM

Live Time: 600.0 seconds

Real Time: 601.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-197-F-
 Title: OOL-10-04-197-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	291.37	72.93	1.01	5.16E+002	79.59	2.71E+003
m	2	284-	306	299.93	75.07	1.02	1.08E+003	94.75	3.24E+003
	3	333-	344	339.47	84.96	0.98	2.78E+002	161.46	2.59E+003
	4	948-	960	953.42	238.45	1.11	1.68E+002	79.16	5.56E+002
	5	1397-	1416	1406.96	351.85	1.26	1.71E+002	67.57	2.90E+002
	6	2325-	2338	2331.09	582.89	0.80	8.37E+001	40.60	1.20E+002
	7	2425-	2442	2435.68	609.04	1.23	1.58E+002	41.61	9.00E+001
	8	3635-	3652	3644.20	911.19	1.09	1.02E+002	34.66	6.48E+001
	9	3867-	3882	3874.36	968.73	0.63	5.97E+001	27.72	4.63E+001
	10	4476-	4487	4481.42	1120.51	0.38	2.80E+001	22.00	3.90E+001
	11	5831-	5856	5843.79	1461.12	1.66	7.05E+002	55.10	1.98E+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: 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	1.49603E+001	1.68327E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.76908E-001	8.89010E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.52151E+001	7.55920E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.24652E-001	2.60200E-001
Bi-214	0.705	609.31*	46.30	6.16230E-001	1.79168E-001
		1120.29*	15.10	3.85171E-001	3.05426E-001
		1764.49	15.80		
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	7.34052E-001	2.62906E-001
		969.11*	16.60	7.24321E-001	3.44974E-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	0.996	1.496026E+001	1.683266E+000
TL-208	0.470	1.769078E-001	8.890096E-002
Pb-212 @	0.580	5.246517E-001	2.602000E-001
Bi-214	0.705	5.570750E-001	1.545402E-001
Ac-228	0.633	7.304769E-001	2.091035E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	8.5967E-001	15.43
3	84.96	4.6407E-001	57.99
5	351.85	2.8421E-001	39.62

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: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	1.2236E-001	1.22E-001	8.3150E-002
	1332.49	100.00	1.2586E-001		2.0077E-001
Nb-94	702.63	100.00	1.2965E-001	1.30E-001	-1.9188E-002
	871.10	100.00	1.3036E-001		1.4466E-001
Ag-108m	79.20	7.10	1.3258E+001	1.54E-001	-1.1607E+001
	433.93	89.90	1.7634E-001		1.3855E-001
	614.37	90.40	1.6193E-001		-9.5795E-002
	722.95	90.50	1.5372E-001		-2.1157E-002
Sb-125	176.33	6.89	3.7547E+000	5.00E-001	-1.9358E+000
	427.89	29.33	4.9975E-001		-2.8699E-001
	463.38	10.35	1.4508E+000		-6.6590E-001
	600.56	17.80	7.5074E-001		1.5833E-001
	606.64	5.02	3.2556E+000		5.8831E+000
	635.90	11.32	1.2217E+000		5.8918E-002
Cs-134	563.23	8.38	1.6902E+000	1.50E-001	2.5461E-002
	569.32	15.43	9.5093E-001		1.7280E-001
	604.70	97.60	1.6220E-001		-4.8535E-002
	795.84	85.40	1.5040E-001		3.6096E-005
	801.93	8.73	1.4510E+000		8.4040E-001
Cs-137	661.65	85.12	1.6711E-001	1.67E-001	7.0756E-002
Eu-152	121.78	28.40	1.4355E+000	3.86E-001	-1.9345E-001
	244.69	7.49	2.8284E+000		-2.4727E+000
	344.27	26.50	6.1288E-001		-6.3812E-001
	778.89	12.74	9.7479E-001		-6.4571E-003
	867.32	4.16	2.9388E+000		-3.4660E+000
	964.01	14.40	9.7139E-001		3.3949E-001
	1085.78	10.00	1.0855E+000		-1.2500E+000
	1112.02	13.30	8.3363E-001		-3.5278E-001
1407.95	20.70	3.8642E-001	-1.2494E-002		
Eu-154	123.07	40.50	9.9471E-001	3.07E-001	-5.0932E-001
	247.94	6.60	3.1257E+000		-5.8739E-001
	591.81	4.83	2.8955E+000		1.4340E+000
	723.30	19.70	7.0332E-001		-1.9065E-001
	756.87	4.33	2.8500E+000		-1.2137E+000
	873.19	11.50	1.1164E+000		-5.4768E-001
	996.32	10.30	9.8251E-001		-1.2272E+000
	1004.76	17.90	6.4620E-001		-1.2693E-001
1274.45	35.50	3.0720E-001	-7.5298E-002		
Eu-155	86.54	30.90	2.4899E+000	2.49E+000	2.7856E-001
	105.31	20.70	2.5033E+000		2.0898E-001
Am-241	59.54	35.90	4.6787E+000	4.68E+000	-5.3496E-001
Cm-243	228.19	10.56	2.1276E+000	1.39E+000	-3.9181E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.3867E+000	1.39E+000	3.4037E-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 7/27/2006 1:13:02 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-198-F-

Sample Title: OOL-10-04-198-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 1:02:57 PM

Live Time: 600.0 seconds

Real Time: 602.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-198-F-
Title: OOL-10-04-198-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	291.34	72.92	1.03	5.68E+002	82.68	2.87E+003
m	2	284-	306	300.20	75.14	1.04	1.14E+003	97.08	3.39E+003
	3	332-	344	339.35	84.93	1.11	3.61E+002	176.46	2.94E+003
	4	945-	960	954.13	238.63	1.06	1.94E+002	91.77	6.66E+002
	5	1399-	1416	1407.08	351.87	0.61	1.27E+002	64.83	2.97E+002
	6	2033-	2051	2042.48	510.74	0.50	1.35E+002	55.49	1.97E+002
	7	2323-	2338	2331.52	583.00	1.00	1.02E+002	42.75	1.24E+002
	8	2431-	2441	2435.64	609.03	1.33	1.12E+002	33.81	7.65E+001
	9	3636-	3651	3643.99	911.14	1.90	8.12E+001	34.44	7.58E+001
	10	3869-	3883	3875.57	969.03	0.58	6.03E+001	31.53	6.87E+001
	11	4472-	4489	4480.93	1120.38	0.49	8.40E+001	25.70	2.70E+001
	12	5323-	5339	5329.95	1332.65	1.85	6.38E+001	20.78	1.52E+001
	13	5831-	5856	5844.16	1461.21	1.77	6.92E+002	57.89	4.24E+001
	14	7052-	7067	7059.91	1765.17	1.54	5.40E+001	16.64	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: 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	0.997	511.00*	100.00	2.30069E-001	9.97182E-002
K-40	0.994	1460.81*	10.67	1.46724E+001	1.70860E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	1.06513E+000	4.69782E-001
		583.14*	84.20	2.14775E-001	9.46336E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.70202E+001	7.91011E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.995	238.63*	44.60	6.04966E-001	3.01523E-001
		609.31*	46.30	4.38713E-001	1.42504E-001
		1120.29*	15.10	1.15549E+000	3.74223E-001
Ac-228	0.635	1764.49*	15.80	8.42103E-001	2.72851E-001
		338.32	11.40		
		911.07*	27.70	5.83154E-001	2.56282E-001
		969.11*	16.60	7.31651E-001	3.90323E-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	0.997	1.836778E-001	1.017804E-001
K-40	0.994	1.467241E+001	1.708600E+000
TL-208	0.752	2.147748E-001	9.437441E-002
Pb-212 @	0.580	6.049660E-001	3.015228E-001
Bi-214	0.995	5.896331E-001	1.196800E-001
Ac-228	0.635	6.278878E-001	2.142309E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	72.92	9.4724E-001	14.55
3	84.93	6.0190E-001	48.86
5	351.87	2.1120E-001	51.16
12	1332.65	1.0641E-001	32.55

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: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	1.13E-001	2.9251E-002
	1332.49	100.00	1.1328E-001		2.3888E-002
Nb-94	702.63	100.00	1.2779E-001	1.28E-001	-6.2491E-002
	871.10	100.00	1.3069E-001		-3.2096E-002
Ag-108m	79.20	7.10	1.3629E+001	1.53E-001	-1.8428E+001
	433.93	89.90	1.6836E-001		-1.3180E-001
	614.37	90.40	1.6925E-001		-1.3586E-001
	722.95	90.50	1.5308E-001		-4.8259E-002
Sb-125	176.33	6.89	3.9609E+000	5.25E-001	1.2008E+000
	427.89	29.33	5.2541E-001		1.5813E-001
	463.38	10.35	1.4527E+000		4.9906E-001
	600.56	17.80	7.7328E-001		-1.9786E-001
	606.64	5.02	3.3385E+000		4.8154E+000
	635.90	11.32	1.1107E+000		-2.1402E-001
Cs-134	563.23	8.38	1.7250E+000	1.56E-001	6.8002E-001
	569.32	15.43	9.1632E-001		-2.6522E-001
	604.70	97.60	1.6476E-001		-2.2358E-001
	795.84	85.40	1.5604E-001		5.0303E-002
	801.93	8.73	1.4624E+000		9.6333E-001
Cs-137	661.65	85.12	1.7549E-001	1.75E-001	1.1053E-001
Eu-152	121.78	28.40	1.4708E+000	3.46E-001	-9.0266E-002
	244.69	7.49	2.8257E+000		-2.3211E+000
	344.27	26.50	6.4988E-001		-4.6113E-001
	778.89	12.74	9.6950E-001		-1.0972E+000
	867.32	4.16	3.1786E+000		-1.7820E+000
	964.01	14.40	1.0328E+000		-2.5990E-001
	1085.78	10.00	1.1919E+000		2.2722E-001
	1112.02	13.30	8.6622E-001		6.4125E-002
1407.95	20.70	3.4555E-001	2.9842E-001		
Eu-154	123.07	40.50	1.0250E+000	3.34E-001	8.0040E-001
	247.94	6.60	3.1999E+000		-2.2313E+000
	591.81	4.83	2.9114E+000		-2.0406E+000
	723.30	19.70	7.0332E-001		-8.8428E-002
	756.87	4.33	2.9855E+000		1.9715E-001
	873.19	11.50	1.1312E+000		-3.7881E-001
	996.32	10.30	1.1289E+000		6.2246E-002
Eu-155	1004.76	17.90	6.8567E-001	2.53E+000	4.0218E-001
	1274.45	35.50	3.3446E-001		2.3655E-001
	86.54	30.90	2.5587E+000		-2.9342E-001
Am-241	105.31	20.70	2.5345E+000	4.92E+000	6.1850E-002
	59.54	35.90	4.9188E+000		-1.7625E-001
Cm-243	228.19	10.56	2.2338E+000	1.40E+000	5.2010E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.4002E+000	1.40E+000	1.4845E-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 7/27/2006 11:36:54 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-10-04-199-F-

Sample Title: OOL-10-04-199-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 11:26:50 AM

Live Time: 600.0 seconds

Real Time: 602.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-199-F-
Title: OOL-10-04-199-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 13 peaks with their respective parameters.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.960	1460.81*	10.67	1.57471E+001	1.74849E+000
TL-208	0.622	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.33587E-001	9.80861E-002
Pb-212	0.580	860.37*	12.46	3.35439E-001	3.63391E-001
		74.81* @	10.70	3.26611E+001	7.11600E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.402	238.63*	44.60	4.63290E-001	2.31406E-001
		609.31*	46.30	3.20037E-001	1.76718E-001
		1120.29	15.10		
Ac-228	0.630	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	6.60451E-001	2.21787E-001
		969.11*	16.60	9.41283E-001	3.76652E-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	0.960	1.574707E+001	1.748491E+000
TL-208	0.622	2.405039E-001	9.469713E-002
Pb-212 @	0.580	4.632902E-001	2.314059E-001
Bi-214	0.402	3.200371E-001	1.767179E-001
Ac-228	0.630	7.327545E-001	1.911157E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	72.92	8.1631E-001	16.99
3	84.89	6.1980E-001	51.06
5	351.83	1.3543E-001	66.01
6	463.03	6.2574E-002	81.23
12	1333.41	6.5513E-002	53.96

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: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	1.13E-001	-7.8644E-003
	1332.49	100.00	1.1281E-001		1.1776E-001
Nb-94	702.63	100.00	1.2303E-001	1.18E-001	-1.1842E-001
	871.10	100.00	1.1835E-001		-1.0836E-002
Ag-108m	79.20	7.10	1.3830E+001	1.48E-001	-1.2020E+001
	433.93	89.90	1.5653E-001		7.2222E-002
	614.37	90.40	1.5771E-001		2.1537E-002
	722.95	90.50	1.4753E-001		5.8511E-002
Sb-125	176.33	6.89	3.9050E+000	4.73E-001	-9.3108E-002
	427.89	29.33	4.7266E-001		-6.7495E-002
	463.38	10.35	1.2902E+000		6.3225E-001
	600.56	17.80	7.3687E-001		2.4806E-003
	606.64	5.02	3.1107E+000		1.2743E-002
	635.90	11.32	1.0016E+000		-2.6252E-001
Cs-134	563.23	8.38	1.4672E+000	1.38E-001	1.1923E+000
	569.32	15.43	8.5312E-001		8.8161E-001
	604.70	97.60	1.5151E-001		2.9565E-002
	795.84	85.40	1.3755E-001		-5.3096E-003
Cs-137	801.93	8.73	1.3312E+000	1.43E-001	-5.4694E-001
	661.65	85.12	1.4263E-001		-3.6739E-002
Eu-152	121.78	28.40	1.4928E+000	3.79E-001	-1.1658E-001
	244.69	7.49	2.8474E+000		-2.9582E-001
	344.27	26.50	5.9839E-001		2.2397E-001
	778.89	12.74	8.9486E-001		1.4362E-001
	867.32	4.16	2.9215E+000		-9.4392E-002
	964.01	14.40	9.7365E-001		-5.5371E-002
	1085.78	10.00	1.0720E+000		1.1053E+000
	1112.02	13.30	8.2696E-001		5.3266E-001
Eu-154	1407.95	20.70	3.7935E-001	3.00E-001	-1.8550E-001
	123.07	40.50	1.0371E+000		-3.7381E-002
	247.94	6.60	3.1464E+000		7.1887E-001
	591.81	4.83	2.6276E+000		-2.6881E+000
	723.30	19.70	6.7321E-001		2.3534E-001
	756.87	4.33	2.8577E+000		3.1530E-001
	873.19	11.50	1.0101E+000		-7.6152E-001
	996.32	10.30	1.1289E+000		-4.3725E-001
Eu-155	1004.76	17.90	6.5296E-001	2.58E+000	4.3314E-002
	1274.45	35.50	3.0032E-001		-7.7049E-002
	86.54	30.90	2.5981E+000		5.8053E-001
Am-241	105.31	20.70	2.5832E+000	5.02E+000	-1.6028E+000
	59.54	35.90	5.0228E+000		-6.6826E-001
Cm-243	228.19	10.56	2.1711E+000	1.32E+000	-2.9604E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.3217E+000	1.32E+000	1.8243E-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 7/27/2006 10:52:11 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-200-F-

Sample Title: OOL-10-04-200-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 10:42:07 AM

Live Time: 600.0 seconds

Real Time: 602.1 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-200-F-
 Title: OOL-10-04-200-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	291.75	73.03	1.00	6.52E+002	85.57	2.80E+003
m	2	285-	305	300.14	75.12	1.00	1.20E+003	99.11	3.32E+003
	3	332-	345	339.59	84.99	0.89	3.79E+002	189.85	3.25E+003
	4	945-	961	954.23	238.65	0.96	2.71E+002	100.25	7.50E+002
	5	1397-	1416	1407.09	351.88	1.37	1.04E+002	71.19	3.47E+002
	6	2034-	2053	2042.78	510.81	1.21	1.72E+002	58.00	2.01E+002
	7	2322-	2340	2333.26	583.43	0.45	1.36E+002	48.37	1.40E+002
	8	2431-	2446	2436.62	609.27	0.94	1.26E+002	39.67	9.28E+001
	9	3086-	3098	3091.84	773.09	0.78	2.14E+001	25.83	5.76E+001
	10	3635-	3655	3644.52	911.27	2.18	1.45E+002	38.46	6.58E+001
	11	3870-	3887	3877.41	969.49	0.36	4.71E+001	32.06	6.69E+001
	12	5323-	5341	5332.94	1333.40	0.98	7.36E+001	22.27	1.64E+001
	13	5835-	5860	5846.87	1461.89	2.17	6.74E+002	54.34	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: 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	2.93901E-001	1.06725E-001
K-40	0.956	1460.81*	10.67	1.42909E+001	1.63346E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.36065E+000	5.06438E-001
		583.14*	84.20	2.87780E-001	1.08970E-001
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.89290E+001	8.28086E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.402	238.63*	44.60	8.46234E-001	3.39660E-001
		609.31*	46.30	4.92072E-001	1.66168E-001
		1120.29	15.10		
Ac-228	0.632	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	1.04289E+000	3.01175E-001
		969.11*	16.60	5.71812E-001	3.93823E-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	2.317403E-001	1.092708E-001
K-40	0.956	1.429089E+001	1.633462E+000
TL-208	0.751	2.877796E-001	1.085655E-001
Pb-212 @	0.580	8.462343E-001	3.396601E-001
Bi-214	0.402	4.920722E-001	1.661680E-001
Ac-228	0.632	8.690510E-001	2.392357E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1.0864E+000	13.13
3	84.99	6.3148E-001	50.11
5	351.88	1.7337E-001	68.43
9	773.09	3.5612E-002	120.90
12	1333.40	1.2265E-001	30.26

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: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	1.2833E-001	1.21E-001	7.6361E-002
	1332.49	100.00	1.2108E-001		1.0289E-001
Nb-94	702.63	100.00	1.4137E-001	1.31E-001	-2.6619E-003
	871.10	100.00	1.3069E-001		1.4358E-002
Ag-108m	79.20	7.10	1.3852E+001	1.52E-001	-2.4785E+001
	433.93	89.90	1.7448E-001		1.1598E-001
	614.37	90.40	1.6925E-001		4.2245E-002
	722.95	90.50	1.5180E-001		-3.2849E-002
Sb-125	176.33	6.89	4.0190E+000	5.43E-001	6.3670E-001
	427.89	29.33	5.4306E-001		-5.6846E-002
	463.38	10.35	1.4468E+000		4.4103E-001
	600.56	17.80	7.7328E-001		-6.0597E-001
	606.64	5.02	3.3728E+000		3.9803E-001
	635.90	11.32	1.2144E+000		1.6648E-001
Cs-134	563.23	8.38	1.7618E+000	1.50E-001	-8.2393E-001
	569.32	15.43	9.4939E-001		8.5226E-001
	604.70	97.60	1.6196E-001		-6.9179E-003
	795.84	85.40	1.4963E-001		2.2944E-002
	801.93	8.73	1.4122E+000		4.4997E-002
Cs-137	661.65	85.12	1.7397E-001	1.74E-001	3.0775E-002
Eu-152	121.78	28.40	1.4850E+000	3.90E-001	1.7675E-001
	244.69	7.49	2.8929E+000		-1.6116E+000
	344.27	26.50	6.5603E-001		2.1567E-001
	778.89	12.74	9.9308E-001		2.4328E-001
	867.32	4.16	3.1062E+000		-3.2885E+000
	964.01	14.40	9.7816E-001		4.1407E-001
	1085.78	10.00	1.2239E+000		-7.6935E-001
	1112.02	13.30	8.8203E-001		7.7791E-002
	1407.95	20.70	3.8991E-001		-2.1182E-001
Eu-154	123.07	40.50	1.0322E+000	3.10E-001	1.2478E-001
	247.94	6.60	3.2616E+000		-8.9604E-001
	591.81	4.83	2.8795E+000		9.9411E-001
	723.30	19.70	7.0185E-001		-1.4978E-001
	756.87	4.33	3.0437E+000		1.4279E+000
	873.19	11.50	1.1515E+000		8.9193E-001
	996.32	10.30	1.1405E+000		3.5736E-001
	1004.76	17.90	6.8354E-001		2.2165E-001
1274.45	35.50	3.0990E-001	1.1616E-001		
Eu-155	86.54	30.90	2.6124E+000	2.61E+000	5.0201E-001
	105.31	20.70	2.6152E+000		-7.0945E-001
Am-241	59.54	35.90	4.9634E+000	4.96E+000	-2.8837E+000
Cm-243	228.19	10.56	2.2405E+000	1.43E+000	2.5065E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.4333E+000	1.43E+000	4.3996E-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 7/27/2006 12:40:39 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-201-F-

Sample Title: OOL-10-04-201-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 12:30:36 AM

Live Time: 600.0 seconds

Real Time: 602.1 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-201-F-
 Title: OOL-10-04-201-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	72.91	1.04	6.23E+002	85.59	2.61E+003
m	2	286-	305	299.89	75.06	1.05	1.08E+003	97.20	3.53E+003
	3	332-	342	339.21	84.89	1.27	5.75E+002	155.91	2.42E+003
	4	513-	522	516.07	129.11	0.79	9.76E+001	113.93	1.45E+003
	5	947-	960	953.69	238.52	0.99	2.38E+002	81.74	5.44E+002
	6	1176-	1184	1179.68	295.02	0.85	4.38E+001	45.32	2.29E+002
	7	1400-	1412	1406.41	351.71	0.58	6.91E+001	50.69	2.28E+002
	8	2011-	2051	2041.58	510.51	1.18	2.05E+002	95.05	3.48E+002
	9	2325-	2339	2330.59	582.77	1.41	9.49E+001	42.50	1.29E+002
	10	2426-	2441	2435.00	608.87	0.70	1.01E+002	41.92	1.18E+002
	11	3633-	3652	3642.47	910.76	1.21	1.43E+002	39.01	7.24E+001
	12	3865-	3882	3873.52	968.52	1.52	6.79E+001	34.46	7.41E+001
	13	5319-	5336	5327.57	1332.06	0.77	7.42E+001	24.43	2.48E+001
	14	5830-	5855	5842.20	1460.72	1.82	7.52E+002	58.28	3.15E+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: 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	3.49181E-001	1.69002E-001
K-40	1.000	1460.81*	10.67	1.59604E+001	1.78824E+000
TL-208	0.748	277.35	6.80		
		510.84*	21.60	1.61658E+000	7.93477E-001
		583.14*	84.20	2.00633E-001	9.35836E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.52720E+001	7.60274E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.398	238.63*	44.60	7.40844E-001	2.80123E-001
		609.31*	46.30	3.93884E-001	1.70539E-001
		1120.29	15.10		
PB-214	0.619	1764.49	15.80		
		74.82* @	6.21	6.07746E+001	1.38227E+001
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
Ac-228	0.629	295.21*	19.20	3.34194E-001	3.50209E-001
		351.92*	37.20	2.83835E-001	2.13546E-001
		338.32	11.40		
		911.07*	27.70	1.02434E+000	3.03965E-001
		969.11*	16.60	8.24088E-001	4.27138E-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	3.058442E-001	1.702009E-001
K-40	1.000	1.596041E+001	1.788244E+000
TL-208	0.748	2.006330E-001	9.335486E-002
Pb-212 @	0.580	7.408437E-001	2.801226E-001
Bi-214	0.398	3.938841E-001	1.705394E-001
PB-214 @	0.619	2.974842E-001	1.823237E-001
Ac-228	0.629	9.570221E-001	2.476570E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1.0378E+000	13.75
3	84.89	9.5785E-001	27.13
4	129.11	1.6267E-001	116.73
13	1332.06	1.2371E-001	32.91

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	1.3512E-001	1.32E-001	1.3810E-001
	1332.49	100.00	1.3248E-001		1.2306E-001
Nb-94	702.63	100.00	1.4276E-001	1.37E-001	-2.5796E-002
	871.10	100.00	1.3722E-001		8.2989E-002
Ag-108m	79.20	7.10	1.3797E+001	1.56E-001	-1.7357E+001
	433.93	89.90	1.7448E-001		5.8233E-002
	614.37	90.40	1.6468E-001		-6.4639E-002
	722.95	90.50	1.5563E-001		2.7284E-002
Sb-125	176.33	6.89	3.9531E+000	5.41E-001	1.5148E+000
	427.89	29.33	5.4120E-001		1.9386E-002
	463.38	10.35	1.4972E+000		2.3099E-001
	600.56	17.80	8.0374E-001		6.4398E-002
	606.64	5.02	3.3514E+000		4.1249E+000
	635.90	11.32	1.2548E+000		1.0371E+000
Cs-134	563.23	8.38	1.7478E+000	1.59E-001	1.4749E-001
	569.32	15.43	9.2748E-001		4.9578E-002
	604.70	97.60	1.6773E-001		7.5874E-002
	795.84	85.40	1.5933E-001		3.9012E-002
	801.93	8.73	1.5108E+000		-5.0608E-001
Cs-137	661.65	85.12	1.6711E-001	1.67E-001	1.1762E-001
Eu-152	121.78	28.40	1.5108E+000	3.83E-001	5.9892E-001
	244.69	7.49	2.9910E+000		1.4605E+000
	344.27	26.50	6.2351E-001		-3.6159E-001
	778.89	12.74	1.0161E+000		3.6162E-001
	867.32	4.16	3.2337E+000		1.2578E-001
	964.01	14.40	1.0663E+000		5.1378E-001
	1085.78	10.00	1.1464E+000		-1.1358E-002
	1112.02	13.30	9.2183E-001		-1.8272E-001
1407.95	20.70	3.8290E-001	-3.8424E-001		
Eu-154	123.07	40.50	1.0397E+000	3.15E-001	3.4717E-001
	247.94	6.60	3.3162E+000		1.0776E+000
	591.81	4.83	2.9167E+000		1.9033E-001
	723.30	19.70	7.1789E-001		1.8896E-001
	756.87	4.33	3.2388E+000		1.3726E+000
	873.19	11.50	1.1687E+000		1.0822E-001
	996.32	10.30	1.1932E+000		1.1123E+000
	1004.76	17.90	6.6185E-001		-3.0890E-001
1274.45	35.50	3.1524E-001	1.4478E-001		
Eu-155	86.54	30.90	2.6066E+000	2.56E+000	-2.5013E+000
	105.31	20.70	2.5575E+000		-8.7578E-001
Am-241	59.54	35.90	5.0059E+000	5.01E+000	5.0794E-001
Cm-243	228.19	10.56	2.2111E+000	1.40E+000	-8.4116E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.4044E+000	1.40E+000	5.5046E-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 7/27/2006 12:24:24 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-202-F-

Sample Title: OOL-10-04-202-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 12:14:22 AM

Live Time: 600.0 seconds

Real Time: 602.1 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-202-F-
Title: OOL-10-04-202-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 12 peaks with their respective parameters.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.49507E+001	1.72977E+000
TL-208	0.464	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.81470E-001	1.06603E-001
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.54701E+001	7.62780E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.24526E-001	2.95565E-001
Bi-214	0.397	609.31*	46.30	2.70356E-001	1.88426E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.630	338.32	11.40		
		911.07*	27.70	8.88973E-001	2.66834E-001
		969.11*	16.60	7.41391E-001	3.81104E-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	1.495070E+001	1.729771E+000
TL-208	0.464	3.814704E-001	1.066030E-001
Pb-212 @	0.580	5.245262E-001	2.955651E-001
Bi-214	0.397	2.703565E-001	1.884259E-001
Ac-228	0.630	8.404244E-001	2.185823E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	72.92	1.0563E+000	13.18
3	84.98	6.7206E-001	46.64
5	351.57	2.0767E-001	52.75
10	1022.68	2.7101E-002	118.81
11	1332.50	1.2838E-001	31.51

M = First peak in a multiplet region
 m = Other peak in a multiplet region
 F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.2438E-001	1.24E-001	1.3178E-002
	1332.49	100.00	1.2755E-001		1.2107E-001
Nb-94	702.63	100.00	1.4109E-001	1.36E-001	2.5452E-002
	871.10	100.00	1.3594E-001		1.5521E-001
Ag-108m	79.20	7.10	1.3899E+001	1.64E-001	-6.5874E+000
	433.93	89.90	1.7613E-001		3.4554E-002
	614.37	90.40	1.6604E-001		-2.9766E-002
	722.95	90.50	1.6360E-001		1.9040E-001
Sb-125	176.33	6.89	3.9580E+000	5.42E-001	-9.5146E-002
	427.89	29.33	5.4182E-001		2.0801E-001
	463.38	10.35	1.5180E+000		1.5932E+000
	600.56	17.80	7.9946E-001		-1.4927E-001
	606.64	5.02	3.3728E+000		5.3572E+000
	635.90	11.32	1.2217E+000		1.0603E+000
Cs-134	563.23	8.38	1.6577E+000	1.52E-001	4.7880E-001
	569.32	15.43	8.7022E-001		-5.8813E-001
	604.70	97.60	1.6773E-001		-2.5343E-002
	795.84	85.40	1.5192E-001		-1.5354E-002
Cs-137	801.93	8.73	1.4043E+000	1.71E-001	-1.6912E+000
	661.65	85.12	1.7058E-001		8.8439E-002
Eu-152	121.78	28.40	1.4860E+000	3.90E-001	-1.2475E+000
	244.69	7.49	3.0445E+000		8.1308E-001
	344.27	26.50	5.8853E-001		3.5974E-002
	778.89	12.74	1.0606E+000		2.4234E-001
	867.32	4.16	3.1706E+000		-5.9062E+000
	964.01	14.40	1.0026E+000		-9.7049E-002
	1085.78	10.00	1.1548E+000		-5.9356E-001
	1112.02	13.30	8.5980E-001		-1.1344E+000
1407.95	20.70	3.8991E-001	2.7422E-001		
Eu-154	123.07	40.50	1.0286E+000	3.28E-001	-6.1733E-001
	247.94	6.60	3.3875E+000		8.6569E-001
	591.81	4.83	2.9638E+000		1.7893E+000
	723.30	19.70	7.5166E-001		6.7178E-001
	756.87	4.33	2.9186E+000		-3.7250E+000
	873.19	11.50	1.1771E+000		8.1023E-001
	996.32	10.30	1.1443E+000		-1.6664E+000
	1004.76	17.90	6.6843E-001		5.2134E-001
1274.45	35.50	3.2818E-001	-1.0043E-001		
Eu-155	86.54	30.90	2.5919E+000	2.59E+000	5.7292E-001
	105.31	20.70	2.6166E+000		1.9372E+000
Am-241	59.54	35.90	4.9651E+000	4.97E+000	-3.5498E+000
Cm-243	228.19	10.56	2.2246E+000	1.46E+000	2.3525E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.4625E+000	1.46E+000	1.4970E+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 7/26/2006 10:43:04 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-10-04-203-F-

Sample Title: OOL-10-04-203-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 10:33:08 PM

Live Time: 600.0 seconds

Real Time: 602.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-203-F-
 Title: OOL-10-04-203-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	291.05	72.85	1.01	5.57E+002	82.92	2.95E+003
m	2	284-	306	300.00	75.09	1.01	1.02E+003	95.87	3.51E+003
	3	333-	345	338.90	84.81	0.93	3.63E+002	175.53	2.90E+003
	4	945-	961	953.50	238.47	0.68	2.18E+002	96.55	7.04E+002
	5	1400-	1411	1405.99	351.60	1.07	1.04E+002	47.85	1.96E+002
	6	2032-	2051	2041.01	510.37	1.61	1.71E+002	53.55	1.64E+002
	7	2324-	2337	2330.50	582.74	1.28	1.35E+002	41.18	1.10E+002
	8	2425-	2442	2434.79	608.82	0.67	9.44E+001	46.90	1.46E+002
	9	3634-	3651	3643.24	910.95	1.04	9.59E+001	36.09	7.41E+001
	10	3864-	3882	3874.36	968.73	0.33	6.89E+001	34.13	6.91E+001
	11	5091-	5102	5096.40	1274.26	0.37	1.82E+001	17.93	2.38E+001
	12	5319-	5338	5328.45	1332.28	2.16	1.10E+002	25.58	1.74E+001
	13	5830-	5853	5842.54	1460.81	1.62	8.28E+002	58.77	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: 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	0.985	511.00*	100.00	2.91450E-001	9.95706E-002
K-40	1.000	1460.81*	10.67	1.75663E+001	1.89120E+000
TL-208	0.747	277.35	6.80		
		510.84*	21.60	1.34931E+000	4.73962E-001
		583.14*	84.20	2.86141E-001	9.47245E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.31444E+001	7.20536E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.397	238.63*	44.60	6.79099E-001	3.19354E-001
		609.31*	46.30	3.68225E-001	1.88457E-001
		1120.29	15.10		
Ac-228	0.633	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	6.88834E-001	2.71037E-001
		969.11*	16.60	8.36292E-001	4.23537E-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	0.985	2.296438E-001	1.016311E-001
K-40	1.000	1.756634E+001	1.891199E+000
TL-208	0.747	2.861409E-001	9.426438E-002
Pb-212 @	0.580	6.790986E-001	3.193541E-001
Bi-214	0.397	3.682246E-001	1.884567E-001
Ac-228	0.633	7.316763E-001	2.282931E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	9.2896E-001	14.88
3	84.81	6.0513E-001	48.34
5	351.60	1.7315E-001	46.05
11	1274.26	3.0357E-002	98.45
12	1332.28	1.8269E-001	23.34

M = First peak in a multiplet region
 m = Other peak in a multiplet region
 F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.3803E-001	1.35E-001	9.2278E-002
	1332.49	100.00	1.3527E-001		1.8952E-001
Nb-94	702.63	100.00	1.3505E-001	1.35E-001	-6.0153E-002
	871.10	100.00	1.4068E-001		7.6538E-002
Ag-108m	79.20	7.10	1.3664E+001	1.55E-001	-7.0491E+000
	433.93	89.90	1.6422E-001		1.9827E-002
	614.37	90.40	1.7057E-001		3.8003E-002
	722.95	90.50	1.5531E-001		4.7863E-002
Sb-125	176.33	6.89	3.9609E+000	4.99E-001	-6.3813E-002
	427.89	29.33	4.9907E-001		-2.9279E-001
	463.38	10.35	1.4761E+000		1.6840E+000
	600.56	17.80	8.0800E-001		1.4463E-001
	606.64	5.02	3.3856E+000		2.7310E+000
	635.90	11.32	1.2826E+000		1.3133E+000
Cs-134	563.23	8.38	1.6306E+000	1.60E-001	-3.1962E-001
	569.32	15.43	8.8697E-001		-8.3900E-001
	604.70	97.60	1.6659E-001		-4.4903E-002
	795.84	85.40	1.6041E-001		1.7444E-001
Cs-137	801.93	8.73	1.4775E+000	1.71E-001	1.4626E+000
	661.65	85.12	1.7089E-001		1.8719E-001
Eu-152	121.78	28.40	1.5156E+000	3.68E-001	3.1805E-001
	244.69	7.49	2.8783E+000		2.9003E-002
	344.27	26.50	6.2643E-001		5.5161E-002
	778.89	12.74	9.9566E-001		6.9211E-001
	867.32	4.16	3.3335E+000		-4.0989E-001
	964.01	14.40	1.0642E+000		1.0490E-001
	1085.78	10.00	1.1464E+000		-3.1158E-001
	1112.02	13.30	8.6302E-001		-3.8593E-001
1407.95	20.70	3.6846E-001	3.6002E-002		
Eu-154	123.07	40.50	1.0518E+000	3.36E-001	-9.6375E-002
	247.94	6.60	3.2030E+000		8.5903E-001
	591.81	4.83	2.9008E+000		1.1610E+000
	723.30	19.70	7.0626E-001		-2.2242E-001
	756.87	4.33	2.9928E+000		5.0527E-002
	873.19	11.50	1.2267E+000		-1.9204E-001
	996.32	10.30	1.2506E+000		3.9375E-001
	1004.76	17.90	7.1479E-001		4.0376E-001
1274.45	35.50	3.3570E-001	2.0922E-001		
Eu-155	86.54	30.90	2.5460E+000	2.55E+000	9.7714E-001
	105.31	20.70	2.5987E+000		2.2166E+000
Am-241	59.54	35.90	4.8817E+000	4.88E+000	-5.8730E-001
Cm-243	228.19	10.56	2.2111E+000	1.37E+000	-1.0975E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.3714E+000	1.37E+000	-2.8247E-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 7/26/2006 6:33:00 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-204-F-

Sample Title: OOL-10-04-204-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 6:22:56 PM

Live Time: 600.0 seconds

Real Time: 602.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-204-F-
 Title: OOL-10-04-204-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	291.01	72.84	1.02	6.03E+002	84.00	2.48E+003
m	2	286-	306	299.91	75.06	1.03	1.16E+003	96.44	3.53E+003
	3	331-	345	338.69	84.76	0.87	3.84E+002	193.77	3.25E+003
	4	947-	959	952.91	238.32	1.19	2.30E+002	76.61	4.90E+002
	5	1399-	1414	1405.43	351.46	1.06	1.78E+002	60.34	2.56E+002
	6	1871-	1881	1875.87	469.08	0.53	2.75E+001	32.64	1.04E+002
	7	2323-	2337	2329.17	582.41	1.25	1.40E+002	41.52	1.07E+002
	8	2426-	2444	2433.41	608.47	1.03	1.28E+002	46.51	1.28E+002
	9	3631-	3649	3640.30	910.21	1.17	1.09E+002	36.60	7.11E+001
	10	3863-	3878	3870.52	967.77	1.12	6.58E+001	28.09	4.62E+001
	11	4468-	4482	4474.90	1118.88	0.54	3.09E+001	25.35	4.71E+001
	12	4681-	4693	4687.26	1171.97	0.43	3.00E+001	24.30	4.70E+001
	13	5316-	5335	5324.94	1331.40	0.39	7.61E+001	22.77	1.69E+001
	14	5825-	5852	5838.10	1459.70	1.90	7.82E+002	59.44	3.09E+001
	15	7046-	7059	7052.50	1763.32	1.00	3.41E+001	16.68	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: 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	0.953	1460.81*	10.67	1.65831E+001	1.84149E+000
Co-60	0.948	1173.22*	100.00	6.28942E-002	5.11801E-002
		1332.49*	100.00	1.65129E-001	5.11055E-002
TL-208	0.458	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.96648E-001	9.59059E-002
		860.37	12.46		
Pb-212	0.579	74.81* @	10.70	3.77456E+001	8.03623E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.959	238.63*	44.60	7.16476E-001	2.63967E-001
		609.31*	46.30	5.00553E-001	1.91545E-001
		1120.29*	15.10	4.25252E-001	3.51504E-001
Ac-228	0.601	1764.49*	15.80	5.31790E-001	2.65413E-001
		338.32	11.40		
		911.07*	27.70	7.82128E-001	2.77874E-001
		969.11*	16.60	7.98183E-001	3.51127E-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	0.953	1.658310E+001	1.841488E+000
Co-60	0.948	1.140863E-001	3.616337E-002
TL-208	0.458	2.966481E-001	9.590594E-002
Pb-212 @	0.579	7.164758E-001	2.639671E-001
Bi-214	0.959	4.972023E-001	1.420693E-001
Ac-228	0.601	7.883106E-001	2.178966E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1.0045E+000	13.94
3	84.76	6.3918E-001	50.53
5	351.46	2.9643E-001	33.93
6	469.08	4.5871E-002	118.58

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	8.2383E-002	6.07E-002	6.2894E-002
		1332.49*	100.00	6.0702E-002		1.6513E-001
	Nb-94	702.63	100.00	1.3996E-001	1.26E-001	9.9965E-002
		871.10	100.00	1.2626E-001		4.1605E-002
	Ag-108m	79.20	7.10	1.3474E+001	1.57E-001	-8.2853E+000
		433.93	89.90	1.6964E-001		-8.0230E-002
		614.37	90.40	1.5743E-001		8.9842E-003
		722.95	90.50	1.6657E-001		1.7650E-001
	Sb-125	176.33	6.89	3.8381E+000	5.41E-001	-1.4527E+000
		427.89	29.33	5.4057E-001		4.6658E-001
		463.38	10.35	1.5161E+000		1.4520E-002
		600.56	17.80	7.6435E-001		-5.0966E-001
		606.64	5.02	3.4068E+000		6.3702E+000
		635.90	11.32	1.1751E+000		3.6033E-001
	Cs-134	563.23	8.38	1.7702E+000	1.51E-001	9.7347E-001
		569.32	15.43	9.1472E-001		-4.0881E-001
		604.70	97.60	1.7198E-001		1.3151E-003
		795.84	85.40	1.5078E-001		-1.0846E-001
		801.93	8.73	1.3642E+000		1.8179E-002
	Cs-137	661.65	85.12	1.8521E-001	1.85E-001	9.6070E-002
	Eu-152	121.78	28.40	1.4688E+000	3.86E-001	8.9066E-001
		244.69	7.49	2.9062E+000		1.6173E+000
		344.27	26.50	6.5100E-001		-5.7194E-001
		778.89	12.74	1.1170E+000		1.5884E-001
		867.32	4.16	2.9816E+000		-1.8968E+000
		964.01	14.40	1.0392E+000		-4.3632E-002
		1085.78	10.00	1.1797E+000		-1.1770E+000
		1112.02	13.30	8.6622E-001		-1.4775E-001
		1407.95	20.70	3.8642E-001		9.4255E-002
	Eu-154	123.07	40.50	1.0200E+000	3.03E-001	-2.0169E-001
		247.94	6.60	3.2278E+000		4.1533E-001
		591.81	4.83	2.9430E+000		-5.8343E-001
		723.30	19.70	7.7333E-001		8.0450E-001
		756.87	4.33	3.2657E+000		1.7572E+000
		873.19	11.50	1.1224E+000		6.0279E-002
		996.32	10.30	1.3154E+000		6.5695E-001
		1004.76	17.90	6.8779E-001		-1.1448E-001
		1274.45	35.50	3.0309E-001		-1.0009E-001
	Eu-155	86.54	30.90	2.5251E+000	2.53E+000	1.4474E-001
		105.31	20.70	2.5760E+000		-1.2968E-001
	Am-241	59.54	35.90	4.8170E+000	4.82E+000	7.7170E-001
	Cm-243	228.19	10.56	2.1468E+000	1.42E+000	-6.8523E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.4169E+000	1.42E+000	3.9602E-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 7/26/2006 11:42:03 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-205-F-

Sample Title: OOL-10-04-205-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 11:31:58 AM

Live Time: 600.0 seconds

Real Time: 601.8 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-205-F-
 Title: OOL-10-04-205-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	291.58	72.98	0.81	4.96E+002	75.93	2.21E+003
m	2	285-	305	299.80	75.04	0.82	8.95E+002	88.65	2.31E+003
	3	332-	344	339.08	84.86	1.10	3.61E+002	162.27	2.46E+003
	4	948-	959	953.02	238.35	0.93	2.58E+002	73.60	4.54E+002
	5	1346-	1356	1351.04	337.86	0.76	4.83E+001	43.79	1.88E+002
	6	1400-	1411	1405.71	351.53	0.51	5.45E+001	49.15	2.28E+002
	7	2029-	2050	2039.91	510.09	1.77	2.06E+002	57.08	1.71E+002
	8	2320-	2338	2329.50	582.49	0.82	1.35E+002	51.08	1.61E+002
	9	2426-	2441	2433.68	608.54	0.51	1.35E+002	38.68	8.46E+001
	10	3431-	3442	3436.44	859.25	0.88	4.16E+001	23.42	4.04E+001
	11	3632-	3652	3640.29	910.21	0.98	1.65E+002	38.97	6.38E+001
	12	3864-	3880	3872.39	968.24	0.63	5.54E+001	30.86	6.16E+001
	13	4683-	4696	4688.65	1172.32	0.37	2.82E+001	22.61	3.68E+001
	14	5318-	5334	5326.56	1331.80	0.44	6.98E+001	22.34	1.92E+001
	15	5826-	5853	5839.46	1460.03	1.74	8.84E+002	62.29	2.80E+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: 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	0.969	511.00*	100.00	3.51850E-001	1.08467E-001
K-40	0.977	1460.81*	10.67	1.87462E+001	2.01211E+000
Co-60	0.976	1173.22*	100.00	5.90822E-002	4.76403E-002
		1332.49*	100.00	1.51614E-001	4.99447E-002
TL-208	0.885	277.35	6.80		
		510.84*	21.60	1.62893E+000	5.19486E-001
		583.14*	84.20	2.85261E-001	1.14211E-001
		860.37*	12.46	6.56122E-001	3.77858E-001
Pb-212	0.579	74.81* @	10.70	2.91485E+001	6.40152E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.389	238.63*	44.60	8.03634E-001	2.61809E-001
		609.31*	46.30	5.27912E-001	1.64236E-001
		1120.29	15.10		
Ac-228	0.976	1764.49	15.80		
		338.32*	11.40	6.41321E-001	5.89851E-001
		911.07*	27.70	1.18617E+000	3.11451E-001
		969.11*	16.60	6.72388E-001	3.81178E-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	0.969	2.835478E-001	1.109923E-001
K-40	0.977	1.874618E+001	2.012107E+000
Co-60	0.976	1.031645E-001	3.447267E-002
TL-208	0.885	3.162120E-001	1.089787E-001
Pb-212 @	0.579	8.036342E-001	2.618089E-001
Bi-214	0.389	5.279116E-001	1.642364E-001
Ac-228	0.976	9.319014E-001	2.232401E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	8.2710E-001	15.30
3	84.86	6.0116E-001	44.99
6	351.53	9.0878E-002	90.13

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	7.6337E-002	6.13E-002	5.9082E-002
		1332.49*	100.00	6.1256E-002		1.5161E-001
	Nb-94	702.63	100.00	1.3651E-001	1.15E-001	9.2519E-002
		871.10	100.00	1.1534E-001		-8.3825E-002
	Ag-108m	79.20	7.10	1.2785E+001	1.46E-001	-5.9382E+000
		433.93	89.90	1.7071E-001		1.6724E-001
		614.37	90.40	1.4615E-001		-1.9739E-002
		722.95	90.50	1.6420E-001		1.7859E-001
	Sb-125	176.33	6.89	3.7691E+000	4.94E-001	2.3849E-001
		427.89	29.33	4.9432E-001		-3.3824E-001
		463.38	10.35	1.3719E+000		8.9481E-001
		600.56	17.80	8.0658E-001		-5.4528E-001
		606.64	5.02	3.2511E+000		3.0359E+000
		635.90	11.32	1.1497E+000		-7.0827E-001
	Cs-134	563.23	8.38	1.6932E+000	1.67E-001	4.8996E-002
		569.32	15.43	9.3694E-001		4.5190E-001
		604.70	97.60	1.7021E-001		-6.5458E-003
		795.84	85.40	1.6674E-001		2.5644E-002
		801.93	8.73	1.5362E+000		8.1308E-001
	Cs-137	661.65	85.12	1.7700E-001	1.77E-001	1.4963E-001
	Eu-152	121.78	28.40	1.3951E+000	3.83E-001	-6.6008E-002
		244.69	7.49	2.7721E+000		-8.2353E-001
		344.27	26.50	6.1466E-001		-1.2736E-001
		778.89	12.74	1.0286E+000		6.0299E-001
		867.32	4.16	2.9128E+000		1.2097E+000
		964.01	14.40	1.0307E+000		4.8624E-001
		1085.78	10.00	1.1293E+000		4.6018E-002
		1112.02	13.30	9.2779E-001		-5.2122E-001
		1407.95	20.70	3.8290E-001		-1.6980E-001
	Eu-154	123.07	40.50	9.6296E-001	3.24E-001	3.9992E-001
		247.94	6.60	3.0742E+000		-1.1663E+000
		591.81	4.83	2.8635E+000		8.2614E-001
		723.30	19.70	7.4753E-001		5.0714E-001
		756.87	4.33	3.1148E+000		1.7042E+000
		873.19	11.50	1.0167E+000		-4.7948E-001
		996.32	10.30	1.1672E+000		-1.4859E+000
		1004.76	17.90	6.7711E-001		1.7516E-001
		1274.45	35.50	3.2436E-001		3.0661E-001
	Eu-155	86.54	30.90	2.3781E+000	2.38E+000	-7.2315E-002
		105.31	20.70	2.4203E+000		2.1164E+000
	Am-241	59.54	35.90	4.5435E+000	4.54E+000	-2.9953E+000
	Cm-243	228.19	10.56	2.0921E+000	1.29E+000	-6.9414E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.2893E+000	1.29E+000	-3.2697E-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 7/26/2006 10:56:02 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-206-F-

Sample Title: OOL-10-04-206-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 10:45:58 AM

Live Time: 600.0 seconds

Real Time: 602.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-206-F-
Title: OOL-10-04-206-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Rows 1-16 with M/m labels.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	3.48374E-001	1.21169E-001
K-40	0.861	1460.81*	10.67	2.03750E+001	2.16101E+000
TL-208	0.747	277.35	6.80		
		510.84*	21.60	1.61284E+000	5.76224E-001
		583.14*	84.20	4.46199E-001	1.24608E-001
		860.37	12.46		
Pb-212	0.725	74.81* @	10.70	3.00223E+001	6.59504E+000
		77.11 @	18.00		
		87.30* @	8.00	3.91277E+000	2.13099E+000
		238.63*	44.60	1.21502E+000	3.15221E-001
Bi-214	0.400	609.31*	46.30	4.69967E-001	1.88915E-001
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.303	74.82* @	6.21	5.17293E+001	1.19678E+001
		77.11 @	10.50		
		87.30* @	4.67	6.70281E+000	3.68548E+000
		241.98	7.49		
		295.21	19.20		
Ac-228	0.972	351.92*	37.20	3.94071E-001	2.22312E-001
		338.32*	11.40	1.13529E+000	7.77733E-001
		911.07*	27.70	1.34348E+000	3.59336E-001
		969.11*	16.60	1.02744E+000	2.95709E-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	2.519954E-001	1.240828E-001
K-40	0.861	2.037501E+001	2.161006E+000
TL-208	0.747	4.461986E-001	1.237566E-001
Pb-212 @	0.725	1.215021E+000	3.152206E-001
Bi-214	0.400	4.699668E-001	1.889151E-001
PB-214 @	0.303	3.940713E-001	2.211872E-001
Ac-228	0.972	1.153480E+000	2.190870E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	8.5061E-001	15.49
M 3	85.06	8.2770E-001	16.68
M 12	965.78	6.5575E-002	44.86
14	1333.96	9.7917E-002	43.76
16	1767.36	7.5492E-002	37.31

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: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	1.3476E-001	1.33E-001	8.6862E-002
	1332.49	100.00	1.3328E-001		2.2287E-001
Nb-94	702.63	100.00	1.4632E-001	1.32E-001	-1.5434E-001
	871.10	100.00	1.3236E-001		-2.9485E-002
Ag-108m	79.20	7.10	1.3189E+001	1.69E-001	-2.1497E+000
	433.93	89.90	1.7302E-001		5.7086E-002
	614.37	90.40	1.9042E-001		6.5868E-002
	722.95	90.50	1.6919E-001		-1.8628E-001
Sb-125	176.33	6.89	3.9099E+000	5.33E-001	1.9827E+000
	427.89	29.33	5.3305E-001		-8.0401E-002
	463.38	10.35	1.5421E+000		2.0206E-001
	600.56	17.80	8.6529E-001		6.1378E-001
	606.64	5.02	3.6075E+000		-3.8565E+000
	635.90	11.32	1.2711E+000		5.1938E-001
Cs-134	563.23	8.38	1.8573E+000	1.66E-001	1.8029E-001
	569.32	15.43	9.9318E-001		-6.5103E-002
	604.70	97.60	1.6614E-001		-1.9246E-001
	795.84	85.40	1.7349E-001		1.6250E-001
	801.93	8.73	1.4998E+000		-1.6711E+000
Cs-137	661.65	85.12	1.7428E-001	1.74E-001	-2.8082E-002
Eu-152	121.78	28.40	1.4433E+000	4.26E-001	6.1402E-001
	244.69	7.49	2.8929E+000		-6.9120E-001
	344.27	26.50	6.2760E-001		-4.6614E-001
	778.89	12.74	1.0654E+000		5.2085E-001
	867.32	4.16	3.3486E+000		-2.0562E+000
	964.01	14.40	1.0704E+000		3.6834E-001
	1085.78	10.00	1.2473E+000		-8.2312E-001
	1112.02	13.30	9.9646E-001		9.5528E-001
1407.95	20.70	4.2624E-001	-8.2788E-003		
Eu-154	123.07	40.50	9.9831E-001	3.15E-001	2.4526E-001
	247.94	6.60	3.2447E+000		2.3154E+000
	591.81	4.83	3.0304E+000		-6.2026E-001
	723.30	19.70	7.9048E-001		-1.2997E-001
	756.87	4.33	3.0292E+000		-2.1783E+000
	873.19	11.50	1.1601E+000		4.5865E-001
	996.32	10.30	1.1672E+000		2.5862E-001
	1004.76	17.90	6.9831E-001		3.4882E-001
1274.45	35.50	3.1524E-001	-2.3358E-001		
Eu-155	86.54	30.90	2.4525E+000	2.45E+000	4.8414E+000
	105.31	20.70	2.4475E+000		3.8888E-001
Am-241	59.54	35.90	4.6496E+000	4.65E+000	1.3340E+000
Cm-243	228.19	10.56	2.2313E+000	1.42E+000	-1.2363E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.4177E+000	1.42E+000	3.3957E-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 7/26/2006 2:16:24 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-207-F-

Sample Title: OOL-10-04-207-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 2:06:22 PM

Live Time: 600.0 seconds

Real Time: 602.2 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-207-F-
Title: OOL-10-04-207-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-	961	953.77	238.40	0.84	1.74E+002	83.02	5.61E+002
2	2323-	2342	2330.36	582.55	1.10	1.81E+002	44.40	9.52E+001
3	2427-	2446	2435.53	608.84	0.90	1.26E+002	46.36	1.24E+002
4	5826-	5857	5841.83	1460.43	2.33	9.11E+002	62.93	2.40E+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	1.99959E+001	2.12816E+000
TL-208	0.464	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.94025E-001	1.09549E-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	5.61844E-001	2.82626E-001
Bi-214	0.399	609.31*	46.30	5.08470E-001	1.96650E-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	0.995	1.999594E+001	2.128161E+000
TL-208	0.464	3.940246E-001	1.095486E-001
Pb-212 @	0.453	5.618440E-001	2.826261E-001
Bi-214	0.399	5.084699E-001	1.966499E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1.3498E-001	1.22E-001	-2.1806E-002
	1332.49	100.00	1.2169E-001		1.3327E-002
Nb-94	702.63	100.00	1.3158E-001	1.32E-001	-9.9849E-002
	871.10	100.00	1.4094E-001		-5.0766E-002
Ag-108m	79.20	7.10	1.6121E+001	1.68E-001	-4.8630E+001
	433.93	89.90	1.8328E-001		-3.0623E-002
	614.37	90.40	1.8385E-001		3.8214E-002
	722.95	90.50	1.6799E-001		7.5778E-003
Sb-125	176.33	6.89	4.2201E+000	5.58E-001	-2.4426E+000
	427.89	29.33	5.5794E-001		6.0673E-001
	463.38	10.35	1.5525E+000		5.4133E-002
	600.56	17.80	8.7984E-001		1.3588E-001
	606.64	5.02	3.6157E+000		6.6976E+000
	635.90	11.32	1.3806E+000		1.3724E+000
Cs-134	563.23	8.38	1.9168E+000	1.76E-001	4.1922E-001
	569.32	15.43	1.0267E+000		-1.0478E+000
	604.70	97.60	1.8205E-001		-4.4562E-002
	795.84	85.40	1.7551E-001		-4.1243E-002
	801.93	8.73	1.5896E+000		2.5590E-001
Cs-137	661.65	85.12	1.7176E-001	1.72E-001	-9.1381E-002
Eu-152	121.78	28.40	1.5604E+000	4.57E-001	-8.7979E-001
	244.69	7.49	3.1264E+000		-3.4512E-001
	344.27	26.50	6.8392E-001		-5.6669E-001
	778.89	12.74	1.1320E+000		-5.3940E-001
	867.32	4.16	3.3696E+000		-3.0993E+000
	964.01	14.40	1.0788E+000		9.9223E-001
	1085.78	10.00	1.3015E+000		-6.0648E-001
	1112.02	13.30	9.6934E-001		-1.6197E+000
1407.95	20.70	4.5659E-001	-2.9679E-001		
Eu-154	123.07	40.50	1.0785E+000	3.53E-001	-4.6950E-001
	247.94	6.60	3.3411E+000		-1.3425E+000
	591.81	4.83	3.2821E+000		3.0133E+000
	723.30	19.70	7.7746E-001		5.4840E-001
	756.87	4.33	3.1921E+000		3.8609E-001
	873.19	11.50	1.2233E+000		-4.3521E-001
	996.32	10.30	1.3029E+000		1.9514E-001
	1004.76	17.90	7.4099E-001		5.1865E-001
1274.45	35.50	3.5253E-001	1.9169E-001		
Eu-155	86.54	30.90	2.8909E+000	2.89E+000	4.7654E+000
	105.31	20.70	2.8928E+000		2.2998E+000
Am-241	59.54	35.90	7.3005E+000	7.30E+000	1.7374E+000
Cm-243	228.19	10.56	2.3060E+000	1.55E+000	-3.8196E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.5497E+000	1.55E+000	5.5683E-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 7/26/2006 1:24:51 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-208-F-

Sample Title: OOL-10-04-208-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 1:14:47 PM

Live Time: 600.0 seconds

Real Time: 602.3 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-208-F-
Title: OOL-10-04-208-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	287-	305	296.65	74.12	1.13	8.78E+002	214.35	3.27E+003
2	945-	963	955.38	238.80	0.74	2.34E+002	104.36	7.70E+002
3	3633-	3654	3641.49	910.33	0.80	1.19E+002	40.59	8.25E+001
4	5826-	5856	5840.99	1460.22	2.53	8.62E+002	62.85	3.44E+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	0.988	1460.81*	10.67	1.89096E+001	2.06067E+000
Pb-212	0.596	74.81* @	10.70	3.70796E+001	1.16093E+001
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60		

* = 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	0.988	1.890957E+001	2.060667E+000
Pb-212 @	0.596	7.555516E-001	3.578497E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	910.33	1.9750E-001	34.26

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: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	1.18E-001	6.9482E-002
	1332.49	100.00	1.1787E-001		1.1204E-002
Nb-94	702.63	100.00	1.3845E-001	1.36E-001	-1.0982E-001
	871.10	100.00	1.3565E-001		6.7981E-002
Ag-108m	79.20	7.10	1.6640E+001	1.69E-001	-4.4109E+001
	433.93	89.90	1.8202E-001		1.2381E-002
	614.37	90.40	1.8539E-001		-2.0821E-001
	722.95	90.50	1.6892E-001		5.9110E-002
Sb-125	176.33	6.89	4.6353E+000	5.55E-001	3.5213E+000
	427.89	29.33	5.5474E-001		-5.1453E-003
	463.38	10.35	1.5966E+000		1.8547E+000
	600.56	17.80	8.4753E-001		3.5044E-002
	606.64	5.02	3.4822E+000		4.8879E+000
	635.90	11.32	1.3111E+000		1.0624E+000
Cs-134	563.23	8.38	1.8215E+000	1.55E-001	-1.9006E+000
	569.32	15.43	1.0021E+000		1.7101E-001
	604.70	97.60	1.7687E-001		-6.8440E-003
	795.84	85.40	1.5461E-001		1.5669E-002
	801.93	8.73	1.5896E+000		-4.6156E-001
Cs-137	661.65	85.12	1.7176E-001	1.72E-001	2.2466E-002
Eu-152	121.78	28.40	1.6459E+000	4.31E-001	1.4874E-001
	244.69	7.49	3.2811E+000		-9.3919E-001
	344.27	26.50	7.0180E-001		-7.7602E-001
	778.89	12.74	1.0708E+000		9.5571E-002
	867.32	4.16	3.2823E+000		-1.9279E+000
	964.01	14.40	1.0766E+000		7.6649E-001
	1085.78	10.00	1.2778E+000		-4.1754E-001
	1112.02	13.30	1.0163E+000		1.8631E-002
1407.95	20.70	4.3072E-001	-4.0575E-002		
Eu-154	123.07	40.50	1.1435E+000	3.44E-001	5.1027E-001
	247.94	6.60	3.6240E+000		-5.1194E-001
	591.81	4.83	3.1398E+000		8.0010E-001
	723.30	19.70	7.8724E-001		8.3621E-001
	756.87	4.33	3.2138E+000		-3.0764E+000
	873.19	11.50	1.1683E+000		-8.6879E-001
	996.32	10.30	1.2340E+000		2.2962E-001
	1004.76	17.90	6.7388E-001		-2.6890E-001
1274.45	35.50	3.4364E-001	1.0595E-001		
Eu-155	86.54	30.90	3.0272E+000	3.03E+000	5.4952E+000
	105.31	20.70	3.0256E+000		-1.1609E+000
Am-241	59.54	35.90	7.5487E+000	7.55E+000	-1.7100E-001
Cm-243	228.19	10.56	2.4630E+000	1.57E+000	-2.6250E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.5706E+000	1.57E+000	-1.0360E+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 7/26/2006 11:38:26 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-209-F-

Sample Title: OOL-10-04-209-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 11:28:22 AM

Live Time: 600.0 seconds

Real Time: 602.0 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-209-F-
Title: OOL-10-04-209-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	2423-	2445	2435.42	608.82	1.13	1.52E+002	46.53	1.06E+002
2	3630-	3652	3642.64	910.62	0.74	1.14E+002	42.53	9.20E+001
3	3866-	3879	3871.84	967.92	0.78	4.48E+001	29.88	6.72E+001
4	5825-	5854	5839.34	1459.80	2.71	9.55E+002	63.34	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: 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	0.967	1460.81*	10.67	2.09626E+001	2.19377E+000
Bi-214	0.398	609.31*	46.30	6.10059E-001	2.01646E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.619	338.32	11.40	8.36412E-001	3.26575E-001
		911.07*	27.70		
		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	0.967	2.096256E+001	2.193773E+000
Bi-214	0.398	6.100589E-001	2.016465E-001
Ac-228	0.619	7.163091E-001	2.465170E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.3769E-001	1.17E-001	-5.5472E-002
	1332.49	100.00	1.1689E-001		4.4028E-002
Nb-94	702.63	100.00	1.4205E-001	1.39E-001	-7.6247E-002
	871.10	100.00	1.3865E-001		7.0085E-002
Ag-108m	79.20	7.10	1.5476E+001	1.68E-001	-4.5007E+001
	433.93	89.90	1.7798E-001		1.3813E-001
	614.37	90.40	1.8228E-001		-8.6156E-002
	722.95	90.50	1.6830E-001		4.9310E-002
Sb-125	176.33	6.89	4.1509E+000	5.22E-001	-4.3231E-001
	427.89	29.33	5.2229E-001		-2.0891E-001
	463.38	10.35	1.5428E+000		5.1678E-001
	600.56	17.80	8.6595E-001		3.7267E-001
	606.64	5.02	3.5646E+000		5.3292E+000
	635.90	11.32	1.2675E+000		-4.5615E-001
Cs-134	563.23	8.38	1.9141E+000	1.66E-001	4.0168E-001
	569.32	15.43	1.0114E+000		-2.1805E-001
	604.70	97.60	1.8425E-001		9.6235E-002
	795.84	85.40	1.6632E-001		4.6960E-002
	801.93	8.73	1.5896E+000		-1.2725E+000
Cs-137	661.65	85.12	1.7855E-001	1.79E-001	1.0281E-001
Eu-152	121.78	28.40	1.4882E+000	4.72E-001	1.4748E-001
	244.69	7.49	2.9368E+000		-6.8039E+000
	344.27	26.50	6.5381E-001		-9.1795E-001
	778.89	12.74	1.0883E+000		-2.8017E-001
	867.32	4.16	3.3539E+000		-1.5679E+000
	964.01	14.40	1.0999E+000		6.4146E-001
	1085.78	10.00	1.2698E+000		-5.9065E-001
	1112.02	13.30	9.8129E-001		-7.6073E-001
1407.95	20.70	4.7199E-001	2.8202E-001		
Eu-154	123.07	40.50	1.0296E+000	3.56E-001	2.1205E-001
	247.94	6.60	3.2302E+000		-1.9931E+000
	591.81	4.83	3.1085E+000		8.2880E-001
	723.30	19.70	7.8306E-001		9.3855E-001
	756.87	4.33	3.1557E+000		-1.5855E+000
	873.19	11.50	1.1859E+000		-8.2269E-001
	996.32	10.30	1.2076E+000		7.4923E-001
	1004.76	17.90	6.5539E-001		4.3276E-001
1274.45	35.50	3.5626E-001	5.0378E-001		
Eu-155	86.54	30.90	2.7690E+000	2.70E+000	3.3933E+000
	105.31	20.70	2.6984E+000		1.4411E-001
Am-241	59.54	35.90	6.9064E+000	6.91E+000	3.6444E+000
Cm-243	228.19	10.56	2.2088E+000	1.44E+000	4.2294E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.4380E+000	1.44E+000	-1.7966E-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 7/26/2006 11:09:24 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-210-F-

Sample Title: OOL-10-04-210-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 10:59:21 AM

Live Time: 600.0 seconds

Real Time: 602.3 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-210-F-
Title: OOL-10-04-210-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	299.60	74.85	2.25	1.15E+003	210.78	3.08E+003
2	946-	962	952.53	238.09	1.45	2.87E+002	98.29	7.12E+002
3	2034-	2052	2040.17	510.00	1.99	1.34E+002	53.90	1.84E+002
4	3631-	3652	3641.30	910.29	1.70	1.21E+002	40.89	8.28E+001
5	3863-	3884	3870.46	967.58	0.41	5.95E+001	38.65	8.75E+001
6	5824-	5855	5839.74	1459.90	2.63	1.01E+003	64.65	1.60E+001
7	6343-	6356	6349.00	1587.22	0.28	1.76E+001	11.24	5.38E+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: 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	0.968	511.00*	100.00	2.35618E-001	9.99642E-002		
K-40	0.973	1460.81*	10.67	2.21212E+001	2.28486E+000		
Pb-212	0.594	74.81* @	10.70	4.67377E+001	1.25602E+001		
		77.11 @	18.00				
		87.30 @	8.00				
Ac-228	0.604	238.63*	44.60	9.27385E-001	3.49512E-001		
		338.32	11.40				
		911.07*	27.70			8.89172E-001	3.17049E-001
		969.11*	16.60			7.39029E-001	4.86423E-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	0.968	2.356176E-001	9.996417E-002
K-40	0.973	2.212121E+001	2.284863E+000
Pb-212 @	0.594	9.273847E-001	3.495118E-001
Ac-228	0.604	8.444044E-001	2.656093E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1587.22	2.9366E-002	63.78

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	1.4072E-001	1.22E-001	1.3972E-002
	1332.49	100.00	1.2169E-001		9.0753E-002
Nb-94	702.63	100.00	1.3815E-001	1.38E-001	8.4342E-002
	871.10	100.00	1.3964E-001		3.2867E-002
Ag-108m	79.20	7.10	1.6534E+001	1.69E-001	-2.7791E+001
	433.93	89.90	1.8597E-001		9.0683E-002
	614.37	90.40	1.8462E-001		-3.8519E-001
	722.95	90.50	1.6892E-001		8.6255E-002
Sb-125	176.33	6.89	4.6928E+000	5.50E-001	1.0958E+000
	427.89	29.33	5.5022E-001		-3.3655E-001
	463.38	10.35	1.5428E+000		-1.6860E+000
	600.56	17.80	8.4178E-001		-9.9053E-001
	606.64	5.02	3.6868E+000		6.4543E+000
	635.90	11.32	1.2991E+000		1.4985E-001
Cs-134	563.23	8.38	1.8387E+000	1.72E-001	1.1510E+000
	569.32	15.43	1.0145E+000		9.8864E-001
	604.70	97.60	1.8664E-001		5.3170E-002
	795.84	85.40	1.7238E-001		1.4402E-001
	801.93	8.73	1.5563E+000		-1.3159E+000
Cs-137	661.65	85.12	1.8138E-001	1.81E-001	1.8035E-001
Eu-152	121.78	28.40	1.6722E+000	4.41E-001	1.0282E-001
	244.69	7.49	3.2924E+000		-4.7332E+000
	344.27	26.50	7.1165E-001		-7.6599E-001
	778.89	12.74	1.0858E+000		-2.3980E-001
	867.32	4.16	3.3064E+000		-1.9886E+000
	964.01	14.40	1.1745E+000		6.3397E-001
	1085.78	10.00	1.1693E+000		-2.8098E-001
	1112.02	13.30	1.0163E+000		-4.7393E-001
1407.95	20.70	4.4061E-001	-3.4893E-002		
Eu-154	123.07	40.50	1.1517E+000	3.24E-001	4.0329E-002
	247.94	6.60	3.6092E+000		-1.2435E+000
	591.81	4.83	3.0501E+000		-9.2500E-001
	723.30	19.70	7.7605E-001		1.4828E-001
	756.87	4.33	3.3198E+000		-1.8247E+000
	873.19	11.50	1.1830E+000		1.4531E-001
	996.32	10.30	1.2037E+000		-1.0696E+000
	1004.76	17.90	7.0502E-001		5.4200E-001
1274.45	35.50	3.2374E-001	-1.6610E-001		
Eu-155	86.54	30.90	3.0178E+000	3.02E+000	6.6832E+000
	105.31	20.70	3.0475E+000		1.4961E-001
Am-241	59.54	35.90	7.3220E+000	7.32E+000	-4.2491E+000
Cm-243	228.19	10.56	2.5010E+000	1.60E+000	-3.9247E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.5967E+000	1.60E+000	7.8232E-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 7/27/2006 4:20:28 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-211-F-

Sample Title: OOL-10-04-211-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 4:10:26 PM

Live Time: 600.0 seconds

Real Time: 601.9 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-211-F-
 Title: OOL-10-04-211-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-	310	291.39	72.80	1.76	4.96E+002	86.82	2.49E+003
m	2	281-	310	300.71	75.13	1.76	7.83E+002	92.90	3.66E+003
	3	333-	347	338.76	84.65	0.79	2.00E+002	159.18	2.21E+003
	4	946-	961	954.32	238.56	1.03	1.80E+002	78.16	4.69E+002
	5	1346-	1359	1352.07	338.01	0.55	4.36E+001	44.28	1.69E+002
	6	1401-	1414	1406.90	351.72	0.66	9.02E+001	50.44	2.07E+002
	7	2284-	2297	2291.82	572.98	0.62	3.78E+001	29.00	6.52E+001
	8	2324-	2340	2331.56	582.91	0.59	8.93E+001	44.31	1.35E+002
	9	2428-	2446	2436.18	609.07	1.77	1.10E+002	45.05	1.24E+002
	10	3633-	3652	3643.57	910.96	1.44	1.44E+002	37.79	6.50E+001
	11	5828-	5855	5842.91	1460.87	2.09	8.04E+002	61.86	4.24E+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	1.000	1460.81*	10.67	1.82642E+001	2.04046E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.99312E-001	1.02238E-001
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	3.03820E+001	6.95973E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.88134E-001	2.71269E-001
Bi-214	0.401	609.31*	46.30	4.51149E-001	1.93762E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.540	338.32*	11.40	6.05466E-001	6.22131E-001
		911.07*	27.70	1.09581E+000	3.14073E-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: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	1.000	1.826417E+001	2.040459E+000
TL-208	0.470	1.993116E-001	1.022376E-001
Pb-212 @	0.594	5.881344E-001	2.712691E-001
Bi-214	0.401	4.511494E-001	1.937625E-001
Ac-228	0.540	9.962206E-001	2.803710E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	8.2624E-001	17.51
3	84.65	3.3349E-001	79.55
6	351.72	1.5032E-001	55.92
7	572.98	6.3062E-002	76.65

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	1.4290E-001	1.13E-001	2.6557E-002
	1332.49	100.00	1.1274E-001		1.0713E-001
Nb-94	702.63	100.00	1.4201E-001	1.34E-001	1.9879E-002
	871.10	100.00	1.3368E-001		-2.1191E-002
Ag-108m	79.20	7.10	1.5320E+001	1.65E-001	2.8566E-002
	433.93	89.90	1.7145E-001		-6.7798E-002
	614.37	90.40	1.8380E-001		-1.1266E-001
	722.95	90.50	1.6539E-001		1.0892E-001
Sb-125	176.33	6.89	3.7435E+000	5.34E-001	8.1921E-001
	427.89	29.33	5.3354E-001		-1.5513E-001
	463.38	10.35	1.3822E+000		-1.3667E-001
	600.56	17.80	8.4577E-001		3.7062E-001
	606.64	5.02	3.5671E+000		5.9380E+000
	635.90	11.32	1.2583E+000		-5.7677E-001
Cs-134	563.23	8.38	1.6806E+000	1.47E-001	8.2371E-001
	569.32	15.43	9.6311E-001		1.1972E-001
	604.70	97.60	1.8000E-001		-1.5890E-002
	795.84	85.40	1.4739E-001		-5.6893E-002
	801.93	8.73	1.4614E+000		-1.6320E+000
Cs-137	661.65	85.12	1.7207E-001	1.72E-001	2.0110E-002
Eu-152	121.78	28.40	1.4737E+000	4.66E-001	-3.9855E-001
	244.69	7.49	2.9069E+000		7.7521E-001
	344.27	26.50	6.0117E-001		-5.0159E-001
	778.89	12.74	1.1227E+000		1.7969E-001
	867.32	4.16	3.1298E+000		-4.2695E+000
	964.01	14.40	1.1489E+000		1.6576E+000
	1085.78	10.00	1.2226E+000		6.9168E-001
	1112.02	13.30	8.5721E-001		-1.8011E+000
1407.95	20.70	4.6587E-001	-4.3439E-002		
Eu-154	123.07	40.50	1.0262E+000	3.32E-001	-3.9366E-002
	247.94	6.60	3.1398E+000		-3.3878E+000
	591.81	4.83	3.0286E+000		2.7308E-001
	723.30	19.70	7.6748E-001		9.3733E-001
	756.87	4.33	3.1448E+000		5.1130E-001
	873.19	11.50	1.1469E+000		-1.5110E+000
	996.32	10.30	1.3134E+000		1.2149E+000
	1004.76	17.90	7.3975E-001		2.2059E-001
1274.45	35.50	3.3240E-001	-2.3775E-001		
Eu-155	86.54	30.90	2.6406E+000	2.64E+000	3.9002E+000
	105.31	20.70	2.6375E+000		8.7912E-001
Am-241	59.54	35.90	6.4255E+000	6.43E+000	-6.0383E+000
Cm-243	228.19	10.56	1.9886E+000	1.35E+000	-1.2690E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3539E+000	1.35E+000	8.5214E-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 7/27/2006 3:57:50 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-212-F-

Sample Title: OOL-10-04-212-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 3:47:48 PM

Live Time: 600.0 seconds

Real Time: 602.0 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-212-F-
Title: OOL-10-04-212-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	2323-	2343	2331.39	582.81	1.26	1.62E+002	47.47	1.17E+002
2	2427-	2448	2436.53	609.09	1.28	1.39E+002	44.60	1.01E+002
3	4688-	4699	4693.37	1173.31	0.32	1.94E+001	20.46	3.56E+001
4	5830-	5859	5843.95	1460.96	2.27	7.08E+002	57.60	3.31E+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	0.999	1460.81*	10.67	1.55397E+001	1.78376E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.52790E-001	1.13209E-001
Bi-214	0.402	860.37	12.46		
		609.31*	46.30	5.59090E-001	1.92146E-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	0.999	1.553969E+001	1.783758E+000
TL-208	0.469	3.527903E-001	1.132087E-001
Bi-214	0.402	5.590905E-001	1.921463E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1173.31	3.2303E-002	105.56

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: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	1.3300E-001	1.16E-001	2.0391E-003
	1332.49	100.00	1.1640E-001		1.7508E-001
Nb-94	702.63	100.00	1.4411E-001	1.23E-001	1.1942E-001
	871.10	100.00	1.2251E-001		-1.3867E-002
Ag-108m	79.20	7.10	1.6341E+001	1.64E-001	-5.2432E+001
	433.93	89.90	1.6409E-001		-6.5877E-002
	614.37	90.40	1.8228E-001		-3.2467E-002
	722.95	90.50	1.6488E-001		-7.4502E-002
Sb-125	176.33	6.89	4.1962E+000	5.12E-001	4.0073E-001
	427.89	29.33	5.1194E-001		3.8748E-001
	463.38	10.35	1.4140E+000		-5.6047E-002
	600.56	17.80	8.0639E-001		4.3807E-001
	606.64	5.02	3.3977E+000		5.0951E-001
	635.90	11.32	1.2172E+000		1.4726E+000
Cs-134	563.23	8.38	1.6166E+000	1.49E-001	-5.4518E-001
	569.32	15.43	9.1757E-001		1.1396E-002
	604.70	97.60	1.6676E-001		-3.0110E-002
	795.84	85.40	1.4901E-001		2.3697E-002
Cs-137	801.93	8.73	1.4437E+000	1.66E-001	-3.9454E-001
	661.65	85.12	1.6571E-001		4.3559E-002
Eu-152	121.78	28.40	1.5650E+000	4.44E-001	1.2932E+000
	244.69	7.49	2.8871E+000		-4.6654E+000
	344.27	26.50	6.4244E-001		-1.0496E+000
	778.89	12.74	1.0453E+000		-2.7254E-001
	867.32	4.16	2.9871E+000		-3.6722E+000
	964.01	14.40	1.0766E+000		2.9972E-001
	1085.78	10.00	1.2373E+000		-7.6643E-001
	1112.02	13.30	8.8757E-001		-8.9555E-001
	1407.95	20.70	4.4386E-001		2.4630E-001
Eu-154	123.07	40.50	1.0749E+000	3.18E-001	2.8647E-001
	247.94	6.60	3.1918E+000		3.1419E-001
	591.81	4.83	2.9520E+000		-3.1047E-001
	723.30	19.70	7.6327E-001		-5.9085E-001
	756.87	4.33	3.1189E+000		-1.2686E+000
	873.19	11.50	1.0755E+000		-4.3370E-001
	996.32	10.30	1.2076E+000		7.0075E-001
	1004.76	17.90	6.7160E-001		-8.0481E-001
	1274.45	35.50	3.1821E-001		-9.8157E-002
Eu-155	86.54	30.90	2.9528E+000	2.88E+000	5.2076E+000
	105.31	20.70	2.8788E+000		-3.6917E+000
Am-241	59.54	35.90	7.2123E+000	7.21E+000	-3.4909E+000
Cm-243	228.19	10.56	2.1637E+000	1.42E+000	1.0243E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.4204E+000	1.42E+000	1.5318E-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 7/27/2006 4:11:06 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-213-F-

Sample Title: OOL-10-04-213-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 4:01:04 PM

Live Time: 600.0 seconds

Real Time: 602.1 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-213-F-
Title: OOL-10-04-213-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	944-	964	955.06	238.72	0.63	2.38E+002	99.57	6.41E+002
2	2321-	2340	2331.25	582.77	0.60	1.34E+002	44.64	1.09E+002
3	2428-	2447	2435.38	608.80	1.85	1.55E+002	41.30	8.26E+001
4	3636-	3654	3644.36	911.05	0.88	1.25E+002	33.42	4.83E+001
5	5830-	5860	5844.95	1461.21	2.77	8.12E+002	58.38	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	0.995	1460.81*	10.67	1.78165E+001	1.92965E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.92679E-001	1.04508E-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	7.70555E-001	3.44085E-001
Bi-214	0.398	609.31*	46.30	6.24699E-001	1.83048E-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	0.995	1.781654E+001	1.929649E+000
TL-208	0.469	2.926793E-001	1.045080E-001
Pb-212 @	0.454	7.705547E-001	3.440854E-001
Bi-214	0.398	6.246988E-001	1.830481E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	911.05	2.0790E-001	26.80

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.18E-001	1.1566E-001
	1332.49	100.00	1.1836E-001		9.2357E-002
Nb-94	702.63	100.00	1.3723E-001	1.36E-001	-8.1013E-003
	871.10	100.00	1.3599E-001		-2.1194E-002
Ag-108m	79.20	7.10	1.6925E+001	1.64E-001	-4.3780E+001
	433.93	89.90	1.6362E-001		-1.9068E-001
	614.37	90.40	1.7778E-001		-5.2509E-002
	722.95	90.50	1.6707E-001		1.6426E-001
Sb-125	176.33	6.89	4.3350E+000	5.11E-001	1.0790E+000
	427.89	29.33	5.1124E-001		1.7573E-001
	463.38	10.35	1.4768E+000		1.1191E+000
	600.56	17.80	8.0033E-001		-1.9548E-001
	606.64	5.02	3.4469E+000		7.4888E+000
	635.90	11.32	1.2197E+000		-1.1409E+000
Cs-134	563.23	8.38	1.6929E+000	1.63E-001	-8.1293E-001
	569.32	15.43	9.0384E-001		-1.0093E+000
	604.70	97.60	1.7271E-001		3.0287E-002
	795.84	85.40	1.6338E-001		5.6849E-002
	801.93	8.73	1.5712E+000		5.1313E-001
Cs-137	661.65	85.12	1.6775E-001	1.68E-001	-6.6415E-003
Eu-152	121.78	28.40	1.5545E+000	4.41E-001	-6.7593E-001
	244.69	7.49	2.9185E+000		-2.9435E-001
	344.27	26.50	6.3333E-001		-8.1694E-001
	778.89	12.74	1.0581E+000		-8.0375E-001
	867.32	4.16	3.2904E+000		-1.1250E+000
	964.01	14.40	1.1082E+000		1.2922E+000
	1085.78	10.00	1.2738E+000		-7.0884E-001
	1112.02	13.30	9.5419E-001		2.2911E-001
1407.95	20.70	4.4061E-001	-3.1973E-001		
Eu-154	123.07	40.50	1.0728E+000	3.29E-001	-5.2273E-001
	247.94	6.60	3.1495E+000		-2.5030E+000
	591.81	4.83	3.0927E+000		-2.2375E-001
	723.30	19.70	7.5751E-001		3.7533E-001
	756.87	4.33	3.2778E+000		1.7108E+000
	873.19	11.50	1.1473E+000		-7.2213E-001
	996.32	10.30	1.2037E+000		-3.3348E-001
	1004.76	17.90	7.0502E-001		-1.2500E-001
1274.45	35.50	3.2917E-001	-2.7353E-001		
Eu-155	86.54	30.90	2.9970E+000	2.92E+000	4.3362E+000
	105.31	20.70	2.9222E+000		1.1502E+000
Am-241	59.54	35.90	7.2674E+000	7.27E+000	-6.6821E+000
Cm-243	228.19	10.56	2.1431E+000	1.42E+000	-1.1662E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.4213E+000	1.42E+000	2.1962E-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 7/27/2006 4:23:40 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-10-04-214-F-

Sample Title: OOL-10-04-214-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 4:13:38 PM

Live Time: 600.0 seconds

Real Time: 602.1 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-214-F-
Title: OOL-10-04-214-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	953.82	238.41	1.09	2.70E+002	99.21	6.53E+002
2	3635-	3653	3644.55	911.10	0.46	1.09E+002	37.70	7.62E+001
3	5324-	5340	5331.90	1332.94	0.35	4.57E+001	20.25	1.93E+001
4	5830-	5858	5843.82	1460.92	2.50	7.92E+002	60.65	3.60E+001
5	7055-	7068	7061.35	1765.31	0.62	2.94E+001	16.10	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: 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	1.000	1460.81*	10.67	1.73877E+001	1.93768E+000
Pb-212	0.453	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.72857E-001	3.48869E-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	1.000	1.738772E+001	1.937682E+000
Pb-212 @	0.453	8.728570E-001	3.488691E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	911.10	1.8132E-001	34.65
3	1332.94	7.6160E-002	44.32
5	1765.31	4.9070E-002	54.70

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: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	1.3458E-001	1.19E-001	-1.7627E-002
	1332.49	100.00	1.1884E-001		1.0983E-001
Nb-94	702.63	100.00	1.4382E-001	1.28E-001	1.9764E-002
	871.10	100.00	1.2800E-001		-3.0885E-002
Ag-108m	79.20	7.10	1.7241E+001	1.53E-001	-5.3369E+001
	433.93	89.90	1.7560E-001		1.0735E-002
	614.37	90.40	1.8820E-001		-1.0046E-001
	722.95	90.50	1.5347E-001		-1.3513E-001
Sb-125	176.33	6.89	4.4298E+000	5.42E-001	-5.5935E-001
	427.89	29.33	5.4174E-001		3.8399E-001
	463.38	10.35	1.4768E+000		2.3341E-002
	600.56	17.80	8.3889E-001		3.4104E-001
	606.64	5.02	3.5902E+000		6.1991E+000
	635.90	11.32	1.2943E+000		9.3532E-001
Cs-134	563.23	8.38	1.7419E+000	1.63E-001	-4.2584E-001
	569.32	15.43	9.5591E-001		-3.9445E-001
	604.70	97.60	1.7846E-001		4.4817E-002
	795.84	85.40	1.6301E-001		1.1018E-002
	801.93	8.73	1.5451E+000		-5.3768E-001
Cs-137	661.65	85.12	1.7307E-001	1.73E-001	5.3227E-002
Eu-152	121.78	28.40	1.6343E+000	4.57E-001	7.6817E-001
	244.69	7.49	2.9085E+000		-4.9768E-001
	344.27	26.50	6.5617E-001		-5.8805E-001
	778.89	12.74	1.0296E+000		-7.2286E-001
	867.32	4.16	3.2256E+000		-1.7025E+000
	964.01	14.40	1.0724E+000		1.0036E+000
	1085.78	10.00	1.2698E+000		1.0486E+000
	1112.02	13.30	9.1674E-001		-9.4063E-001
1407.95	20.70	4.5659E-001	1.1868E-001		
Eu-154	123.07	40.50	1.1209E+000	3.41E-001	-8.9949E-001
	247.94	6.60	3.1867E+000		-1.0653E+000
	591.81	4.83	3.0608E+000		-1.6231E-001
	723.30	19.70	7.1894E-001		3.7953E-001
	756.87	4.33	2.9431E+000		-2.5309E+000
	873.19	11.50	1.1073E+000		8.7898E-001
	996.32	10.30	1.2227E+000		4.0830E-001
	1004.76	17.90	6.6239E-001		9.2680E-002
1274.45	35.50	3.4106E-001	1.4046E-001		
Eu-155	86.54	30.90	3.0431E+000	3.01E+000	3.8942E+000
	105.31	20.70	3.0146E+000		-9.3757E-001
Am-241	59.54	35.90	7.6362E+000	7.64E+000	2.5413E-001
Cm-243	228.19	10.56	2.2432E+000	1.44E+000	4.6400E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.4406E+000	1.44E+000	1.9354E+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 7/27/2006 3:29:15 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-10-04-215-F-

Sample Title: OOL-10-04-215-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 3:19:12 PM

Live Time: 600.0 seconds

Real Time: 601.8 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-215-F-
 Title: OOL-10-04-215-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	291.30	72.91	0.92	4.02E+002	77.68	2.03E+003
m	2	287-	306	299.85	75.05	0.93	8.44E+002	90.56	2.94E+003
	3	332-	343	339.09	84.86	0.79	3.52E+002	159.34	2.50E+003
	4	846-	857	852.63	213.25	0.41	5.82E+001	68.42	4.62E+002
	5	945-	978	953.93	238.58	0.78	3.24E+002	149.06	1.02E+003
	6	1401-	1410	1406.54	351.74	0.93	5.45E+001	40.07	1.60E+002
	7	2036-	2051	2041.21	510.42	1.57	1.45E+002	49.84	1.65E+002
	8	2325-	2339	2330.95	582.85	1.12	1.35E+002	39.07	9.00E+001
	9	2428-	2444	2435.56	609.01	0.98	1.51E+002	38.98	7.79E+001
	10	3632-	3653	3643.86	911.10	1.61	1.41E+002	38.56	6.42E+001
	11	4475-	4487	4481.29	1120.47	0.34	3.60E+001	22.19	3.50E+001
	12	5323-	5337	5329.93	1332.65	1.25	4.83E+001	20.39	2.07E+001
	13	5831-	5858	5843.81	1461.12	1.88	7.15E+002	58.07	3.70E+001
	14	7052-	7067	7059.69	1765.11	1.23	3.80E+001	15.45	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	0.987	511.00*	100.00	2.47371E-001	9.14352E-002
K-40	0.996	1460.81*	10.67	1.51678E+001	1.73932E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	1.14524E+000	4.33520E-001
		583.14*	84.20	2.85489E-001	9.05927E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	2.74821E+001	6.14080E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.995	238.63*	44.60	1.00906E+000	4.91048E-001
		609.31*	46.30	5.89478E-001	1.68471E-001
		1120.29*	15.10	4.95847E-001	3.09821E-001
		1764.49*	15.80	5.92628E-001	2.48175E-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	0.987	1.857057E-001	9.348405E-002
K-40	0.996	1.516784E+001	1.739319E+000
TL-208	0.750	2.854893E-001	9.011373E-002
Pb-212 @	0.580	1.009063E+000	4.910475E-001
Bi-214	0.995	5.745427E-001	1.271158E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	6.7034E-001	19.31
3	84.86	5.8630E-001	45.30
4	213.25	9.7021E-002	117.54
6	351.74	9.0826E-002	73.52
10	911.10	2.3459E-001	27.40
12	1332.65	8.0459E-002	42.24

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: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	1.12E-001	-5.3167E-002
	1332.49	100.00	1.1185E-001		9.9934E-002
Nb-94	702.63	100.00	1.2903E-001	1.27E-001	1.8425E-001
	871.10	100.00	1.2660E-001		-4.1407E-002
Ag-108m	79.20	7.10	1.3431E+001	1.55E-001	-4.6250E+000
	433.93	89.90	1.5560E-001		1.4719E-002
	614.37	90.40	1.5628E-001		-3.3914E-002
	722.95	90.50	1.5499E-001		1.0846E-001
Sb-125	176.33	6.89	3.5668E+000	4.75E-001	1.3221E-001
	427.89	29.33	4.7480E-001		-7.4370E-003
	463.38	10.35	1.3802E+000		2.0143E-001
	600.56	17.80	7.4307E-001		-4.2500E-001
	606.64	5.02	3.1840E+000		3.2687E+000
	635.90	11.32	1.1751E+000		-1.9664E-001
Cs-134	563.23	8.38	1.5269E+000	1.45E-001	-8.7697E-001
	569.32	15.43	8.5829E-001		1.9185E-001
	604.70	97.60	1.6102E-001		-8.2896E-002
	795.84	85.40	1.4532E-001		5.7395E-002
	801.93	8.73	1.4317E+000		4.3304E-001
Cs-137	661.65	85.12	1.5725E-001	1.57E-001	6.0167E-002
Eu-152	121.78	28.40	1.4288E+000	4.00E-001	1.5968E+000
	244.69	7.49	2.6874E+000		7.4348E-001
	344.27	26.50	5.7214E-001		-5.4232E-001
	778.89	12.74	8.9486E-001		-1.0927E+000
	867.32	4.16	3.0735E+000		6.3038E-001
	964.01	14.40	9.6684E-001		-1.1944E-001
	1085.78	10.00	1.1506E+000		-4.5994E-001
	1112.02	13.30	7.9965E-001		-4.9987E-001
	1407.95	20.70	4.0017E-001		3.7707E-001
Eu-154	123.07	40.50	9.7747E-001	3.14E-001	-5.4785E-001
	247.94	6.60	2.9566E+000		1.4314E+000
	591.81	4.83	2.8955E+000		2.1940E+000
	723.30	19.70	7.1355E-001		5.8634E-001
	756.87	4.33	2.8345E+000		9.0828E-001
	873.19	11.50	1.0802E+000		-3.1077E-001
	996.32	10.30	1.1520E+000		-4.1319E-001
	1004.76	17.90	6.3247E-001		-3.6496E-001
	1274.45	35.50	3.1391E-001		-2.4588E-001
Eu-155	86.54	30.90	2.4770E+000	2.47E+000	-3.6173E-001
	105.31	20.70	2.4662E+000		1.0949E+000
Am-241	59.54	35.90	4.7630E+000	4.76E+000	-6.4914E-001
Cm-243	228.19	10.56	2.0597E+000	1.26E+000	2.0752E-001

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	1.3055E-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 7/27/2006 11:45:13 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-10-04-216-F-

Sample Title: OOL-10-04-216-F-G

Description: saturated soil

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 11:42:54 AM

Live Time: 136.9 seconds

Real Time: 137.3 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C SP E A K A N A L Y S I S R E P O R T

Filename: BRN7722
Log Number: OOL-10-04-216-F-
Title: OOL-10-04-216-F-G
Description: saturated soil

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	297-	306	300.26	75.15	0.72	1.02E+002	73.60	5.75E+002
2	333-	344	340.09	85.11	0.98	1.16E+002	79.86	6.11E+002
3	950-	960	955.33	238.93	0.33	4.68E+001	31.29	8.62E+001
4	2327-	2336	2331.58	583.01	1.01	3.22E+001	15.63	1.38E+001
5	5837-	5858	5845.96	1461.66	1.50	1.33E+002	25.35	8.62E+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	0.972	1460.81*	10.67	1.24053E+001	2.56236E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.98140E-001	1.49981E-001
		860.37	12.46		
Pb-212	0.578	74.81* @	10.70	1.44484E+001	1.08384E+001
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.40577E-001	4.39583E-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	0.972	1.240528E+001	2.562364E+000
TL-208	0.472	2.981404E-001	1.499813E-001
Pb-212 @	0.578	6.405768E-001	4.395833E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	85.11	8.4565E-001	68.99

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	2.6304E-001	2.63E-001	2.2902E-001
	1332.49	100.00	2.7632E-001		7.6456E-002
Nb-94	702.63	100.00	2.4902E-001	2.32E-001	-2.1963E-001
	871.10	100.00	2.3219E-001		-1.5387E-001
Ag-108m	79.20	7.10	2.8801E+001	3.26E-001	-7.2271E+000
	433.93	89.90	3.2897E-001		-1.8430E-001
	614.37	90.40	3.6559E-001		-2.9417E-002
	722.95	90.50	3.2612E-001		4.2132E-003
Sb-125	176.33	6.89	7.4130E+000	1.04E+000	2.3031E+000
	427.89	29.33	1.0432E+000		3.2993E-001
	463.38	10.35	2.8389E+000		1.2772E+000
	600.56	17.80	1.7021E+000		-6.7179E-001
	606.64	5.02	6.8143E+000		3.9290E+000
	635.90	11.32	2.5011E+000		1.3478E+000
Cs-134	563.23	8.38	3.4857E+000	3.23E-001	2.6912E-001
	569.32	15.43	1.9303E+000		7.3654E-001
	604.70	97.60	3.2311E-001		-2.7830E-001
	795.84	85.40	3.2931E-001		8.0753E-002
	801.93	8.73	3.4590E+000		3.3826E+000
Cs-137	661.65	85.12	3.1720E-001	3.17E-001	1.1698E-001
Eu-152	121.78	28.40	3.0098E+000	8.87E-001	-7.7882E-001
	244.69	7.49	5.5434E+000		1.7201E+000
	344.27	26.50	1.2023E+000		-1.6732E-001
	778.89	12.74	2.1253E+000		-1.6535E-002
	867.32	4.16	6.7409E+000		-4.4217E+000
	964.01	14.40	1.9002E+000		-1.8526E+000
	1085.78	10.00	2.6258E+000		1.3689E+000
	1112.02	13.30	1.7752E+000		-5.6735E-002
	1407.95	20.70	8.8739E-001		-5.8928E-002
Eu-154	123.07	40.50	2.0799E+000	7.35E-001	-5.9904E-001
	247.94	6.60	6.2642E+000		-8.6937E-002
	591.81	4.83	5.9403E+000		-2.8856E+000
	723.30	19.70	1.4983E+000		1.5570E-002
	756.87	4.33	6.8215E+000		-3.7689E-001
	873.19	11.50	1.9515E+000		-2.8480E+000
	996.32	10.30	2.2404E+000		-1.8202E-001
	1004.76	17.90	1.2680E+000		-1.0360E+000
	1274.45	35.50	7.3544E-001		5.5037E-002
Eu-155	86.54	30.90	5.3912E+000	5.15E+000	-1.7515E+000
	105.31	20.70	5.1482E+000		-1.5630E+000
Am-241	59.54	35.90	1.0290E+001	1.03E+001	2.1415E+000
Cm-243	228.19	10.56	4.2976E+000	2.60E+000	-8.2545E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.6006E+000	2.60E+000	-8.3777E-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 7/27/2006 11:24:00 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-10-04-217-F-

Sample Title: OOL-10-04-217-F-G

Description: saturated soil

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 11:13:57 AM

Live Time: 600.0 seconds

Real Time: 601.9 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-217-F-
 Title: OOL-10-04-217-F-G
 Description: saturated soil

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	291.27	72.91	0.90	6.31E+002	82.82	2.64E+003
m	2	284-	306	300.10	75.11	0.91	1.02E+003	94.78	3.04E+003
	3	332-	345	339.32	84.92	0.98	3.66E+002	189.52	3.26E+003
	4	948-	960	954.42	238.70	1.16	1.84E+002	73.59	4.66E+002
	5	1349-	1362	1352.74	338.29	0.62	5.27E+001	46.90	1.86E+002
	6	1398-	1414	1407.33	351.94	0.59	9.18E+001	53.42	2.08E+002
	7	2033-	2052	2042.37	510.71	1.23	1.62E+002	50.83	1.45E+002
	8	2327-	2343	2332.46	583.23	1.15	1.76E+002	38.90	6.90E+001
	9	2430-	2442	2436.60	609.27	0.68	1.13E+002	35.38	8.12E+001
	10	3154-	3163	3158.58	789.78	0.31	1.51E+001	19.23	3.59E+001
	11	3636-	3654	3645.94	911.62	0.82	8.78E+001	34.93	6.72E+001
	12	3869-	3884	3876.96	969.38	0.50	5.81E+001	29.07	5.39E+001
	13	5036-	5047	5041.74	1260.60	0.48	1.15E+001	14.34	1.65E+001
	14	5835-	5856	5846.18	1461.72	1.66	6.39E+002	55.97	4.68E+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	0.997	511.00*	100.00	2.75986E-001	9.44944E-002
K-40	0.969	1460.81*	10.67	1.35614E+001	1.61738E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	1.27772E+000	4.49746E-001
		583.14*	84.20	3.72193E-001	9.54927E-002
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.30143E+001	7.16559E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.402	238.63*	44.60	5.75230E-001	2.46612E-001
		609.31*	46.30	4.40101E-001	1.48282E-001
		1120.29	15.10		
Ac-228	0.993	1764.49	15.80		
		338.32*	11.40	6.99043E-001	6.32330E-001
		911.07*	27.70	6.30878E-001	2.61207E-001
		969.11*	16.60	7.05586E-001	3.60564E-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	0.997	1.955928E-001	9.668388E-002
K-40	0.969	1.356138E+001	1.617379E+000
TL-208	0.752	3.721930E-001	9.471924E-002
Pb-212 @	0.580	5.752304E-001	2.466120E-001
Bi-214	0.402	4.401013E-001	1.482824E-001
Ac-228	0.993	6.608638E-001	2.006049E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1.0511E+000	13.13
3	84.92	6.0948E-001	51.83
6	351.94	1.5305E-001	58.17
10	789.78	2.5147E-002	127.43
13	1260.60	1.9211E-002	124.38

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: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	1.2030E-001	1.10E-001	1.0988E-001
	1332.49	100.00	1.1039E-001		1.0697E-001
Nb-94	702.63	100.00	1.2779E-001	1.22E-001	-9.4825E-002
	871.10	100.00	1.2237E-001		8.9949E-002
Ag-108m	79.20	7.10	1.3916E+001	1.51E-001	-1.1624E+001
	433.93	89.90	1.5182E-001		1.0385E-001
	614.37	90.40	1.6304E-001		-7.0413E-002
	722.95	90.50	1.5147E-001		9.5564E-002
Sb-125	176.33	6.89	3.8038E+000	4.53E-001	4.1230E-001
	427.89	29.33	4.5292E-001		-1.7467E-001
	463.38	10.35	1.2679E+000		-1.2838E+000
	600.56	17.80	7.5682E-001		-1.1297E+000
	606.64	5.02	3.2995E+000		5.6765E+000
	635.90	11.32	1.1497E+000		6.9547E-001
Cs-134	563.23	8.38	1.5623E+000	1.39E-001	5.7375E-001
	569.32	15.43	8.8531E-001		-4.0396E-001
	604.70	97.60	1.6149E-001		7.4268E-002
	795.84	85.40	1.3922E-001		3.2639E-002
	801.93	8.73	1.3560E+000		1.0744E+000
Cs-137	661.65	85.12	1.5486E-001	1.55E-001	3.3735E-003
Eu-152	121.78	28.40	1.4693E+000	4.51E-001	1.2054E-001
	244.69	7.49	2.6702E+000		-2.8189E-001
	344.27	26.50	5.5854E-001		3.5571E-002
	778.89	12.74	9.5344E-001		-3.9724E-001
	867.32	4.16	2.8601E+000		-5.7541E+000
	964.01	14.40	9.6684E-001		4.0650E-001
	1085.78	10.00	1.0674E+000		-1.2201E+000
	1112.02	13.30	8.9756E-001		6.6170E-001
1407.95	20.70	4.5071E-001	1.2144E-001		
Eu-154	123.07	40.50	1.0270E+000	2.85E-001	6.6154E-001
	247.94	6.60	2.8900E+000		-1.3246E+000
	591.81	4.83	2.7761E+000		5.6779E-001
	723.30	19.70	6.9592E-001		4.1766E-001
	756.87	4.33	2.9928E+000		1.1785E+000
	873.19	11.50	1.0802E+000		1.7999E-001
	996.32	10.30	1.1210E+000		-4.6434E-001
	1004.76	17.90	6.6624E-001		3.4473E-001
1274.45	35.50	2.8457E-001	-1.7111E-001		
Eu-155	86.54	30.90	2.6104E+000	2.55E+000	8.0259E-001
	105.31	20.70	2.5517E+000		4.1104E-001
Am-241	59.54	35.90	4.9991E+000	5.00E+000	-8.1341E-001
Cm-243	228.19	10.56	2.0515E+000	1.23E+000	1.0260E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.2277E+000	1.23E+000	6.0854E-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 7/27/2006 10:38:44 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-218-F-

Sample Title: OOL-10-04-218-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 10:28:40 AM

Live Time: 600.0 seconds

Real Time: 602.1 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-218-F-
 Title: OOL-10-04-218-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	291.39	72.93	1.05	6.30E+002	87.07	2.46E+003
m	2	287-	306	300.17	75.13	1.06	1.14E+003	99.13	3.87E+003
	3	332-	345	339.43	84.95	0.89	4.65E+002	196.28	3.47E+003
	4	945-	959	954.22	238.65	0.95	2.62E+002	87.11	5.96E+002
	5	1402-	1415	1406.96	351.85	0.50	1.01E+002	52.78	2.25E+002
	6	2033-	2051	2043.55	511.00	1.00	1.62E+002	53.88	1.76E+002
	7	2322-	2339	2332.81	583.32	1.08	1.52E+002	45.06	1.15E+002
	8	2428-	2446	2437.01	609.37	0.34	1.31E+002	46.42	1.27E+002
	9	2584-	2600	2595.57	649.02	0.42	3.07E+001	32.69	7.83E+001
	10	3634-	3654	3645.64	911.55	1.53	1.36E+002	37.91	6.56E+001
	11	4475-	4490	4482.55	1120.79	1.70	5.93E+001	26.19	3.97E+001
	12	5325-	5341	5333.39	1333.51	1.46	6.98E+001	22.88	2.13E+001
	13	5834-	5858	5846.89	1461.89	1.70	6.21E+002	52.32	2.20E+001
	14	7056-	7071	7062.92	1765.92	0.86	4.42E+001	15.36	5.80E+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	2.76939E-001	9.93510E-002
K-40	0.956	1460.81*	10.67	1.31756E+001	1.53958E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	1.28212E+000	4.71726E-001
		583.14*	84.20	3.21320E-001	1.04082E-001
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.71262E+001	7.95635E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.982	238.63*	44.60	8.18095E-001	3.00450E-001
		609.31*	46.30	5.09109E-001	1.91607E-001
		1120.29*	15.10	8.15335E-001	3.70490E-001
		1764.49*	15.80	6.89462E-001	2.49338E-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	2.075334E-001	1.018378E-001
K-40	0.956	1.317561E+001	1.539583E+000
TL-208	0.752	3.213199E-001	1.035538E-001
Pb-212 @	0.580	8.180948E-001	3.004504E-001
Bi-214	0.982	6.105134E-001	1.405684E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1.0501E+000	13.82
3	84.95	7.7458E-001	42.23
5	351.85	1.6818E-001	52.30
9	649.02	5.1128E-002	106.57
10	911.55	2.2733E-001	27.80
12	1333.51	1.1625E-001	32.80

M = First peak in a multiplet region
 m = Other peak in a multiplet region
 F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.2195E-001	1.19E-001	5.4988E-002
	1332.49	100.00	1.1884E-001		1.3301E-001
Nb-94	702.63	100.00	1.3738E-001	1.33E-001	5.0784E-002
	871.10	100.00	1.3334E-001		-5.6706E-002
Ag-108m	79.20	7.10	1.4243E+001	1.56E-001	-1.6027E+001
	433.93	89.90	1.7407E-001		9.3593E-002
	614.37	90.40	1.7188E-001		1.5578E-002
	722.95	90.50	1.5594E-001		3.0230E-002
Sb-125	176.33	6.89	3.9414E+000	5.15E-001	3.0547E-001
	427.89	29.33	5.1504E-001		-2.0900E-001
	463.38	10.35	1.4230E+000		1.1913E+000
	600.56	17.80	8.3031E-001		1.6463E-002
	606.64	5.02	3.4236E+000		4.3526E-001
	635.90	11.32	1.1776E+000		9.7808E-002
Cs-134	563.23	8.38	1.6184E+000	1.47E-001	3.3501E-001
	569.32	15.43	8.9028E-001		7.8539E-001
	604.70	97.60	1.6313E-001		-9.1992E-002
	795.84	85.40	1.4651E-001		-3.6903E-002
Cs-137	801.93	8.73	1.5072E+000	1.49E-001	8.3651E-001
	661.65	85.12	1.4887E-001		-3.9380E-003
Eu-152	121.78	28.40	1.5169E+000	4.13E-001	-2.9816E-001
	244.69	7.49	2.9286E+000		1.3044E+000
	344.27	26.50	6.3684E-001		2.6944E-002
	778.89	12.74	1.0261E+000		2.6626E-001
	867.32	4.16	3.1865E+000		6.0078E-001
	964.01	14.40	9.3440E-001		-2.2088E-001
	1085.78	10.00	1.2318E+000		1.3981E+000
	1112.02	13.30	8.3695E-001		2.2363E-001
Eu-154	1407.95	20.70	4.1343E-001	2.90E-001	2.1244E-001
	123.07	40.50	1.0445E+000		8.5854E-002
	247.94	6.60	3.1401E+000		-1.0190E+000
	591.81	4.83	3.0101E+000		8.0467E-001
	723.30	19.70	7.1355E-001		1.2002E-001
	756.87	4.33	3.0365E+000		-1.9999E+000
	873.19	11.50	1.0985E+000		-1.1402E+000
Eu-155	996.32	10.30	1.2186E+000	2.66E+000	-1.7666E-001
	1004.76	17.90	6.6624E-001		-6.2421E-001
	1274.45	35.50	2.9040E-001		6.3659E-002
	86.54	30.90	2.6882E+000		2.8536E-001
Am-241	105.31	20.70	2.6594E+000	5.18E+000	-1.2320E+000
Am-241	59.54	35.90	5.1797E+000	5.18E+000	-1.5403E+000
Cm-243	228.19	10.56	2.1805E+000	1.40E+000	-1.2975E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.4010E+000	1.40E+000	-4.9068E-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 7/27/2006 10:22:05 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-219-F-

Sample Title: OOL-10-04-219-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 10:12:05 AM

Live Time: 600.0 seconds

Real Time: 602.2 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-219-F-
 Title: OOL-10-04-219-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	291.51	72.97	0.97	5.42E+002	85.16	3.25E+003
m	2	284-	305	300.24	75.15	0.97	1.19E+003	101.45	3.36E+003
	3	332-	344	339.07	84.86	0.89	4.41E+002	185.74	3.24E+003
	4	949-	971	954.62	238.75	1.34	2.23E+002	125.86	9.96E+002
	5	1347-	1357	1353.02	338.36	1.01	6.42E+001	46.03	2.05E+002
	6	1404-	1411	1407.54	351.99	0.45	8.33E+001	38.81	1.52E+002
	7	2034-	2051	2044.43	511.22	0.85	1.62E+002	53.69	1.80E+002
	8	2324-	2342	2331.86	583.08	1.35	1.89E+002	45.33	1.02E+002
	9	2429-	2443	2436.73	609.30	1.09	1.18E+002	39.67	1.01E+002
	10	3636-	3654	3645.09	911.41	1.10	1.24E+002	34.06	5.23E+001
	11	3869-	3884	3876.37	969.23	0.95	7.26E+001	29.14	4.94E+001
	12	5093-	5104	5098.84	1274.87	0.29	2.21E+001	17.30	2.19E+001
	13	5327-	5340	5332.91	1333.39	1.50	3.19E+001	20.37	2.51E+001
	14	5833-	5859	5846.17	1461.71	1.75	6.74E+002	53.05	1.35E+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	0.998	511.00*	100.00	2.75862E-001	9.89976E-002
K-40	0.969	1460.81*	10.67	1.42897E+001	1.61411E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	1.27714E+000	4.70040E-001
		583.14*	84.20	3.99977E-001	1.09103E-001
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.84705E+001	8.22682E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.402	238.63*	44.60	6.96234E-001	4.07474E-001
		609.31*	46.30	4.58826E-001	1.64726E-001
		1120.29	15.10		
Ac-228	0.998	1764.49	15.80		
		338.32*	11.40	8.52523E-001	6.25600E-001
		911.07*	27.70	8.88889E-001	2.65144E-001
		969.11*	16.60	8.81288E-001	3.65595E-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	1.894665E-001	1.017250E-001
K-40	0.969	1.428967E+001	1.614112E+000
TL-208	0.752	3.999769E-001	1.083218E-001
Pb-212 @	0.580	6.962343E-001	4.074737E-001
Bi-214	0.402	4.588256E-001	1.647256E-001
Ac-228	0.998	8.827150E-001	2.030220E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	9.0390E-001	15.70
3	84.86	7.3493E-001	42.12
6	351.99	1.3879E-001	46.60
12	1274.87	3.6780E-002	78.41
13	1333.39	5.3246E-002	63.75

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: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	1.2195E-001	1.09E-001	4.1234E-002
	1332.49	100.00	1.0892E-001		1.4206E-001
Nb-94	702.63	100.00	1.3505E-001	1.27E-001	-7.4683E-002
	871.10	100.00	1.2660E-001		-3.0916E-002
Ag-108m	79.20	7.10	1.4551E+001	1.55E-001	-2.1314E+001
	433.93	89.90	1.6510E-001		-7.8454E-002
	614.37	90.40	1.6604E-001		-1.7639E-002
	722.95	90.50	1.5499E-001		-5.0472E-002
Sb-125	176.33	6.89	4.0391E+000	5.25E-001	3.8252E+000
	427.89	29.33	5.2477E-001		-1.4662E-001
	463.38	10.35	1.3966E+000		-1.9183E+000
	600.56	17.80	8.1363E-001		2.0842E-001
	606.64	5.02	3.3643E+000		3.9251E+000
	635.90	11.32	1.1650E+000		1.3646E-001
Cs-134	563.23	8.38	1.6785E+000	1.61E-001	1.3072E+000
	569.32	15.43	8.6683E-001		-9.1943E-001
	604.70	97.60	1.6313E-001		-3.1134E-003
	795.84	85.40	1.6113E-001		-1.9645E-002
	801.93	8.73	1.4356E+000		-4.8349E-001
Cs-137	661.65	85.12	1.5725E-001	1.57E-001	-8.6566E-002
Eu-152	121.78	28.40	1.5275E+000	3.86E-001	-1.0300E+000
	244.69	7.49	3.0343E+000		-2.0407E-001
	344.27	26.50	6.5100E-001		-1.2693E-002
	778.89	12.74	9.6150E-001		1.8022E-001
	867.32	4.16	3.1627E+000		-9.0899E-003
	964.01	14.40	9.5077E-001		-5.3915E-001
	1085.78	10.00	1.1797E+000		-4.2100E-001
	1112.02	13.30	8.4683E-001		-6.6775E-001
	1407.95	20.70	3.8642E-001		-3.8113E-002
	Eu-154	123.07	40.50		1.0617E+000
247.94		6.60	3.3177E+000	-1.2055E+000	
591.81		4.83	2.8635E+000	1.4263E+000	
723.30		19.70	7.1065E-001	-1.1962E-001	
756.87		4.33	2.9261E+000	7.8807E-001	
873.19		11.50	1.1045E+000	1.1511E+000	
996.32		10.30	1.1969E+000	1.1088E+000	
1004.76		17.90	6.5963E-001	-5.0168E-002	
1274.45	35.50	3.1258E-001	-2.5514E-001		
Eu-155	86.54	30.90	2.7209E+000	2.67E+000	5.4373E-002
	105.31	20.70	2.6652E+000		3.3020E-001
Am-241	59.54	35.90	5.1829E+000	5.18E+000	-3.2465E+000
Cm-243	228.19	10.56	2.2612E+000	1.41E+000	8.0182E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.4119E+000	1.41E+000	7.4678E-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 7/27/2006 1:11:15 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-10-04-220-F-

Sample Title: OOL-10-04-220-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 1:01:12 AM

Live Time: 600.0 seconds

Real Time: 602.1 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-220-F-
 Title: OOL-10-04-220-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	291.35	72.93	1.00	5.46E+002	84.24	3.12E+003
m	2	284-	306	299.82	75.04	1.00	1.05E+003	97.77	3.46E+003
	3	331-	345	338.43	84.70	0.80	3.85E+002	201.78	3.53E+003
	4	946-	960	954.03	238.61	0.97	2.31E+002	86.68	5.98E+002
	5	1399-	1414	1405.35	351.44	1.31	1.05E+002	56.96	2.45E+002
	6	2324-	2339	2330.56	582.76	0.70	1.69E+002	44.10	1.11E+002
	7	2426-	2442	2434.87	608.84	1.41	1.48E+002	40.79	9.13E+001
	8	3633-	3653	3642.27	910.71	1.27	1.37E+002	35.09	5.02E+001
	9	3865-	3881	3873.36	968.48	1.09	4.39E+001	31.86	7.01E+001
	10	4472-	4487	4478.95	1119.89	0.49	3.55E+001	27.07	5.05E+001
	11	5319-	5337	5328.41	1332.27	0.90	5.73E+001	20.92	1.67E+001
	12	5829-	5855	5841.86	1460.64	1.67	7.01E+002	56.49	2.99E+001
	13	7051-	7065	7058.78	1764.88	0.53	3.81E+001	17.66	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: 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	1.48708E+001	1.69851E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.57957E-001	1.04259E-001
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	3.42027E+001	7.42161E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.21724E-001	2.93055E-001
Bi-214	0.992	609.31*	46.30	5.75894E-001	1.74186E-001
		1120.29*	15.10	4.88446E-001	3.75994E-001
		1764.49*	15.80	5.93845E-001	2.81670E-001
Ac-228	0.628	338.32	11.40		
		911.07*	27.70	9.82252E-001	2.76191E-001
		969.11*	16.60	5.32317E-001	3.90740E-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	1.487083E+001	1.698510E+000
TL-208	0.468	3.579567E-001	1.042587E-001
Pb-212 @	0.581	7.217243E-001	2.930545E-001
Bi-214	0.992	5.684408E-001	1.378338E-001
Ac-228	0.628	8.323491E-001	2.255370E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	9.0978E-001	15.43
3	84.70	6.4152E-001	52.42
5	351.44	1.7553E-001	54.08
11	1332.27	9.5518E-002	36.50

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: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	1.1778E-001	1.18E-001	7.4235E-003
	1332.49	100.00	1.1794E-001		1.5878E-001
Nb-94	702.63	100.00	1.3505E-001	1.29E-001	3.9582E-002
	871.10	100.00	1.2866E-001		9.7830E-002
Ag-108m	79.20	7.10	1.4109E+001	1.55E-001	-6.1017E+000
	433.93	89.90	1.6244E-001		-9.5824E-002
	614.37	90.40	1.6276E-001		-2.6041E-002
	722.95	90.50	1.5499E-001		1.5095E-002
Sb-125	176.33	6.89	3.8772E+000	5.10E-001	3.2052E+000
	427.89	29.33	5.1044E-001		-3.9188E-001
	463.38	10.35	1.4468E+000		8.5262E-001
	600.56	17.80	7.8211E-001		1.5891E-001
	606.64	5.02	3.3082E+000		3.2976E+000
	635.90	11.32	1.1850E+000		5.3027E-001
Cs-134	563.23	8.38	1.6814E+000	1.54E-001	4.9405E-001
	569.32	15.43	8.7359E-001		1.3424E-001
	604.70	97.60	1.6476E-001		-8.6877E-002
	795.84	85.40	1.5381E-001		-2.9079E-002
	801.93	8.73	1.3723E+000		-6.0671E-001
Cs-137	661.65	85.12	1.6357E-001	1.64E-001	1.3615E-002
Eu-152	121.78	28.40	1.5039E+000	4.54E-001	8.9402E-002
	244.69	7.49	2.7900E+000		-3.0022E-001
	344.27	26.50	5.9778E-001		1.6743E-001
	778.89	12.74	9.9308E-001		-6.2992E-001
	867.32	4.16	3.1225E+000		-2.9952E+000
	964.01	14.40	9.6912E-001		-3.9881E-001
	1085.78	10.00	1.0720E+000		-6.9840E-001
	1112.02	13.30	8.6622E-001		1.8597E-001
1407.95	20.70	4.5366E-001	-1.4368E-001		
Eu-154	123.07	40.50	1.0400E+000	3.11E-001	5.1767E-001
	247.94	6.60	3.0661E+000		-1.1809E+000
	591.81	4.83	2.8635E+000		-2.4011E-001
	723.30	19.70	7.1500E-001		3.2208E-001
	756.87	4.33	3.0437E+000		8.9290E-001
	873.19	11.50	1.0985E+000		3.3739E-001
	996.32	10.30	1.1634E+000		-1.0174E-001
	1004.76	17.90	5.9915E-001		9.7986E-002
1274.45	35.50	3.1124E-001	-1.4782E-001		
Eu-155	86.54	30.90	2.6323E+000	2.61E+000	1.5692E+000
	105.31	20.70	2.6064E+000		6.0203E-002
Am-241	59.54	35.90	5.0362E+000	5.04E+000	-1.2277E+000
Cm-243	228.19	10.56	2.1564E+000	1.30E+000	1.6812E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.2993E+000	1.30E+000	-1.7854E-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 7/27/2006 1:27:48 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-221-F-

Sample Title: OOL-10-04-221-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 1:17:45 AM

Live Time: 600.0 seconds

Real Time: 602.1 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-221-F-
 Title: OOL-10-04-221-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	291.08	72.86	0.95	6.13E+002	84.86	2.61E+003
m	2	285-	306	299.80	75.04	0.96	1.08E+003	97.03	3.38E+003
	3	333-	345	338.98	84.83	0.92	3.97E+002	180.48	3.07E+003
	4	945-	960	953.92	238.58	1.03	2.09E+002	87.65	5.95E+002
	5	1347-	1356	1352.07	338.12	0.58	4.98E+001	39.21	1.55E+002
	6	1400-	1414	1405.74	351.54	1.37	1.53E+002	51.35	1.85E+002
	7	1844-	1855	1849.64	462.52	0.54	2.97E+001	32.77	9.93E+001
	8	2034-	2050	2041.89	510.59	1.14	1.57E+002	49.33	1.52E+002
	9	2324-	2336	2330.07	582.64	1.17	1.33E+002	37.73	8.98E+001
	10	2427-	2444	2434.98	608.87	0.43	1.40E+002	45.06	1.19E+002
	11	3634-	3649	3642.23	910.70	0.95	6.93E+001	33.41	7.37E+001
	12	3867-	3882	3873.72	968.57	0.79	6.38E+001	28.74	5.02E+001
	13	4472-	4487	4479.34	1119.98	1.12	5.10E+001	24.72	3.60E+001
	14	5321-	5335	5328.74	1332.35	1.21	3.95E+001	19.60	2.05E+001
	15	5828-	5854	5841.75	1460.61	1.54	7.88E+002	59.47	3.04E+001
	16	7052-	7066	7059.30	1765.02	0.42	3.37E+001	15.22	9.27E+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	2.67294E-001	9.16690E-002
K-40	0.998	1460.81*	10.67	1.67047E+001	1.84942E+000
TL-208	0.746	277.35	6.80		
		510.84*	21.60	1.23747E+000	4.36260E-001
		583.14*	84.20	2.81610E-001	8.78118E-002
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	3.51875E+001	7.58655E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.993	238.63*	44.60	6.52786E-001	2.91881E-001
		609.31*	46.30	5.44561E-001	1.88103E-001
		1120.29*	15.10	7.01493E-001	3.48124E-001
Ac-228	0.994	1764.49*	15.80	5.26063E-001	2.43182E-001
		338.32*	11.40	6.61440E-001	5.30750E-001
		911.07*	27.70	4.97865E-001	2.46709E-001
		969.11*	16.60	7.74013E-001	3.58206E-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	2.064665E-001	9.358972E-002
K-40	0.998	1.670471E+001	1.849417E+000
TL-208	0.746	2.816101E-001	8.733091E-002
Pb-212 @	0.581	6.527856E-001	2.918810E-001
Bi-214	0.993	5.629450E-001	1.368148E-001
Ac-228	0.994	5.962634E-001	1.897522E-001

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1.0224E+000	13.83
3	84.83	6.6183E-001	45.45
6	351.54	2.5460E-001	33.61
7	462.52	4.9438E-002	110.47
14	1332.35	6.5764E-002	49.69

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	1.3476E-001	1.13E-001	1.6143E-001
	1332.49	100.00	1.1281E-001		9.0360E-002
Nb-94	702.63	100.00	1.3996E-001	1.27E-001	5.1834E-002
	871.10	100.00	1.2695E-001		-3.0494E-002
Ag-108m	79.20	7.10	1.4209E+001	1.48E-001	-1.0302E+001
	433.93	89.90	1.5997E-001		2.0528E-003
	614.37	90.40	1.4829E-001		-3.4665E-002
	722.95	90.50	1.6803E-001		1.3114E-001
Sb-125	176.33	6.89	3.8411E+000	4.86E-001	2.6228E+000
	427.89	29.33	4.8605E-001		-5.6777E-002
	463.38	10.35	1.3864E+000		9.8343E-002
	600.56	17.80	7.5379E-001		-9.9952E-001
	606.64	5.02	3.4236E+000		5.4698E+000
	635.90	11.32	1.1395E+000		7.8797E-001
Cs-134	563.23	8.38	1.6961E+000	1.49E-001	3.5572E-001
	569.32	15.43	8.9193E-001		5.1003E-002
	604.70	97.60	1.7132E-001		-9.1767E-002
	795.84	85.40	1.4924E-001		1.1494E-001
	801.93	8.73	1.4004E+000		-4.6622E-001
Cs-137	661.65	85.12	1.5759E-001	1.58E-001	-3.5659E-002
Eu-152	121.78	28.40	1.4944E+000	3.76E-001	3.4462E-001
	244.69	7.49	2.7748E+000		5.1436E-001
	344.27	26.50	6.0265E-001		-3.0450E-001
	778.89	12.74	1.0654E+000		-3.4325E-001
	867.32	4.16	2.9816E+000		-2.9601E-001
	964.01	14.40	1.0286E+000		4.7364E-001
	1085.78	10.00	1.1336E+000		-9.2812E-001
	1112.02	13.30	8.6940E-001		8.6302E-002
1407.95	20.70	3.7576E-001	-1.1460E-001		
Eu-154	123.07	40.50	1.0291E+000	3.39E-001	8.3304E-002
	247.94	6.60	3.0333E+000		-1.6844E+000
	591.81	4.83	2.9638E+000		5.9535E-001
	723.30	19.70	7.7333E-001		6.9733E-001
	756.87	4.33	3.1148E+000		2.1615E+000
	873.19	11.50	1.1015E+000		-9.3595E-002
	996.32	10.30	1.1328E+000		7.8327E-002
Eu-155	1004.76	17.90	6.5296E-001	2.60E+000	-2.5768E-002
	1274.45	35.50	3.3939E-001		-1.2322E-001
	86.54	30.90	2.5954E+000		-6.7313E-002
Am-241	105.31	20.70	2.6158E+000	5.01E+000	1.5175E+000
	59.54	35.90	5.0101E+000		-1.5480E+000
Cm-243	228.19	10.56	2.1520E+000	1.30E+000	9.9303E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.2993E+000	1.30E+000	1.1582E+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 7/26/2006 6:18:50 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-10-04-222-F-

Sample Title: OOL-10-04-222-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 6:08:45 PM

Live Time: 600.0 seconds

Real Time: 602.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-222-F-
 Title: OOL-10-04-222-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	291.17	72.88	1.03	6.29E+002	83.80	2.86E+003
m	2	284-	304	299.64	75.00	1.04	1.14E+003	97.25	3.18E+003
	3	332-	345	339.11	84.87	0.89	4.31E+002	186.52	3.12E+003
	4	944-	959	952.89	238.32	1.34	2.63E+002	90.08	6.15E+002
	5	1173-	1183	1178.65	294.77	1.36	5.44E+001	51.80	2.71E+002
	6	1399-	1414	1404.76	351.30	1.19	1.23E+002	56.46	2.35E+002
	7	2321-	2339	2329.09	582.39	0.78	1.36E+002	45.31	1.18E+002
	8	2427-	2442	2433.71	608.55	1.10	1.02E+002	42.87	1.25E+002
	9	3633-	3649	3640.39	910.23	0.58	8.93E+001	35.58	7.67E+001
	10	3863-	3879	3870.52	967.77	0.31	8.23E+001	29.71	4.68E+001
	11	4470-	4485	4476.86	1119.36	1.27	4.95E+001	23.68	3.15E+001
	12	5315-	5334	5324.55	1331.30	0.40	7.63E+001	27.55	3.47E+001
	13	5825-	5851	5838.74	1459.86	1.74	7.52E+002	57.33	2.36E+001
	14	7047-	7061	7053.47	1763.56	0.69	3.83E+001	15.59	8.70E+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	0.965	1460.81*	10.67	1.59553E+001	1.77381E+000
TL-208	0.458	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.87381E-001	1.02850E-001
		860.37	12.46		
Pb-212	0.579	74.81* @	10.70	3.72281E+001	7.95688E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.19305E-001	3.08846E-001
Bi-214	0.973	609.31*	46.30	3.98026E-001	1.74219E-001
		1120.29*	15.10	6.81165E-001	3.33668E-001
		1764.49*	15.80	5.97120E-001	2.50203E-001
		74.82* @	6.21	6.41450E+001	1.44791E+001
PB-214	0.611	77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.14832E-001	4.01093E-001
		351.92*	37.20	5.04915E-001	2.46707E-001
		338.32	11.40		
Ac-228	0.601	911.07*	27.70	6.41218E-001	2.65984E-001
		969.11*	16.60	9.98250E-001	3.75459E-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	0.965	1.595532E+001	1.773811E+000
TL-208	0.458	2.873813E-001	1.028500E-001
Pb-212 @	0.579	8.193052E-001	3.088456E-001
Bi-214	0.973	4.968729E-001	1.314169E-001
PB-214 @	0.611	4.801887E-001	2.101382E-001
Ac-228	0.601	7.605245E-001	2.170401E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1.0489E+000	13.31
3	84.87	7.1833E-001	43.28
12	1331.30	1.2719E-001	36.10

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: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	1.2113E-001	1.21E-001	-1.0376E-001
	1332.49	100.00	1.3328E-001		1.8594E-001
Nb-94	702.63	100.00	1.3298E-001	1.31E-001	-1.0946E-001
	871.10	100.00	1.3069E-001		1.5199E-003
Ag-108m	79.20	7.10	1.3793E+001	1.57E-001	-3.2661E+001
	433.93	89.90	1.7634E-001		9.1023E-002
	614.37	90.40	1.5685E-001		-8.7605E-002
	722.95	90.50	1.5905E-001		7.2015E-003
Sb-125	176.33	6.89	3.8401E+000	5.42E-001	4.2514E+000
	427.89	29.33	5.4182E-001		-3.4884E-001
	463.38	10.35	1.5142E+000		2.3764E-001
	600.56	17.80	8.0800E-001		-8.3394E-002
	606.64	5.02	3.3728E+000		5.3569E+000
	635.90	11.32	1.1650E+000		1.9423E-001
Cs-134	563.23	8.38	1.6961E+000	1.48E-001	-1.1230E+000
	569.32	15.43	9.2272E-001		3.5715E-001
	604.70	97.60	1.7352E-001		-6.8206E-002
	795.84	85.40	1.4847E-001		-1.5794E-002
	801.93	8.73	1.4510E+000		-7.3867E-001
Cs-137	661.65	85.12	1.7790E-001	1.78E-001	1.6239E-001
Eu-152	121.78	28.40	1.4671E+000	3.42E-001	-3.0975E-001
	244.69	7.49	2.7969E+000		-1.2250E+000
	344.27	26.50	6.2410E-001		2.5181E-001
	778.89	12.74	9.7479E-001		-2.6788E-001
	867.32	4.16	3.0487E+000		-1.2866E+000
	964.01	14.40	1.0765E+000		5.5101E-001
	1085.78	10.00	1.1548E+000		-2.3846E-001
	1112.02	13.30	8.8516E-001		-4.3661E-001
1407.95	20.70	3.4157E-001	-3.6770E-001		
Eu-154	123.07	40.50	1.0140E+000	3.62E-001	1.0529E-001
	247.94	6.60	3.0807E+000		-1.9636E+000
	591.81	4.83	2.9534E+000		1.8298E+000
	723.30	19.70	7.2649E-001		-2.5783E-001
	756.87	4.33	3.0937E+000		2.2056E-001
	873.19	11.50	1.1105E+000		-1.2291E-001
	996.32	10.30	1.2005E+000		-4.8775E-001
Eu-155	1004.76	17.90	6.8354E-001	2.55E+000	4.5803E-001
	1274.45	35.50	3.6186E-001		2.0147E-001
	86.54	30.90	2.5512E+000		4.7054E-001
Am-241	105.31	20.70	2.5575E+000	4.90E+000	8.8897E-001
	59.54	35.90	4.8998E+000		-5.4698E+000
Cm-243	228.19	10.56	2.1188E+000	1.38E+000	-6.4110E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.3833E+000	1.38E+000	5.0986E-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 7/26/2006 11:25:26 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-223-F-

Sample Title: OOL-10-04-223-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 11:15:22 AM

Live Time: 600.0 seconds

Real Time: 601.8 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-223-F-
Title: OOL-10-04-223-F-G
Description:

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Rows 1-13 with peak labels M and m.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.966	511.00*	100.00	3.47367E-001	1.07974E-001
K-40	0.986	1460.81*	10.67	1.88282E+001	1.98575E+000
TL-208	0.745	277.35	6.80		
		510.84*	21.60	1.60818E+000	5.16843E-001
		583.14*	84.20	3.06084E-001	1.00100E-001
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.26507E+001	7.04351E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.392	238.63*	44.60	7.43277E-001	2.40168E-001
		609.31*	46.30	3.79528E-001	1.57196E-001
		1120.29	15.10		
Ac-228	0.620	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	9.46503E-001	2.68607E-001
		969.11*	16.60	8.00283E-001	3.78447E-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	0.966	2.812532E-001	1.100962E-001
K-40	0.986	1.882817E+001	1.985751E+000
TL-208	0.745	3.060839E-001	9.960226E-002
Pb-212 @	0.580	7.432770E-001	2.401680E-001
Bi-214	0.392	3.795278E-001	1.571961E-001
Ac-228	0.620	8.975192E-001	2.190420E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	8.4086E-001	15.41
3	84.87	5.8943E-001	50.22
5	351.58	1.2294E-001	63.19
8	595.19	4.3692E-002	105.68
12	1331.78	8.2083E-002	40.04

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: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	1.2438E-001	1.18E-001	-7.0638E-002
	1332.49	100.00	1.1839E-001		1.7977E-001
Nb-94	702.63	100.00	1.3853E-001	1.33E-001	4.5685E-003
	871.10	100.00	1.3302E-001		-6.0682E-003
Ag-108m	79.20	7.10	1.3055E+001	1.52E-001	-1.1815E+001
	433.93	89.90	1.5860E-001		1.7649E-002
	614.37	90.40	1.5367E-001		7.4869E-002
	722.95	90.50	1.5244E-001		-4.6162E-003
Sb-125	176.33	6.89	3.5949E+000	4.92E-001	-1.7677E+000
	427.89	29.33	4.9158E-001		4.9714E-002
	463.38	10.35	1.3509E+000		-6.5551E-001
	600.56	17.80	7.2273E-001		2.1395E-001
	606.64	5.02	3.1430E+000		3.2062E+000
	635.90	11.32	1.1599E+000		3.1226E-001
Cs-134	563.23	8.38	1.7135E+000	1.53E-001	1.2225E+000
	569.32	15.43	8.6683E-001		-2.3752E-001
	604.70	97.60	1.5912E-001		-1.1602E-001
	795.84	85.40	1.5343E-001		8.4445E-002
Cs-137	801.93	8.73	1.3884E+000	1.56E-001	-1.1491E+000
	661.65	85.12	1.5589E-001		-1.3017E-001
Eu-152	121.78	28.40	1.3855E+000	4.42E-001	-2.6215E-001
	244.69	7.49	2.6932E+000		-7.6792E-001
	344.27	26.50	5.8354E-001		5.7326E-001
	778.89	12.74	1.0410E+000		-4.4144E-001
	867.32	4.16	3.1225E+000		-1.5801E+000
	964.01	14.40	1.0455E+000		2.4464E-001
	1085.78	10.00	1.1838E+000		-7.4895E-001
	1112.02	13.30	9.1583E-001		-2.4532E-001
1407.95	20.70	4.4170E-001	2.2872E-001		
Eu-154	123.07	40.50	9.6020E-001	3.32E-001	1.4874E-001
	247.94	6.60	2.9668E+000		-9.3576E-001
	591.81	4.83	2.9534E+000		-1.6176E+000
	723.30	19.70	7.0185E-001		1.5302E-001
	756.87	4.33	2.9336E+000		-1.1423E+000
	873.19	11.50	1.1799E+000		-8.5709E-003
	996.32	10.30	1.1634E+000		-1.2256E-001
	1004.76	17.90	7.0039E-001		1.8502E-001
1274.45	35.50	3.3196E-001	2.6270E-001		
Eu-155	86.54	30.90	2.4520E+000	2.43E+000	1.0637E+000
	105.31	20.70	2.4274E+000		-3.7104E-001
Am-241	59.54	35.90	4.7003E+000	4.70E+000	-2.1471E-001
Cm-243	228.19	10.56	2.0185E+000	1.26E+000	-2.6395E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.2607E+000	1.26E+000	1.5700E-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 7/26/2006 11:09:59 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-224-F-

Sample Title: OOL-10-04-224-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 10:59:55 AM

Live Time: 600.0 seconds

Real Time: 601.8 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-224-F-
 Title: OOL-10-04-224-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	291.60	72.99	0.91	5.41E+002	77.95	2.56E+003
m	2	284-	307	300.33	75.17	0.91	9.95E+002	90.95	2.68E+003
	3	332-	346	339.39	84.94	0.80	2.43E+002	189.54	3.15E+003
	4	949-	960	954.69	238.77	0.94	2.10E+002	72.59	4.63E+002
	5	1400-	1417	1408.33	352.19	0.59	1.27E+002	61.85	2.65E+002
	6	2035-	2053	2044.21	511.17	1.18	1.19E+002	57.40	2.19E+002
	7	2325-	2344	2333.88	583.59	1.14	1.39E+002	48.63	1.36E+002
	8	2431-	2445	2437.96	609.61	0.88	1.23E+002	40.98	1.09E+002
	9	3640-	3655	3647.71	912.07	1.61	8.89E+001	34.95	7.61E+001
	10	3872-	3887	3879.30	969.97	0.93	4.08E+001	31.30	7.12E+001
	11	5328-	5346	5336.06	1334.18	0.36	6.57E+001	22.11	1.83E+001
	12	5837-	5863	5850.14	1462.71	1.87	8.93E+002	62.32	2.70E+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: 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	2.03983E-001	1.01838E-001
K-40	0.870	1460.81*	10.67	1.89526E+001	2.02588E+000
TL-208	0.747	277.35	6.80		
		510.84*	21.60	9.44365E-001	4.77739E-001
		583.14*	84.20	2.93491E-001	1.09749E-001
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.22392E+001	6.97230E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.400	238.63*	44.60	6.54603E-001	2.48603E-001
		609.31*	46.30	4.80136E-001	1.70452E-001
		1120.29	15.10		
Ac-228	0.608	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	6.38637E-001	2.61547E-001
		969.11*	16.60	4.95566E-001	3.83571E-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	1.405887E-001	1.045404E-001
K-40	0.870	1.895260E+001	2.025879E+000
TL-208	0.747	2.934914E-001	1.093318E-001
Pb-212 @	0.580	6.546034E-001	2.486029E-001
Bi-214	0.400	4.801360E-001	1.704522E-001
Ac-228	0.608	5.932288E-001	2.160914E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	9.0205E-001	14.40
3	84.94	4.0581E-001	77.85
5	352.19	2.1110E-001	48.83
11	1334.18	1.0943E-001	33.67

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: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	1.2478E-001	1.17E-001	1.2988E-002
	1332.49	100.00	1.1656E-001		5.4128E-002
Nb-94	702.63	100.00	1.3939E-001	1.27E-001	3.7496E-002
	871.10	100.00	1.2729E-001		-3.9906E-003
Ag-108m	79.20	7.10	1.3110E+001	1.56E-001	2.6579E-001
	433.93	89.90	1.7323E-001		1.0283E-001
	614.37	90.40	1.7853E-001		-1.4895E-001
	722.95	90.50	1.5625E-001		-5.3866E-002
Sb-125	176.33	6.89	3.5841E+000	5.07E-001	1.4356E+000
	427.89	29.33	5.0712E-001		-1.0708E-001
	463.38	10.35	1.5329E+000		1.3750E+000
	600.56	17.80	8.3851E-001		9.4916E-001
	606.64	5.02	3.3471E+000		-2.1975E+000
	635.90	11.32	1.2360E+000		-7.2572E-001
Cs-134	563.23	8.38	1.6726E+000	1.57E-001	9.2263E-001
	569.32	15.43	9.2906E-001		-1.4966E-001
	604.70	97.60	1.5695E-001		-5.2397E-002
	795.84	85.40	1.5715E-001		8.2695E-002
Cs-137	801.93	8.73	1.4849E+000	1.63E-001	2.9664E-001
	661.65	85.12	1.6324E-001		2.1935E-002
Eu-152	121.78	28.40	1.3912E+000	4.29E-001	8.9083E-002
	244.69	7.49	2.8161E+000		6.5621E-001
	344.27	26.50	5.8542E-001		-3.8653E-001
	778.89	12.74	1.0581E+000		-1.5801E-001
	867.32	4.16	3.1547E+000		-2.8854E+000
	964.01	14.40	9.9599E-001		5.2493E-001
	1085.78	10.00	1.2703E+000		1.6077E-001
	1112.02	13.30	8.8828E-001		2.6669E-001
1407.95	20.70	4.2938E-001	5.3181E-002		
Eu-154	123.07	40.50	9.6116E-001	3.03E-001	-3.3499E-001
	247.94	6.60	3.1512E+000		-1.5137E-001
	591.81	4.83	2.8201E+000		1.4952E-001
	723.30	19.70	7.1933E-001		-9.1950E-002
	756.87	4.33	3.1428E+000		1.2531E+000
	873.19	11.50	1.1105E+000		1.0511E-001
	996.32	10.30	1.1709E+000		-3.2190E-001
	1004.76	17.90	7.1479E-001		5.6847E-001
1274.45	35.50	3.0309E-001	-4.9130E-001		
Eu-155	86.54	30.90	2.4392E+000	2.39E+000	1.0266E+000
	105.31	20.70	2.3863E+000		-8.9034E-001
Am-241	59.54	35.90	4.6341E+000	4.63E+000	-4.4775E-001
Cm-243	228.19	10.56	2.0814E+000	1.32E+000	5.1362E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.3217E+000	1.32E+000	2.9594E-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 7/26/2006 1:57:32 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-226-F-

Sample Title: OOL-10-04-225-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 1:47:30 PM

Live Time: 600.0 seconds

Real Time: 602.2 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-226-F-
Title: OOL-10-04-225-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	2320-	2344	2332.18	583.00	1.71	1.55E+002	53.15	1.41E+002
2	5000-	5011	5005.94	1251.45	0.45	2.34E+001	17.68	2.26E+001
3	5320-	5333	5326.91	1331.70	0.31	3.62E+001	21.54	2.98E+001
4	5827-	5857	5841.74	1460.40	2.72	8.88E+002	61.16	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: 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	1.94836E+001	2.07133E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.38505E-001	1.23978E-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	0.995	1.948361E+001	2.071335E+000
TL-208	0.471	3.385055E-001	1.239779E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1251.45	3.9076E-002	75.41
3	1331.70	6.0372E-002	59.46

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	1.3340E-001	1.29E-001	6.0020E-003
	1332.49	100.00	1.2898E-001		1.4205E-001
Nb-94	702.63	100.00	1.4265E-001	1.36E-001	3.8471E-002
	871.10	100.00	1.3565E-001		7.8272E-002
Ag-108m	79.20	7.10	1.6870E+001	1.66E-001	-5.5422E+001
	433.93	89.90	1.7207E-001		5.8924E-002
	614.37	90.40	1.7992E-001		-1.8001E-001
	722.95	90.50	1.6644E-001		1.2434E-001
Sb-125	176.33	6.89	4.5003E+000	5.18E-001	-1.0852E+000
	427.89	29.33	5.1818E-001		-2.7622E-001
	463.38	10.35	1.4849E+000		-1.3312E+000
	600.56	17.80	7.8343E-001		-1.0346E-001
	606.64	5.02	3.4690E+000		4.4988E+000
	635.90	11.32	1.2576E+000		3.5543E-001
Cs-134	563.23	8.38	1.7599E+000	1.58E-001	1.1666E+000
	569.32	15.43	9.1073E-001		-8.9533E-001
	604.70	97.60	1.7527E-001		1.2258E-001
	795.84	85.40	1.5810E-001		6.8341E-003
	801.93	8.73	1.4356E+000		-1.5013E+000
Cs-137	661.65	85.12	1.6976E-001	1.70E-001	1.0632E-001
Eu-152	121.78	28.40	1.6181E+000	4.03E-001	4.1205E-002
	244.69	7.49	3.1931E+000		-3.4608E+000
	344.27	26.50	6.8843E-001		-4.8119E-001
	778.89	12.74	1.0003E+000		-3.5914E-001
	867.32	4.16	3.2009E+000		-2.9364E+000
	964.01	14.40	1.1206E+000		1.1463E+000
	1085.78	10.00	1.3210E+000		3.9804E-001
	1112.02	13.30	9.2625E-001		-1.5778E+000
1407.95	20.70	4.0305E-001	-5.5582E-002		
Eu-154	123.07	40.50	1.1182E+000	3.29E-001	-2.0976E-001
	247.94	6.60	3.4484E+000		-2.9274E-001
	591.81	4.83	2.9409E+000		1.9939E+000
	723.30	19.70	7.5607E-001		1.0848E-001
	756.87	4.33	3.1040E+000		-2.1334E+000
	873.19	11.50	1.1859E+000		-1.0730E-001
	996.32	10.30	1.1648E+000		-6.6211E-001
	1004.76	17.90	7.1580E-001		-1.5538E-001
1274.45	35.50	3.2917E-001	4.1315E-002		
Eu-155	86.54	30.90	3.0462E+000	2.99E+000	8.3339E+000
	105.31	20.70	2.9933E+000		-1.5315E+000
Am-241	59.54	35.90	7.3300E+000	7.33E+000	-5.6307E+000
Cm-243	228.19	10.56	2.4001E+000	1.46E+000	1.8923E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.4571E+000	1.46E+000	-1.5446E-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 7/26/2006 1:41:47 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-10-04-226-F-

Sample Title: OOL-10-04-226-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 1:31:44 PM

Live Time: 600.0 seconds

Real Time: 602.1 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-226-F-
Title: OOL-10-04-226-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	2425-	2445	2435.71	608.89	0.68	9.93E+001	48.54	1.42E+002
2	3631-	3652	3642.52	910.59	0.40	1.32E+002	39.34	7.14E+001
3	5826-	5856	5841.97	1460.46	2.60	8.32E+002	62.07	3.50E+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	0.996	1460.81*	10.67	1.82631E+001	2.01058E+000
Bi-214	0.399	609.31*	46.30	3.99118E-001	2.01301E-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	0.996	1.826309E+001	2.010577E+000
Bi-214	0.399	3.991180E-001	2.013014E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	910.59	2.1939E-001	29.89

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	1.2178E-001	1.20E-001	9.2118E-002
	1332.49	100.00	1.2028E-001		1.5238E-001
Nb-94	702.63	100.00	1.3876E-001	1.24E-001	3.9911E-002
	871.10	100.00	1.2363E-001		-8.8203E-002
Ag-108m	79.20	7.10	1.6262E+001	1.66E-001	-3.7628E+001
	433.93	89.90	1.6687E-001		-3.0395E-001
	614.37	90.40	1.7965E-001		-5.9030E-003
	722.95	90.50	1.6613E-001		7.2684E-002
Sb-125	176.33	6.89	4.2970E+000	5.48E-001	-1.7398E+000
	427.89	29.33	5.4828E-001		3.8319E-001
	463.38	10.35	1.4562E+000		-1.3309E-002
	600.56	17.80	8.3744E-001		-1.1964E-001
	606.64	5.02	3.4513E+000		2.6602E+000
	635.90	11.32	1.2300E+000		4.0307E-001
Cs-134	563.23	8.38	1.7479E+000	1.68E-001	-1.2942E-001
	569.32	15.43	9.5917E-001		-5.3149E-001
	604.70	97.60	1.7801E-001		1.3711E-003
	795.84	85.40	1.6848E-001		7.5150E-002
	801.93	8.73	1.5969E+000		-4.0761E-001
Cs-137	661.65	85.12	1.7535E-001	1.75E-001	2.1229E-001
Eu-152	121.78	28.40	1.5319E+000	4.53E-001	-2.6112E-004
	244.69	7.49	2.9760E+000		-2.7942E+000
	344.27	26.50	6.6030E-001		-1.1320E+000
	778.89	12.74	1.1224E+000		8.4803E-001
	867.32	4.16	3.1760E+000		-7.5829E-001
	964.01	14.40	1.0830E+000		1.2006E+000
	1085.78	10.00	1.2332E+000		8.5378E-001
	1112.02	13.30	9.2940E-001		-6.8582E-002
1407.95	20.70	4.5344E-001	-1.8981E-001		
Eu-154	123.07	40.50	1.0606E+000	3.21E-001	-1.2266E-001
	247.94	6.60	3.1985E+000		-1.2617E+000
	591.81	4.83	3.0448E+000		-9.7343E-001
	723.30	19.70	7.6613E-001		4.1207E-001
	756.87	4.33	3.1630E+000		-3.3519E-001
	873.19	11.50	1.0787E+000		2.2780E-001
	996.32	10.30	1.1036E+000		2.5014E-001
	1004.76	17.90	6.4831E-001		1.1695E-002
1274.45	35.50	3.2099E-001	8.5693E-002		
Eu-155	86.54	30.90	2.8791E+000	2.83E+000	4.2006E+000
	105.31	20.70	2.8347E+000		2.2906E+000
Am-241	59.54	35.90	6.9948E+000	6.99E+000	-1.0342E+001
Cm-243	228.19	10.56	2.2468E+000	1.44E+000	8.9672E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.4371E+000	1.44E+000	1.7609E-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 7/26/2006 11:23:54 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-227-F-

Sample Title: OOL-10-04-227-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 11:13:50 AM

Live Time: 600.0 seconds

Real Time: 602.3 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-10-04-227-F-
Title: OOL-10-04-227-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 5 rows of peak data.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	0.978	1460.81*	10.67	2.12395E+001	2.24294E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.74482E-001	1.19672E-001
		860.37	12.46		
Pb-212	0.589	74.81* @	10.70	3.67095E+001	1.11292E+001
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.385	238.63*	44.60	3.14316E-001	2.24943E-001
		609.31*	46.30	6.46953E-001	2.14763E-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	0.978	2.123950E+001	2.242943E+000
TL-208	0.468	2.744819E-001	1.196722E-001
Pb-212 @	0.589	3.143156E-001	2.249426E-001
Bi-214	0.385	6.469535E-001	2.147633E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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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	1.5152E-001	1.33E-001	2.2377E-001
	1332.49	100.00	1.3290E-001		1.5335E-001
Nb-94	702.63	100.00	1.5011E-001	1.44E-001	1.6486E-001
	871.10	100.00	1.4351E-001		-1.9857E-002
Ag-108m	79.20	7.10	1.7048E+001	1.74E-001	-1.4227E+001
	433.93	89.90	1.9656E-001		1.7290E-001
	614.37	90.40	1.8895E-001		9.5227E-002
	722.95	90.50	1.7375E-001		3.7948E-002
Sb-125	176.33	6.89	4.6280E+000	6.07E-001	-1.0298E+000
	427.89	29.33	6.0739E-001		3.3864E-001
	463.38	10.35	1.6577E+000		-3.0929E-001
	600.56	17.80	8.6874E-001		-4.4110E-001
	606.64	5.02	3.6660E+000		4.4610E+000
	635.90	11.32	1.3509E+000		3.2612E-001
Cs-134	563.23	8.38	2.0386E+000	1.67E-001	-3.4878E-001
	569.32	15.43	1.0668E+000		-2.3568E-001
	604.70	97.60	1.8815E-001		-2.9786E-002
	795.84	85.40	1.6740E-001		9.4773E-002
Cs-137	801.93	8.73	1.6610E+000	1.86E-001	1.3063E-001
	661.65	85.12	1.8630E-001		3.9251E-002
Eu-152	121.78	28.40	1.6531E+000	4.66E-001	8.7153E-001
	244.69	7.49	3.2124E+000		-5.5809E+000
	344.27	26.50	7.5282E-001		-4.6630E-001
	778.89	12.74	1.0808E+000		-6.8669E-001
	867.32	4.16	3.6254E+000		-1.7751E-001
	964.01	14.40	1.1958E+000		1.4793E+000
	1085.78	10.00	1.3626E+000		7.5431E-001
	1112.02	13.30	9.9015E-001		-1.5017E+000
Eu-154	1407.95	20.70	4.6590E-001	3.71E-001	-3.4508E-001
	123.07	40.50	1.1508E+000		7.6885E-001
	247.94	6.60	3.5615E+000		2.2050E-001
	591.81	4.83	3.3460E+000		2.4275E+000
	723.30	19.70	8.0235E-001		-8.4567E-002
	756.87	4.33	3.5350E+000		1.2234E+000
	873.19	11.50	1.2512E+000		-4.6686E-001
	996.32	10.30	1.3815E+000		1.7867E-001
Eu-155	1004.76	17.90	7.6931E-001	3.02E+000	-1.5601E-001
	1274.45	35.50	3.7082E-001		1.1573E-001
	86.54	30.90	3.0490E+000		4.0048E+000
Am-241	105.31	20.70	3.0238E+000	7.41E+000	1.2490E+000
	59.54	35.90	7.4089E+000		-6.4323E-001
Cm-243	228.19	10.56	2.4695E+000	1.57E+000	-2.0380E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.5674E+000	1.57E+000	-4.3654E-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 7/26/2006 10:54:30 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-228-F-

Sample Title: OOL-10-04-228-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 10:44:25 AM

Live Time: 600.0 seconds

Real Time: 602.5 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-10-04-228-F-
Title: OOL-10-04-228-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It contains 9 rows of peak data.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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
Be-7	0.975	477.60*	10.40	6.66207E-001	5.60751E-001
K-40	0.989	1460.81*	10.67	2.22417E+001	2.31765E+000
TL-208	0.464	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.20595E-001	1.33360E-001
Bi-214	0.392	860.37	12.46		
		609.31*	46.30	5.17505E-001	2.31368E-001
		1120.29	15.10		
Ac-228	0.621	1764.49	15.80		
		338.32	11.40		
		911.07*	27.70	1.38014E+000	3.50772E-001
		969.11*	16.60	1.15841E+000	4.51389E-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
Be-7	0.975	6.662070E-001	5.607508E-001
K-40	0.989	2.224167E+001	2.317654E+000
TL-208	0.464	3.205948E-001	1.333599E-001
Bi-214	0.392	5.175055E-001	2.313680E-001
Ac-228	0.621	1.296654E+000	2.769744E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	74.26	1.9462E+000	18.13
2	84.99	7.1496E-001	48.72
3	462.92	6.9263E-002	102.25

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: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	1.3576E-001	1.31E-001	1.6683E-002
	1332.49	100.00	1.3074E-001		5.7725E-002
Nb-94	702.63	100.00	1.5150E-001	1.44E-001	-5.4584E-002
	871.10	100.00	1.4382E-001		-5.3272E-002
Ag-108m	79.20	7.10	1.7560E+001	1.81E-001	-5.0764E+001
	433.93	89.90	1.9578E-001		-3.2324E-003
	614.37	90.40	1.9343E-001		-1.0700E-001
	722.95	90.50	1.8132E-001		1.5690E-001
Sb-125	176.33	6.89	4.8991E+000	6.02E-001	7.8056E-001
	427.89	29.33	6.0151E-001		-2.6909E-001
	463.38	10.35	1.6918E+000		6.1993E-001
	600.56	17.80	9.0161E-001		5.1740E-001
	606.64	5.02	3.8289E+000		8.0636E+000
	635.90	11.32	1.4118E+000		-6.9789E-001
Cs-134	563.23	8.38	1.9086E+000	1.78E-001	-3.7491E-001
	569.32	15.43	1.0417E+000		-5.7836E-002
	604.70	97.60	1.8986E-001		-8.2677E-003
	795.84	85.40	1.7790E-001		1.4721E-001
	801.93	8.73	1.6505E+000		-3.4582E-001
Cs-137	661.65	85.12	1.8355E-001	1.84E-001	5.4298E-002
Eu-152	121.78	28.40	1.7503E+000	4.50E-001	9.5285E-001
	244.69	7.49	3.4871E+000		-6.7742E+000
	344.27	26.50	7.6956E-001		-7.4388E-001
	778.89	12.74	1.1055E+000		-1.4479E+000
	867.32	4.16	3.6036E+000		1.8982E+000
	964.01	14.40	1.2409E+000		-7.6174E-002
	1085.78	10.00	1.3055E+000		-1.2951E+000
	1112.02	13.30	9.9601E-001		-1.5468E+000
1407.95	20.70	4.5027E-001	-4.5097E-002		
Eu-154	123.07	40.50	1.2123E+000	3.66E-001	-2.8899E-001
	247.94	6.60	3.7928E+000		-2.4274E+000
	591.81	4.83	3.2320E+000		-2.0149E-001
	723.30	19.70	8.3566E-001		1.0855E+000
	756.87	4.33	3.2637E+000		-1.3744E+000
	873.19	11.50	1.2261E+000		-2.0129E-001
	996.32	10.30	1.2780E+000		7.2694E-001
	1004.76	17.90	7.1793E-001		-1.1351E-001
1274.45	35.50	3.6603E-001	1.2892E-001		
Eu-155	86.54	30.90	3.1171E+000	3.12E+000	-1.2695E-001
	105.31	20.70	3.1542E+000		7.9658E-002
Am-241	59.54	35.90	7.4825E+000	7.48E+000	3.4370E+000
Cm-243	228.19	10.56	2.6218E+000	1.72E+000	-1.0848E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.7212E+000	1.72E+000	1.5829E+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 7/26/2006 1:01:18 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-229-F-

Sample Title: OOL-10-04-229-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 12:51:14 PM

Live Time: 600.0 seconds

Real Time: 602.2 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-10-04-229-F-
Title: OOL-10-04-229-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	953.59	238.36	1.64	3.52E+002	110.26	7.75E+002
2	3632-	3652	3643.00	910.71	2.02	1.89E+002	39.16	5.72E+001
3	3866-	3882	3874.41	968.57	0.36	7.16E+001	32.57	6.54E+001
4	4473-	4485	4479.90	1119.94	0.51	2.03E+001	25.27	5.38E+001
5	5825-	5856	5841.08	1460.24	2.88	9.95E+002	66.03	2.80E+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: 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	0.989	1460.81*	10.67	2.18384E+001	2.28615E+000
Pb-212	0.452	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
Ac-228	0.631	238.63*	44.60	1.13859E+000	3.98817E-001
		338.32	11.40		
		911.07*	27.70	1.38577E+000	3.28644E-001
		969.11*	16.60	8.89824E-001	4.15384E-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	0.989	2.183842E+001	2.286149E+000
Pb-212 @	0.452	1.138591E+000	3.988172E-001
Ac-228	0.631	1.194843E+000	2.577327E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1119.94	3.3750E-002	124.80

M = First peak in a multiplet region
 m = Other peak in a multiplet region
 F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.3653E-001	1.17E-001	3.2224E-002
	1332.49	100.00	1.1738E-001		1.0140E-001
Nb-94	702.63	100.00	1.3906E-001	1.32E-001	-1.6384E-002
	871.10	100.00	1.3223E-001		-1.2465E-002
Ag-108m	79.20	7.10	1.6020E+001	1.73E-001	-5.0458E+001
	433.93	89.90	1.8223E-001		-9.1779E-002
	614.37	90.40	1.9220E-001		-1.6455E-001
	722.95	90.50	1.7285E-001		1.0287E-001
Sb-125	176.33	6.89	4.4430E+000	5.48E-001	8.6871E-003
	427.89	29.33	5.4763E-001		-3.8243E-001
	463.38	10.35	1.6097E+000		-1.6267E-001
	600.56	17.80	8.8396E-001		7.6563E-002
	606.64	5.02	3.6368E+000		6.0591E+000
	635.90	11.32	1.2919E+000		-9.6594E-001
Cs-134	563.23	8.38	1.8157E+000	1.73E-001	4.9015E-001
	569.32	15.43	9.8008E-001		-6.5123E-001
	604.70	97.60	1.8425E-001		2.0279E-001
	795.84	85.40	1.7343E-001		2.0234E-001
	801.93	8.73	1.5451E+000		-1.1452E+000
Cs-137	661.65	85.12	1.7209E-001	1.72E-001	3.5488E-002
Eu-152	121.78	28.40	1.5812E+000	4.21E-001	-1.6770E+000
	244.69	7.49	3.2175E+000		-1.4946E-001
	344.27	26.50	7.1110E-001		-9.4163E-002
	778.89	12.74	1.1079E+000		-4.3825E-001
	867.32	4.16	3.2256E+000		-4.0893E-002
	964.01	14.40	1.1823E+000		2.7271E-001
	1085.78	10.00	1.2332E+000		7.9524E-001
	1112.02	13.30	1.0305E+000		-8.9437E-002
	1407.95	20.70	4.2057E-001		-3.4324E-002
Eu-154	123.07	40.50	1.1013E+000	3.22E-001	-3.3854E-001
	247.94	6.60	3.5084E+000		1.6837E+000
	591.81	4.83	3.2168E+000		3.1968E-001
	723.30	19.70	7.9689E-001		1.0751E+000
	756.87	4.33	3.2778E+000		1.0211E+000
	873.19	11.50	1.1473E+000		-2.6858E-001
	996.32	10.30	1.2780E+000		7.4734E-001
	1004.76	17.90	7.2218E-001		1.0932E-001
	1274.45	35.50	3.2237E-001		-2.6382E-001
Eu-155	86.54	30.90	2.8711E+000	2.87E+000	6.2387E+000
	105.31	20.70	2.9030E+000		7.7957E-001
Am-241	59.54	35.90	7.2697E+000	7.27E+000	-1.4104E+000
Cm-243	228.19	10.56	2.4251E+000	1.48E+000	1.8594E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.4827E+000	1.48E+000	-1.3338E+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 7/27/2006 8:44:24 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-230-F-

Sample Title: OOL-10-04-230-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 8:34:23 AM

Live Time: 600.0 seconds

Real Time: 600.7 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-230-F-
Title: OOL-10-04-230-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-	960	953.80	238.43	1.09	1.74E+002	59.56	2.91E+002
2	1174-	1184	1179.82	294.94	0.79	4.07E+001	37.94	1.37E+002
3	1395-	1414	1406.79	351.69	1.25	1.44E+002	50.71	1.50E+002
4	2030-	2049	2041.56	510.40	0.46	1.39E+002	42.73	9.62E+001
5	2323-	2339	2330.59	582.67	1.27	1.17E+002	38.07	8.34E+001
6	2427-	2444	2434.84	608.74	0.90	1.12E+002	36.40	7.05E+001
7	3634-	3651	3642.11	910.59	1.62	9.73E+001	30.53	4.47E+001
8	4472-	4484	4478.54	1119.73	0.88	2.48E+001	19.25	2.72E+001
9	5829-	5855	5841.20	1460.44	1.89	6.89E+002	52.55	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: 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	0.988	511.00*	100.00	2.49157E-001	8.38437E-002
K-40	0.995	1460.81*	10.67	1.56636E+001	1.74203E+000
TL-208	0.747	277.35	6.80		
		510.84*	21.60	1.15351E+000	3.99433E-001
		583.14*	84.20	2.60234E-001	9.14665E-002
		860.37	12.46		
Pb-212	0.446	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.68883E-001	2.13870E-001
Bi-214	0.697	609.31*	46.30	4.63361E-001	1.60460E-001
		1120.29*	15.10	3.65701E-001	2.86609E-001
		1764.49	15.80		
PB-214	0.549	74.82 @	6.21		
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.24465E-001	3.07645E-001
		351.92*	37.20	6.20379E-001	2.41306E-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	0.988	1.929468E-001	8.612049E-002
K-40	0.995	1.566363E+001	1.742027E+000
TL-208	0.747	2.602340E-001	9.107245E-002
Pb-212 @	0.446	5.688835E-001	2.138704E-001
Bi-214	0.697	4.400550E-001	1.400105E-001
PB-214 @	0.549	5.076675E-001	1.898677E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	910.59	1.6212E-001	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: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	1.0783E-001	9.95E-002	4.2054E-002
	1332.49	100.00	9.9464E-002		3.1551E-002
Nb-94	702.63	100.00	1.2279E-001	1.01E-001	8.4098E-002
	871.10	100.00	1.0124E-001		-1.4211E-002
Ag-108m	79.20	7.10	1.1477E+001	1.46E-001	-4.7717E+001
	433.93	89.90	1.5037E-001		-7.6307E-003
	614.37	90.40	1.5668E-001		-5.9080E-002
	722.95	90.50	1.4556E-001		1.8719E-001
Sb-125	176.33	6.89	3.2314E+000	4.35E-001	8.1683E-001
	427.89	29.33	4.3451E-001		-3.0860E-001
	463.38	10.35	1.2375E+000		-4.6815E-001
	600.56	17.80	6.9463E-001		4.2679E-001
	606.64	5.02	3.0991E+000		5.0807E+000
	635.90	11.32	1.0591E+000		3.7791E-001
Cs-134	563.23	8.38	1.5292E+000	1.38E-001	1.1434E+000
	569.32	15.43	7.9927E-001		-4.0743E-001
	604.70	97.60	1.5626E-001		3.0186E-003
	795.84	85.40	1.3781E-001		6.1225E-002
Cs-137	801.93	8.73	1.2592E+000	1.47E-001	-8.9557E-001
	661.65	85.12	1.4692E-001		5.9366E-002
Eu-152	121.78	28.40	1.1783E+000	3.50E-001	-8.4295E-002
	244.69	7.49	2.5027E+000		-2.0697E+000
	344.27	26.50	5.3025E-001		-3.0273E-001
	778.89	12.74	9.0989E-001		-1.1422E-002
	867.32	4.16	2.5241E+000		-2.1668E+000
	964.01	14.40	9.0949E-001		7.6785E-001
	1085.78	10.00	9.8483E-001		6.8182E-002
	1112.02	13.30	7.9525E-001		2.2677E-001
1407.95	20.70	3.5020E-001	2.2406E-001		
Eu-154	123.07	40.50	8.2360E-001	2.81E-001	3.1742E-001
	247.94	6.60	2.6744E+000		3.6861E-001
	591.81	4.83	2.5198E+000		-8.4388E-001
	723.30	19.70	6.6528E-001		1.8619E-001
	756.87	4.33	2.5458E+000		-1.0632E+000
	873.19	11.50	8.7654E-001		-1.2794E+000
	996.32	10.30	1.0750E+000		2.3732E-001
	1004.76	17.90	6.2800E-001		5.7554E-001
1274.45	35.50	2.8117E-001	-8.2325E-002		
Eu-155	86.54	30.90	2.0911E+000	2.07E+000	4.2968E+000
	105.31	20.70	2.0683E+000		-4.3893E-001
Am-241	59.54	35.90	4.9447E+000	4.94E+000	2.4070E-001
Cm-243	228.19	10.56	1.8496E+000	1.17E+000	1.8565E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1656E+000	1.17E+000	-9.0449E-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 7/27/2006 2:34:40 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-10-04-231-F-

Sample Title: OOL-10-04-231-F-G

Description: SATURATED SOIL

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 2:24:36 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-10-04-231-F-
Title: OOL-10-04-231-F-G
Description: SATURATED SOIL

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It contains 6 rows of peak data.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.75944E+001	1.95144E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.08464E-001	1.11572E-001
Pb-212	0.453	860.37	12.46		
		74.81 @	10.70		
		77.11 @	18.00		
Ac-228	0.635	87.30 @	8.00		
		238.63*	44.60	6.24674E-001	2.77952E-001
		338.32	11.40		
		911.07*	27.70	1.03317E+000	2.63844E-001
		969.11*	16.60	4.86779E-001	3.43752E-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	1.759442E+001	1.951443E+000
TL-208	0.471	4.084643E-001	1.115722E-001
Pb-212 @	0.453	6.246735E-001	2.779520E-001
Ac-228	0.635	8.306091E-001	2.092996E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.50	1.7083E-001	45.13

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	1.1128E-001	8.68E-002	-6.1302E-002
	1332.49	100.00	8.6823E-002		1.4995E-002
Nb-94	702.63	100.00	1.1658E-001	1.11E-001	-1.5526E-002
	871.10	100.00	1.1107E-001		4.6094E-002
Ag-108m	79.20	7.10	1.2175E+001	1.43E-001	-2.9106E+001
	433.93	89.90	1.4439E-001		-4.0563E-002
	614.37	90.40	1.6641E-001		-1.8900E-001
	722.95	90.50	1.4293E-001		5.5779E-002
Sb-125	176.33	6.89	3.0650E+000	4.37E-001	4.1215E-001
	427.89	29.33	4.3727E-001		-4.0427E-001
	463.38	10.35	1.2670E+000		1.4986E-002
	600.56	17.80	6.6359E-001		2.6641E-001
	606.64	5.02	3.0856E+000		5.3616E+000
	635.90	11.32	1.0331E+000		4.5676E-001
Cs-134	563.23	8.38	1.3764E+000	1.42E-001	-2.8784E-001
	569.32	15.43	7.8101E-001		2.0049E-001
	604.70	97.60	1.4931E-001		4.6670E-002
	795.84	85.40	1.4233E-001		-2.6472E-003
	801.93	8.73	1.2620E+000		-1.8670E+000
Cs-137	661.65	85.12	1.4560E-001	1.46E-001	-5.6315E-002
Eu-152	121.78	28.40	1.1317E+000	4.14E-001	7.5274E-001
	244.69	7.49	2.3328E+000		-5.6303E-001
	344.27	26.50	5.2896E-001		-8.0628E-001
	778.89	12.74	8.1104E-001		-4.1803E-001
	867.32	4.16	2.7560E+000		7.5772E-001
	964.01	14.40	8.8357E-001		-9.3018E-002
	1085.78	10.00	1.0089E+000		-5.6294E-001
	1112.02	13.30	8.1522E-001		-1.1429E+000
1407.95	20.70	4.1366E-001	4.6295E-001		
Eu-154	123.07	40.50	7.8098E-001	3.04E-001	3.2784E-001
	247.94	6.60	2.4194E+000		-1.3495E+000
	591.81	4.83	2.3581E+000		1.4434E+000
	723.30	19.70	6.6500E-001		5.0547E-001
	756.87	4.33	2.7046E+000		-1.1871E-001
	873.19	11.50	9.5896E-001		1.5434E-001
	996.32	10.30	9.9755E-001		-2.1913E-002
	1004.76	17.90	5.9109E-001		-2.4261E-002
1274.45	35.50	3.0392E-001	-1.2165E-001		
Eu-155	86.54	30.90	2.1467E+000	2.07E+000	2.1880E+000
	105.31	20.70	2.0713E+000		4.0437E-001
Am-241	59.54	35.90	5.3705E+000	5.37E+000	-4.8472E+000
Cm-243	228.19	10.56	1.6792E+000	1.13E+000	-6.0501E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1269E+000	1.13E+000	-6.6889E-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 7/27/2006 11:42:39 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-232-F-

Sample Title: OOL-10-04-232-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 11:32:37 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-10-04-232-F-
Title: OOL-10-04-232-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-	1416	1405.07	351.22	1.71	1.19E+002	59.74	2.23E+002
2	1843-	1853	1848.01	461.96	0.94	3.15E+001	27.11	6.65E+001
3	3633-	3647	3641.26	910.28	0.52	2.82E+001	33.55	8.88E+001
4	5829-	5858	5843.05	1460.73	2.58	8.26E+002	60.74	2.89E+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	1.000	1460.81*	10.67	1.81339E+001	1.98321E+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	1.000	1.813393E+001	1.983208E+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	351.22	1.9797E-001	50.29
2	461.96	5.2483E-002	86.10
3	910.28	4.6923E-002	119.18

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	1.2178E-001	9.99E-002	1.1412E-003
	1332.49	100.00	9.9898E-002		-9.5795E-002
Nb-94	702.63	100.00	1.2122E-001	1.18E-001	1.0401E-001
	871.10	100.00	1.1752E-001		4.2718E-002
Ag-108m	79.20	7.10	1.2933E+001	1.54E-001	-2.4135E+001
	433.93	89.90	1.5469E-001		-1.0862E-001
	614.37	90.40	1.6555E-001		-1.5286E-001
	722.95	90.50	1.5414E-001		1.3189E-003
Sb-125	176.33	6.89	3.2983E+000	4.82E-001	-3.7303E+000
	427.89	29.33	4.8172E-001		3.0417E-001
	463.38	10.35	1.3572E+000		4.4739E-001
	600.56	17.80	7.4680E-001		5.2920E-001
	606.64	5.02	3.2266E+000		2.7516E+000
	635.90	11.32	1.1780E+000		8.1844E-001
Cs-134	563.23	8.38	1.6133E+000	1.55E-001	-4.5726E-001
	569.32	15.43	8.8989E-001		1.6743E-001
	604.70	97.60	1.6183E-001		3.4445E-002
	795.84	85.40	1.5461E-001		-4.7651E-002
Cs-137	801.93	8.73	1.3774E+000	1.65E-001	-1.6852E-001
	661.65	85.12	1.6502E-001		3.4149E-002
Eu-152	121.78	28.40	1.2052E+000	4.57E-001	2.5285E-001
	244.69	7.49	2.5226E+000		-4.9497E+000
	344.27	26.50	6.0126E-001		-4.6969E-001
	778.89	12.74	9.4738E-001		-9.5198E-001
	867.32	4.16	2.8970E+000		2.2388E-001
	964.01	14.40	1.0681E+000		1.1976E+000
	1085.78	10.00	1.1605E+000		3.7981E-001
	1112.02	13.30	9.0066E-001		-6.2847E-001
1407.95	20.70	4.5659E-001	1.2228E-001		
Eu-154	123.07	40.50	8.2859E-001	3.08E-001	-3.4160E-001
	247.94	6.60	2.8049E+000		1.5489E-001
	591.81	4.83	2.8734E+000		2.5775E-001
	723.30	19.70	7.0819E-001		3.2669E-001
	756.87	4.33	2.8551E+000		9.4867E-001
	873.19	11.50	1.0087E+000		-4.6020E-001
	996.32	10.30	1.1078E+000		-2.4880E-001
	1004.76	17.90	6.5304E-001		4.2974E-001
1274.45	35.50	3.0828E-001	1.4345E-001		
Eu-155	86.54	30.90	2.2836E+000	2.24E+000	2.5049E+000
	105.31	20.70	2.2428E+000		1.7182E+000
Am-241	59.54	35.90	5.8558E+000	5.86E+000	-6.2015E-001
Cm-243	228.19	10.56	1.8641E+000	1.27E+000	-7.8800E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2729E+000	1.27E+000	1.0183E+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 7/27/2006 2:07:08 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-233-F-

Sample Title: OOL-10-04-233-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 1:57:08 PM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-233-F-
Title: OOL-10-04-233-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. It lists 9 peaks with their respective parameters.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.000	1460.81*	10.67	1.85042E+001	1.98975E+000
TL-208	0.747	277.35	6.80		
		510.84*	21.60	6.23702E-001	3.92552E-001
		583.14*	84.20	3.03239E-001	1.02700E-001
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	1.00555E+001	5.51154E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.44496E-001	2.21313E-001
Bi-214	0.692	609.31*	46.30	5.26812E-001	1.62143E-001
		1120.29	15.10		
		1764.49*	15.80	5.94858E-001	2.37384E-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	0.957		
	K-40	1.000	1.850420E+001	1.989751E+000
	TL-208	0.747	3.237686E-001	9.935607E-002
	Pb-212 @	0.594	6.444956E-001	2.213130E-001
	Bi-214	0.692	5.484590E-001	1.338907E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.97	1.3458E-001	56.66
7	910.90	1.5131E-001	38.49

M = First peak in a multiplet region
 m = Other peak in a multiplet region
 F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L 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	1.3157E-001	1.03E-001	9.8347E-002
	1332.49	100.00	1.0264E-001		3.6545E-002
Nb-94	702.63	100.00	1.1604E-001	1.06E-001	-3.8883E-002
	871.10	100.00	1.0605E-001		-5.7067E-002
Ag-108m	79.20	7.10	1.3020E+001	1.36E-001	-1.4438E+001
	433.93	89.90	1.5170E-001		-2.5124E-002
	614.37	90.40	1.6298E-001		-1.5282E-001
	722.95	90.50	1.3614E-001		4.2020E-002
Sb-125	176.33	6.89	3.2913E+000	4.64E-001	-5.9474E-001
	427.89	29.33	4.6435E-001		-1.5851E-001
	463.38	10.35	1.3499E+000		-4.6328E-001
	600.56	17.80	7.1825E-001		3.1967E-001
	606.64	5.02	3.3536E+000		4.9313E+000
	635.90	11.32	1.0898E+000		3.4711E-001
Cs-134	563.23	8.38	1.5929E+000	1.58E-001	4.8762E-002
	569.32	15.43	8.4529E-001		-1.1812E-001
	604.70	97.60	1.7304E-001		4.6986E-002
	795.84	85.40	1.5800E-001		9.0269E-002
	801.93	8.73	1.4867E+000		-1.0713E+000
Cs-137	661.65	85.12	1.6168E-001	1.62E-001	1.4745E-001
Eu-152	121.78	28.40	1.2061E+000	3.89E-001	-5.8282E-001
	244.69	7.49	2.5759E+000		-4.6300E+000
	344.27	26.50	5.5901E-001		-5.3912E-001
	778.89	12.74	8.6407E-001		-9.6388E-001
	867.32	4.16	2.6784E+000		-2.2532E+000
	964.01	14.40	1.0084E+000		6.3607E-001
	1085.78	10.00	1.2043E+000		-8.8880E-001
	1112.02	13.30	7.8305E-001		-5.5040E-001
1407.95	20.70	3.8885E-001	1.9113E-001		
Eu-154	123.07	40.50	8.3729E-001	3.26E-001	-6.2476E-001
	247.94	6.60	2.7889E+000		4.9583E-001
	591.81	4.83	2.4075E+000		-1.6834E+000
	723.30	19.70	6.1797E-001		-3.3830E-001
	756.87	4.33	2.5845E+000		-1.7821E+000
	873.19	11.50	9.3078E-001		-5.8722E-001
	996.32	10.30	1.0562E+000		-1.0227E+000
	1004.76	17.90	6.5908E-001		5.3505E-001
1274.45	35.50	3.2646E-001	8.4926E-002		
Eu-155	86.54	30.90	2.1855E+000	2.18E+000	2.0820E+000
	105.31	20.70	2.1836E+000		9.0720E-001
Am-241	59.54	35.90	6.2939E+000	6.29E+000	1.4299E-001
Cm-243	228.19	10.56	1.7689E+000	1.18E+000	-6.9107E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1778E+000	1.18E+000	1.1041E-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 7/27/2006 3:09:24 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: ORG7829

Spectrum File: ORG7829

Sample ID: OOL-10-04-234-F-

Sample Title: OOL-10-04-234-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 2:59:23 PM

Live Time: 600.0 seconds

Real Time: 601.8 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-234-F-
Title: OOL-10-04-234-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-	309	300.83	75.16	0.78	2.24E+002	138.85	1.80E+003
2	948-	961	954.46	238.59	1.31	2.08E+002	65.80	3.28E+002
3	1402-	1415	1406.74	351.68	0.89	6.79E+001	43.53	1.53E+002
4	2322-	2341	2332.25	583.08	0.43	1.41E+002	42.17	9.20E+001
5	2426-	2446	2436.36	609.12	1.78	1.22E+002	40.69	8.52E+001
6	3636-	3652	3642.95	910.80	0.35	7.10E+001	30.96	5.60E+001
7	3865-	3882	3874.11	968.60	0.98	7.12E+001	26.39	3.38E+001
8	5830-	5857	5842.90	1460.86	2.24	7.38E+002	58.08	3.12E+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: 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	1.000	1460.81*	10.67	1.67675E+001	1.89348E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.14747E-001	1.02653E-001
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	8.67174E+000	5.63893E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.80259E-001	2.39811E-001
Bi-214	0.402	609.31*	46.30	5.01857E-001	1.78689E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.629	338.32	11.40		
		911.07*	27.70	5.40182E-001	2.43664E-001
		969.11*	16.60	9.19170E-001	3.54024E-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	1.000	1.676749E+001	1.893484E+000
TL-208	0.471	3.147474E-001	1.026529E-001
Pb-212 @	0.593	6.802590E-001	2.398107E-001
Bi-214	0.402	5.018573E-001	1.786894E-001
Ac-228	0.629	6.620051E-001	2.007169E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.68	1.1316E-001	64.11

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: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	1.2710E-001	1.09E-001	3.2152E-002
	1332.49	100.00	1.0929E-001		1.4507E-001
Nb-94	702.63	100.00	1.2814E-001	1.18E-001	-7.5383E-002
	871.10	100.00	1.1842E-001		-1.0426E-001
Ag-108m	79.20	7.10	1.4337E+001	1.52E-001	-8.4823E+000
	433.93	89.90	1.5890E-001		-9.0034E-002
	614.37	90.40	1.6693E-001		9.3611E-002
	722.95	90.50	1.5187E-001		-2.6299E-002
Sb-125	176.33	6.89	3.4499E+000	4.87E-001	-2.8354E+000
	427.89	29.33	4.8701E-001		3.6314E-001
	463.38	10.35	1.4533E+000		2.1863E+000
	600.56	17.80	7.3763E-001		-5.2224E-001
	606.64	5.02	3.1659E+000		3.0049E+000
	635.90	11.32	1.1109E+000		2.7631E-001
Cs-134	563.23	8.38	1.5998E+000	1.46E-001	-3.2754E-001
	569.32	15.43	8.9068E-001		2.7721E-001
	604.70	97.60	1.6370E-001		6.0639E-004
	795.84	85.40	1.4561E-001		-1.0272E-001
	801.93	8.73	1.3959E+000		-1.2249E+000
Cs-137	661.65	85.12	1.5371E-001	1.54E-001	7.2622E-002
Eu-152	121.78	28.40	1.3346E+000	4.38E-001	-1.2107E-001
	244.69	7.49	2.5677E+000		-2.5477E+000
	344.27	26.50	5.6259E-001		-7.5045E-001
	778.89	12.74	9.5946E-001		-4.8682E-001
	867.32	4.16	2.9425E+000		-9.4248E-001
	964.01	14.40	1.0613E+000		4.0922E-001
	1085.78	10.00	1.2317E+000		1.1317E+000
	1112.02	13.30	8.9364E-001		-4.7056E-002
1407.95	20.70	4.3825E-001	1.7203E-001		
Eu-154	123.07	40.50	9.2139E-001	3.41E-001	3.5705E-001
	247.94	6.60	2.8143E+000		-2.2849E+000
	591.81	4.83	2.8413E+000		2.4522E+000
	723.30	19.70	6.8766E-001		-5.7226E-001
	756.87	4.33	2.8660E+000		-5.9201E-001
	873.19	11.50	1.0695E+000		2.1780E-001
	996.32	10.30	9.9224E-001		5.7499E-001
	1004.76	17.90	5.6337E-001		-4.1776E-001
1274.45	35.50	3.4111E-001	4.8695E-002		
Eu-155	86.54	30.90	2.4157E+000	2.38E+000	4.2695E+000
	105.31	20.70	2.3775E+000		-3.4198E-001
Am-241	59.54	35.90	6.2341E+000	6.23E+000	-2.2850E+000
Cm-243	228.19	10.56	1.8749E+000	1.18E+000	3.5500E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1767E+000	1.18E+000	-1.1838E+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 7/27/2006 3:40:16 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-10-04-235-F-

Sample Title: OOL-10-04-235-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 3:30:14 PM

Live Time: 600.0 seconds

Real Time: 601.9 seconds

Energy Calibration Date: 7/20/2006

Eff Calibration Date: 5/1/2006

Calibration Efficiency: 7829Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-235-F-
Title: OOL-10-04-235-F-G
Description:

Geometry:

Table with 9 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 10 rows of peak data.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.000	1460.81*	10.67	1.99027E+001	2.12641E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.01231E-001	1.17762E-001
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.79365E+001	6.85700E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.43569E-001	2.45473E-001
Bi-214	0.696	609.31*	46.30	5.06752E-001	1.82520E-001
		1120.29	15.10		
		1764.49*	15.80	6.68716E-001	2.27660E-001
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	6.11344E-001	2.78993E-001
		969.11*	16.60	1.23334E+000	3.89190E-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	1.000	1.990272E+001	2.126411E+000
TL-208	0.471	4.012310E-001	1.177625E-001
Pb-212 @	0.593	6.435687E-001	2.454731E-001
Bi-214	0.696	5.701232E-001	1.424047E-001
Ac-228	0.632	8.224805E-001	2.267503E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	3.1762E-001	71.22
4	351.87	2.4644E-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: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	1.4331E-001	1.17E-001	8.9045E-002
	1332.49	100.00	1.1663E-001		1.2476E-001
Nb-94	702.63	100.00	1.3293E-001	1.30E-001	8.1777E-002
	871.10	100.00	1.3033E-001		8.8662E-002
Ag-108m	79.20	7.10	1.5059E+001	1.60E-001	-2.9862E+000
	433.93	89.90	1.6262E-001		5.3652E-002
	614.37	90.40	1.8515E-001		7.0813E-002
	722.95	90.50	1.6033E-001		-7.3645E-003
Sb-125	176.33	6.89	3.7025E+000	5.06E-001	-1.6504E+000
	427.89	29.33	5.0645E-001		-1.0508E-002
	463.38	10.35	1.4447E+000		-2.2393E-001
	600.56	17.80	8.0559E-001		-1.1051E-001
	606.64	5.02	3.3775E+000		4.7973E+000
	635.90	11.32	1.2103E+000		7.8209E-001
Cs-134	563.23	8.38	1.7131E+000	1.54E-001	3.6070E-001
	569.32	15.43	9.9318E-001		8.7888E-001
	604.70	97.60	1.7328E-001		2.2618E-002
	795.84	85.40	1.5384E-001		1.6125E-001
	801.93	8.73	1.4783E+000		7.9296E-001
Cs-137	661.65	85.12	1.6498E-001	1.65E-001	6.3403E-002
Eu-152	121.78	28.40	1.4382E+000	4.52E-001	1.1592E-002
	244.69	7.49	2.8065E+000		-3.3487E+000
	344.27	26.50	6.0250E-001		-5.0324E-001
	778.89	12.74	1.0403E+000		-2.8285E-002
	867.32	4.16	3.1479E+000		-2.4685E+000
	964.01	14.40	1.1160E+000		8.4412E-001
	1085.78	10.00	1.1997E+000		-4.9987E-001
	1112.02	13.30	9.0427E-001		-1.1623E+000
1407.95	20.70	4.5229E-001	2.2878E-001		
Eu-154	123.07	40.50	9.9304E-001	3.19E-001	-4.1134E-001
	247.94	6.60	3.0371E+000		-2.2405E+000
	591.81	4.83	2.9944E+000		2.3989E-001
	723.30	19.70	7.4913E-001		5.8417E-001
	756.87	4.33	3.0169E+000		8.4555E-002
	873.19	11.50	1.1140E+000		-4.4417E-001
	996.32	10.30	1.1515E+000		-3.3266E-001
	1004.76	17.90	6.7651E-001		1.1829E-001
1274.45	35.50	3.1888E-001	9.5581E-002		
Eu-155	86.54	30.90	2.5749E+000	2.54E+000	3.9641E+000
	105.31	20.70	2.5441E+000		1.8084E+000
Am-241	59.54	35.90	6.2223E+000	6.22E+000	-3.5893E+000
Cm-243	228.19	10.56	1.9927E+000	1.36E+000	2.7900E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3567E+000	1.36E+000	1.0929E+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 7/26/2006 4:11:45 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-236-F-

Sample Title: OOL-10-04-236-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 4:01:41 PM

Live Time: 600.0 seconds

Real Time: 601.5 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-236-F-
 Title: OOL-10-04-236-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	290.82	72.79	1.02	4.39E+002	69.11	1.78E+003
m	2	284-	306	299.77	75.03	1.03	7.49E+002	79.63	2.31E+003
	3	332-	345	338.99	84.84	0.80	2.43E+002	154.32	2.16E+003
	4	939-	959	953.10	238.37	1.04	1.89E+002	98.39	6.43E+002
	5	1176-	1183	1179.45	294.96	0.52	3.02E+001	36.70	1.59E+002
	6	1399-	1414	1405.16	351.39	1.00	1.26E+002	54.54	2.15E+002
	7	2034-	2050	2040.99	510.36	0.70	1.07E+002	49.46	1.68E+002
	8	2321-	2337	2329.73	582.55	0.87	1.38E+002	44.83	1.23E+002
	9	2426-	2443	2433.89	608.59	0.88	1.34E+002	42.13	1.01E+002
	10	3630-	3650	3640.93	910.37	0.62	1.22E+002	38.00	7.01E+001
	11	3863-	3880	3871.72	968.07	1.23	6.62E+001	28.95	4.68E+001
	12	5825-	5851	5839.42	1460.03	1.87	8.79E+002	63.07	3.63E+001
	13	7048-	7061	7054.21	1763.74	0.38	2.15E+001	16.53	1.75E+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: 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	0.984	511.00*	100.00	1.82506E-001	8.79579E-002
K-40	0.977	1460.81*	10.67	1.86330E+001	2.01611E+000
TL-208	0.742	277.35	6.80		
		510.84*	21.60	8.44933E-001	4.13017E-001
		583.14*	84.20	2.91177E-001	1.02095E-001
		860.37	12.46		
Pb-212	0.579	74.81* @	10.70	2.44179E+001	5.44418E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.679	238.63*	44.60	5.89687E-001	3.20402E-001
		609.31*	46.30	5.23519E-001	1.76495E-001
		1120.29	15.10		
PB-214	0.615	1764.49*	15.80	3.35186E-001	2.59832E-001
		74.82* @	6.21	4.20727E+001	9.86515E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
Ac-228	0.613	295.21*	19.20	2.30194E-001	2.82578E-001
		351.92*	37.20	5.18328E-001	2.40123E-001
		338.32	11.40		
		911.07*	27.70	8.75250E-001	2.90883E-001
		969.11*	16.60	8.03926E-001	3.61388E-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	0.984	1.196112E-001	9.065705E-002
K-40	0.977	1.863303E+001	2.016113E+000
TL-208	0.742	2.911773E-001	1.016532E-001
Pb-212 @	0.579	5.896870E-001	3.204020E-001
Bi-214	0.679	4.640578E-001	1.459981E-001
PB-214 @	0.615	3.975106E-001	1.829808E-001
Ac-228	0.613	8.472081E-001	2.265984E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	7.3129E-001	15.75
3	84.84	4.0536E-001	63.45

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	1.2910E-001	1.16E-001	-2.7997E-002
	1332.49	100.00	1.1610E-001		6.4606E-002
Nb-94	702.63	100.00	1.3738E-001	1.18E-001	-9.9435E-002
	871.10	100.00	1.1835E-001		-1.4466E-002
Ag-108m	79.20	7.10	1.1194E+001	1.46E-001	-8.0505E+000
	433.93	89.90	1.6466E-001		1.0179E-001
	614.37	90.40	1.4646E-001		-4.1232E-002
	722.95	90.50	1.5625E-001		1.9651E-001
Sb-125	176.33	6.89	3.2262E+000	4.73E-001	1.4875E+000
	427.89	29.33	4.7266E-001		1.1691E-001
	463.38	10.35	1.3677E+000		7.3145E-001
	600.56	17.80	7.8649E-001		-7.9490E-002
	606.64	5.02	3.2820E+000		4.1905E+000
	635.90	11.32	1.1107E+000		4.9183E-001
Cs-134	563.23	8.38	1.5527E+000	1.50E-001	3.6317E-001
	569.32	15.43	8.6683E-001		6.6270E-001
	604.70	97.60	1.6682E-001		-3.4281E-002
	795.84	85.40	1.4963E-001		8.3231E-002
	801.93	8.73	1.2886E+000		-4.9440E-001
Cs-137	661.65	85.12	1.7151E-001	1.72E-001	1.8491E-001
Eu-152	121.78	28.40	1.2068E+000	4.07E-001	2.5132E-001
	244.69	7.49	2.4566E+000		-1.9987E-001
	344.27	26.50	5.6829E-001		2.5585E-001
	778.89	12.74	9.2324E-001		-1.0027E+000
	867.32	4.16	2.8866E+000		-1.8161E+000
	964.01	14.40	1.0264E+000		1.6887E-001
	1085.78	10.00	1.1421E+000		-7.2419E-001
	1112.02	13.30	8.5658E-001		-6.5296E-001
1407.95	20.70	4.0686E-001	-2.2923E-002		
Eu-154	123.07	40.50	8.2930E-001	3.28E-001	-5.0325E-001
	247.94	6.60	2.7078E+000		-1.3472E-001
	591.81	4.83	2.9430E+000		3.3021E-001
	723.30	19.70	7.2364E-001		1.0479E+000
	756.87	4.33	2.8883E+000		-5.6244E-001
	873.19	11.50	1.0361E+000		1.0242E+000
	996.32	10.30	1.2680E+000		1.1241E+000
	1004.76	17.90	6.7495E-001		-1.8578E-001
	1274.45	35.50	3.2818E-001		-6.8205E-002
Eu-155	86.54	30.90	2.1176E+000	2.12E+000	4.3205E-002
	105.31	20.70	2.1185E+000		1.4313E+000
Am-241	59.54	35.90	4.1184E+000	4.12E+000	1.9290E-001
Cm-243	228.19	10.56	1.7976E+000	1.21E+000	-8.0539E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.2113E+000	1.21E+000	9.9124E-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 7/26/2006 4:34:10 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-237-F-

Sample Title: OOL-10-04-237-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/26/2006 4:24:06 PM

Live Time: 600.0 seconds

Real Time: 601.6 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-237-F-
 Title: OOL-10-04-237-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	290.90	72.81	0.94	4.22E+002	72.80	2.14E+003
m	2	284-	306	299.66	75.00	0.94	8.30E+002	85.24	2.60E+003
	3	332-	345	339.45	84.95	1.16	2.92E+002	167.00	2.52E+003
	4	946-	961	952.99	238.35	0.99	3.05E+002	88.03	5.69E+002
	5	1397-	1413	1404.05	351.12	1.15	1.41E+002	55.80	2.14E+002
	6	2322-	2337	2329.68	582.54	1.18	1.71E+002	41.04	8.93E+001
	7	2424-	2439	2433.25	608.43	1.50	1.14E+002	39.26	9.47E+001
	8	3632-	3649	3640.66	910.30	1.14	1.41E+002	35.34	5.64E+001
	9	3863-	3878	3871.50	968.02	0.44	5.50E+001	27.31	4.60E+001
	10	5321-	5334	5326.51	1331.79	0.49	4.20E+001	17.73	1.40E+001
	11	5827-	5851	5838.74	1459.86	1.87	8.48E+002	59.81	2.08E+001
	12	7046-	7063	7053.77	1763.63	0.41	4.67E+001	16.73	7.31E+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: 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	0.966	1460.81*	10.67	1.79862E+001	1.93110E+000
TL-208	0.463	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.61029E-001	9.87035E-002
		860.37	12.46		
Pb-212	0.579	74.81* @	10.70	2.70791E+001	5.99191E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.52434E-001	3.12474E-001
Bi-214	0.672	609.31*	46.30	4.45702E-001	1.62618E-001
		1120.29	15.10		
		1764.49*	15.80	7.27948E-001	2.70814E-001
Ac-228	0.610	338.32	11.40		
		911.07*	27.70	1.00949E+000	2.79169E-001
		969.11*	16.60	6.67558E-001	3.38768E-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	0.966	1.798620E+001	1.931100E+000
TL-208	0.463	3.610287E-001	9.870351E-002
Pb-212 @	0.579	9.524339E-001	3.124741E-001
Bi-214	0.672	5.205017E-001	1.394142E-001
Ac-228	0.610	8.712012E-001	2.154415E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	7.0287E-001	17.26
3	84.95	4.8605E-001	57.26
5	351.12	2.3531E-001	39.52
10	1331.79	7.0052E-002	42.19

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	1.2358E-001	1.04E-001	9.8021E-002
	1332.49	100.00	1.0436E-001		7.7139E-002
Nb-94	702.63	100.00	1.2748E-001	1.15E-001	-2.5707E-002
	871.10	100.00	1.1534E-001		-8.0189E-002
Ag-108m	79.20	7.10	1.2262E+001	1.44E-001	3.9746E+000
	433.93	89.90	1.4940E-001		-8.7121E-002
	614.37	90.40	1.4429E-001		-1.7418E-001
	722.95	90.50	1.4786E-001		1.1989E-001
Sb-125	176.33	6.89	3.5483E+000	4.85E-001	-1.4809E+000
	427.89	29.33	4.8535E-001		-2.5850E-001
	463.38	10.35	1.3296E+000		1.2830E+000
	600.56	17.80	7.2431E-001		-3.8795E-001
	606.64	5.02	3.1749E+000		1.9116E+000
	635.90	11.32	1.1027E+000		6.0611E-002
Cs-134	563.23	8.38	1.6755E+000	1.40E-001	4.0508E-001
	569.32	15.43	8.9686E-001		-1.5983E-001
	604.70	97.60	1.6406E-001		3.2692E-002
	795.84	85.40	1.4046E-001		-1.2889E-002
	801.93	8.73	1.2973E+000		2.2545E-001
Cs-137	661.65	85.12	1.6775E-001	1.68E-001	1.9413E-002
Eu-152	121.78	28.40	1.3271E+000	4.07E-001	-6.3369E-002
	244.69	7.49	2.6630E+000		-1.0564E+000
	344.27	26.50	5.6376E-001		-2.6418E-001
	778.89	12.74	9.2881E-001		-1.0666E+000
	867.32	4.16	2.7236E+000		-1.1703E+000
	964.01	14.40	9.7365E-001		4.1051E-001
	1085.78	10.00	1.1548E+000		-4.7955E-001
	1112.02	13.30	8.7890E-001		-6.6514E-001
1407.95	20.70	4.0686E-001	1.1494E-001		
Eu-154	123.07	40.50	9.2092E-001	3.22E-001	-7.3089E-002
	247.94	6.60	2.9175E+000		-1.6148E-001
	591.81	4.83	2.7761E+000		8.0544E-001
	723.30	19.70	6.8239E-001		5.6308E-001
	756.87	4.33	2.8883E+000		-1.0791E+000
	873.19	11.50	1.0134E+000		4.8399E-001
	996.32	10.30	1.1932E+000		4.8531E-001
	1004.76	17.90	6.9412E-001		3.3266E-001
1274.45	35.50	3.2178E-001	-9.6638E-002		
Eu-155	86.54	30.90	2.2721E+000	2.27E+000	2.2689E-002
	105.31	20.70	2.2985E+000		1.8716E+000
Am-241	59.54	35.90	4.3859E+000	4.39E+000	3.9265E-001
Cm-243	228.19	10.56	2.0332E+000	1.27E+000	3.3667E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.2654E+000	1.27E+000	-4.0748E-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 7/27/2006 8:06:58 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-238-F-

Sample Title: OOL-10-04-238-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 7:56:52 AM

Live Time: 600.0 seconds

Real Time: 602.2 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E 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-10-04-238-F-
 Title: OOL-10-04-238-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	291.29	72.91	1.01	5.29E+002	78.23	2.54E+003
m	2	284-	306	300.07	75.11	1.02	9.54E+002	91.49	3.13E+003
	3	335-	343	338.84	84.80	1.18	3.53E+002	130.18	1.90E+003
	4	946-	959	954.52	238.73	1.03	3.00E+002	88.18	6.27E+002
	5	1348-	1357	1352.29	338.18	0.70	5.29E+001	46.72	2.28E+002
	6	1399-	1415	1407.14	351.89	1.10	1.48E+002	64.04	2.94E+002
	7	2324-	2340	2332.11	583.15	1.12	1.97E+002	46.33	1.16E+002
	8	2430-	2446	2436.25	609.18	1.65	1.56E+002	45.50	1.21E+002
	9	3635-	3656	3644.36	911.23	1.19	1.84E+002	41.45	6.94E+001
	10	3867-	3884	3876.74	969.33	1.53	1.05E+002	32.00	4.89E+001
	11	5324-	5339	5332.48	1333.28	1.16	5.25E+001	21.65	2.25E+001
	12	5831-	5858	5845.28	1461.49	1.90	1.06E+003	65.28	1.04E+001
	13	7056-	7069	7062.32	1765.77	1.15	3.04E+001	14.40	8.59E+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: 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	0.982	1460.81*	10.67	2.25432E+001	2.29110E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.17365E-001	1.12043E-001
		860.37	12.46		
Pb-212	0.580	74.81* @	10.70	3.09784E+001	6.76027E+000
		77.11 @	18.00		
		87.30 @	8.00		
Bi-214	0.682	238.63*	44.60	9.37256E-001	3.11841E-001
		609.31*	46.30	6.09109E-001	1.92682E-001
		1120.29	15.10		
Ac-228	0.999	1764.49*	15.80	4.74342E-001	2.29580E-001
		338.32*	11.40	7.01700E-001	6.29995E-001
		911.07*	27.70	1.31861E+000	3.34150E-001
		969.11*	16.60	1.27601E+000	4.10874E-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	0.982	2.254319E+001	2.291101E+000
TL-208	0.472	4.173653E-001	1.120431E-001
Pb-212 @	0.580	9.372555E-001	3.118407E-001
Bi-214	0.682	5.534128E-001	1.475897E-001
Ac-228	0.999	1.214773E+000	2.397370E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	8.8204E-001	14.78
3	84.80	5.8802E-001	36.90
6	351.89	2.4681E-001	43.25
11	1333.28	8.7483E-002	41.24

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: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	1.3252E-001	1.15E-001	1.5893E-001
	1332.49	100.00	1.1517E-001		8.7807E-002
Nb-94	702.63	100.00	1.4080E-001	1.34E-001	-1.2182E-002
	871.10	100.00	1.3433E-001		-8.6092E-002
Ag-108m	79.20	7.10	1.2922E+001	1.61E-001	-1.5237E+001
	433.93	89.90	1.7049E-001		-1.4555E-002
	614.37	90.40	1.7575E-001		-8.5446E-003
	722.95	90.50	1.6119E-001		-4.1666E-002
Sb-125	176.33	6.89	3.9443E+000	5.20E-001	1.3642E+000
	427.89	29.33	5.1960E-001		1.2912E-002
	463.38	10.35	1.5347E+000		6.7670E-002
	600.56	17.80	8.2062E-001		2.7481E-002
	606.64	5.02	3.6274E+000		-8.7153E-001
	635.90	11.32	1.2168E+000		-5.6565E-001
Cs-134	563.23	8.38	1.7590E+000	1.58E-001	-7.9063E-001
	569.32	15.43	9.7078E-001		5.2076E-001
	604.70	97.60	1.7505E-001		-3.6851E-002
	795.84	85.40	1.5788E-001		5.9018E-002
Cs-137	801.93	8.73	1.4624E+000	1.62E-001	-2.1436E+000
	661.65	85.12	1.6226E-001		7.3150E-002
Eu-152	121.78	28.40	1.4749E+000	4.42E-001	-2.2824E-001
	244.69	7.49	3.0796E+000		5.3298E-001
	344.27	26.50	6.4424E-001		-3.2838E-001
	778.89	12.74	1.0508E+000		-8.9593E-001
	867.32	4.16	3.3411E+000		-1.3425E+000
	964.01	14.40	1.0539E+000		8.3730E-002
	1085.78	10.00	1.2278E+000		-4.2972E-001
	1112.02	13.30	8.7890E-001		-2.1980E-001
1407.95	20.70	4.4170E-001	1.8558E-001		
Eu-154	123.07	40.50	1.0222E+000	3.10E-001	-2.0174E-001
	247.94	6.60	3.3993E+000		-9.8593E-002
	591.81	4.83	2.9793E+000		-1.0106E+000
	723.30	19.70	7.4891E-001		-5.9565E-002
	756.87	4.33	3.1498E+000		8.0030E-002
	873.19	11.50	1.2104E+000		1.3371E+000
	996.32	10.30	1.3416E+000		1.2155E-001
	1004.76	17.90	7.6012E-001		-3.8218E-001
1274.45	35.50	3.0990E-001	-7.4194E-002		
Eu-155	86.54	30.90	2.4737E+000	2.47E+000	3.9834E+000
	105.31	20.70	2.5186E+000		-5.4110E-001
Am-241	59.54	35.90	4.5538E+000	4.55E+000	-2.8590E+000
Cm-243	228.19	10.56	2.2785E+000	1.48E+000	-8.5728E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.4784E+000	1.48E+000	-2.5112E-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 7/27/2006 8:22:34 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-239-F-

Sample Title: OOL-10-04-239-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 8:12:28 AM

Live Time: 600.0 seconds

Real Time: 602.1 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-239-F-
 Title: OOL-10-04-239-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	291.60	72.99	0.96	6.20E+002	80.76	2.64E+003
m	2	284-	304	299.93	75.07	0.97	9.23E+002	90.61	2.75E+003
	3	332-	343	339.40	84.94	1.10	3.72E+002	159.93	2.51E+003
	4	950-	962	954.44	238.71	0.83	2.84E+002	81.04	5.37E+002
	5	1399-	1415	1406.89	351.83	1.07	1.30E+002	59.08	2.49E+002
	6	2325-	2338	2331.93	583.10	1.15	1.57E+002	41.35	1.05E+002
	7	2429-	2443	2436.68	609.29	1.12	1.22E+002	40.13	1.03E+002
	8	2898-	2918	2908.22	727.18	0.73	5.97E+001	39.89	9.73E+001
	9	3635-	3655	3644.99	911.39	1.37	1.24E+002	40.94	8.49E+001
	10	3868-	3882	3875.59	969.04	0.38	6.25E+001	31.41	6.75E+001
	11	4477-	4489	4483.25	1120.96	0.56	2.45E+001	23.54	4.55E+001
	12	5325-	5338	5331.30	1332.99	1.06	4.59E+001	22.49	3.11E+001
	13	5832-	5858	5845.74	1461.61	1.67	9.72E+002	63.85	2.04E+001
	14	7056-	7071	7063.30	1766.01	0.84	4.27E+001	17.81	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: 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	0.976	1460.81*	10.67	2.06146E+001	2.14960E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.32869E-001	9.76118E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	9.57682E-001	6.49922E-001
Pb-212	0.580	74.81* @	10.70	3.00425E+001	6.58509E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.85142E-001	2.88362E-001
Bi-214	0.979	609.31*	46.30	4.75027E-001	1.67113E-001
		1120.29*	15.10	3.37053E-001	3.25786E-001
		1764.49*	15.80	6.65607E-001	2.85652E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	8.91547E-001	3.11410E-001
		969.11*	16.60	7.58756E-001	3.89467E-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	0.976	2.061458E+001	2.149604E+000
TL-208	0.472	3.328694E-001	9.761182E-002
Bi-212	1.000	9.576820E-001	6.499225E-001
Pb-212 @	0.580	8.851416E-001	2.883618E-001
Bi-214	0.979	4.930433E-001	1.318934E-001
Ac-228	0.633	8.397594E-001	2.432203E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1.0331E+000	13.03
3	84.94	6.2074E-001	42.94
5	351.83	2.1714E-001	45.35
12	1332.99	7.6526E-002	48.98

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: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	1.3327E-001	1.25E-001	1.2803E-001
	1332.49	100.00	1.2500E-001		1.9070E-001
Nb-94	702.63	100.00	1.3939E-001	1.30E-001	6.8912E-002
	871.10	100.00	1.3002E-001		2.0512E-002
Ag-108m	79.20	7.10	1.3095E+001	1.67E-001	-4.0722E+001
	433.93	89.90	1.6728E-001		8.6167E-002
	614.37	90.40	1.7188E-001		2.7123E-002
	722.95	90.50	1.6948E-001		6.4770E-002
Sb-125	176.33	6.89	3.7619E+000	4.87E-001	-2.6257E+000
	427.89	29.33	4.8744E-001		-3.1331E-001
	463.38	10.35	1.5010E+000		4.8142E-001
	600.56	17.80	7.8357E-001		-1.5259E-001
	606.64	5.02	3.3082E+000		2.9367E+000
	635.90	11.32	1.2168E+000		-1.6982E-001
Cs-134	563.23	8.38	1.7019E+000	1.59E-001	1.9897E-001
	569.32	15.43	9.2272E-001		6.3804E-001
	604.70	97.60	1.5912E-001		-6.4904E-002
	795.84	85.40	1.6113E-001		3.8882E-002
Cs-137	801.93	8.73	1.5108E+000	1.73E-001	-1.4595E-001
	661.65	85.12	1.7336E-001		3.0202E-003
Eu-152	121.78	28.40	1.4651E+000	3.65E-001	6.3038E-001
	244.69	7.49	2.8676E+000		2.9673E-001
	344.27	26.50	6.1228E-001		-1.9887E-001
	778.89	12.74	9.5614E-001		-1.5042E+000
	867.32	4.16	3.0817E+000		-2.7247E-001
	964.01	14.40	1.0601E+000		-2.9186E-002
	1085.78	10.00	1.2435E+000		-2.3731E-001
	1112.02	13.30	8.8828E-001		2.8847E-001
Eu-154	1407.95	20.70	3.6475E-001	3.33E-001	-1.6029E-001
	123.07	40.50	1.0130E+000		6.3877E-001
	247.94	6.60	3.2216E+000		3.4432E-001
	591.81	4.83	2.9325E+000		-2.2765E+000
	723.30	19.70	7.8393E-001		2.4037E-001
	756.87	4.33	3.2456E+000		2.2056E-001
	873.19	11.50	1.1515E+000		6.8424E-001
	996.32	10.30	1.2365E+000		1.0976E+000
Eu-155	1004.76	17.90	6.6405E-001	2.48E+000	3.8527E-001
	1274.45	35.50	3.3321E-001		-2.8490E-001
	86.54	30.90	2.4843E+000		-5.3488E-001
Am-241	105.31	20.70	2.4854E+000	4.69E+000	-1.3889E+000
	59.54	35.90	4.6904E+000		-1.7256E+000
Cm-243	228.19	10.56	2.2162E+000	1.38E+000	1.0981E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.3765E+000	1.38E+000	-3.3437E-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 7/27/2006 7:53:12 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: BRN7722

Spectrum File: BRN7722

Sample ID: OOL-10-04-240-F-

Sample Title: OOL-10-04-240-F-G

Description:

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 7:43:06 AM

Live Time: 600.0 seconds

Real Time: 602.0 seconds

Energy Calibration Date: 6/29/2006

Eff Calibration Date: 3/23/2006

Calibration Efficiency: 7722Soillm180170

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00

Peak Locate Range (in channels): 200 - 8192

Identification Energy Tolerance: 1.250 FWHM

 Y A N K E E R O W E P O R T A B L E 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-10-04-240-F-
 Title: OOL-10-04-240-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	291.38	72.93	1.14	5.79E+002	78.05	2.43E+003
m	2	284-	306	299.98	75.08	1.14	9.75E+002	88.83	3.04E+003
	3	945-	960	953.82	238.55	1.23	2.86E+002	94.42	6.76E+002
	4	1172-	1188	1179.74	295.04	0.77	1.17E+002	71.61	3.89E+002
	5	1402-	1414	1406.89	351.83	1.15	1.29E+002	50.50	2.02E+002
	6	2324-	2340	2332.01	583.12	1.13	1.79E+002	48.66	1.39E+002
	7	2430-	2443	2436.94	609.35	0.82	1.43E+002	40.89	1.06E+002
	8	2900-	2914	2906.93	726.86	0.57	5.73E+001	30.79	6.57E+001
	9	3634-	3653	3644.77	911.33	0.97	1.62E+002	39.53	6.99E+001
	10	3870-	3885	3876.31	969.22	0.79	7.35E+001	31.93	6.35E+001
	11	5324-	5340	5331.69	1333.09	0.79	4.83E+001	23.37	2.98E+001
	12	5833-	5859	5845.36	1461.51	1.94	1.05E+003	67.12	2.70E+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: 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	0.981	1460.81*	10.67	2.23614E+001	2.30334E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.78955E-001	1.14123E-001
		860.37	12.46		
Bi-212	0.996	727.17*	11.80	9.19031E-001	5.05588E-001
Pb-212	0.580	74.81* @	10.70	3.16894E+001	6.84996E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.91889E-001	3.25987E-001
Bi-214	0.402	609.31*	46.30	5.56758E-001	1.73604E-001
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.619	74.82* @	6.21	5.46018E+001	1.24505E+001
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	8.88852E-001	5.66283E-001
		351.92*	37.20	5.29074E-001	2.25511E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	1.16413E+000	3.13927E-001
		969.11*	16.60	8.92686E-001	3.98771E-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	0.981	2.236137E+001	2.303343E+000
TL-208	0.472	3.789555E-001	1.141232E-001
Bi-212	0.996	9.190308E-001	5.055879E-001
Pb-212 @	0.580	8.918888E-001	3.259867E-001
Bi-214	0.402	5.567579E-001	1.736036E-001
PB-214 @	0.619	5.783204E-001	2.095090E-001
Ac-228	0.633	1.060268E+000	2.466639E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	9.6455E-001	13.49
11	1333.09	8.0417E-002	48.43

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	1.3139E-001	1.21E-001	-8.4581E-002
	1332.49	100.00	1.2108E-001		9.9958E-002
Nb-94	702.63	100.00	1.3853E-001	1.28E-001	2.3719E-002
	871.10	100.00	1.2832E-001		3.2830E-005
Ag-108m	79.20	7.10	1.2481E+001	1.55E-001	-1.0462E+001
	433.93	89.90	1.6836E-001		-7.6343E-002
	614.37	90.40	1.8299E-001		-1.4798E-001
	722.95	90.50	1.5468E-001		-3.4668E-002
Sb-125	176.33	6.89	3.6746E+000	5.27E-001	4.4071E-001
	427.89	29.33	5.2669E-001		-1.2529E-001
	463.38	10.35	1.5123E+000		1.1002E+000
	600.56	17.80	8.1082E-001		2.6433E-001
	606.64	5.02	3.5433E+000		4.3466E+000
	635.90	11.32	1.2572E+000		2.6531E-001
Cs-134	563.23	8.38	1.7135E+000	1.60E-001	-1.8415E+000
	569.32	15.43	9.8726E-001		4.5969E-001
	604.70	97.60	1.6998E-001		-1.1585E-001
	795.84	85.40	1.6005E-001		1.1350E-001
	801.93	8.73	1.4004E+000		-2.2701E+000
Cs-137	661.65	85.12	1.7305E-001	1.73E-001	8.9205E-002
Eu-152	121.78	28.40	1.3752E+000	4.36E-001	-3.0816E-001
	244.69	7.49	2.9089E+000		7.4631E-001
	344.27	26.50	6.4084E-001		-1.8062E-002
	778.89	12.74	9.8267E-001		-3.1058E-001
	867.32	4.16	2.9560E+000		-5.8262E+000
	964.01	14.40	1.1066E+000		8.9391E-002
	1085.78	10.00	1.2817E+000		6.9627E-001
	1112.02	13.30	8.8203E-001		-2.8935E-001
1407.95	20.70	4.3559E-001	-1.3459E-001		
Eu-154	123.07	40.50	9.5715E-001	3.31E-001	3.7343E-001
	247.94	6.60	3.1622E+000		2.0808E-001
	591.81	4.83	2.9896E+000		-6.0792E-001
	723.30	19.70	7.2077E-001		-3.8680E-002
	756.87	4.33	3.2253E+000		-4.4411E-001
	873.19	11.50	1.1105E+000		-1.2945E-001
	996.32	10.30	1.2680E+000		2.5784E-001
	1004.76	17.90	7.2289E-001		4.8494E-001
1274.45	35.50	3.3071E-001	3.1956E-002		
Eu-155	86.54	30.90	2.3610E+000	2.36E+000	5.2542E+000
	105.31	20.70	2.4040E+000		1.1629E+000
Am-241	59.54	35.90	4.4444E+000	4.44E+000	-1.1230E-001
Cm-243	228.19	10.56	2.1249E+000	1.40E+000	2.2248E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.3994E+000	1.40E+000	6.8601E-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 7/27/2006 1:49:25 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-10-04-241-F-

Sample Title: OOL-10-04-241-F-G

Description: I/S CONCRETE WALL IN SHOT/SATURA

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 1:39:23 PM

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-10-04-241-F-
Title: OOL-10-04-241-F-G
Description: I/S CONCRETE WALL IN SHOT/SATURATED SOIL

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	945-	963	955.67	238.87	1.22	2.13E+002	72.02	3.37E+002
2	1395-	1415	1406.72	351.64	0.57	1.23E+002	53.67	1.72E+002
3	3867-	3884	3874.88	968.68	0.67	5.80E+001	26.08	3.60E+001
4	4120-	4131	4125.99	1031.46	0.33	1.46E+001	15.43	1.84E+001
5	4477-	4488	4482.63	1120.62	0.83	2.68E+001	18.41	2.42E+001
6	5831-	5859	5844.45	1461.08	2.32	7.68E+002	57.54	2.08E+001
7	7054-	7068	7060.90	1765.20	0.61	3.40E+001	17.26	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	0.998	1460.81*	10.67	1.68644E+001	1.86012E+000
Pb-212	0.453	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.89942E-001	2.56947E-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	0.998	1.686439E+001	1.860124E+000
Pb-212	@ 0.453	6.899418E-001	2.569466E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.64	2.0503E-001	43.63
3	968.68	9.6667E-002	44.96
4	1031.46	2.4369E-002	105.52
5	1120.62	4.4665E-002	68.70
7	1765.20	5.6667E-002	50.77

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: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	8.55E-002	4.4807E-002
	1332.49	100.00	8.5466E-002		-6.2685E-003
Nb-94	702.63	100.00	1.1099E-001	1.02E-001	-6.7906E-002
	871.10	100.00	1.0194E-001		-2.1140E-002
Ag-108m	79.20	7.10	1.1369E+001	1.36E-001	-2.0498E+001
	433.93	89.90	1.4251E-001		6.6560E-002
	614.37	90.40	1.5417E-001		-1.2879E-001
	722.95	90.50	1.3620E-001		-3.8688E-002
Sb-125	176.33	6.89	2.9428E+000	4.41E-001	-7.2345E-001
	427.89	29.33	4.4054E-001		1.2574E-001
	463.38	10.35	1.3164E+000		4.5189E-001
	600.56	17.80	6.3718E-001		6.7240E-002
	606.64	5.02	2.9481E+000		3.1165E+000
	635.90	11.32	9.9579E-001		-2.0789E-001
Cs-134	563.23	8.38	1.3531E+000	1.17E-001	-9.5762E-002
	569.32	15.43	7.2885E-001		-2.2434E-001
	604.70	97.60	1.4795E-001		1.1748E-001
	795.84	85.40	1.1684E-001		-1.7398E-001
	801.93	8.73	1.2145E+000		6.9543E-001
Cs-137	661.65	85.12	1.4162E-001	1.42E-001	9.7501E-002
Eu-152	121.78	28.40	1.0678E+000	3.96E-001	2.1420E-001
	244.69	7.49	2.1721E+000		-1.0083E+000
	344.27	26.50	5.2154E-001		-5.8748E-001
	778.89	12.74	7.9398E-001		7.0275E-002
	867.32	4.16	2.5658E+000		-7.8277E-001
	964.01	14.40	9.0941E-001		-1.8657E-001
	1085.78	10.00	1.0441E+000		-1.4967E+000
	1112.02	13.30	7.5125E-001		-1.2349E+000
1407.95	20.70	3.9581E-001	1.4396E-002		
Eu-154	123.07	40.50	7.3106E-001	2.66E-001	-1.4441E-001
	247.94	6.60	2.3811E+000		-1.4443E+000
	591.81	4.83	2.2651E+000		-1.2272E+000
	723.30	19.70	6.2752E-001		-2.1521E-001
	756.87	4.33	2.6436E+000		-1.7883E+000
	873.19	11.50	9.0252E-001		4.1984E-001
	996.32	10.30	9.3976E-001		-2.5605E-001
	1004.76	17.90	5.8584E-001		2.5617E-001
1274.45	35.50	2.6631E-001	-3.3052E-001		
Eu-155	86.54	30.90	2.0026E+000	1.96E+000	1.9332E+000
	105.31	20.70	1.9607E+000		-1.0169E+000
Am-241	59.54	35.90	5.4780E+000	5.48E+000	-2.0962E+000
Cm-243	228.19	10.56	1.5937E+000	1.07E+000	-2.7843E-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	-3.3097E-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 7/27/2006 1:33:14 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-10-04-242-F-

Sample Title: OOL-10-04-242-F-G

Description: I/S CONCRETE WALL IN SHOT

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 1:23:11 PM

Live Time: 600.0 seconds

Real Time: 601.1 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-10-04-242-F-
Title: OOL-10-04-242-F-G
Description: I/S CONCRETE WALL IN SHOT

Geometry:

Table with 10 columns: Peak No., ROI start, ROI end, Peak centroid, Energy (keV), FWHM (keV), Net Peak Area, Net Area Uncert., Continuum Counts. Contains 4 rows of peak data.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
 N U C L I 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	1.50973E+001	1.72969E+000
Bi-214	0.403	609.31*	46.30	5.74507E-001	1.76266E-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	1.509735E+001	1.729692E+000
Bi-214	0.403	5.745069E-001	1.762661E-001

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	910.88	1.7417E-001	27.04
3	1156.98	2.2750E-002	106.15

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: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	1.1734E-001	9.58E-002	-1.1163E-002
	1332.49	100.00	9.5752E-002		2.1583E-002
Nb-94	702.63	100.00	1.0219E-001	1.02E-001	-6.8993E-002
	871.10	100.00	1.0463E-001		-1.6726E-002
Ag-108m	79.20	7.10	1.1453E+001	1.34E-001	-1.4423E+001
	433.93	89.90	1.3355E-001		2.1141E-002
	614.37	90.40	1.6439E-001		1.2914E-002
	722.95	90.50	1.3388E-001		1.7571E-001
Sb-125	176.33	6.89	2.8775E+000	4.27E-001	3.3018E-001
	427.89	29.33	4.2730E-001		2.2629E-001
	463.38	10.35	1.1903E+000		-1.0102E-001
	600.56	17.80	6.5615E-001		-2.0873E-001
	606.64	5.02	3.0756E+000		3.3875E+000
	635.90	11.32	9.8303E-001		2.6541E-001
Cs-134	563.23	8.38	1.4586E+000	1.29E-001	9.9266E-001
	569.32	15.43	7.7291E-001		-1.8086E-001
	604.70	97.60	1.5094E-001		-5.3218E-002
	795.84	85.40	1.2883E-001		4.0646E-002
	801.93	8.73	1.2097E+000		1.1359E-002
Cs-137	661.65	85.12	1.2623E-001	1.26E-001	-7.9907E-002
Eu-152	121.78	28.40	1.0530E+000	4.17E-001	-1.8604E-001
	244.69	7.49	2.1817E+000		-3.1221E+000
	344.27	26.50	5.3628E-001		-7.2389E-001
	778.89	12.74	7.9052E-001		-3.2900E-001
	867.32	4.16	2.6777E+000		6.1042E-002
	964.01	14.40	9.3203E-001		1.3537E+000
	1085.78	10.00	9.5630E-001		-5.2230E-001
	1112.02	13.30	7.3131E-001		-8.2348E-001
1407.95	20.70	4.1713E-001	4.6818E-001		
Eu-154	123.07	40.50	7.2835E-001	2.40E-001	-3.1955E-001
	247.94	6.60	2.2744E+000		-2.2625E+000
	591.81	4.83	2.4202E+000		-7.7069E-001
	723.30	19.70	6.0969E-001		5.7564E-001
	756.87	4.33	2.4320E+000		3.9759E-001
	873.19	11.50	9.2174E-001		4.4494E-002
	996.32	10.30	9.7868E-001		2.8581E-001
	1004.76	17.90	5.5320E-001		-4.7668E-001
1274.45	35.50	2.3959E-001	-3.6828E-001		
Eu-155	86.54	30.90	1.9902E+000	1.94E+000	1.7557E+000
	105.31	20.70	1.9362E+000		-9.7943E-001
Am-241	59.54	35.90	5.3518E+000	5.35E+000	-4.5175E+000
Cm-243	228.19	10.56	1.5732E+000	1.10E+000	-4.6933E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1008E+000	1.10E+000	1.3565E+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 7/27/2006 12:59:36 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: GRN7780

Spectrum File: GRN7780

Sample ID: OOL-10-04-243-F-

Sample Title: OOL-10-04-243-F-G

Description: SATURATED SOIL

Sample Type:

Geometry:

Acquisition Started: 7/27/2006 12:49:35 PM

Live Time: 600.0 seconds

Real Time: 601.1 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 SP E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-10-04-243-F-
Title: OOL-10-04-243-F-G
Description: SATURATED SOIL

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	306	297.38	74.30	1.18	1.96E+002	125.04	1.29E+003
2	1397-	1416	1405.74	351.39	1.19	1.17E+002	48.40	1.40E+002
3	2321-	2341	2333.62	583.37	0.91	1.16E+002	38.68	7.55E+001
4	2428-	2447	2436.64	609.12	2.20	1.16E+002	35.51	6.05E+001
5	3634-	3654	3644.61	911.12	1.56	1.03E+002	30.88	3.96E+001
6	5831-	5858	5843.49	1460.84	2.32	7.13E+002	56.34	2.48E+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	1.000	1460.81*	10.67	1.56567E+001	1.77107E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.51899E-001	9.04955E-002
Bi-214	0.402	860.37	12.46		
		609.31*	46.30	4.68476E-001	1.54033E-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	1.000	1.565673E+001	1.771068E+000
TL-208	0.470	2.518988E-001	9.049547E-002
Bi-214	0.402	4.684759E-001	1.540327E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	3.2744E-001	63.65
2	351.39	1.9437E-001	41.50
5	911.12	1.7232E-001	29.86

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: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	1.1223E-001	7.75E-002	6.6438E-002
	1332.49	100.00	7.7541E-002		-5.2624E-002
Nb-94	702.63	100.00	1.0588E-001	9.73E-002	-8.3741E-002
	871.10	100.00	9.7276E-002		-2.5430E-002
Ag-108m	79.20	7.10	1.0958E+001	1.34E-001	-1.2077E+001
	433.93	89.90	1.3355E-001		-4.8825E-002
	614.37	90.40	1.5198E-001		-1.8861E-002
	722.95	90.50	1.3543E-001		9.8117E-002
Sb-125	176.33	6.89	2.8016E+000	4.02E-001	1.3915E+000
	427.89	29.33	4.0215E-001		-5.3743E-002
	463.38	10.35	1.1326E+000		1.1115E-001
	600.56	17.80	6.4863E-001		-4.5959E-001
	606.64	5.02	2.9585E+000		3.9731E+000
	635.90	11.32	1.0084E+000		2.3147E-001
Cs-134	563.23	8.38	1.4586E+000	1.22E-001	1.2520E+000
	569.32	15.43	7.7087E-001		1.1805E-002
	604.70	97.60	1.4685E-001		-5.5198E-002
	795.84	85.40	1.2198E-001		1.9843E-002
	801.93	8.73	1.1446E+000		-1.3671E+000
Cs-137	661.65	85.12	1.2937E-001	1.29E-001	-4.6321E-002
Eu-152	121.78	28.40	1.0212E+000	3.85E-001	4.1430E-001
	244.69	7.49	2.1683E+000		-3.5011E+000
	344.27	26.50	5.0866E-001		-5.9717E-001
	778.89	12.74	8.5690E-001		-1.8138E-001
	867.32	4.16	2.3819E+000		-1.1840E+000
	964.01	14.40	9.8035E-001		5.3625E-001
	1085.78	10.00	9.8822E-001		-9.0991E-001
	1112.02	13.30	7.8580E-001		-1.2253E+000
1407.95	20.70	3.8467E-001	1.6184E-001		
Eu-154	123.07	40.50	7.0475E-001	2.65E-001	-2.6206E-001
	247.94	6.60	2.3992E+000		9.2696E-001
	591.81	4.83	2.3790E+000		-1.1104E+000
	723.30	19.70	6.2045E-001		2.5674E-001
	756.87	4.33	2.5077E+000		-2.0188E+000
	873.19	11.50	8.6680E-001		3.7779E-001
	996.32	10.30	1.0068E+000		2.0166E-002
	1004.76	17.90	5.7786E-001		2.1717E-002
1274.45	35.50	2.6461E-001	-1.8931E-002		
Eu-155	86.54	30.90	1.9605E+000	1.89E+000	2.4144E+000
	105.31	20.70	1.8875E+000		-2.0322E+000
Am-241	59.54	35.90	5.0603E+000	5.06E+000	-5.0528E+000
Cm-243	228.19	10.56	1.5380E+000	1.04E+000	5.8476E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0369E+000	1.04E+000	5.0294E-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